OECD Territorial Reviews

Regional Policy for Greece Post-2020

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BETTER POLICIES FOR BETTER LIVES

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Foreword

This review is part of a series of *OECD Territorial Reviews* created in 2001 to support regional development across OECD countries. Territorial reviews examine a range of policies to support economic growth in regions, improve the well-being of residents and support the transition to a low-carbon economy. Policies for economic growth, social inclusion and environmental sustainability are more effective when they are aligned and take into account the region-specific characteristics, assets and bottlenecks in their design.

The *Territorial Review of Greece: Regional Policy for Greece Post 2020*, approved by the Regional Development Policy Committee [CFE/RDPC(2020)5] on 28 May 2020, was undertaken prior to the COVID-19 pandemic and examines the role of regions and regional policy in the recovery of the Greek economy since the 2008 global financial crisis. It examines the performance of Greek regions against international trends and identifies effective policy responses and recommendations for effective implementation of regional and EU cohesion policies in Greece for the years ahead.

The release of this report comes at a critical time for Greece, having exited financial assistance in August 2018 and sustaining a path to economic recovery. This momentum needs to continue and be deepened in the coming years, despite the current COVID-19 outbreak that is hindering Greece's recovery efforts.

Amid heightened attention on growing geographic inequality, OECD member countries have re-oriented regional development policies towards a place-based approach to foster inclusive growth. Economic and social reforms have been extensive in Greece and must be complemented by place-based policies that target or adapt them to region-specific conditions.

Place-based regional policy design and implementation can stimulate investment, improve entrepreneurial and business ecosystems and build resilient labour markets while tackling social challenges such as fostering dialogue, rebuilding trust, reducing inequalities and improving the quality of jobs and education. Place-based regional development policy can help Greek regions to realise their economic potential and capitalise on their strengths. This requires a deep understanding of how policies interact at different levels of government for maximum impact.

Regional governments need to develop their own bottom-led regional development strategies and ensure they are co-ordinated with national priorities, together with private investment and foreign direct investment (FDI) to spur local development. The OECD's work has illustrated the importance of aligning regional development strategies with sectoral policies (support for private investment, infrastructure and human capital policies) to generate multiplier effects. To this aim, many OECD Member countries have strengthened their multi-level governance system or promoted asymmetric decentralisation in recent years. This trend is likely to continue and can help to adapt governance to various regional, metropolitan and local conditions and capacities.

While Greece has advanced on this front in recent years undertaking administrative and regulatory reforms, it is imperative to further consolidate the role of subnational governments in regional development and investment policies.

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Abbreviations and acronyms

Δ.Ε.ΑΝ.Α.Δ.	Inter-ministerial Committees for the Redefinition of Competences and Procedures
ACCMR	Athens Coordination Centre for Migrant and Refugee Issues
ALMP	Active Labour Market Policy
BOP	Balance of Payments
CA	Certifying Authority
CAP	EU Common Agricultural Policy
CCDP	Co-ordinating Committee for Development Policy
CDFI	Community Development Finance Institution
CF	Cohesion Fund
CFP	Common Fisheries Policy
CLLD	Community-Led Local Development
DAFNI	Sustainable Islands Network
DEMETRA	Organisation of Agricultural Vocational Education, Training and Employment
DG REGIO	European Commission Directorate-General for Regional and Urban Policy
DG REFORM	European Commission Directorate-General for Structural Reform Support
DWT	Deadweight Tonnage
EAFRD	European Agricultural Fund for Rural Development
EAGF	European Agricultural Guarantee Fund
ECB	European Central Bank
EDP	Entrepreneurial Discovery Process
EEA	European Economic Area
EEO	Energy Efficiency Oblication
EIB	European Investment Bank
EIDHR	European Instrument for Democracy and Human Rights
EIF	European Investment Fund
EKDDA	National Centre for Public Administration and Local Government
ELSTAT	Hellenic Statistical Authority
EMFF	European Maritime and Fisheries Fund
ENPE	Association of Regions of Greece
EPAnEK	Operational Programme for Entrepreneurship, Competitiveness and Innovation
ERDF	European Regional Development Fund
ESF	European Social Fund
ESIF	European Structural and Investments Funds
ETAT	Food Industrial Research and Technological Development Company
ETC	European Territorial Co-operation
EYSE	Special Service for the Implementation
EYSEKT	Special Service for the Co-ordination and Monitoring of ESF Actions
EYSSA	Special Service for Strategy, Planning and Evaluation
EYTHY	Special Service for Institutional Support
FEAD	Fund for European Aid to the Most Deprived
GNTO	Greek National Tourism Organisation
GVA	Gross Value-added
GVC	Global Value Chain
IB	Intermediary Body

IBO	Inter-branch organisations
ICT	Information and Communication Technology
IDEKE	Institute of Adult Continuing Education
IDIKA	National Social Security Service
IIS	Integrated Information System
IMF	International Monetary Fund
ITI	Integrated Territorial Investments
KEDE	Central Union of Municipalities of Greece
KEK	Vocational Training Centres
LAG	Local Action Group
LAI	Local Autonomy Index
LRAs	Local And Regional Authorities
LSP	Local Spatial Plan
MA	Managing Authority
MCS	Management and Control System
MIS	Special Service for the Monitoring Information System
MoEE	Ministry of the Environment and Energy
MoU	Memorandum of Understanding
MOU	Management Organisation Unit of Development Programmes
MTFS	Medium-Term Fiscal Strategy Framework
NAS	Greek National Adaptation Strategy
NCA	National Co-ordination Authority
NDP	National Development Programme
NGA	Next Generation Access
NGO	Non-Governmental Organisation
NSRF	National Strategic Reference Framework
NWMP	New National Waste Management Plan
OAED	Manpower Employment Organisation
OASA	Athens Urban Transport Organisation
OP	National and regional Operational Programmes
ORSA	Organisation for Planning and Environmental Protection of Athens
PA	Partnership Agreement
PAYT	Pay As You Throw
PEDA	Regional Association of Municipalities of Attica
PIB	Public Investment Budget
PIP	Public Investment Programme
PPP	Private Public Partnerships
PSKE	State Aid Information System
R&D	Research and Development
RAI	Regional Authority Index
RDP	Rural Development Programme
RIA	Regulatory Impact Assessment
RIS3	Research and Innovation Strategy for Smart Specialisation
ROPs	Regional Operational Programmes
RTI	Research, Technology and Innovation
SEO	Social Economy Organisation
SMEs	Small and Medium Enterprises
SSP	Special Spatial Plan
TiVA	Tourism Trade in Value Added
TO	EU Thematic Objectives
UNHCR	United Nations Refugee Agency
VAT	Value Added Tax
VET	Vocational Education and Training
YEI	Youth Employment Initiative
ZOE	Urbanisation Control Zones

Executive summary

Key messages

After the 2008 crisis, the Greek economy initiated its recovery in 2017, bouncing back in 2018 with a 1.9% growth rate that was estimated to reach up to 2.3% by 2019. Unemployment – although still high – has edged down from 27.5% in 2013 to around 17.3% in 2019.

While Greece has contained the COVID-19 pandemic effectively, the negative impact on tourism, investment and public finances is a setback to Greece's longer-term recovery. The impact of the COVID-19 pandemic on the tourism sector is unprecedented. Tourism has been hard hit, especially in places where the sector supports many jobs and businesses. OECD estimates on the COVID-19 impact point to a 60% decline in international tourism – if recovery starts in July in 2020. This could rise to 75% if recovery is delayed to September and up to 80% if recovery begins in December 2020. Domestic tourism will recoup more quickly but will not be able to fully compensate for the decline in international tourism.

The unique geography of Greece shapes the distribution of population and high concentration of economic activities in urban regions. Compared to other OECD countries with large, sparsely populated regions, relatively more people live in Greece's rural areas, especially remote ones with rather limited access to cities. The impact of the financial crisis has not been equal across Greek regions. Greece now has the 9th highest level of regional disparities in gross domestic product (GDP) per capita among 30 OECD member countries. The greatest declines in productivity because of the 2008 crisis occurred in remote islands, but also in Western Greece and Attica. The latter, which was contributing to 48% of national GDP and 43% employment by 2017, suffered disproportionally during the crisis, losing around 10% of its total population. Together with Central Macedonia, it experienced over half (58%) of total job losses in Greece. This economic shock was so sharp that "lagging" Greek regions have converged to Attica's current productivity level – which remains below its potential. This may be considered the "wrong kind" of regional convergence.

OECD estimates show that, at a growth rate of around 2%, Greece would recover to its pre-crisis period level in 15 years. In contrast, if growth in Attica could be restored to 3%, the recovery period in Greece would be halved to around 8 years. Thus, revamping the productivity of Athens is key to fostering Greece's national growth, especially under the current circumstances of a global slowdown due to COVID-19. Recovery in Attica, however, should not be isolated. Balanced and widespread growth across all Greek regions is needed. European Union (EU) funds have played an important role during the recovery process and will continue to be crucial in the future. They represent over 80% of Greek public investment and OECD analysis estimates that, between 2009 and 2018, each euro of EU Structural Funds in Greece generated an additional 64 cents of GDP.

Since the global financial crisis, Greece has undertaken an impressive number of nationwide structural reforms (from pension and tax reforms to justice, labour market, public investment, social, energy and environmental policies) as well as decentralisation and regionalisation reforms. The country is now facing additional development priorities from fostering digitalisation, improving entrepreneurial and business ecosystems, and addressing environmental challenges. These new priorities must also tackle existing social challenges and mitigate rising inequalities.

The current COVID-19 outbreak is slowing recovery down and putting the Greek economy at risk again. While the medium- and long-term impacts of the pandemic remain uncertain, the Greek government will need to co-ordinate policy action at the local, regional and national levels in order to minimise job losses and business closures in the immediate and medium terms.

Key recommendations

Preparation of the current national strategy should be complemented by a new place-based development strategy. Regions, cities, rural communities and municipalities need to align objectives and all have an active role to play in meeting the economy-wide targets while tailoring public investments and service delivery to local needs. To fulfil this task, Greece will need to continue advancing reforms in institutional and fiscal multi-level governance systems and sustain the progress in the governance and utilisation of EU funds in the 2021-27 programming period, with a particular focus on regional development.

To sustain Greece's economic recovery from the global financial crisis and ongoing COVID-19 pandemic, the review has identified concrete actions in five main areas:

1. Strengthen regional policies

- **Strengthen the place-based approach to regional development** by creating a national place-based policy with a long-term vision, prioritising place-based policies across different types of Greek regions and adapting structural policies to their needs and opportunities. Elaborate long-term evidence-based and integrated development strategies at the regional and local levels and support place-based policy intervention through quality data and public consultations.
- **Make better use of spatial planning and develop integrated perspectives at the regional level** through the facilitation and speeding up of the transition to the new integrated approach to regional spatial planning, aligning regional spatial plans and regional operational programmes.
- **Develop an explicit national urban policy**, strengthening the governance systems of the metropolitan areas of Athens and Thessaloniki and reinforcing inter-municipal co-operation to foster the role of cities and municipalities as economic development actors.
- **Strengthen the co-ordination of rural development with sectoral policies** and develop an integrated medium- to long-term overarching rural development strategy.
- **Foster rural economic diversification** supporting bottom-up initiatives beyond agriculture and traditional sectors, favouring the digital transformation of the rural economy and sustaining the development of a broader view of innovation – beyond the traditional science and technology-based model – through better-tuned regional smart specialisation strategies.
- **Strengthen the competitiveness of the agro-food sector from the bottom up** through the development of new and more focused measures to preserve and consolidate agricultural land, strengthening demand-driven farm advisory and extension services and modernising producer groups and co-operative enterprises.

2. Foster productivity, competitiveness and local job creation in all regions

- **Focus support on regions' key economic specialisations**, further differentiating smart specialisation strategies among groups of regions in Greece.
- **Strengthen support to SMEs for local employment generation** by mobilising regional networks of entrepreneurs and researchers to better link research and businesses, consolidating the

knowledge triangle of education, research and innovation through place-based policies and strengthening and expanding business services for SMEs in all Greek regions.

- **Develop integrated national and regional tourism strategies for the medium to long term** using tourism as a catalyst for regional development and connecting tourism to local value chains by: fostering integrated approaches to thematic tourism product development and marketing; promoting vertical production processes to enhance the delivery of high added-value certified food products; developing an all-year-round supply chain network; developing a comprehensive agro-tourism policy; and promoting measures and actions in regions and localities targeted at fostering digitalisation in the tourism sector.

3. Foster quality employment and social inclusion in all regions

- **Facilitate the creation of quality jobs and support the development of relevant local skills** through aligning education and skills provision with local labour markets, strengthening mechanisms and actions to better match job seekers and employers in local labour markets and developing regional strategies to retain youth and talent.
- **Reinforce local services to reduce poverty and support social inclusion** by strengthening both awareness and the ecosystem to support the social economy in all Greek regions and reinforcing actions at the national and regional levels to better connect local labour markets with existing social services.

4. Enhance connectivity and sustainable development in all regions

- **Enhance regional connectivity to meet current and future needs** by advancing in the National Digital Strategy and strengthening the digital infrastructure across regions – particularly in remote places.
- **Ensure sustainability from the bottom up and protect natural assets in Greek regions** by fully implementing Greece's Circular Economy Strategy, enforcing its action plan in all regions and increasing the commitment to the environmental agenda at the subnational level.

5. Strengthen multi-level governance for regional development

- **Consolidate the implementation of the decentralisation and regionalisation reforms** by better aligning fiscal and administrative decentralisation and further differentiating territorial governance.
- **Strengthen the Greek multi-level governance framework and regional development**, consolidating and expanding the progress made over 2014-20 for the overall architecture of the ESPA system. Simplify and streamline the rules and procedures both for the management of EU Structural Funds and for the design and implementation of regional development policies. Reinforce the administrative capacities of all regions, municipalities, actors and institutions. Improve efficiency and increase trust among parties through strengthened inter-sectoral and vertical co-ordination across municipalities and regions while building stronger partnerships with subnational governments.

1 Assessment and recommendations

Assessment

The *OECD Territorial Review: Regional policy for Greece post-2020* provides comprehensive diagnosis and tailored policy recommendations on how to make the most of regional development policy in Greece after 2020.

After a deep crisis, started in 2008-09, the Greek economy initiated its recovery only in 2017, bouncing back in 2018 with a 1.9% growth rate, estimated to reach up to 2.3% in 2019. Unemployment – although still high – has edged down to around 17.3% in 2019 (from 27.5% in 2013 and 19.6% in 2018), with new jobs being created every day. The minimum wage was raised (by 11%) in 2019 for the first time since 2012, positioning Greece near the average of OECD member countries. Despite these positive developments, the current COVID-19 outbreak is slowing down Greece's recovery efforts. For instance, the OECD estimates the COVID-19 outbreak to yield a 45% decline in international tourism in 2020; which will likely have a significant effect on the Greek economy as tourism accounts directly for 6.8% of the gross domestic product (GDP) and 10.0% of total employment in the country. OECD economic estimates anticipate a sharp decline in global GDP in 2020. The Greek Fiscal Council, a member of the European Union's independent fiscal institutions network, estimated in March 2020 that for every 1 percentage point decrease in eurozone GDP, Greece's GDP would slow by about 0.8%.

The 2008 global financial crisis had sizable consequences for Greece's economy. GDP today is one-fourth smaller than it was in 2007, while GDP per capita is the third-lowest among OECD countries. In contrast, GDP in OECD countries recovered to pre-crisis levels by 2011 and, in 2017, it was 15% larger than in 2007. The crisis has not come equally across Greek regions. Greece now has the 9th highest level of regional disparities in GDP per capita among 30 OECD countries. The greatest declines in productivity occurred in remote islands but also Western Greece and Attica. The latter, which contributes to 48% of national GDP and 43% employment by 2017, suffered disproportionally during the crisis, losing around 10% of its total population. Together with Central Macedonia, it experienced more than half (58%) of the total job losses in Greece, which amount to nearly 700 000. This economic shock was so sharp that Greek "lagging" regions have converged to Attica's current productivity level – which remains below its potential. This may be considered the "wrong kind" of regional convergence.

Estimates in this review show that, at a growth rate of around 2%, Greece would recover to its pre-crisis level in 15 years. In contrast, if growth is restored to 3% in Attica, the recovery period in Greece would be halved to around 8 years. Thus, revamping the productivity of Athens is key to foster Greece's national growth, especially under the current circumstances of a global slowdown due to COVID-19. The recovery in Attica could, therefore, have a very strong impact on the aggregate growth figures but it should not be isolated. Balanced and widespread growth in all Greek regions is needed. To that aim, a nationwide regional development strategy that can prioritise different policy responses, taking into account the different needs and characteristics of Greek regions can be an effective tool to restore inclusive growth across the territory.

European Union (EU) funds have played an important role during the recovery process: they represent more than 80% of Greek public investment and analysis in the review estimates that between 2009 and 2018 each euro of Structural Funds in Greece generated an extra 64 cents of GDP.

Greece has already undertaken an impressive number of nationwide structural reforms since the global financial crisis (from pension and tax reforms to justice, labour market, public investment, social, energy and environmental policies). Greece is also facing new development priorities from fostering digitalisation, improving entrepreneurial and business ecosystems, and addressing environmental challenges. At the same time, these new priorities must also tackle existing social challenges and mitigate rising inequalities.

This ambitious national strategy can be complemented by a place-based development strategy. Regions, cities, rural communities and municipalities should align objectives and all have an active role in meeting the economy-wide objectives while tailoring public investments and service delivery to local needs.

To fulfil this task, Greece will need to continue advancing the reform of its institutional and fiscal multi-level governance (MLG) system. Since 2010, Greece has established, a new architecture of the MLG system to deliver regional and local development policies. A number of improvements have been made and the shift towards a greater place-based approach to regional development policy is taking place, notably through: i) a decentralisation agenda, in particular regionalisation; and ii) a more strategic approach to EU funds management, including a greater regional approach in the 2014-20 programming period compared to the previous one.

These two agendas should not be seen in isolation given their strong connections: the process of decentralisation unavoidably has a significant impact on regional development policy and the management of EU funds. The priorities in the short and medium terms should be the consolidation of the changes that have been introduced by the decentralisation agenda and the new architecture of the management and control system of the EU funds for the current programming period. Indeed, more effective investments for regional development require:

1. Better functioning of framework conditions, in particular the decentralisation system (clarification in the assignment of responsibilities, greater subnational fiscal autonomy, greater differentiation in the assignment of responsibilities to reflect varying capacities of subnational governments).
2. Sustaining the progress in the governance of EU funds in the 2021-27 programming period, with a particular focus on regional operational programmes more targeted to local needs; and a more integrated/co-ordinated multi-level system as a whole. Improvements in the governance of EU funds may be used as a leverage to improve the whole multi-level governance system. A more strategic and reinforced partnership between the central, regional and municipal levels is not only important for the management of EU funds but for the public investment system as a whole.

Recommendations

The current COVID-19 outbreak is slowing down Greece’s recovery efforts. While the medium- and long-term impacts of COVID-19 remain uncertain and will vary between countries and industries, the Greek government will need to take co-ordinated policy action at the local, regional and national levels to minimise job losses and business closures in the immediate and medium terms.

To sustain Greece’s economic recovery from the global financial and COVID-19 crisis, this review identifies actions in five main areas for Greek regions to seize long-term development opportunities. These include:

1. Strengthening regional policies.
2. Fostering productivity, competitiveness and local job creation in all regions.
3. Fostering quality employment and social inclusion in all regions.
4. Enhancing connectivity and sustainable development in all regions.
5. Strengthening multilevel governance for regional development.

Strengthening regional policies

Strengthen the place-based approach to regional development

- **Create a national place-based policy with a long-term vision**. Regional policy supports job creation, competitiveness, economic growth, improved quality of life and sustainable development. Greece's National Development Strategy is focused on delivering growth to all regions. Territorial policies are central to achieving a wide number of the policy goals in the strategy, and regional and local governments are critical to their implementation. However, these territorial dynamics are not fully elaborated in the strategy, which does not offer a comprehensive view on regional development; it does not discuss the policy mechanisms that can be used to implement regional policies and presents a wide range of sectoral policies for which a territorial lens is absent. Beyond the National Growth Strategy, well-defined territorial development policy should be explicitly stated at the national level, mainstreaming regional, urban and rural development with economy-wide structural and sectoral policies to better target and implement public investments.
- **Prioritise place-based policies across different types of Greek regions and adapt structural policies to their needs and opportunities**. OECD analysis shows four types of regions in Greece, each with specific strengths and weaknesses that require different policy responses. They are:
    - *Metropolitan regions* with developed research and technology capabilities and a potential to further diversify knowledge-intensive manufacturing and services (Attica, Central Macedonia).
    - *Regions with a manufacturing base*, gathering traditional industry sectors with a low level of innovation capabilities (East Macedonia-Thrace, West Macedonia, Continental Greece); these resource-rich regions face the challenge of modernising their industrial base, in order to generate higher-value activities and diversifying their economies.
    - *Rural regions* with local services and primary activities, and potential for innovation in the agro-food industry, also linked to tourism (Epirus, Peloponnese, Thessaly and Western Greece).
    - *Insular regions* with strengths in quality tourism and specialised agricultural products (Crete, Ionian Islands, North Aegean, South Aegean).

  Greece's development strategies would benefit from a place-based approach where sectoral policies (support for private investment, infrastructure and human capital policies) meet and interact in each place, generating multiplier effects. Place-based policies also help to ensure that growth benefits reach different population groups and places – from continental, mountainous and island localities.
- **Long-term evidence-based and integrated development strategies need to be elaborated at the regional and local levels**. The capacity of regions and other local actors to identify their strengths and opportunities and to build on them is fundamental to the success of regional policies. In Greece, the current regional and local policies are mainly shaped by EU policies and are often delivered through the sum of many (often small-scale) projects which leads to duplication, high administrative costs and weak co-ordination – including between local and regional governments. This is because subnational governments have struggled to think of policies in an integrated way that is connected to medium- and long-term development visions. This vision is needed to galvanise local development and involve a broad array of local actors across the public, private and tertiary sectors.
- **Place-based policy intervention needs to be supported by quality data and public consultations**. Despite efforts at different levels of government to improve the quality and relevance of public data, there is still a need to raise their quality to inform decision-making on local and regional issues. For instance, the Hellenic statistical authority should harmonise territorial, firm-level and employee-level data sets and improve both quality and accessibility so that disaggregated data can be statistically processed, data can be matched across sources and metadata is available

to guide interpretation. The thematic coverage, currently focused mostly on economic and financial information, should also be improved to inform regional policies more widely. To improve relevance, a review of the definition of regions, rural and urban areas in Greek statistics would also be required as currently there is a mismatch between functional spatial units and what is represented in the data, e.g. for the region around Athens

Make better use of spatial planning and develop integrated perspectives at the regional level

- **Facilitate and speed up regions' transition to the new integrated approach to regional spatial planning**. In 2016, Greece has set the framework (Law 4447/16) for a new approach to integrated regional spatial planning, which foresees a four-level top-down hierarchy where the two first levels (national-regional) have a strategic role and the third and fourth one (local) have a regulatory character. These strategic documents set development ambitions and help to co-ordinate and prioritise public investments. All regions must transition to this system in a timely manner and adopt plans. It is equally important that they are implemented through concrete actions and monitored on an ongoing basis. These plans should be elaborated by regions themselves through a strong process of public consultation. Spatial planning (including maritime spatial planning) should become an integral part of a region's economic and social development across policy areas and should meaningfully engage a wide range of public and private local stakeholders, including the broader public.
- **Align regional spatial plans and Regional Operational Programmes (OPs)**. Fostering co-ordination among land use, sectoral and regional development policies including Regional OPs to facilitate the promotion and implementation of eligible projects and avoid unjustified hurdles linked to land use permissions. For example, this co-ordination could involve leveraging property taxes to ensure more desirable types of land use and avoid unintended outcomes. A better alignment of spatial planning with national and regional tourism policies should also be prioritised to lower the administrative burden on the tourism industry. Such spatial planning issues concern both urban and rural areas.

Develop an explicit national urban policy

- **Strengthen the governance systems of the metropolitan areas of Athens and Thessaloniki**. A more effective integrated governance and planning of Athens' and Thessaloniki's metropolitan areas is needed in order to deliver multi-sectoral strategies for economic development and better management of negative agglomeration effects. This could be done by:
  - developing specific partnership agreements or contracts between the largest metropolitan areas and the government (as in the United Kingdom, for example).
  - reforming the allocation of financial resources for metropolitan areas as, in order to be successful, metropolitan institutional structures should also enjoy a degree of decision-making authority over resources and own revenues. To start, specific tax regimes for inter-municipal groupings or metropolitan areas could be promoted without taking resources away from the municipalities.
  - developing comprehensive planning for metropolitan areas to connect spatial planning considerations with broader economic, social and environmental goals and objectives. In Attica, this could, for instance, be realised by integrating the multiple bodies dealing with metropolitan issues into the Region of Attica's metropolitan committees. This could also serve to strengthen their role as an interface with the national and EU levels.
- **Strengthen inter-municipal co-operation to foster the role of cities and municipalities as economic development actors**. In general, urban areas' economic potential should be

strengthened and linkages to surrounding regions should be improved for positive spill-over effects. Beyond metropolitan areas, there is a need to strengthen inter-municipal co-operation more generally across Greece, including between small- and medium-sized municipalities and rural areas. Networks of small- and medium-sized cities should be encouraged to increase their ability to deliver services and economic development as well as to enhance rural-urban linkages. Inter-municipal co-operation can help address shared challenges such as population decline and the delivery of services for the ageing population. To ensure that instruments like inter-municipal contracts or co-operation agreements are indeed used, regional and national authorities should create financial incentives for municipalities to establish joint projects and services. Such institutionalised practices can complement the support to inter-municipal co-operation and rural-urban partnerships provided through EU-funded investments, such as LEADER, Community-Led Local Development (CLLD) and Integrated Territorial Investments (ITIs) and render it more sustainable in the medium to long term.

Strengthen the co-ordination of rural development with sectoral policies

- **Develop an integrated medium- to long-term overarching rural development strategy**. Rural development is shaped by a range of additional policy areas, from transportation and ports to the provision and accessibility of education and health services. A rural lens on these policies from a range of national ministries is important. Consistency and co-ordination are needed between the central and sub-national governments and at the local level to integrate sectoral approaches, involve private partners and achieve the appropriate geographic scale. The need for a more integrated approach also applies to policies for different types of regions. Greece has no overarching rural development strategy apart from the European Structural and Investment Funds (ESIF) intervention; thus, it is important to develop enhanced co-ordination of rural, regional, agricultural, fisheries and maritime policies to consider different development needs across regions and draw on their specific resources. Various co-ordination options may include special high-level units, integrated ministries, "policy proofing" and inter-ministerial co-ordination via working groups and formal contracts. Some OECD member countries have established a specific Council of Ministers with a rural mandate in order to address this issue. Beyond governance structures, the inherent silos between these policy domains can be also addressed at an organisational level. For example, relationships and knowledge sharing between ministries can be strengthened through opportunities for short-term secondments and co-ordinating professional development opportunities and staff training.

Foster rural economic diversification

- **Support bottom-up initiatives beyond agriculture and traditional sectors**. While this is also a goal of the Rural Development Programme, the diversity of Greece's rural economies calls for a wider policy intervention by the national and regional governments to target these objectives more effectively. At the regional and local levels, the EU LEADER programme has played a critical role in reorienting rural development beyond agricultural policies in many EU countries and should be strengthened in Greece alongside CLLD while reducing the administrative burdens and financial requirements associated with those programmes. In the forthcoming EU Cohesion policy period, LEADER's local action groups (LAGs) and CLLD should be used in Greece to more greatly involve private sector partners in determining local development priorities and shaping initiatives that can:
    - strengthen the tradeable sector in rural areas through value-added activities and linking up to export markets.
    - support the development of rural tourism in key rural destinations through quality tourism products and by linking up to local food and handicraft industries.

  - strengthen the valorisation of rural amenities and ecosystem services.
  - anticipate and adopt strategies to manage population decline in rural areas with respect to how services and infrastructure are delivered.
- **Favour the digital transformation of the rural economy**. The performance of Greece in the digital infrastructure is uneven and underdeveloped, especially in rural and remote areas. In terms of connectivity, small- and medium-sized enterprises (SMEs) lag in their high-speed broadband connections compared to large firms. Overall digital infrastructure needs to be strengthened and digital transformation of the economy sped up and sustained with dedicated legislative measures, financial support and incentives at the national and regional levels. Support should be given for developing smart cities and territories, extending coverage with high-speed broadband, addressing concerns about digital illiteracy and using technology to improve services for citizens' well-being.
- **Sustain the development of a broader view of innovation – beyond the traditional science and technology-based model through better-tuned regional smart specialisation strategies.** A large share of the firms in rural, regional economies are small and micro enterprises with no formal research and development (R&D) activity but in some cases with the ability to develop non-standard forms of innovation, for example in the delivery of services or in processes or goods that are not export-oriented but that can lead to increased productivity and improved well-being in the areas concerned. In a rural context, smart specialisation strategies can become a way to facilitate a stronger growth process if the scope of the opportunities for support is expanded beyond the usual format of export-oriented high-technology products and formal research. Thus, smart specialisation should not be seen as being about technologies as such but about knowledge and its application and this applies to all sectors, including agriculture and craft-based industries.

Strengthen the competitiveness of the agro-food sector from the bottom up

- **Enhance the competitiveness of the agro-food sector**. Targeted policy actions are needed from the national and regional governments to raise skill levels in the sector, strengthen the existing larger farms where it is possible to increase economies of scale and develop the potential of smaller- to medium-sized ones to produce high-quality or niche products. Specific goals should include quality export promotion strategies and local connections to the supply chains catering to tourism and the local economy. Strategies to strengthen Greece's regional agriculture-aquaculture and agro-food competitiveness are threefold:
  - Develop new and more focused measures to preserve and consolidate agricultural land. Land consolidation can help to improve the spatial configuration of dwellings and service structures, reducing the number of small-scale inefficient farms, offering the opportunity to create diverse landscapes with conditions for multifunctional development of rural areas, including recreation and tourism. Greece has had several policies to prevent the abandonment of rural areas and to improve land consolidation. Despite this, progress in land consolidation has been slow and should be reinforced.
  - Strengthen demand-driven farm advisory and extension services. Agricultural advisory and extension services share research and innovative practices and create sets of farming practices tailored to the needs and abilities of farms in a particular region. Such services are all the more important in Greece's regions because of the low innovation and productivity of Greek agriculture. There are several options to strengthen agricultural advisory and extension services across public, private and hybrid models. However, the Greek situation with a large share of very small low-income farms makes paying for private advisory services challenging. Greece also urgently needs to strengthen the connections between advisory and extension services and scientific academic and research institutions – this could form a hybrid model with some fee-paying services. Public policies should promote collaborative schemes involving digital technologies.

  - Modernise producer groups and co-operative enterprises to promote value-added processing, production and marketing and to capitalise on Greece's rich agricultural diversity and regional identity. One possible solution is for farmers to form a production and marketing co-operative that provides advice on production methods to assure uniform and high-quality products, and pools production to facilitate sales to distributors and processors. The public sector can play an important role in both strengthening the attractiveness and efficiency of collective initiatives and co-operatives through targeted tax policies and a favourable legislative environment.

Fostering productivity, competitiveness and local job creation in all regions

Focus support to regions' key economic specialisations

- **Further differentiate Smart Specialisation Strategies among groups of regions in Greece**. Through reinforced and differentiated Smart Specialisation Strategies, regional productivity and competitiveness could be improved by focusing on areas of competitive advantage including tourism, manufacturing and logistics, and food production amongst others. Regions with more developed research and technology capabilities and a potential to diversify towards knowledge-intensive manufacturing and services should be sustained with ad hoc measures. For example, the metropolitan regions of Athens and Thessaloniki should be supported in further developing research and technology capabilities and foster the potential to produce knowledge-intensive manufacturing and high-value tradeable services for the EU. Regions with a traditional manufacturing base should prioritise support for the regional innovation ecosystem, reskilling of workforce and SME services and incubators. Rural and remote regions (including islands) should invest in digital infrastructures and upscaling local services. Not all regions in Greece have strong science- and technology-based innovation systems, for instance, when universities are absent. This would require an approach to smart specialisation that takes a broader perspective on innovation as well as co-ordination of smart specialisation strategies across regions.

Strengthen support to SMEs for local employment generation

- **Mobilise regional networks of entrepreneurs and researchers to better link research and businesses, through:**
  - **strengthening the role of Regional Councils for Research and Innovation**. The Entrepreneurial Discovery Process in each region and the role of Regional Councils for Research and Innovation can be a relevant step to better support the design and implementation of regions' smart specialisation strategies. With sufficient resources, these councils could also determine areas of focus for collecting and analysing diverse information held by entrepreneurs or embedded in firms and public institutions, foster co-operation across regions and better connect academia and businesses to encourage investments in "home-grown" innovation instead of purchasing it.
  - **consolidating the knowledge triangle of education, research and innovation by place-based policies** that promote locally research, technology diffusion, entrepreneurship and fostering closer ties between businesses, research centres and universities. This is key to support SMEs and businesses generation in all the regions. While Regional Councils for Research and Innovation can become an important mechanism to strengthen the connections between research centres, universities, enterprises and start-ups, other structures such as digital hubs, innovation districts etc. are also needed and should be set up on regional and inter-regional bases. To do so, Greece should establish a comprehensive programme providing targeted and continuous measures, for instance using the Hellenic Foundation for Support and Innovation to put out revolving calls aligned with smart specialisation and including incentives for research-enterprise partnerships.

- **Strengthen and expand business services for SMEs in all Greek regions.** Greece should move towards a new and more flexible approach to supporting SMEs (and industry), with greater regional-level involvement. The country currently does not have a well-developed system of business advisory services and there is a strong need for one-stop-shop services that can help local businesses navigate regulations, access finance and connect to the relevant networks and expertise. Support instruments should consider the demand side, for instance targeting start-ups or lagging companies and exploring both competitive and co-operative mechanisms for supporting innovation. Concrete measures should be considered according to regions' needs and include: establishing incubators for small firms, expanding e-services for firms, SMEs' export capacities (e.g. through subsidising the hiring of temporary export managers), supporting the establishment of entrepreneurial networks for knowledge and practice sharing and further developing social enterprises.

Develop integrated national and regional tourism strategies for the medium to long term

- **The national and regional governments should use tourism as a catalyst for regional development.** The current COVID-19 pandemic is an unprecedented crisis for the tourism economy. OECD estimates on the COVID-19 impact point to 60% decline in international tourism if recovery starts in July 2020. This could rise to 75% if recovery is delayed until September and up to 80% if recovery starts in December 2020. Domestic tourism will restart more quickly but will not be able to fully compensate for the decline in international tourism. In Greece, the consequences can be severely negative, especially for regions such as Attica, Crete, the Ionian Islands, Khalkidhiki and the South Aegean,. Nevertheless, tourism has the potential to contribute to a quick recovery and to be a catalyst for regional development. The COVID-19 crisis can be seen as an opportunity to accelerate the transformation of the tourism economy. Developing a policy targeted to spread the economic benefits of tourism further afield should be considered a priority for Greece and its regions. Such a policy can help spread the benefits of tourism away from major destinations such as cities, historical sites and coastal areas to lesser developed, often rural, areas where the opportunities for the development of other industries may be limited. The development of tourism in these less developed areas should be based on their tourism potential and take an integrated policy perspective. This is seen as an effective way of focusing resources (including infrastructure investments) and harnessing stakeholder engagement. Destinations, in turn, require their own policies and plans to achieve successful, well-supported and integrated tourism development. Frameworks and guidelines for this can be provided from central government.
- **Connect tourism to local value chains by:**
    - **fostering integrated approaches to tourism thematic product development and marketing**. Product development should take into account, for instance, the close linkages of tourism with gastronomy and culture. Well-being and medical tourism are also an important segment for Greece, particularly for the ageing population, a demographic segment whose importance is growing both in terms of market size as well as spending power.
    - **promoting vertical production processes to enhance the delivery of high-added-value, certified food products** and strengthening the agricultural production base of tourist areas in order to address the shortage (e.g. in islands) of resources required by residents and tourists.
    - **developing all-year-round supply chain networks**, in co-operation with local suppliers and regional logistics centres. Supply-side policies to improve competitiveness may also include investment promotion and the simplification of business regulations.
    - **developing a comprehensive agro-tourism policy**. Agro-tourism in Greece was initiated in the 1980s, however a structured agro-tourism policy is still missing. This type of tourism has been based heavily on individual initiatives and has been facing several difficulties due to the

lack of experience and entrepreneurial skills, as well as correct infrastructure. Greece is starting to use quality labels to create synergies with the local agro-food sector and encourage tourism in rural areas. This practice should be further developed.

- **Promote measures and actions in regions and localities targeted to foster digitalisation in the tourism sector**. Both destinations and tourism businesses need to fully embrace digitalisation to foster their competitiveness and sell their products in the domestic and international markets. There are three main areas of action to support digitalisation in the tourism sector. first, branding and marketing to better communicate with tourists, second, to collect information and data on tourism supply and demand; third, to prepare the tourism workforce and develop the availability of skilled human resources.

Fostering quality employment and social inclusion in all the regions

Facilitate the creation of quality jobs and support the development of relevant skills locally

- **Align education and skills provision with local labour markets**. Greece has achieved high participation and attainment rates in education but the country needs to address the simultaneous issues of over- and under-qualification. A forward-looking skill strategy, including at the regional level, is needed to ensure a better match between the skills youth acquire at school and those needed in the labour market. Universities should offer training programmes that match the needs of regional employers for specialised skills. Training in financial literacy should be strengthened and youth should benefit from specific programmes to start businesses. Employers themselves should be encouraged to employ low-skilled youth and to expand quality apprenticeship and internship programmes. Regions should draw plans for continuous vocational training, targeting active adults, employees, job seekers, civil servants, freelance workers, entrepreneurs, ensuring the coherence of vocational training according to their economic and social priorities, in consultation with the state and social partners.
- **Strengthen mechanisms and actions to better match job seekers and employers in local labour markets**. Greece is among the OECD countries with the highest qualification mismatch rates in their workforces. Better matching job seekers with employers through improved vacancy registration and access to information as well as engagement with reinforced local employment offices can reduce unemployment, support labour productivity and firm growth. This would be particularly beneficial for SMEs that often lack capacity to manage recruitments. In view of the relatively centralised design of employment policy in Greece, the development of better regional data and information as well as a larger use of Local Development Pacts, whose design and implementation involves local actors and stakeholders, could help ensure the relevance of employment policies for local needs and economic opportunities. The tourism sector, which faces labour and skills shortages, should be supported by improving the awareness and attractiveness of careers in the sector and ensuring the availability of relevant training programmes linked to sectoral and local needs.
- **Develop regional strategies to retain youth and talents**. Although demand for talent and brain drain are both driven by job markets, ad hoc policies or measures implemented locally or regionally to retain, attract or regain a highly educated workforce can be also effective. Regions and cities could: i) better identify the needs of talent, for example by establishing a dialogue with young people; ii) improve co-ordination with relevant players benefitting from the presence of talent in the territory; iii) identify and support key driving sectors for retaining/attracting talent; iv) stimulate the recruitment of outside talent; v) mitigate/remove structural impediments/barriers to attracting international talents; vi) co-operate with other authorities facing the same challenges with regards to highly skilled workers; vii) improve broadband connectivity in rural and remote areas to improve opportunities for youth; and viii) leverage international networks, e.g. through the Greek

international community, establishing links between youth, businesses and academia and facilitating business creation and investments, also through mentoring programmes and economic diplomacy programmes (e.g. by the Ministry of Foreign Affairs).

Reinforce local services to reduce poverty and support social inclusion

- **Strengthen awareness and the ecosystem to support the social economy in all Greek regions**. Addressing the diverse challenges of social inclusion requires Greece's governments, whether at the national, regional or local level, to work with other actors, including the private sector and social economy. In Greece, the social economy, in particular, can play an important role in identifying local needs and responding to social and economic challenges on the ground, also for groups that are "hard to reach" through other measures. Social economy organisations such as associations, co-operatives, mutual organisations, foundations or social enterprises are driven by the goal of realising a social impact and rely on community resources such as volunteers to support social inclusion. The national and subnational governments can support those organisations by raising awareness for their work, provide support structures for developing social enterprises, facilitate access to funding sources and foster the acquisition of social-entrepreneurship skills in the education and training systems. To encourage employment creation through social economy organisations, it is important to strengthen the ecosystem by ensuring stable public financial support, enabling dedicated measures in public procurement and providing subsidies for the employment of disadvantaged individuals.
- **Reinforce actions at the national and regional levels to better connect local labour markets with existing social services**. Greece should further build on existing good practices providing local labour market activation and connections to social services such as the support schemes to the Roma community and migrants as well as community centres, whose network should be strengthened, further developed nationwide and made sustainable over time (beyond EU funding). While regions already have a mandate for designing and implementing regional action plans for social inclusion, they should require more and better-integrated data on social vulnerabilities, labour market and entrepreneurship aspects to inform more comprehensive social interventions across sectors and tailored to territorial needs.

Enhancing connectivity and sustainable development in all regions

Enhance regions' connectivity to meet current and future needs

- **Advance in the National Digital Strategy and strengthen digital infrastructure across regions, particularly in remote places**. Greece should keep investing in a comprehensive digital strategy to enable its economic transformation, reap productivity gains, improve public services and the quality of life of citizens. Such a strategy should include: i) ensuring inclusive access to digital infrastructures, especially in rural areas and on islands; ii) accelerating the transition to high-speed Internet; iii) providing an adequate legal framework; iv) building a modern e-government with strengthened in-house capacity; and v) helping different economic sectors and SMEs take advantage of productivity-enhancing digital tools.
- **Develop an integrated plan for maritime, air and land transport, in order to achieve the timely transition of residents, visitors and goods to and from regions and islands**. Crucial for supporting growth is the presence of accessible, high-quality, resilient, reliable and sustainable infrastructures. The aim should be to develop and upgrade road and rail networks and improve the efficiency of maritime transport, which is important for Greece's territorial cohesion. Upgrading commuting and communication between the islands and the mainland should be a further priority.

Ensure sustainability from the bottom up and protect natural assets in Greek regions

- **Fully implement Greece's Circular Economy Strategy, enforcing its action plan in all the regions**. The Greek government has set as a priority the implementation of circular economy objectives through a Circular Transition Business Plan of Greece. It is necessary now to speed up and fully implement the Circular Economy Strategy, enforcing its action plan on the ground. Action should be accelerated at three levels: i) setting criteria for green and circular public procurement; ii) promoting industrial clustering of businesses for supporting circular entrepreneurship, environmental industry, digital transformation; and iii) stimulating employment through measures to strengthen the collaborative economy and small-scale entrepreneurship. In particular, the implementation of those actions outlined in (ii) and (iii) will necessitate the use of a territorial lens to be successful.
- **Increase the commitment to the environmental agenda at the subnational level**. Greece needs to build on existing progress in implementing national and EU environmental legislation and land use policies to preserve its environmental capital. This implies:
  - **harnessing the potential of subnational governments to deliver sustainable development**, including: i) strengthening regional and local data collection, statistical systems and methodological approaches to track policy implementation; ii) mobilising funding to help subnational governments address environmental priorities (e.g. developing a green fiscal strategy, making greater use of land value capture tools, green bonds etc.); iii) fostering effective horizontal co-operation, in particular in metropolitan areas - for instance financing instruments (e.g. congestion charges, eco-taxes) should be applied at the regional/metropolitan scale, not only in city centres; and iv) speeding up and completing the legislative systematisation and mapping (e.g. "forest maps") initiated with support from the European Commission.
  - **making improvements in energy efficiency a major priority for subnational governments**. The necessary completion of the National Energy & Climate Plans (NECPs) for 2021-30 within the EU "Clean Energy for all Europeans" strategy will be an important step forward. To succeed, clean energy investments need to carefully consider different regional needs and contexts. For instance, local authorities should be supported in implementing plans for decarbonisation, renewable resources, energy savings, demand-side management and the production of clean electricity. The monitoring of the impact of such measures should be reinforced.
  - **continuing to upgrade waste management infrastructure in "more-in-need" regions/municipalities** (e.g. islands), accelerating the construction of appropriate waste treatment units and increasing the utilisation of public-private partnerships and institutional contracts.

Strengthening multilevel governance for regional development

Consolidating the implementation of the decentralisation and regionalisation reforms

Better align fiscal and administrative decentralisation

- As part of the implementation of the Kleisthenis reform, further clarify the responsibilities and functions assigned to each level of government, notably for infrastructure and transport, urban planning, environmental policy and energy policy, in order to reduce the space for conflict in its allocation. Clarification of responsibilities is particularly needed for the competencies of regions and deconcentrated authorities.

- The Inter-ministerial Committees for the Redefinition of Competences and Procedures introduced by the Kleisthenis reform should consider:
    - ensuring a balance in the way different responsibilities and functions are decentralised, i.e. ensure that the various responsibilities are decentralised to a similar extent.
    - exploring the possibility of increasing the number of exclusive competencies for regions and/or municipalities and reducing the number of shared ones.
- Put in place a permanent committee within the Ministry of the Interior to evaluate every new bill that involves the transfer of responsibilities foreseen by the Kleisthenis reform.
- Revise the criteria for the allocation of state grants to municipalities. In particular, consider specific provisions or complementary indicators for insular and mountainous municipalities or localities that receive the most important influx of tourists at certain times of the year.
- Give subnational governments greater tax autonomy, i.e. more taxing power over rates and bases, in particular concerning property tax; tourist tax and other local taxes, and update the municipality residents' registry, to have more accurate property tax collection.
- Given the very low subnational debt, there is room for manoeuvre to enhance borrowing at the subnational level to finance investment projects (golden rule), in particular for large metropolitan areas, in a prudent and controlled manner. This needs to go hand in hand with the development of a clear set of fiscal rules for "responsible borrowing", including regular audits and controls, and enforcement mechanisms and sanctions for non-compliance. The use of bonds may be developed in Athens and Thessaloniki.
- There is room for manoeuvre to make more use of tariffs and fees, which are currently very low by international standards, especially for urban transport in large cities. Land-based financing might be introduced.

Further differentiate territorial governance

- Introduce more differentiation in the allocation of competencies to reflect not only geographic conditions but also different local government capacities. There are different ways to implement differentiated decentralisation according to the capacity and performance of municipalities: devolving additional competencies to the most capable municipalities; allocating additional fiscal powers to municipalities with greater financial and technical capacities (e.g. access to borrowing, tax power, ability to define user fees and tariffs, etc.); and simplifying reporting mechanisms of weaker municipalities to alleviate the administrative burden.
- Move forward with the decree allowing for territorially specific policies and the possibility for asymmetric decentralisation provided for by the Kallikratis Law, with differentiated sets of responsibilities given to different types of regions/cities, in particular to island municipalities in the domains of agriculture, natural resources, transport and planning and environment.
- Greece may encourage such differentiation through pilot experiments and on a voluntary basis, as has been done by different OECD countries. The system of "municipalities with extended powers" put in place by Columbia or the Czech Republic may be particularly inspiring for Greece.

Strengthening the Greek multilevel governance framework and regional development: A special focus on the multilevel governance of EU funds

Further consolidate the progress made in 2014-20 for the overall architecture of the Partnership Agreement (ESPA) system

- For the next (2021-27) programming period, Greece should focus on strengthening the existing management architecture instead of introducing new changes, which would bring further administrative costs and uncertainty. In particular, the delimitation and separation of the strategic planning functions from the management and implementation of the Operational Programmes (OPs) at the national level in the 2014-20 period should be consolidated.

- At the regional level, such division could be explored in the future – with regional Directorates of Development Planning taking on the equivalent role of executive units – if and only if regions have the appropriate human resources in terms of quantity and expertise.
- To consolidate the important progress made in the 2014-20 period, improvement efforts need to be focused on three dimensions: i) responsibilities and co-ordination: better delineating responsibilities and strengthening and deepening co-ordination mechanisms, especially between the national and subnational levels; ii) administrative capacities: reinforcing the administrative capacities of the different parties with a special focus on beneficiaries; and iii) administrative simplification: continuing the efforts in streamlining the rules and procedures to navigate within the management and control system (MCS) to increase efficiency and accountability.
- Strengthen the role of the executive units by better clarifying and communicating their role and responsibilities to all the parties involved in the planning and management of EU funds as well as ensuring that they all have the adequate personnel and internal capacities to fulfil their responsibilities.

Strengthening co-ordination across sectors

- Implement systematic co-ordination of policy priorities and collaboration on policy design and implementation (on the content of the OPs, the call for projects, their management and evaluation) among the different actors of the MCS. Greece would, for example, benefit from integrated outcome indicators for the projects' monitoring defined by all parties, beyond the sectoral output and impact indicators.
- Better co-ordination between the Managing Authorities implementing state aid actions and State Aid Special Service are also necessary. This co-ordination could be improved by setting up a platform and/or a state aid database with direct access by the Managing Authorities (MAs). At the same time, it could be of help developing standard templates for state aid calls for proposals with reference to the institutional framework and, consequently, continuous updating in a database/platform.
- Improve the functioning of the Monitoring Committees and transform them into effective steering groups that ensure better use of funds by improving the communication among members as well as ensuring clearer communication of what is expected from these bodies. To facilitate their task, a smaller but potentially more targeted Monitoring Committee in terms of representation could be more functionally operational and efficient.
- Better exploiting the synergies and complementarities within the Managing Authorities, by harmonising the working culture and management process of projects with different sizes and scope, among others.

Building stronger partnerships with subnational governments

- For the next programming period, the 13 regions with cumulated experience can have a more prominent role, in particular in the definition of priorities to be included in the Regional Operational Programmes (ROPs). National ministries, MAs, regions and beneficiaries responsible for the implementation of the Partnership Agreement need to work more closely together on the preparation, implementation, monitoring and evaluation of the different programmes and projects.
- Improve the co-ordination between the central, regional and municipal levels by strengthening the existing formal co-ordination mechanisms to further improve their impact and concrete outputs. National ministries, MAs, regions and beneficiaries responsible for the implementation of the

Partnership Agreement must work systematically more closely together on the preparation, implementation, monitoring and evaluation of the different programmes and projects. For this, the role of municipalities' regional associations in formulating common positions and issuing eligible programmes to be considered for incorporation into the ROPs lust also be strengthened.

- Adopt a more systematic approach to co-ordination and collaboration, especially with regards to beneficiaries (municipalities), disseminate best practices in project preparation.
- Establish regular opportunities for two-way communication between Managing Authorities (Mas), Intermediate Bodies (IBs) and beneficiaries regarding changes in regulations, processes or programmes to contribute to reducing project delays.

Reinforcing the capacities of all actors and institutions

- Staff shortages need to be addressed. *Ad portas* of the new programming period, the hiring of new personnel is a top priority; new staff needs to be involved from the planning stage of the new PA. Special services are in particular need of lawyers (particularly in the field of public procurement) and specialists in information technology (IT) and software programming, financial instruments, auditing, accounting, and local and regional development planning.
- For the next programming period, Greece may consider activating the register of freelance engineers that was considered by law 4314/2014 to support weak beneficiaries that lack technical staff.
- Develop a competency framework within MAs for the optimisation of human resources.
- Promote inter-regional collaboration to find innovative solutions to recruitment challenges. This has been carried out in Italy for example, in the regions of Calabria, Friuli-Venezia-Giulia and Umbria. These three regions have collaborated to set up a registry of chartered accountants specialised in programme management and control and co-financed by ESIF.
- Focus extensively on building the planning capacities of the 13 regions. Regions should gradually internalise tasks linked to the planning process that, during the last years, have been done mainly by external consultants. The degree of differentiation of the ROPs should be assessed, to make sure they reflect regional needs and priorities.
- Further expand the capacity-building activities that the Management Organisation Unit of Development Programmes (MOU) offers to regional MAs and, in particular, to beneficiaries. Develop targeted and dedicated actions to help small municipalities and their institutions to improve their technical, managerial and organisational skills for the implementation of their projects. This needs to be done after a comprehensive review of the training needs of operational staff and managers in regional MAs and an assessment of staff shortages.
- To better target the support, the MOU could also expand the geographical coverage of their taskforces, which are currently present in some areas of Greece, making it easier to address quickly any local requests.

Streamlining the rules and procedures for the management of EU Structural Funds

- Introduce flexibility and differentiation in the regulatory framework depending on the size of projects. Currently, the MCS requires the same amount and type of documentation and licenses, number of approvals, and obligations (e.g. to apply to an "open tender") for large and expensive projects as it does for small and less expensive ones. A more flexible regulatory framework might ensure that resources are used in a more efficient way by responding more effectively to different needs tailoring responses to specific challenges.
- Activate the MCS Network. The National Co-ordination Authority (NCA) needs to activate the MCS network, including actors from all levels to serve as a consultative forum as well as a platform to

share information and experience on critical matters such as system amendments, legal framework amendments and their impact.

- Diagnose the regulatory bottlenecks in the use of EU funds at the country level to identify where simplification and flexibility are needed.

Strengthening the overall multilevel governance system for regional development and public investment

Improving inter-sectoral and vertical co-ordination

- Establish a co-ordination platform (which could be an inter-ministerial committee) to define the territorial development policy priorities of Greece. Setting up a cross-ministerial committee, including subnational actors, on regional development policies and investments would guide and complement the work done at the technical level by the numerous thematic networks and committees. Out of a sample of 27 OECD countries, 20 have put in place a permanent inter-ministerial committee on territorial development issues; Greece is therefore an exception in not having such a body.
- Greece could strengthen and expand the scope of the already existing contracts to transform them into broader "territorial contracts" promoting specific territorial goals and regional development priorities. Greece could follow the example of France that has a long tradition of state-region planning contracts. Contractual multi-year arrangements would also strengthen multi-sector investment approaches that go beyond EU funds.

Making co-ordination across municipalities and regions more efficient

- Regions need to further pro-actively support projects that require cross-jurisdictional co-operation, in particular regarding weaker and rural municipalities. They are the ones that can organise peer learning, offer technical support and act as a political facilitator.
- The central governments can also create financial incentives whereby municipalities can access higher funding amounts for joint projects or shared services.
- Alternatively, Greece can promote co-financing arrangements for projects between the national government and municipal networks. This has been done by Portugal, for example, using multilevel contracts for this purpose.

Building trust among parties

- Pursue the efforts to strengthen transparency. Open data sources need to be redesigned to be more functional and usable. There is a need for more advanced tools mainly for data discovery, data visualisation (e.g. maps and charts) and users' feedback.
- Further develop the national government's website to track the implementation of the National Strategic Reference Framework (NSRF) to make data clearer and useful to understand local issues to support decision-making. This platform could consider all public investments and not only the ones funded through EU funds. Improve the consistency of the data sets so that the name of regional units does not change over time, for example, and so that they are ready to be statistically processed. Use the same "hierarchy" to present data.
- The central level has a key role to play in facilitating data and encouraging its use. For example, many countries in the OECD have digitised their planning documents (e.g. France, the Netherlands). The KOSTRA system in Norway has facilitated "bench-learning" and, by this means, informs policy-making.

Reinforce the administrative capacity of regions and municipalities

- Regions and municipalities should implement strategic workforce planning. For this, they should conduct an adequate and rigorous competency assessment of the capacity gap of municipalities and regions. In this task, it is important to distinguish between the short-term operational dimension and the longer-term strategic dimension.
- To overcome low salaries and attract qualified personnel, Greece could put in place incentives for public administration employees to move to smaller and remote municipalities, that might take the form of career advancements, allowances for housing and transport to personnel relocating.
- Introduce new IT tools or joint e-government platforms to narrow the gaps in capacity across regions or localities and facilitate peer learning. For example, Greece may be inspired by KiTerritorial which is a web-based toolkit developed by the Department of National Planning in Colombia that offers specific instruments to support local leaders in the formulation of their territorial development plans (PDT).
- Greek regions need to take a more proactive role in capacity-building processes to benefit municipalities in a more targeted way. Regions could, for example, directly support municipalities through technical assistance to prepare investment projects or planning instruments. Regions could also take a more proactive role in supporting critical projects that require cross-jurisdictional co-operation and in encouraging peer learning practices. They could also have the mandate to incentivise municipal co-operation for investment projects financed through the national investment programme or EU funds, offering technical support and acting as a political facilitator

Simplifying rules to design and implement regional development policies more efficiently

- Simplify legal checks for certain actions as all municipal and regional authorities' decisions must be legally vetted by the state decentralised authorities which are often viewed as a source of considerable delays and bureaucratic impediments.
- Develop guidance on the most effective and efficient means of reducing regulatory burdens, including licence/permit arrangements, minimising reporting and record-keeping requirements, monitoring/testing requirements and enforcement and inspections procedures.
- Further improve Law 4412/2016 on public procurement. In particular, it could be considered merging stages of the bidding process (dead times) from the notice of the project to contracting. The time required for decentralised administrations to preapprove projects, usually leading to a 1-2 month delay for technical projects, could also be shortened. For further simplification, when the law is amended, a transitional period could be given to correct the standard tender documents.
- Introduce more effective and better-defined time limits into legal bases that might be accompanied by "silent-is-consent" rules, implying that if an authority has not responded, the applicant can assume the request was authorised.

2 Socio-economic trends, growth potential and opportunities

This chapter discusses the socio-economic structure and performance of regions in Greece, with a focus on how the 2008 financial crisis affected economic structures and future regional growth potential. The diagnosis made in this chapter serves as a basis for framing regional policies to set regions on a solid and fast recovery path that can help alleviate the worsening socio-economic conditions brought about by the crisis. The uneven and deep effects of the crisis mean that regional development strategies require not only a substantial increase in economic activity and employment, but also the reallocation of resources to more productive uses. OECD analysis estimates that, between 2009 and 2018, each euro of EU Structural Funds in Greece generated an additional 64 cents of GDP. In this context, the EU funds have been key to supporting public investment and GDP growth in Greece.

Summary

In the aftermath of the financial crisis, Greece experienced the largest recession across OECD countries. While most OECD countries returned to gross domestic product (GDP) growth by 2010, Greece only did so in 2017 (1.3%) and 2018 (2.2%). The crisis and long recovery period had sizable consequences for the economy and its regions so that Greece's GDP is today one-fourth smaller than in 2007. To recover what was lost across all regions, Greece would need to boost its economic growth considerably, especially in lagging regions: growing at average 2014-17 levels means Greece would only return to its pre-crisis level beyond 2050 and some underperforming regions would not recover even within this century.

This chapter discusses the socio-economic structure and performance of regions in Greece, with a focus on how the 2008 financial crisis affected economic structures and future regional growth potentials. The diagnosis made in this chapter serves as a basis for framing regional policies to set regions in a solid and fast recovery path that can help alleviate the worsening socio-economic conditions brought about by the crisis.

In Greece, unique geographical characteristics shape the distribution and access of people and resources across the territory. A mountainous terrain and island geography mean that relatively more people in Greece live in low-density rural areas with less access to cities than in other OECD countries. In fact, the share of people in remote rural areas resembles that of countries with large sparsely populated territories such as Norway and Sweden, with the difference that in Greece most people in remote regions lack adequate access to the Internet. The geographical conditions have also resulted in a high concentration at the top of the urban system, so that almost one out of two people live in one of the two main metropolitan areas, Athens (located in the Attica region) and Thessaloniki (located in Central Macedonia). In between these extremes, medium-sized cities will likely continue losing population to ageing and urban concentration in the next five decades despite recent incoming waves of international migrants.

Against this background, the analysis of the effects of the crisis and long recovery shows a fundamental change in the population composition and productive structure of regions. The loss of half a million people nationwide to outmigration had a much larger negative impact on the share of the working-age population in urban regions including Attica (11% decrease) compared to intermediate and rural regions (4% and 2.5% decrease respectively) between 2000 and 2019. Because migrants were mostly working-age, outmigration also led to an acceleration of the elderly dependency ratio especially in urban regions where, by 2016, there was one elderly person for every three working-age persons.

The productive structure of Greece changed as a response to the shock of the crisis. In the post-crisis period, resources shifted towards tourism-related sectors, allowing island regions to buffer the effects of the crisis in terms of employment and incomes. However, the bulk of sectors declined and regions specialised in manufacturing and construction were badly hurt. The economic decline that followed the crisis was mostly concentrated in Attica and Central Macedonia, where more than half of the near 725 000 jobs lost occurred. Job creation in two island regions relying on tourism was not nearly enough to compensate for the downfall of the two main regions.

Because of the combined effect of population and productive structure shocks, the largest urban regions, Attica and Central Macedonia, showed a remarkable lack of resilience to the negative economic shock compared to other island regions that rely on tourism. Particularly striking is the complete change in the role of Attica that went from leading productivity growth in the pre-crisis period to dragging the recovery in the post-crisis period, despite its strong potential.

Still, urban regions concentrated most of the economic activity in the country in 2017. Attica is the only region that hosts activities that benefit from scale economies and it is the only region with a larger share of Greek GDP (48%) compared to population (35%). The distance between Attica and the rest of the country is large: regions at the bottom produce only half a unit for every unit of GDP per capita produced in Attica. As the largest, most diverse in terms of economic structure and most educated regional economy,

Athens has the potential to generate further scale effects in Attica and Greece. However, with the crisis, Athens lost ground to all other OECD cities of similar size including those over which it held an initial advantage (Barcelona, Manchester and Naples).

Employment recovery is thus key in addressing pressing social issues including low incomes, poverty and inequality across regions. The uneven and deep effects of the crisis mean that regional development strategies require not only a substantial increase in economic activity and employment but also the reallocation of resources to more productive uses. A decade after the crisis, more than half of all part-time employees are in search of full-time positions and the share of unemployed who have not had a job for more than a year is over 40 percentage points higher in Greece compared to other OECD countries. Unemployment rates in regions in Greece are amongst the highest across the OECD and in some regions more than half of young workers are unemployed. Despite the high share of university graduates that place Athens at the level of European capitals like Berlin, investment in research and development (R&D) is low and the innovation performance of regions in Greece is at the bottom across OECD regions.

Since the early 1980s, the European Union Structural Funds (now called European Structural and Investment Funds, ESIF) have provided financing aid to EU member states to promote convergence across Europe's regions. ESIF finance several economic and social areas including public infrastructure and human capital, social policy and public administration. Greece has been a major beneficiary of these funds. Without ESIF, the crisis would have been deeper and the ongoing recovery slower. The results from two different models show that between 2009 and 2017, each euro of EU funds generated an extra 64 cents of GDP, implying a multiplier of 0.64. In this context, the EU funds have been key to supporting public investment and GDP growth. Another study estimates that EU Structural Funds in the programming period 2007-13 boosted Greece's GDP by 2.2% a year by 2015 and by 2023; the yearly impact is predicted to increase to 2.8% (Monfort et al., 2017[1]).

This chapter contains five sections. The first section gives an overview of relevant macroeconomic trends affecting regional performance before and after the economic crisis. The second section describes the distribution of people and economic activity across the Greek territory, highlighting the role of geographical factors in their concentration. The third section analyses the effect of the crisis on regions in terms of demographic dynamics, income and poverty, employment, economic structure and productivity. The fourth section discusses the role of innovation, human capital, environmental and social capital as enabling factors for regional development. The last section discusses the impact of the EU funds on the Greek economy. Beyond immediate responses (more information on www.oecd.org/coronavirus), the medium- and long-term impacts of the recent (February 2020-ongoing) COVID-19 pandemic remain uncertain and will vary between countries and segments of the industry.

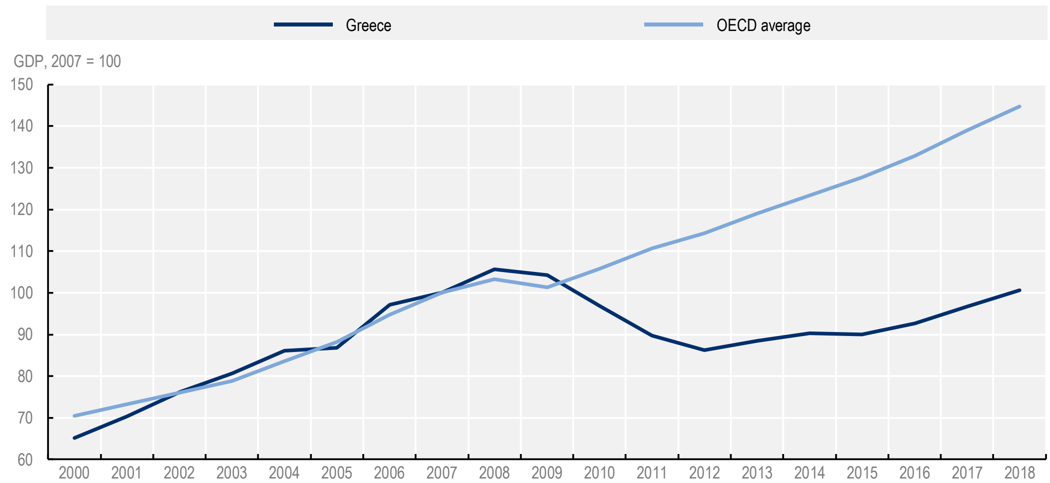
National economic trends framing regional development

Recent macroeconomic indicators show that economic recovery in Greece is within reach but it will take time to materialise. This section analyses the evolution of the main macroeconomic indicators on economic activity, productivity, prices and external performance before and after the economic crisis.

At current growth rates, Greece would recover its pre-crisis GDP level only in 15 years

GDP in Greece grew by 1.9% in 2018, with estimates showing GDP growth at 2.3% in 2019 and 3% in 2020. While this is a positive development, GDP in Greece would recover to its 2007 GDP levels in about 15 years at this growth pace. In 2007, prior to the crisis, GDP in Greece had increased by one-third of its value in 2000, growing at a faster rate than OECD countries (Figure 2.1). With the crisis, GDP levels fell by 24% by 2016 as compared to its peak in 2007. Although GDP subsequently stabilised, by 2018, the economy had a similar size than it had in 2003 and was one-fifth smaller than before the crisis. In contrast, GDP in OECD countries recovered to pre-crisis levels by 2011 and in 2018, was 40% larger than in 2007.

Figure 2.1. GDP in Greece and OECD countries, 2000-18



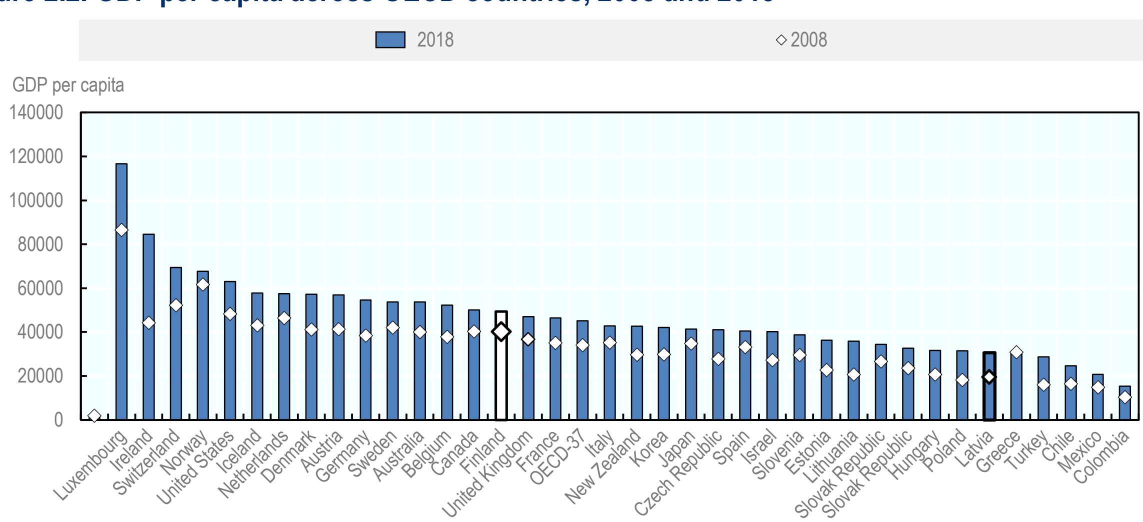
Note: GDP is measured in current prices, constant purchasing power parity (PPPs), 2015 being the reference year, the unit of measure is USD. GDP is normalised to its 2007 level.
Source: OECD (2020[2]), *OECD National Accounts*, http://www.oecd.org/sdd/na/, (accessed on 20 February 2020).

StatLink https://doi.org/10.1787/888934166384

After the crisis, GDP per capita in Greece became the third-lowest among OECD countries

Greece is one of three OECD countries where GDP per capita is lower in 2018 than in 2008. GDP per capita in Greece stood at USD 28 024 in 2018, down from USD 35 538 in 2008. Across OECD countries, only Chile and Mexico had lower GDP per capita levels in 2018. In 2008, Greece ranked slightly behind the OECD average GDP per capita, ahead of Chile, Israel, Korea, Mexico, New Zealand, Portugal, Turkey and Eastern European countries (Figure 2.2). The deep crisis and slow recovery of the Greek economy reflect on the overall life satisfaction of the Greek population, which fell to the lowest levels among OECD countries (Box 2.1).

Figure 2.2. GDP per capita across OECD countries, 2008 and 2018



Note: GDP is measured in constant prices, 2015 PPPs.
Source: (OECD, 2020[3]) *Gross domestic product (GDP) (Database)*, https://data.oecd.org/gdp/gross-domestic-product-gdp.htm, (accessed on 13 August 2020).

StatLink https://doi.org/10.1787/888934166403

Box 2.1. Well-being indicators in Greece

Greece's regions are top-scorers in the OECD for the well-being indicators of health and safety but are among the lowest when it comes to jobs and life satisfaction. Economic outcomes weigh in heavily on the well-being of Greece in multiple dimensions. Greece fares better in health outcomes, safety and work-life balance, according to the OECD Better Life Index, a composite indicator of ten well-being dimensions (Figure 2.3). Yet, subjective well-being is among the lowest in OECD countries, with Greeks grading their general life satisfaction with an average grade of 5.2, compared to 6.5 OECD average.

More than a decade after the crisis, Greece performs below OECD averages in most economic indicators of well-being, including jobs and income. Compared to the OECD average, the share of the working-age population with a job is much lower, about 52% compared to 67%. A large proportion of the unemployed are unemployed long-term and Greeks face 17.4% loss of earnings if they get unemployed, compared to 4.9% across the OECD. Job quality, measured in average wages, is far below the OECD average (USD 25 124 versus USD 44 290), as do household income and net financial wealth.

In terms of well-being indicators, "civic engagement", which measures citizens' participation in the political process, engagement in developing regulations and inequality, Greece has a grade 3.9 out of 10. "Voter turnout" stands at 64% in the last elections, has fallen since 2007 and is lower than 69% average across OECD countries. "Community" is 82.3 and puts Greece at the 36th place out of 38 countries. Greeks are also exposed to high air pollution and lower water quality than the OECD average.

Figure 2.3. Well-being indicators in Greece and OECD countries, 2017

Note: Based on the Better Life Index. Each indicator set is measured by one to four indicators from the OECD Better Life indicator set. Each indicator is normalised between scores of 1 (worst) to 10 (best).
Source: (OECD, 2017[4]), *OECD Better Life Index*, http://www.oecdbetterlifeindex.org/, (accessed on 16 January 2019).

StatLink https://doi.org/10.1787/888934166422

Greece has a low incidence of part-time employment, high total working hours and longer average tenure as compared to other OECD countries

Reducing the costs of labour for firms is a step towards labour retention and slowing down unemployment. However, the crisis period induced structural changes and sectoral reallocation of economic activity on the labour market and therefore created large skill, sectoral and locational mismatches, resulting in high structural unemployment (Tagkalakis, 2016[5]).

Indeed, the labour market in Greece is characterised by a low incidence of part-time employment, high total working hours and longer average tenure as compared to other OECD countries. By 2017, unemployment remains high and employment rates low, more than half of all part-time employees are in search of a full-time position and the share of unemployed who have not had a job for more than a year is over 40 percentage points higher in Greece compared to other OECD countries.

In 2007, 8% of jobs were part-time, while a share of part-time work in the OECD was a double of the share in Greece. The prevalence of part-time employment increased to 11% by 2017, mainly driven by an increase in involuntary part-time employment, as 6.6% of employees would prefer a full-time job instead. Yet, despite the conditions of part-time work improving in recent years, part-time employees still face a penalty in terms of pay, job security, training or promotion (OECD, 2018[6]).

Besides high part-time employment, Greece has one of the highest annual working hours across OECD countries. An average worker in Greece worked 2 018 hours in 2017, the third-largest behind Korea and Mexico and well above the OECD average of 1 759 hours. Since the crisis, the average hours worked per employee declined, while the OECD average has been stable. Long working hours are a sign of labour market rigidities that translate into lower productivity per hour worked.

The average tenure in Greece increased in 2010, which suggest that mostly fewer senior employees were let go during the crisis period and less new hires were initiated. An average Greek employee had worked at their current employer for 12.8 years in 2017. This tenure average is close to other southern countries, including Italy and Portugal, but well above the OECD average of 10.2 years. Long-tenure workers also face a risk of long-term joblessness (OECD, 2018[6]). The average tenure in Greece reached its peak in 2013 as the labour market recovered and new workers were hired, decreasing average tenure.

Labour productivity has steadily declined since 2007

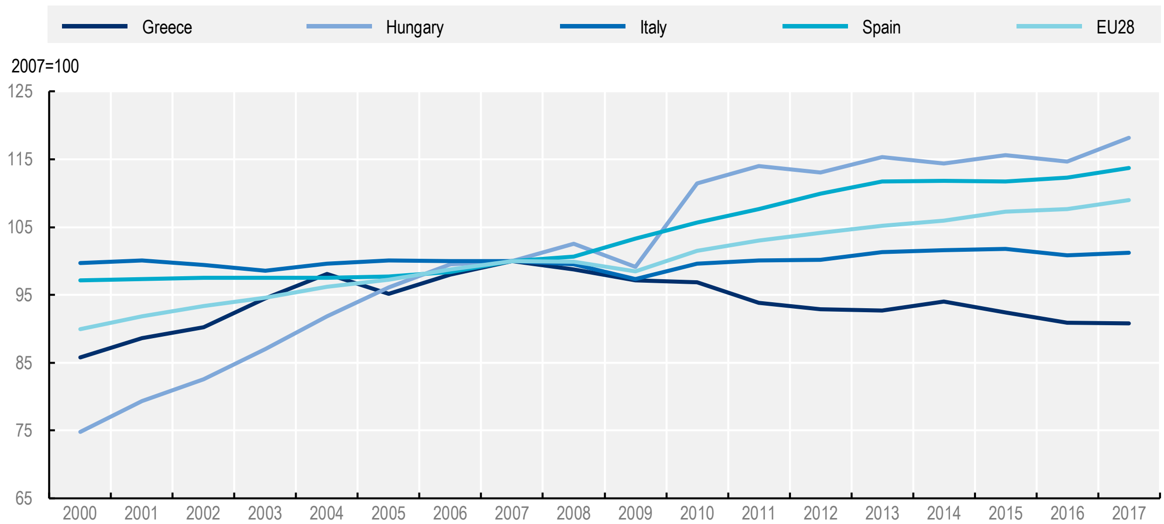
Labour productivity measures the efficiency of labour input with other factors of production in the production process and serves as a benchmark for competitive performance across countries. Potential GDP growth in Greece declined from the early 2000s, due to both falling productivity and employment growth (OECD, 2018[7]). The fall in investments during the crisis has diminished the productive capital in Greece with the capital's depreciation rate higher than the investment rate. Low capital accumulation is also holding back growth in labour productivity and consequently hurting living standards (OECD, 2018[7]).

Greece's labour productivity stayed below OECD average levels during the period 2000-18. Initial levels and growth rate between 2000 and 2008 were comparable to those of Slovenia. However, labour productivity in Greece declined continuously since its peak in 2007. By 2018, it had reached 90% of its pre-crisis level, similar to the level of labour productivity in some Eastern European countries that had substantially lowe productivity in 2000.

Compared to other Southern European countries, labour productivity in Greece increased faster in the period leading up to the crisis. Between 2000 and 2007, Greece improved its productivity by 15%, while productivity in Italy and Spain remained stagnant. After 2007, productivity growth picked up across European countries at a different pace, increasing by about 9% in EU28 countries during the past decade, while it declined in Greece (Figure 2.4).

Figure 2.4. Labour productivity in selected OECD countries and EU28, 2000-17

Gross value-added (GVA) per hour worked, normalised to its value in 2007



Source*:* OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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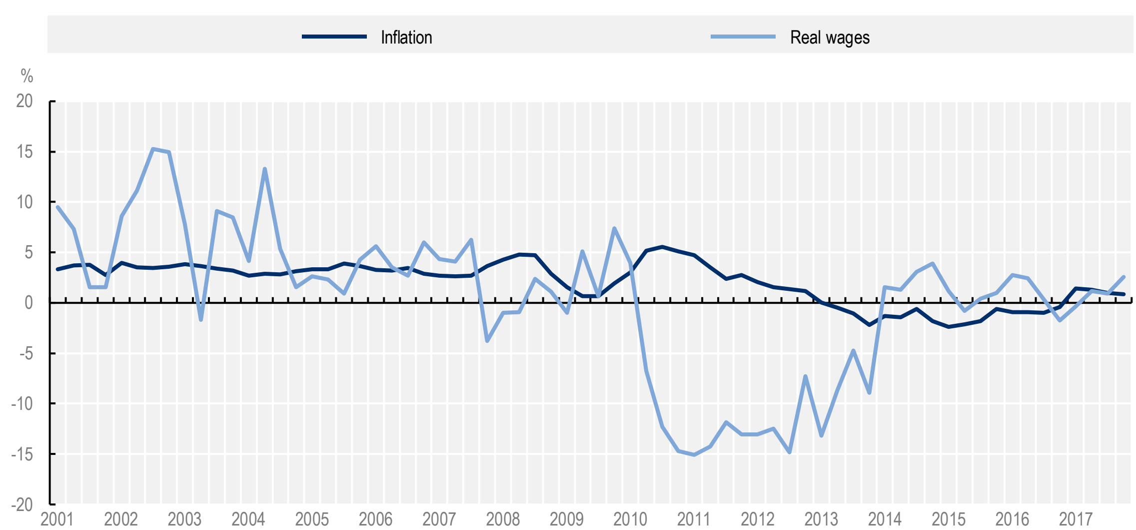
While inflation has recently returned wage levels remain below pre-crisis levels

For most of the post-crisis period, Greece experienced deflation. Consumer prices fell continuously between 2013 and 2016 by 0.8 to 1.7% annually. The deflation trend has reversed since 2017, with prices increasing by 1.1% in 2017 and 0.6% in 2018 (Figure 2.5). Since 2012, annual inflation in Greece has remained low at under 2%. Private consumption has stabilised and investments grew by 10% in 2017, after falling each quarter between 2009 and 2013 by up to 33%.

Figure 2.5. Inflation and real wages in Greece, 2001-18



Note: Real wage growth measured using average wages in USD 2016 PPP.
Source: OECD (2020[9]), *Average Wages, Inflation CPI (indicators)*, https://data.oecd.org/, (accessed on 06 March 2020).

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Despite recent inflation, wage pressure remains moderate. Following a continuous drop between 2010 and 2013, real wages stabilised, growing at an annual rate of 1% in 2018. Compared to their highest level in 2009, real wages were 21% lower at their peak between 2013 and 2018 (at USD 33 763), and 19% lower than in 2007. This contrasts with Italy, Portugal and Spain, where real wages are about the same as they were prior to the crisis.

Wages in Greece are among the lowest across OECD countries. In 2016, a medium-skilled worker in Greece earns as much as a worker with the same skills in Portugal, about USD 8.4 per hour worked. The skill premium for high-skilled workers is about 60% compared to medium-skilled workers, similar to the premium in the United States (60%) and under the premium in Mexico (89%), Turkey (81%), Portugal (77%), Hungary (68%), Poland (68%) and Slovenia (65%). Going from low skill to medium skill increases the hourly wage by about 28% in Greece, which is close to the average skill premium across OECD countries.

Exports recovered but shifted towards medium-low technology goods

External demand gained importance after the crisis following the crash of internal demand. The share of exports in GDP rose from 24% in 2008 to 34% in 2017 (OECD, 2018[7]). The value of exports fell sharply at the end of 2008 and in the first quarter of 2009 (Figure 2.6). Across OECD countries, the value of exports of goods fell by 22% between 2008 and 2009, and together with exports in services recovered to their pre-crisis levels by 2011.

While exports of goods recovered to their pre-crisis level by 2011, exports in services were still below their pre-crisis peak by 2019. Manufacturing goods represent the largest share of the goods exports, while agricultural products are also important export commodities especially for the largest trading partners, as they represented 14% of exports to Italy and 10% to Germany. In contrast, exports in services had not yet reached their pre-crisis peak by 2017. Still, service exports represented more than half of total exports in 2019, making Greece one of the top countries where service sector exports represent the majority of trade. Across OECD countries, only Luxemburg (84%) and Iceland (56%) have a higher share of services in total exports.

Figure 2.6. Exports of goods and services in Greece, 2002-19

Note: Quarterly data. The value of exports is converted to USD and seasonally adjusted.
Source: OECD (2020[10]), *International Trade and Balance of Payments (database)*, http://www.oecd.org/sdd/its/, (accessed on 14 February 2020).

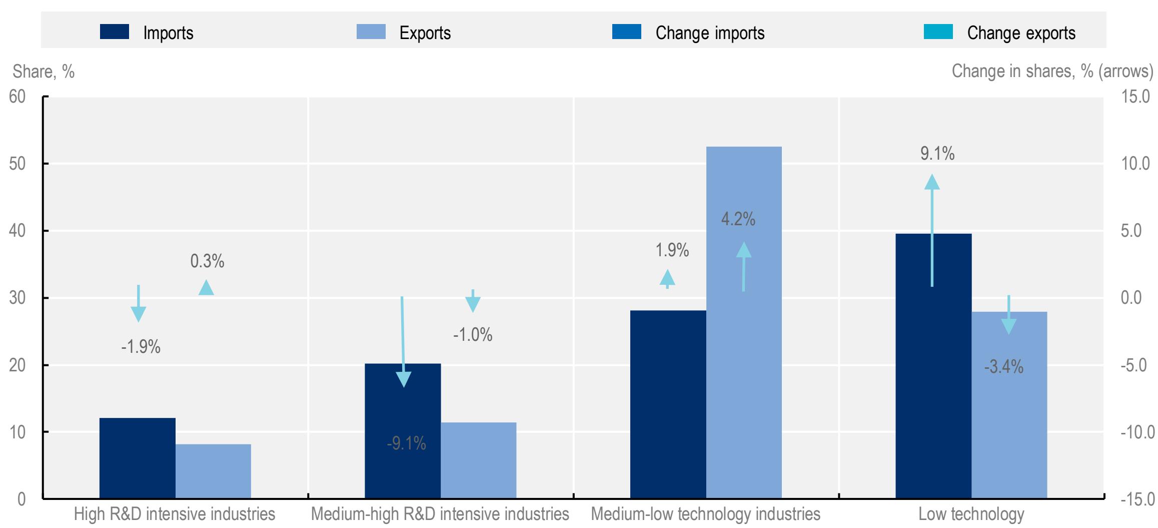
StatLink https://doi.org/10.1787/888934166479

Despite increases in R&D-intensive industries exports, Greece's export portfolio shifted towards medium-low technology exports. Between 2000 and 2017, the share of exports in medium-low technology manufacturing in total primary and manufacturing exports increased by 4.2 percentage points, from 48% in 2000 to 53% in 2017 (Figure 2.7). Almost one-third of 2016 manufacturing exports were in coke and refined petroleum products, followed by food and beverages products (18%) and basic metals (11%). Meanwhile, the share of exports in R&D intensive industries increased from 7.9% to 8.2% while the share of exports from low technology industries fell by 3.4%.

Compared to their exports, Greece imports more from industries with better technologies. Across economic sectors, the largest share of merchandise imports come from mineral fuels, lubricants and related material (23%), followed by machinery and transport equipment (22%), and chemicals (16%) (OECD, 2018[7]). Out of the total value of imports, 12% are from high and 20% from medium-high technology industries.

Figure 2.7. Trade in primary and manufacturing goods by knowledge intensity, 2000-17

Share in exports and imports in 2017 and change over 2000-17



Note: Classification of industries by knowledge intensity is defined by Eurostat.
Source: OECD (2019[11]), *Industry and Services (database)*, https://www.oecd.org/statistics/data-collection/industryandservices.htm, (accessed on 20 February 2019).

StatLink https://doi.org/10.1787/888934166498

The distribution of people and economic activity across regions

Because of its idiosyncratic features, geography is an important determinant of local economic outcomes in Greece. Mountainous and island geographical features are behind high population concentration in the two main metropolitan areas and the existence of sparsely populated in large parts of the territory. This section discusses main geographical features and administrative divisions of Greece, the distribution of the population across the territory and inequalities in access to cities. It then continues with a description of the distribution of economic activity, which mirrors the distribution of the population across the territory. The next section will discuss the regional dynamics before and after the crisis.

Unique geographic features shape the distribution of people across regions

Greece has a unique mountainous and island geography

Greece is located in the south-eastern part of Europe, occupying almost one-quarter of the territory of the Balkan Peninsula and two smaller peninsulas of Khalkidhiki and Peloponnese. The country borders Albania, North Macedonia, Bulgaria in the north and Turkey in the east. The Aegean Sea surrounds the east of the country, the Ionian Sea the west and the Mediterranean Sea the south.

Greece has the largest coastline in Europe and the 11th longest coastline in the world at 13 676 km in length, with around 6 000 islands[1] that represent about 20% of the national territory, out of which only 227 are inhabited. The largest islands are Crete, Euboea, Lesbos and Rhodes. The remaining islands are at most two-thirds of the size of Rhodes, with 27 islands spreading over an area of at least 100 km² (see Box 2.2).

Seas and coastal areas play a very important economic and strategic role for Greece and Greece's maritime and blue economy have great potential for innovation and growth. In 2018, the blue economy in Greece counted 14.2% of all jobs and about 5.2% of GVA. Coastal tourism and maritime transport were the larger contributors with 13% of the GVA and 3.8% of the employment, while marine living resources generated around 7% of jobs and GVA (EC, 2020[12]). Located on the crossroad of Africa, Asia and Europe, Greece holds a strategic position in global freight transport. Most of the trade in goods by volume and value is exchanged using cargo. The port of Piraeus in Athens is one of the top ten European ports in number of cargo units by 2017. In addition, it is one of the fastest-growing major European ports; the number of cargos handled more than doubled between 2011 and 2017, in line with the increase in exports in the same period. Passenger ports are also busy. In 2015 more than 8 million passengers passed through the port of Piraeus, a volume only surpassed by the ports of Calais, Dover, Helsinki, Stockholm and Tallinn in Europe. Yet, in 2015, the port of Piraeus served 25% fewer passengers than in 2010. The port of Perama, the western terminus of Athens' port, embarked and disembarked over 7 million passengers, falling by 45% between 2010 and 2015 (Eurostat, 2015[13])

Box 2.2. National administrative divisions, island groupings and OECD regional typology

Greece is a unitary country with a two-tier sub-national system. The local government structure is represented by 325 municipalities (dimos) and 13 regions. This system is in place since the 2010 Kallikratis reform, replacing a previous organisational structure of 1 033 municipalities and communities and 54 prefectures. The average population of a municipality is 33 410 inhabitants (Brezzi et al., 2011[14]). The municipalities are further divided into 6 133 local communities (with less than 2 000 inhabitants) and municipal communities (with more than 2 000 inhabitants). The General Secretary appointed by the Ministry of the Interior leads seven deconcentrated state administrations. Greece is divided into 74 regional units for administrative purposes.

The only official definition of urban areas and rural areas is the definition of the Hellenic Statistical Authority (in the Statistical Yearbook of Greece 2009-10). It defines an urban population as the population of municipal/communal departments in which the largest population centre has 2 000 or more inhabitants; and rural population as the population of those municipal/communal departments in which the largest locality has less than 2 000 inhabitants.

Moreover, there is no clear official medium-sized cities in Greece. A population of 50 000 inhabitants is used as a threshold for medium-sized cities in Law 3852/2010 for Local Administration. Cities with a population of between 2 000-10 000 inhabitants are considered very small (previously semi-urban) and from 10 000-50 000 are considered small to medium.

Islands are grouped into seven clusters. Crete with its surrounding islands constitutes the administrative region of Crete. The Argo-Saronic Islands spread near Athens in the Saronic gulf and the administrative region of Attica. Euboea is located in Continental Greece. The North Aegean islands are located in the northeastern Aegean Sea near the west coast of Turkey. The North Aegean islands belong to the administrative region of North Aegean, with the exception of Samothrace and Thasos , which are administratively attached to the Eastern Macedonia region. The third-largest Greek island, Lesbos, is also located in this cluster. Islands in the southern part of the west Turkish coast are labelled Dodecanese islands and include Rhodos. The Cyclades is a dense cluster of islands in the central part of the Aegean Sea. The Dodecanese islands and Cyclades compose the administrative region of the South Aegean islands. Sporades is a group of islands in the Aegean Sea near the coast of Euboea in the region of Thessaly, and finally, the Ionian Islands are located in the west in the Ionian Sea. The Ionian Islands constitute the region of the same name except for the island of Kythera, which is administratively attached to Attica.

The regions in OECD countries are classified into two territorial levels that reflect the administrative organisation of the given country. Greece has 13 large regions (TL2) and 52 small regions (TL3). TL2 regions correspond to 13 Greek regions formed by the Kallikratis reform. TL3 regions correspond to regional units and a combination of regional units. According to the OECD regional typology, out of 52 TL3 regions: 8 are predominantly urban (PU), 15 are intermediate (IN), 3 are predominantly rural close to a city (PRC) and 26 are predominantly rural remote (PRR). Such typological classification is useful for comparison of indicators across countries. More details on OECD regional typology can be found in (Brezzi et al., 2011[14]).

Source: (Brezzi et al., 2011[14]), "OECD Extended Regional Typology: The Economic Performance of Remote Rural Regions", https://dx.doi.org/10.1787/5kg6z83tw7f4-en.

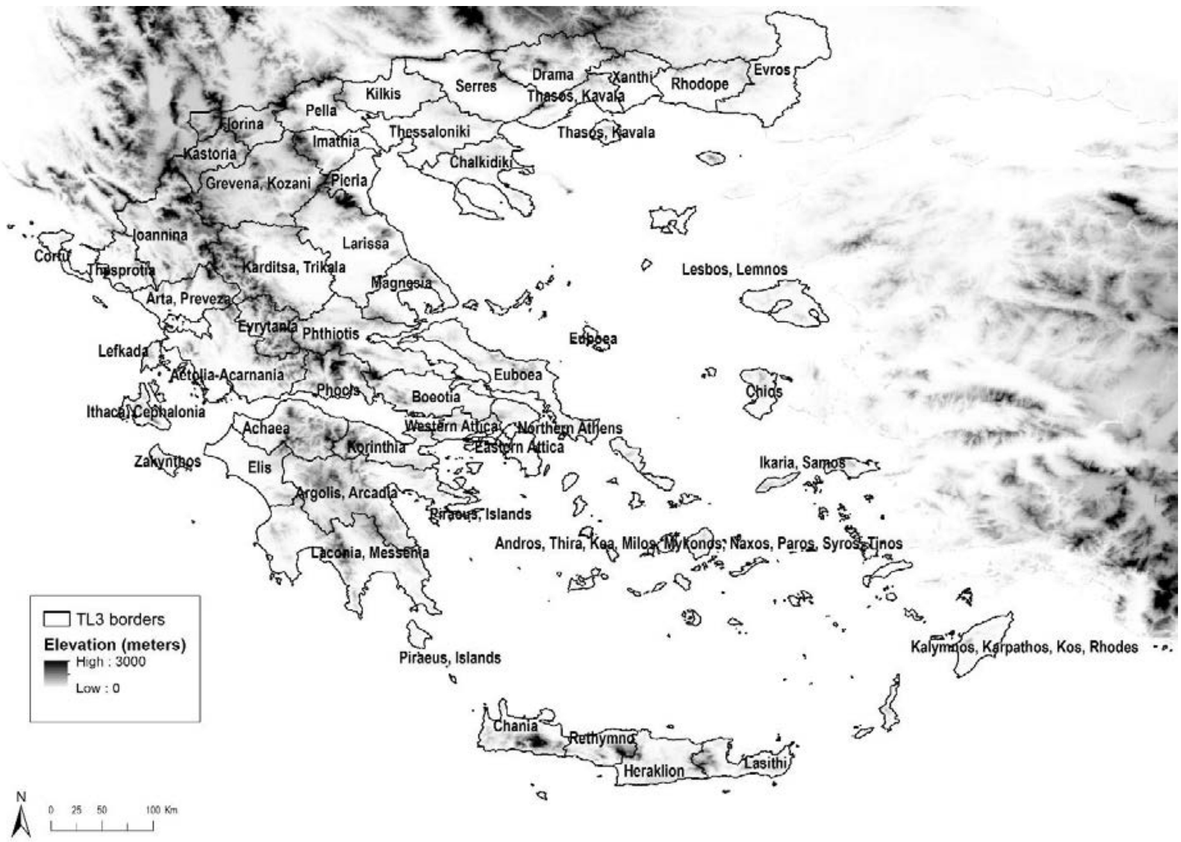
Most of the Greek territory is mountainous. The Pindus range, an extension of the Dinaric Alps, spreads across Greece from the northwest to the southeast. Another part of the same mountain stretches across the Peloponnese region and the Aegean Sea under water, forming many of the islands. The Rhodope Mountains is another mountain range at the border with Bulgaria. The highest peak is Mount Olympus at 2 918 m above sea level. The Central and Western regions also contain many mountainous peaks and canyons. Forests spread across the eastern part of Greece. Central Macedonia and Thessaly territories contain lower elevation areas (Figure 2.8).

In Greece, relatively more people live in rural areas compared to other OECD countries

The population of Greece was 10.72 million in 2019, which places it at the 18th place in the ranking of the most populated OECD countries. Compared to OECD countries, predominantly urban regions in Greece contain a smaller proportion of people (45% versus 48%) and land (2.9% versus 6.1%); intermediate regions contain a smaller percentage of people (23% versus 27%) and a larger percentage of land (25% versus 11%); and predominantly rural regions contain a larger percentage of people (32% versus 25%) and a smaller percentage of land (72% versus 83%) (Figure 2.9, see Box 2.2). The share of the population in urban regions in Greece is comparable to countries of similar population size such as Portugal (47%) and Sweden (50%).

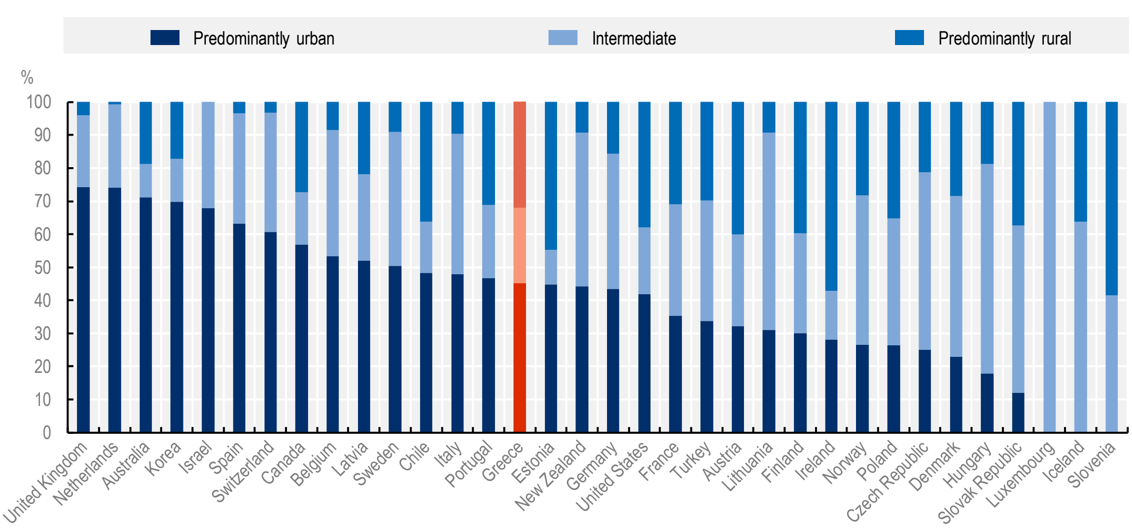
Out of 3.4 million people living in predominantly rural regions, 3 million live in rural remote regions, making Greece the country with the second-largest share of the rural population in remote regions across OECD countries (Figure 2.10), with levels similar to countries with large areas relative to population, such as Iceland and Norway.

Figure 2.8. Elevation in Greece and TL3 administrative divisions



Source: Grid elevation tiles obtained from Amazon Web Services. For a complete list of sources, see https://github.com/tilezen/joerd/blob/master/docs/data-sources.md.

Figure 2.9. Population shares by regional typology across OECD countries, 2019



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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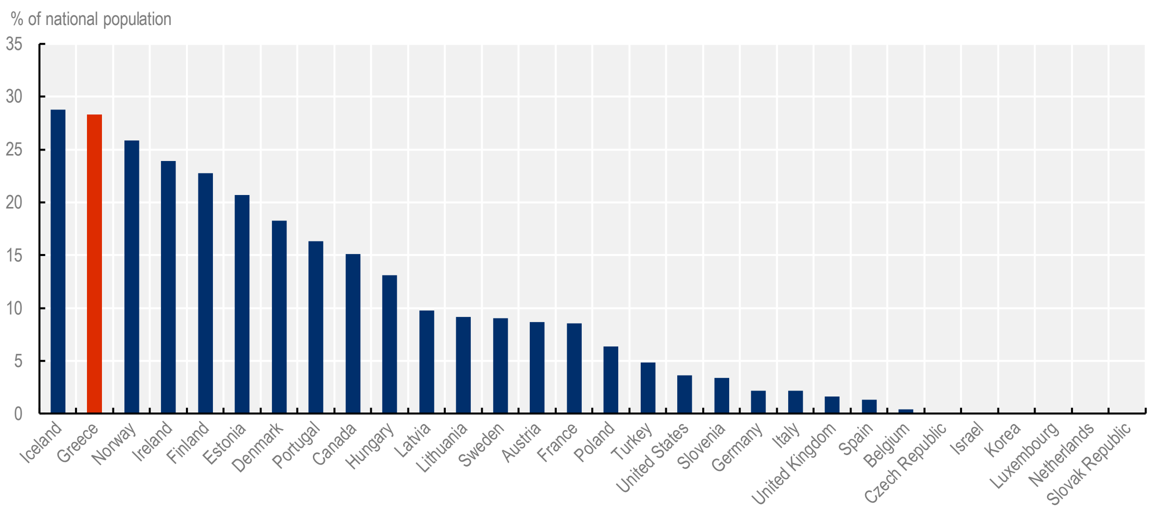
Figure 2.10. Population in remote rural TL3 regions across OECD countries, 2019



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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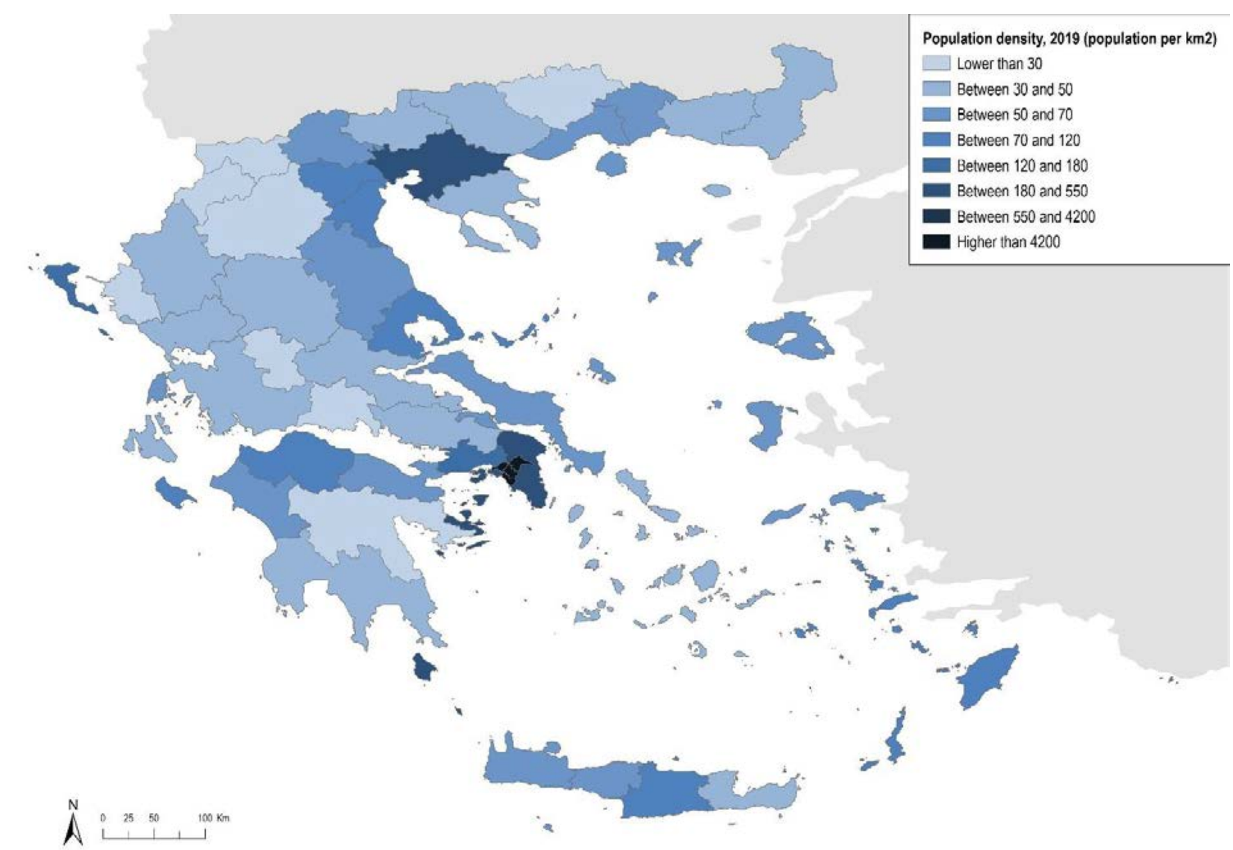
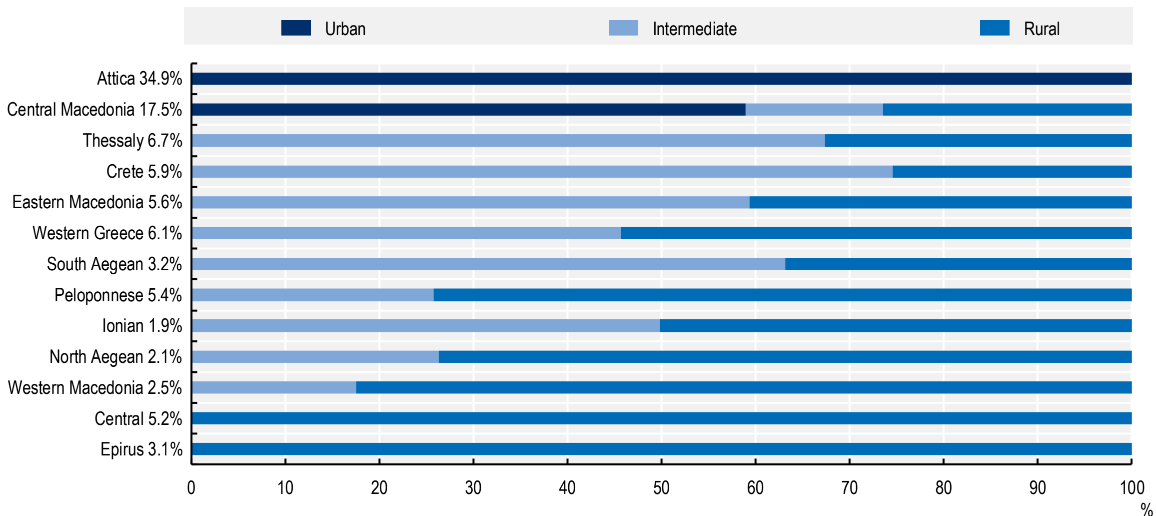
Figure 2.11. Population density in TL3 regions in Greece, 2019



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

The mountainous and island geography results in relatively low and widely varying population density levels across the Greek territory. All urban small regions belong to the two main large regions of Greece that concentrate more than half of the country's population: Attica, home to the capital Athens, and Central Macedonia, home to Thessaloniki, the second-largest city. Meanwhile, Epirus and Continental Greece are entirely composed of predominantly rural regions; the North Aegean, Peloponnese and Western Macedonia regions all have more than 73% of their population living in rural remote small regions.

Figure 2.12. Distribution of the population in Greece by OECD regional typology (TL3), 2019



Note: The country's distribution of population among regions is listed next to the region's name. The bars indicate the percentage of the population living in TL3 regions classified into three types of regions according to the OECD regional typology.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

StatLink https://doi.org/10.1787/888934166555

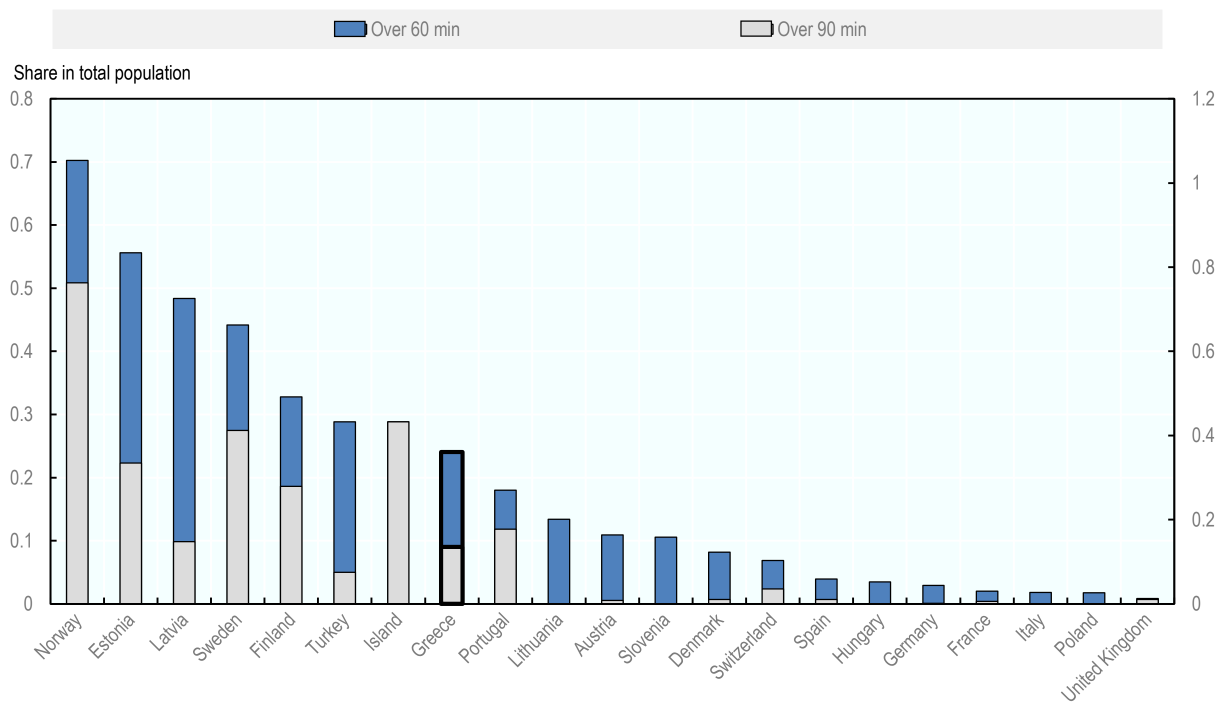
The level of access to cities in Greece is comparable to that of countries with large sparsely populated regions

The proportion of people with relatively low access to a city in Greece is high compared to OECD countries. People in mountainous areas and small islands need considerable travel time to reach the closest city: about a quarter of the population in Greece lives at least a 60-minute drive from a populated centre with 50 000 inhabitants or more (Figure 2.13). Across OECD countries, this is comparable to the share of population distanced from a city in sparsely populated countries such as Canada or Iceland.

About 1 million people in Greece (approximately 973 000) must travel at least 90 minutes to reach the nearest city. Some populated areas do not have access to a city even within two or more hours of travel. It takes more than six hours on average to reach the nearest town from islands in the South Aegean region, almost three hours from the Ionian Islands region and over two hours from the North Aegean and Peloponnese regions. These differences in accessibility highly influence the incidence of seasonal activities across the territory (see Box 2.3).

Accessibility to towns and cities matters for a number of reasons. Larger agglomerations have more dynamic and diversified economies and a greater range of public and private services available, including specialist services that are unlikely to exist in smaller communities (e.g. healthcare specialists and post-secondary education institutions). In contrast, regions with more limited accessibility – like Greece's many islands – face higher transportation costs and seasonal transport variability. Moreover, many islands are poorly connected to core energy infrastructure and obtain their electricity primarily from inefficient, expensive and polluting diesel generators (Roinioti and Koroneos, 2019[15]).

Figure 2.13. Share of the population by accessibility to a city, 2015



Note: Accessibility is measured as the median time in minutes to travel from the TL3 region to the closest town or city with at least 50 000 inhabitants. The accessibility to cities grid as described in Weiss, 2018[16] is used to calculate the median TL3 time to the closest city across grid-cells that fall within TL3 boundaries A city is defined as an urban centre in the GHSL SMOD layer, that is, "contiguous cells with a density of at least 1 500 per km^2 or a density built up greater than 50% and a minimum population of 50 000 inhabitants" (Weiss, 2018[16]). Travel times are based on an impedance travel grid capturing the availability of roads, railroads, waterways and topographical conditions.
Source: Calculations based on Weiss, 2018[16] using the Global Human Settlement Layer (2015).

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Box 2.3. The seasonal economy of Greek islands

During the summer period, Greek islands are relatively well connected but transport options diminish in the winter, posing significant challenges to access to services and public goods. About 12% of the total number of subsidised ferry routes provided their services less than 52 times a year and 22% of routes are served exactly 52 times per year. About 10% of the routes have at least a daily service on average over the year (Angelopoulos, Chlomoudis and Papadimitriou, 2013[17]) The ferry schedule changes in the winter, when ferry frequency drops to two times per week. The case of the island of Anafi in the South Aegean with 271 inhabitants during the wintertime and up to 2 000 in the summer illustrates the situation: the only way to get to Anafi is maritime transport, which takes 19 hours from Athens and much longer in winter months when the ferry frequencies drop.

Regarding air transport, there are 39 airports in Greece, including 15 international, 5 serving 85% of the total air traffic. About three-quarters of tourist trips are made via air transport (ECORYS, 2007[18]) The

South Aegean region has at least ten national and international airports, the North Aegean five and the Ionian Islands four.

The remaining islands that do not have an airport must rely on the ferry connections. As the cost of serving an island can be significant, ferry stops are subsidised by the national government. Public service obligation ensures transport services necessary to service provision in areas with lack of commercial potential, in concordance with the EU Charter of Fundamental Rights (Article 36) that argues for access to services of general economic interest to promote social and territorial cohesion of the union. In 2011, public service obligation services subsidised 87 routes out of which 56 were inter-island connections.

Source: (Angelopoulos, Chlomoudis and Papadimitriou, 2013[17]) *Cost Assessment of Sea and Air Transport PSO Services: The Case of Greece;* (ECORYS, 2007[18]), *Study on Strategic Evaluation on Transport Investment Priorities under Structural and Cohesion Funds for the Programming Period*, http://www.ecorys.com.

The lack of physical access in Greece is not balanced with higher Internet access. Although access to services improved between 2006 and 2017, Greek regions remain among the bottom regions in terms of broadband Internet access. In Attica, the most economically advanced region, only 59% of households have access to broadband Internet. This level is comparable to regions in Chile, Mexico, Turkey and some, mostly remote, regions in Israel, Japan, New Zealand, Poland and the United States.

Most of the urban population in Greece is concentrated in two metropolitan areas

The share of urban population living in metropolitan areas in Greece stands out in comparison to other OECD countries. More than half (57%) of country inhabitants live in functional urban areas (hereon called cities), distributed into: 33% in a large metropolitan area; 10% in a metropolitan area; 6% in medium-sized cities; and 8% in small cities (Table 2.1 and Figure 2.14). In comparison, 39% of the OECD population lives in large metropolitan areas, 16% in metropolitan areas, 11%, in medium-sized cities and 4% in small cities. Besides small countries with no medium-sized cities (Estonia, Latvia and Luxemburg) across OECD countries, only Korea has a smaller share of the population in medium-sized cities (5%) compared to Greece (OECD, 2018[19]). Medium -sized cities in Greece are also smaller than what the rank-size rule of city size would predict (see Box 2.4).

Table 2.1. Number of functional urban areas (FUAs) and population share by size category, Greece, 2017

FUA category (size range)	Number	Share of national population (%)
Large metropolitan area (over 1.5 million inhabitants)	1 (Athens, 3.5 million inhabitants)	33
Metropolitan area (500 000 to 1.5 million inhabitants)	1 (Thessaloniki, 1 million inhabitants)	10
Medium-sized (250 000 to 500 000 inhabitants)	6	6
Small (50 000 to 250 000 inhabitants)	6	8
Total	14	57

Source: OECD (2019[20]), *Functional Urban Areas*, http://www.oecd.org/cfe/regionaldevelopment/Greece.pdf (accessed on 28 July 2020).

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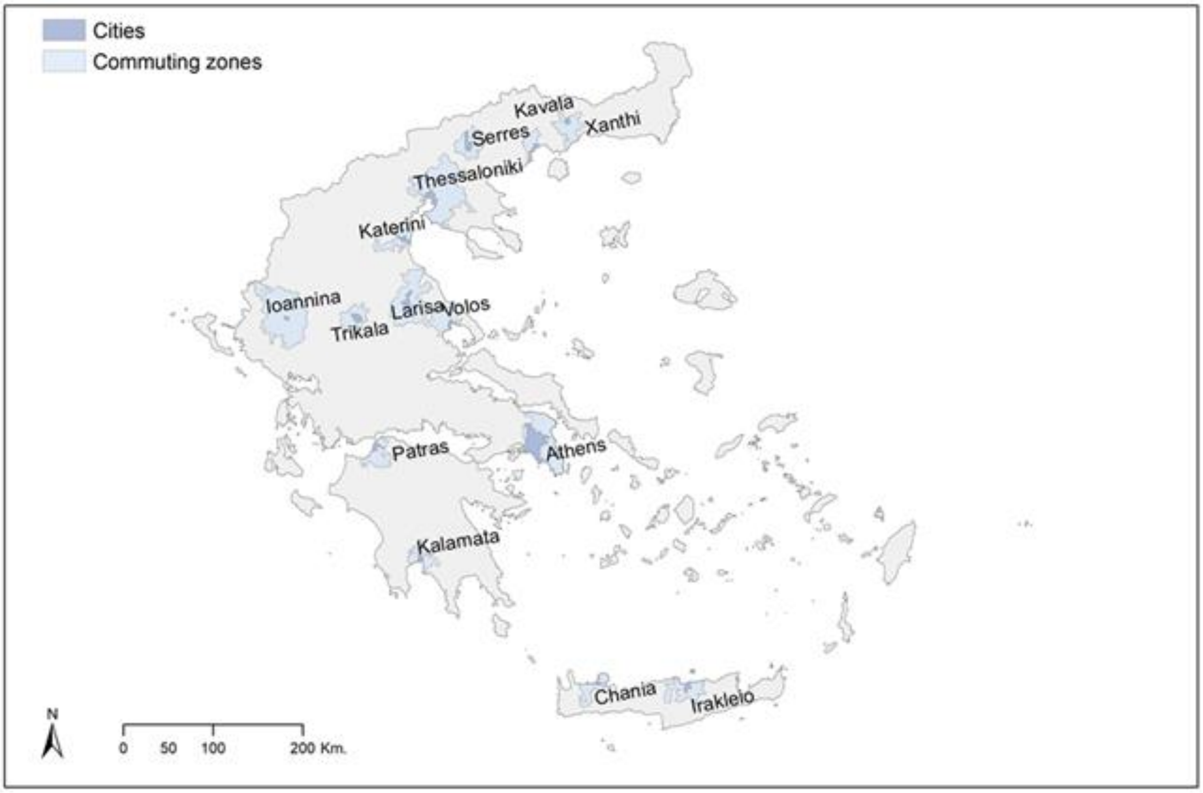
Figure 2.14. Functional urban areas in Greece



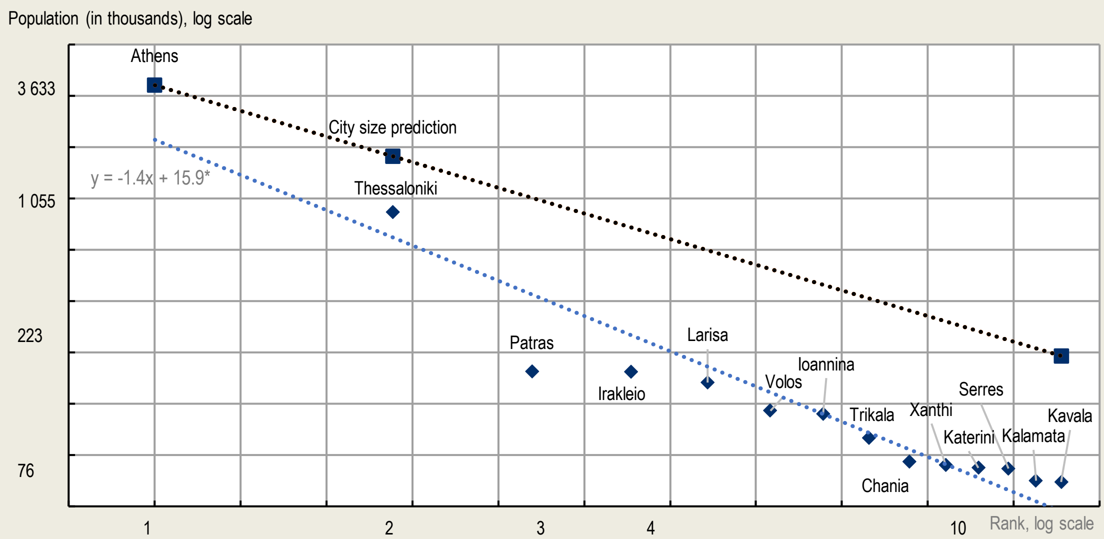
Source: OECD (2019[20]), *Functional Urban Areas*, http://www.oecd.org/cfe/regionaldevelopment/Greece.pdf (accessed on 28 July 2020).

Box 2.4. Rank-size rule applied to cities in Greece

Medium-sized cities in Greece seem to be under-sized

The city size distribution in Greece compared to a rank-size rule shows that middle-size cities in Greece could potentially host a larger share of the urban population. According to the rank-size rule of the cities (Zipf's law), the largest city is usually twice the size of the second-largest city, with this relation continuing linearly. For Greece, a graphic representation of cities with more than 75 000 inhabitants shows that the smaller cities have a population under the rank-size rule prediction. A slope smaller than minus one is indicative of primacy of the main city, Athens. Thessaloniki, which is less one-third of the size of Athens, would potentially host another 760 000 inhabitants for a perfect rank-size rule match. The gap between Thessaloniki and the third-largest city is even larger. Patras has only slightly more than one-fifth of Thessaloniki's population, suggesting that it would be able to host another 300 000 people.

Figure 2.15. City size distribution in Greece, 2017



Note: Cities refer to functional urban areas. Prediction is estimated given the size of Athens. The linear fitted lower line takes all functional urban areas.
Source: OECD (2019[20]), *Functional Urban Areas*, http://www.oecd.org/cfe/regionaldevelopment/Greece.pdf (accessed on 28 July 2020).

StatLink https://doi.org/10.1787/888934166612

Intermediate and rural regions will shrink in the next five decades

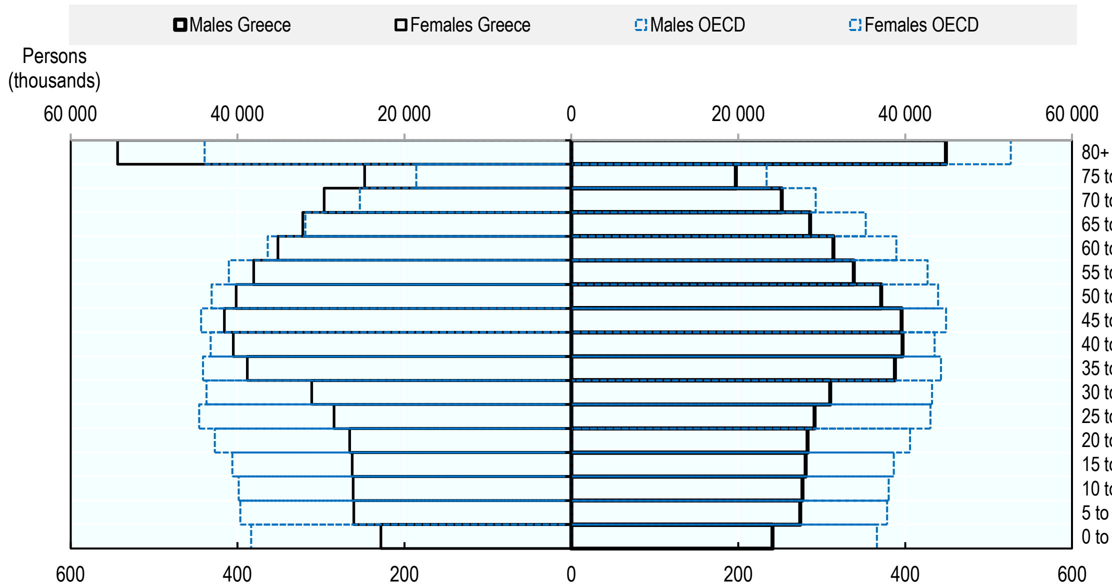
Greece's population is ageing – a megatrend that is common across many OECD countries. The percentage of people of 65 years of age or more is 24%, about 4 percentage points above the value for OECD countries, and has a similarly balanced distribution between females (25%) and males (22%) to OECD countries (21% females versus 18% males) (Figure 2.16). Low fertility rates have affected the proportion of young people that could potentially join the labour force within the next decade: in Greece, the proportion of people in the 0-10 age bracket is 14% whereas across OECD countries it is 17%. In turn, the elderly population increased by about 21% while the working-age population shrank by 6% between 2001 and 2017.

Intermediate and rural regions are projected to experience considerable population losses between 2015 and 2060, while population levels in urban regions are projected to remain relatively stable (Figure 2.17). Population levels in intermediate regions will decrease from approximately 2.5 million people in 2015 to approximately 1.5 million in 2060, while rural regions are projected to shrink from about 3.5 million to about 2 million.

Meanwhile, international migrants residing in Greece are mostly concentrated in Athens. According to the latest population census, in 2011, the share of foreign residents from non-EU and EU countries in the total population was 9% and 3% respectively. Besides Attica, foreign residents also cluster in Northern Greece, Central Macedonia and Continental Greece (Figure 2.18).

Figure 2.16. Population distribution by age group in Greece and OECD countries, 2018

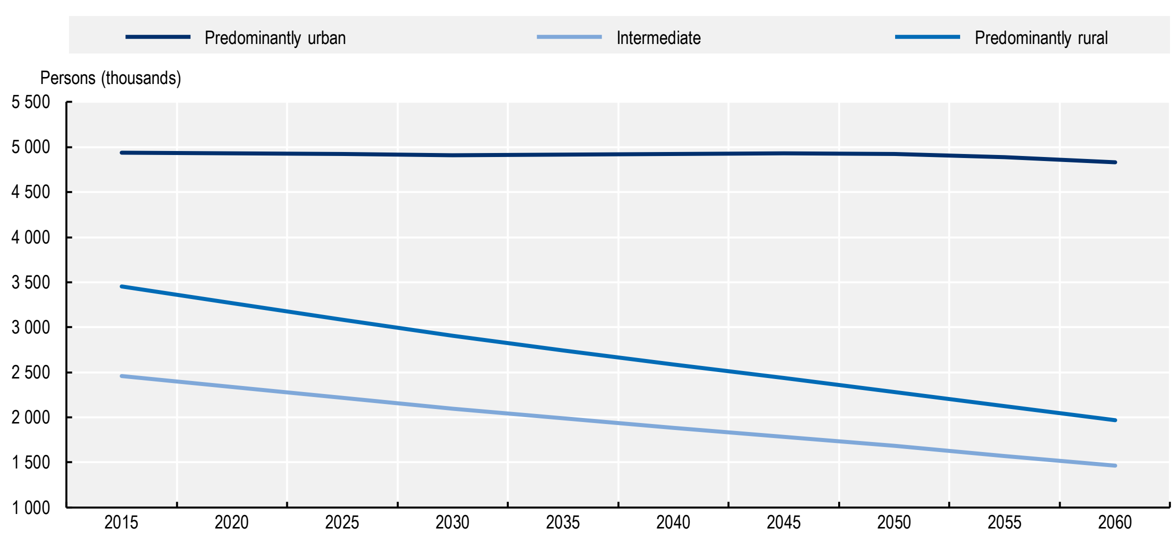
Secondary axis used for OECD values (number of persons, thousands)



Source: OECD (2020[21]), *Demography and Population (database)*, https://data.oecd.org/pop/population.htm, (accessed on 18 February 2020).

StatLink https://doi.org/10.1787/888934166631

Figure 2.17. Population projections by type of TL3 region in Greece, 2015-60



Source: Eurostat (2019[22]), *Population Projections*, https://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data, (accessed in February 2019).

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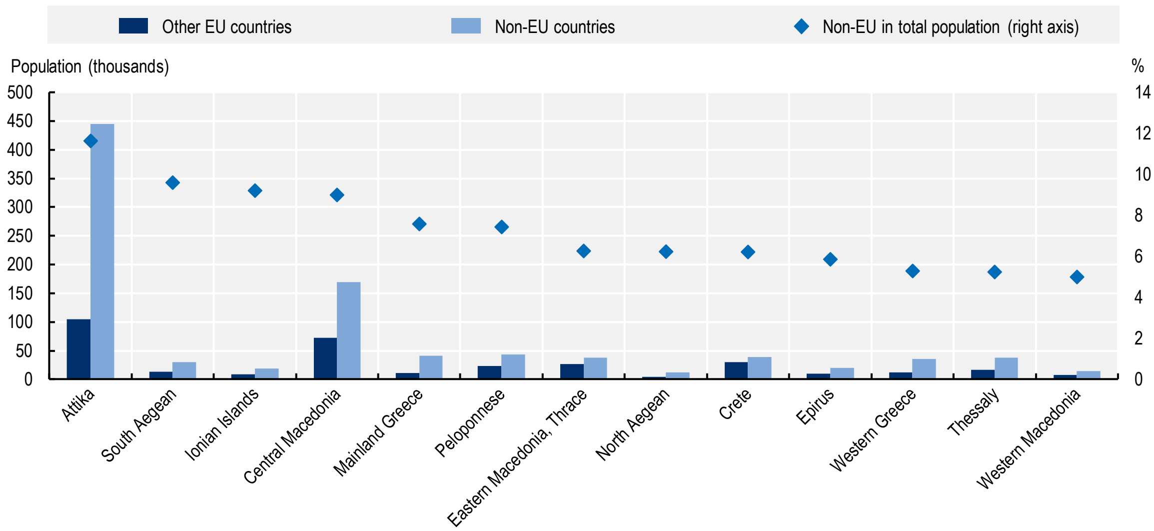
Figure 2.18. Regional distribution of immigrants by country of origin in Greece, 2011



Note: Analysis performed at TL2 level; The OECD migrant definition includes temporary and permanent migrants with visas, asylum seekers and undocumented migrants. Although this category has a diverse composition, generally speaking, it is a vulnerable group at high risk of poverty, facing unemployment, with no or limited access to services, including the financial and health system.
Source: (Eurostat, 2019[23]), Migration and migrant population statistics (Database), https://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics, (accessed 1 March 2019).

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Economic activity concentrates in urban regions

Attica is the only region in Greece that contributes a larger share of national output compared to the population

Higher productivity of factors arising from scale economies and agglomeration effects allow large urban conglomerations to produce more output proportional to their populations (OECD, 2015[24]). Attica concentrates almost half (47%) of the country's GDP, above its share of the population (35%) and employment (36%) (Table 2.2). In contrast, the second largest region, Central Macedonia, concentrates a larger share of the population (17%) relative to GDP (14%) and about the same share of employment (17%).

Attica is the only region in Greece with a substantial presence of industries with higher scale economies. The region concentrates the largest percentage of firms in the country (27%), absorbs the bulk of total turnover (65%) and has much higher average firm sizes compared to other regions (47 employees per firm versus an average of 14 across regions). In contrast, Central Macedonia, the second region in importance, concentrates 19% of firms but only 11% of turnover and has an average firm size of 12 employees per firm. Within the region of Attica, the sector with the largest employment-to-size ratio is monetary intermediation (where over 45 000 people work in 57 firms), followed by the manufacture of refined petroleum products and temporary employment agency activities.

Regions outside Attica and Central Macedonia have much thinner economic activity bases, composed of activities with much smaller turnover and average size. Attica concentrates 6 times more employment, 3 times more firms and 20 times more turnover, and has 35 workers more per firm on average compared to Thessaly, the third region in importance. The gap with the smallest region in terms of population, the

North Aegean, is even more staggering: Attica concentrates 18 times more employment, 10 times more firms and 89 times more turnover, and has 42 more workers per firm on average.

Table 2.2. Population, employment, GDP, firms and turnover shares, and average firm size across TL2 regions in Greece, 2019

Percentage of total national value

TL2 region	Population (% national)	GDP (% national)	Employment (% national)	Firms (% national)	Turnover (% national)	Average firm size (employees per firm)
Attica	35	47	36	27	65	47
Central Macedonia	17	14	17	19	11	12
Thessaly	7	5	6	9	3	12
Western Greece	6	5	6	7	3	8
Crete	6	5	6	7	4	7
Eastern Macedonia, Thrace	6	4	6	5	2	11
Peloponnese	5	4	5	5	3	9
Continental Greece	5	5	5	5	2	8
Epirus	3	2	3	3	1	29
South Aegean	3	3	3	4	2	7
Western Macedonia	2	2	2	2	1	11
Ionian Islands	2	2	2	3	1	10
North Aegean	2	1	2	3	1	5

Note: Average firm sizes calculated as weighted averages from small region-NAEC 3-digit sector values, with employment used as weight.
Source: Population (2019), GDP (2018) and employment (2018) come from OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020); employment and firms come from Hellenic Statistical Authority (2016[25]), *Statistical Business Register*, http://www.statistics.gr/en/statistics/-/publication/SBR01/.

StatLink https://doi.org/10.1787/888934166688

Manufacturing activity clusters in small regions close to metropolitan areas

Higher-level services that require agglomeration economies tend to show high levels of concentration in metropolitan areas, while resource-intensive sectors tend to show large concentration near natural resources. The regional specialisation index measures the extent to which an economic sector is over- or under-represented in comparison to the national sectoral distribution. Sectors that use more mobile resources and that do not rely on specialised resources tend to show regional specialisation indices close to one, so that the share of the sector in the region is close to the national average.

The regional specialisation index shows that, indeed, higher-level services are overrepresented in Attica, including information and communication, finance and professional, scientific and technical sectors (Table 2.3). On the other hand, natural resources guide the specialisation in mining and energy of Western

Macedonia in the northwest, Continental Greece, and Peloponnese in the south, and in tourism in the regions of the South Aegean and the Ionian Islands, where tourism, wholesale and retail trade, repairs, transport, accommodation and food services, contribute to over 50% of value-added.

Specialisation in manufacturing coincides with proximity to the two main metropolitan areas, Athens and Thessaloniki. In Continental Greece, located north of Attica region, manufacturing accounts for 27% of the value-added, 17 percentage points over the national average. Peloponnese, also bordering Attica, as well as the northern regions of Thessaly, Eastern and Central Macedonia – where Thessaloniki is located – also have higher than average shares of manufacturing in GVA.

Table 2.3. Regional specialisation in industries in Greece, 2017

Regional share of GVA of an industry as a multiple of the national average

	Agriculture, forestry and fishing	Mining, energy, electricity, water supply	Manufacturing	Construction	Distr. trade, transport, accom., food serv. activities	Information and communication	Financial and insurance activities	Professional, scientific and technical activities	Administrative and support service activities	Other services
Attica	0.09	0.62	0.84	0.79	0.98	1.57	1.43	1.39	0.94	0.92
North Aegean	1.34	0.82	0.40	1.33	0.98	0.55	0.71	0.63	1.57	0.88
South Aegean	0.63	1.05	0.23	1.54	2.04	0.28	0.50	0.72	0.69	0.94
Crete	1.71	0.92	0.59	1.40	1.45	0.55	0.70	0.87	0.88	1.11
Eastern Macedonia, Thrace	1.92	1.31	1.17	1.05	0.85	0.49	0.63	0.60	1.37	0.88
Central Macedonia	1.37	0.74	1.30	1.05	0.98	0.63	0.73	0.83	1.16	1.15
Western Macedonia	2.15	8.27	0.55	1.10	0.46	0.32	0.50	0.38	0.92	0.67
Epirus	2.06	0.71	0.87	1.80	0.91	0.44	0.69	0.64	1.27	1.06
Thessaly	2.87	0.57	1.37	1.11	0.77	0.31	0.52	0.43	1.29	1.19
Ionian Islands	1.02	0.49	0.24	1.25	1.87	0.30	0.46	0.82	0.72	1.26
Western Greece	2.65	0.75	0.92	1.24	0.88	0.71	0.60	0.53	1.13	1.20
Central Greece	1.86	2.21	2.60	0.88	0.73	0.30	0.43	0.46	0.75	0.81
Peloponnese	2.25	1.95	1.38	1.32	0.80	0.44	0.55	0.46	0.85	1.28

Note: The index of specialisation is computed as a share of GVA in industry within the region over the average share of this industry across all regions. Then, the index of specialisation of magnitude 1 shows that the industry share of the region is equivalent to the national average. If the index is smaller than one, the industry is under-represented compared to the national average, and values over one indicate over-representation and therefore specialisation of the region in the given industry. The real estate sector has been excluded because it accounts for the value of real estate and employs a small share of employment, shifting the weight of the real economy. The real estate sector has had different dynamics than the rest of the sectors. Real estate GVA grew in all regions over the past decade, increasing the value-added in the sector by at least 20% over the period and almost 40% in Eastern Macedonia. Other sectors grew by smaller – if any – margin. The unit of measure is real GVA in 2015 USD.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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The effects of the crisis on regions

The economic crisis and long recovery period had dissimilar effects across the Greek territory. This section discusses the effect of the crisis across regions and cities in five areas: demography, incomes, investment, employment and productive structure. It also includes a special focus on productivity developments across regions, focusing on the dynamics of catching up and regional characteristics that play a role in productivity shifts.

Uneven effects on population levels and composition in large and small regions

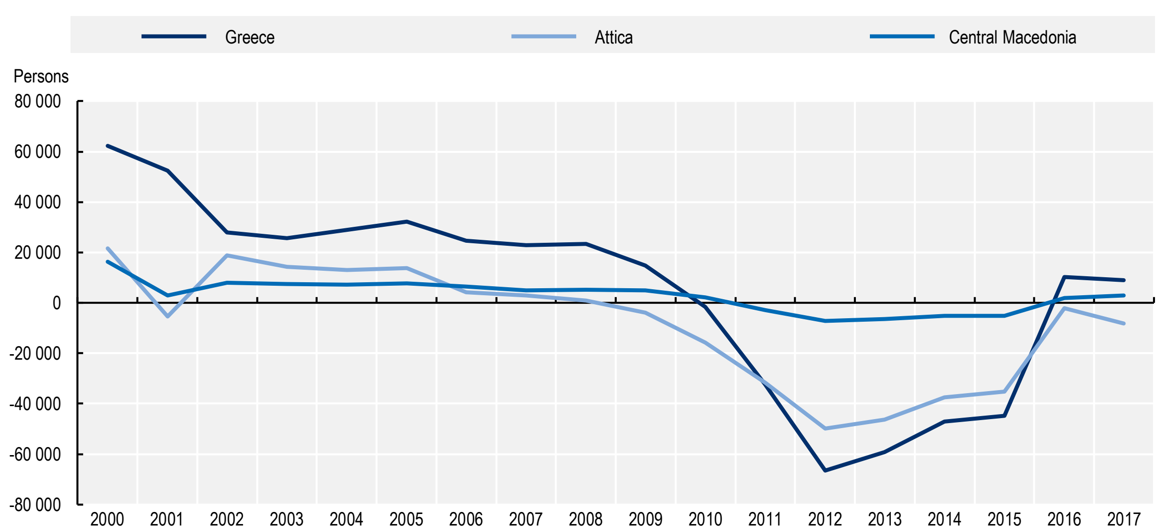
Population levels shrank after the crisis despite incoming international migration

A combination of ageing, low fertility rates and negative net migration flows resulted in an absolute loss in population of 355 000 individuals between 2011 and 2017, representing a continuous fall in population of 0.5% per year on average over the period.

Negative net migration flows were one contributor to population loss in the post-crisis period. Net migration flows started to decline in 2005 and fell rapidly in 2008 when a steady decline in net migration linked with the economic crisis began. By 2010, outflows exceeded inflows, particularly driven by outmigration from Attica. After reaching the lowest level of net migration in 2012 (about 125 000 people leaving against 58 000 entering), net migration flows rose again and became positive in 2016. The increase in inward migration is not related to return migration but to an increase in international migration mostly to Attica and some of the islands (from around 33 000 in 2014 to about 85 000 in 2017) partly originating from Afghanistan, Iraq and Syria (see Box 2.5).

Figure 2.19. Net migration flows in Greece and selected TL2 regions, 2000-17

Difference between the number of immigrants and the number of emigrants



Note: Net migration statistically adjusted (adjusted for demographic trends); regions in the sample: Attica (TL2), Central Macedonia (TL2) and national level (TL1).
Source: (Eurostat, 2019[23]), Migration and migrant population statistics (Database), https://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics, (accessed 1 March 2019).

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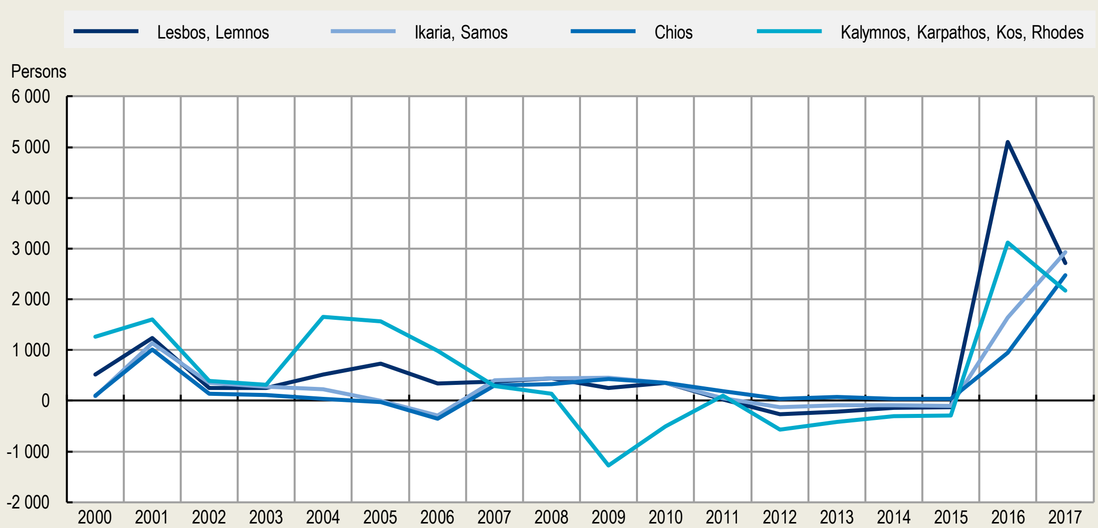
Box 2.5. International migrants in Athens and the Aegean islands

International migrants represent a considerable part of the population in Greece, especially in Athens and some island regions. The OECD definition of migrants includes temporary and permanent migrants with visa, asylum seekers and undocumented migrants, regardless of whether their movement is voluntary or involuntary, what the causes for the movement are or what the length of the stay is.

According to the last population census in 2011, 23% of the population in the municipality of Athens (155 000 people) had a foreign nationality background. Albanians, Filipinos, Bangladeshis and Ukrainians were the largest migrant communities. Estimates based on the number of resident permits issued show that the number of annually-issued permits decreased after the 2008 economic crisis, down to 33 000 in 2016 from about 56 000 in 2009. By 2016, some 78 000 migrants had a residence permit. Estimates on the number of refugees and asylum seekers[2] show that more than 40% of refugees in Greece (around 15 000 people) are currently settled in Athens. Since 2015, the Aegean Islands have been the main destination for international migrants alongside Athens (Figure 2.20). In 2019, the Aegean Islands hosted around 14 400 refugees and migrants. Ikaria and Lesvos are in fact the top two European regions (TL3) with the highest rates of net migration.

Figure 2.20. Net migration in selected island regions in Greece, 2000-17

Difference between the number of immigrants and the number of emigrants



Note: Net migration statistically adjusted (adjusted for demographic trends).
Source: (Eurostat, 2019[23]), Migration and migrant population statistics (Database), https://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics, (accessed 1 March 2019).

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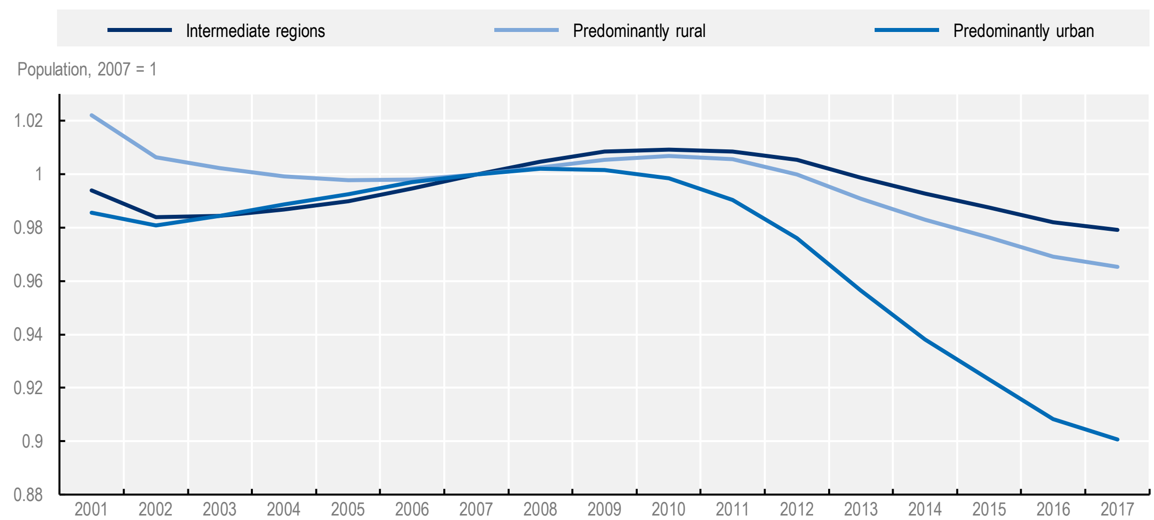
The loss in working-age population in the past decade happened mostly in urban areas

Urban areas in Greece bore the bulk of population losses in the post-crisis period. The loss of population in urban regions between 2007 and 2019 explains 84% of the national population loss of

311 390 individuals. In contrast, urban regions in OECD countries absorbed 71% of the population gains in the same period.

Urban regions bore even larger losses of working-age population due to an increase in the elderly share. The total loss of 533 140 working-age individuals over 2007-19 represented a loss of the working-age population of 11% in urban regions, 4% in rural regions and 2.5% in intermediate regions (Figure 2.21). The losses in working-age population are larger compared to the total population due to related to ageing and low birth rates in Athens and Thessaloniki, where the elderly population increased by 135 000 in the period. Lower birth rates added to population decline. The population under 15 years of age decreased by about 1% since 2002, amounting to a decrease of 31 000 young people over the decade since 2007.

Figure 2.21. Working-age population change by regional typology in Greece, 2001-19



Note: Population is normalised to 1 in 2007.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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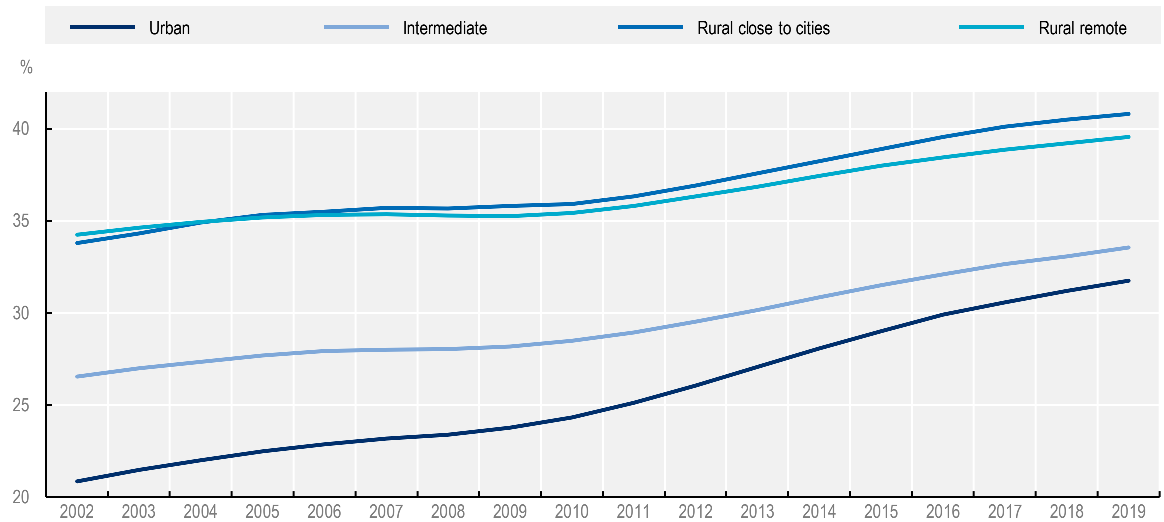
Dependency ratios increased rapidly in urban regions in the post-crisis period

Greece has one of the highest shares of elderly population living in urban areas across OECD countries. The share of people aged 65 and over in 2016 in urban regions in Greece was 6 percentage points higher than across OECD urban regions (30% versus 24%, or 3 working persons per every 1 elderly person as compared to 4 working persons per 1 elderly person). This gap appeared almost entirely after the crisis, as in 2002 it was only 1 percentage point (21% versus 20%) (Figure 2.22). Across OECD countries, only Greece, Poland and Portugal experienced increases in the elderly dependency ratios in urban areas between 2002 and 2016.

Despite fast increases in ageing in urban areas, elderly dependency is highest in rural regions. In 2019, the elderly dependency ratio in rural regions close to cities was 40%, close to the value for remote regions (39%) and above intermediate regions (32%). This stands in contrast with 2002 values for OECD rural regions close to cities and remote regions where the elderly dependency ratios were lower (34%).

Figure 2.22. Elderly dependency ratio by type of TL3 region in Greece, 2002-19



Note: Elderly dependency ratios constructed with 65+ over 15-64 working-age population data.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Uneven effect on incomes and poverty in large regions

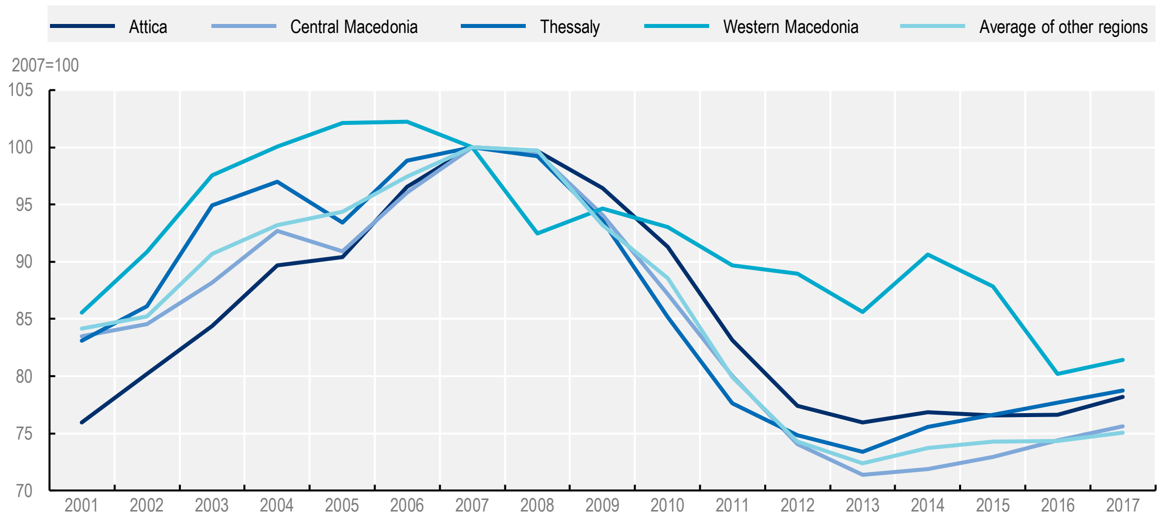
Large regions other than Attica have led the recent economic recovery

Attica has the highest GDP per capita among Greek TL2 regions (EUR 22 704 in 2017), more than double of the value of Eastern Macedonia (EUR 11 777) and close to its levels in 2000. This is despite a 23% fall in its levels between 2007 and 2016 that brought the region's GDP back to its 2000 levels. The South Aegean has the second-highest GDP per capita (EUR 18 537), which is still 20% lower than Attica (Figure 2.23). By 2017, all regions in Greece ranked below the median of OECD regions in terms of income, measured in disposable income per capita.

Prior to the crisis in 2007, Attica grew at a fast pace, increasing its GDP per capita by 26.7% in period 2000-07 at an average annual growth rate of 4.5%. The North Aegean grew at a similar pace, while other regions increased their GDP per capita by about 18% between 2000 and 2007, except for Western Macedonia where growth halted in 2006. Between 2014 and 2017 and in line with national trends, most regions started growing in terms of GDP per capita again, with the exception of the North Aegean and Western Macedonia.

Despite large differences in economic size, each region in Greece has the potential to contribute to the recovery of economic growth. Greek GDP would grow by 1.4% instead of actual 0.2% between 2013 and 2016 if the Attica region was excluded. Between 2015 and 2017, regions of Attica and Western Macedonia diminished the aggregate contribution of all other regions to the national GDP by almost 50%. The fall of GDP in Attica and Western Macedonia over the period was almost equivalent to the GDP increase in Continental Greece and Thessaly combined. Central Macedonia contributed to the growth of national GDP the most over 2015-17 period, responsible for over 60% of the national GDP increase (Figure 2.24).

Figure 2.23. GDP per capita evolution by region in Greece, 2000-17



Note: The GDP per capita normalised to its level in 2007.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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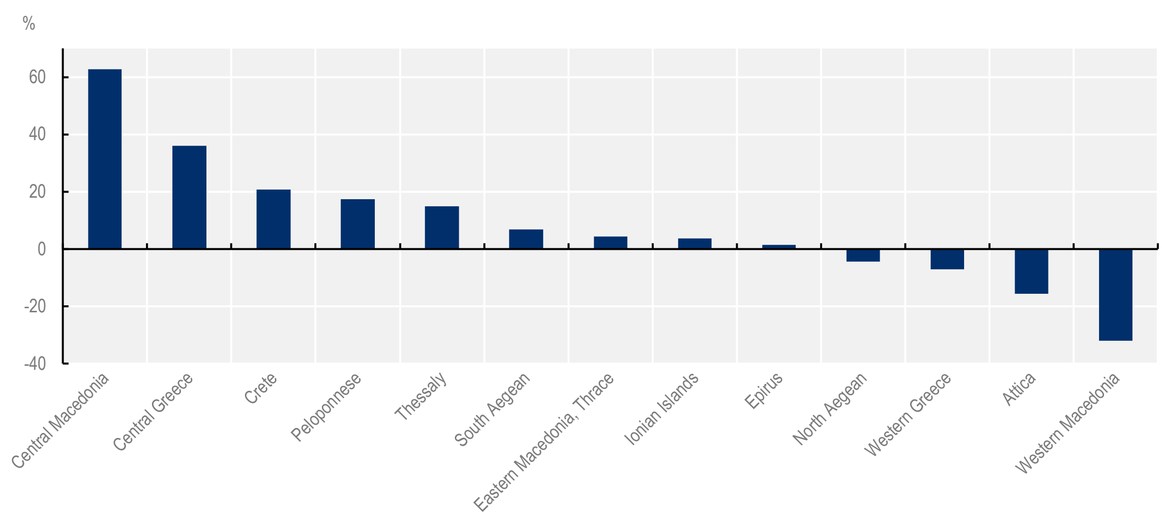
Figure 2.24. Regional contribution to national GDP growth in Greece, 2015-17



Note: Regional contribution to national growth is calculated as an interaction of region's growth in GDP between 2015 and 2017 and 2017 share of regional in national GDP, and further normalised by overall Greek GDP growth in the given period to calculate the share. The figure portrays positive contribution if the growth rate in the region was positive, and negative if GDP fell in the region, rescaled by the size of the contribution.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

StatLink https://doi.org/10.1787/888934166821

Returning to pre-crisis income levels may take some regions an additional 12 years

If regional growth rates remained at 2014 levels (the first year of economic recovery since the crisis), five Greek regions would recover to their pre-crisis GDP per capital levels by 2027. The majority of the other regions would reach this level by 2039. However, for three regions (Continental Greece, Central Macedonia and Eastern Macedonia), recovery would be even beyond 2039.

In a scenario wherein 2018 all regions would return to their average pre-crisis levels (2002-07), Attica would recover by 2023 (Table 2.4) and other regions would recover shortly after, by 2029 at the latest. However, if growth rates remained at average 2015-17 levels, Greece would not see recovery in this half of the century and some regions such as the North Aegean and Western Macedonia, with shrinking GDP in this period, will not recover. The Ionian Islands region saw the largest drop in its pre-crisis GDP, with 2016 GDP 29% below its 2007 level. This region would recover by 2051 in this scenario. Continental Greece, with the highest average annual growth rates between 2015 and 2017 would recover first in 2029. Alternatively, if Attica and Central Macedonia grew at a 3% pace each year, Greek GDP would reach its pre-crisis level by 2028, and both Attica and Central Macedonia regions would recover by 2027.

Table 2.4. Pre-crisis GDP recovery scenarios for Greece

Recovery to pre-crisis level	2002-07 average growth rates	2014 growth	3% growth for metro, 2014 rates for the rest	Average 2015-17 growth rates
Greece	2024	2045	2028	Beyond 2050
Attica	2023	Beyond 2050	2027	Beyond 2050
Central Macedonia	2025	Beyond 2050	2027	2034
Ionian Islands	2027	2027	2027	Beyond 2050

Note: Growth rate of GDP in each region is averaged across years. The recovery is considered as the first year when Greece or the region has equal or higher GDP to its levels in 2007. If the growth rate is negative, the region will not recover in such a scenario.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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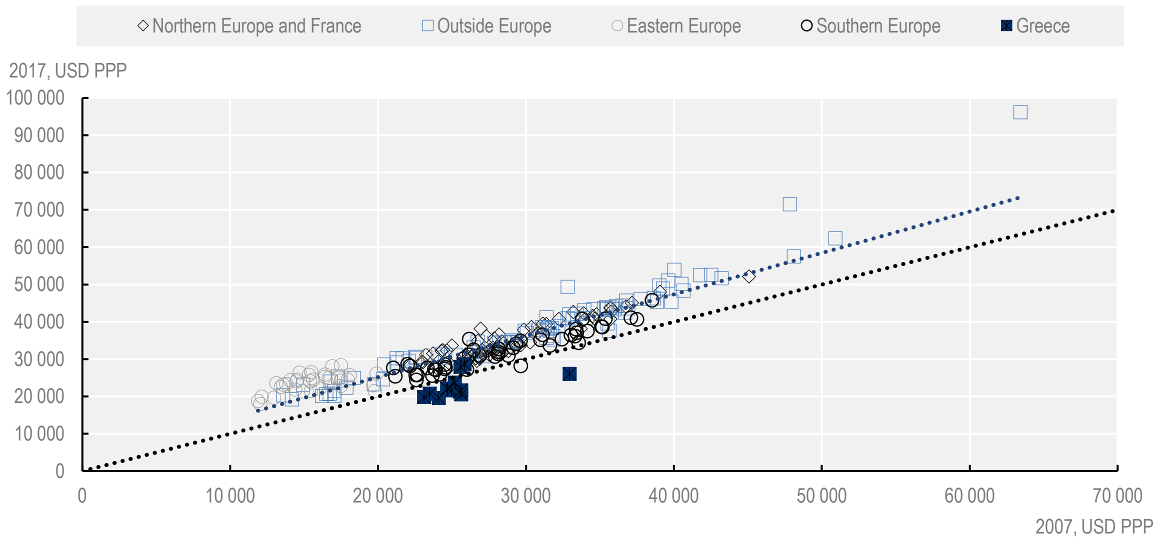
Regional household incomes decreased and regional poverty rates increased across more regions in Greece than in any other OECD country

After the crisis and during the long recovery period, most large regions in Greece experienced a decrease in household incomes while most OECD regions experienced an increase. All regions in Greece, with the exception of the Ionian Islands and South Aegean regions (with income growth of 9% and 11% respectively), had experienced an average 14% drop in their pre-crisis household income by 2017 (Figure 2.25). Meanwhile, household income across other OECD TL2 regions increased by 26% on average. In fact, between 2007 and 2017, 11 of the 12 TL2 regions with available data (246) with falling household incomes were Greek.

Such fall in income implies that by 2017, large regions in Greece had the lowest income among regions of EU countries in Southern Europe, even after accounting for the lower-than-average increase in income in many of the regions in Southern Europe. In Figure 2.25, regions located below the 45-degree line have a lower income in 2017 than in 2007, including regions in Greece and the Melilla region in Spain, while regions above the trend line grew faster than an average OECD region. Incomes across regions in Greece in 2017 were lower than in many of Eastern European regions, most of which had lower income levels than Greek regions in 2007.

Figure 2.25. Growth of household income in OECD TL2 regions, 2007 and 2017



Note: The figure includes data only if available for both years. Northern Europe and France include regions from Austria, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Sweden and the United Kingdom. Outside Europe includes regions from Australia, Canada, Israel, Korea and the United States, Eastern European regions are from the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and the Slovak Republic. Finally, Southern Europe is composed of regions in Italy, Portugal and Spain.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

StatLink https://doi.org/10.1787/888934166859

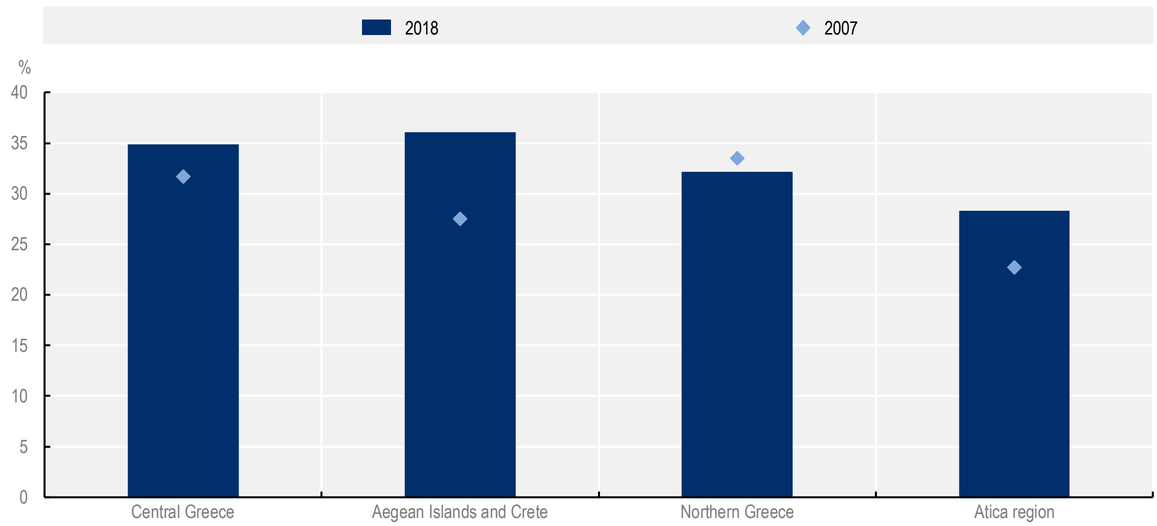
As with household incomes, poverty rates increased in Greek large regions between 2007 and 2018 while they decreased in most European regions. The largest increases in the percentage of people at risk of poverty or social exclusion occurred in the Aegean Islands and Crete from 27.5% by 9 percentage points between 2007 and 2018, followed by Attica and Continental Greece with increases of about 6 and 3 percentage points from 23% and 32% respectively. Other European regions experienced similar changes in poverty rates in the same period were multiple regions in Spain such as Comunidad Valenciana (10 percentage points) or Canarias (7), Cantabria (9) and Ceuta (9) and the Italian regions Abruzzo (9), Campania (8), Marche (9) and Provincia Autonoma di Trento (13). The other regions where the measure is available for the period experienced smaller increases and most had seen a poverty rate drop. Some regions in Hungary, Italy and Spain are the only ones that, together with Greek regions, faced poverty rates of over 30% in 2017.[3]

Despite the large changes in some of the islands, Attica and Continental Greece, the regions with the highest risk of poverty in Greece before and after the crisis are located along the northern border as well as in regions within Peloponnese. In contrast, regions with medium or medium-to-high rates of risk of poverty are close to metropolitan areas (Artelaris and Kandylis, 2014[26]).

The increase in the geographical divide in household income and poverty performance across regions after the crisis was accompanied by increasing levels of interpersonal inequality at the national level. Between 2000 and 2007, Greece experienced an exceptional inequality reduction compared to other European countries, when the bottom 40% of income distribution grew at a significantly higher rate than the average national income. Yet, in the decade following the economic crisis, the dynamics reversed, and lowest income part of the distribution fell behind the average growth as in most of Northern and Western European countries (Blanchet, Chancel and Gethin, 2019[27]). This trend reversal made Greece one of a few countries (Bulgaria, Germany and the United Kingdom) with both high poverty and high inequality levels.

Figure 2.26. Regional poverty rates in selected TL2 regions in Greece, 2007 and 2018

People at risk of poverty or social exclusion, as a percentage of the total population



Note: TL2 regions are grouped as follows: Northern Greece refers to Central Macedonia, Eastern Macedonia and Thrace, Epirus and Western Macedonia. Continental Greece groups Continental Greece, the Ionian Islands, Peloponnese, Thessaly and Western Greece regions. The Aegean Islands and Crete bring together Crete and the North and South Aegean Islands regions. Finally, the region of Attica remains by itself. At risk of poverty are persons with an equivalised disposable income below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). Material deprivation covers indicators relating to economic strain and durables. For 2018, the NUTS 2 region data have been weighted by regional population and aggregated to allow comparability with 2007.
Source: Eurostat (2020[28]), *People at Risk of Poverty or Social Exclusion by NUTS 2 Regions (database)*, https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tgs00107&plugin=1 (accessed on 14 February 2020).

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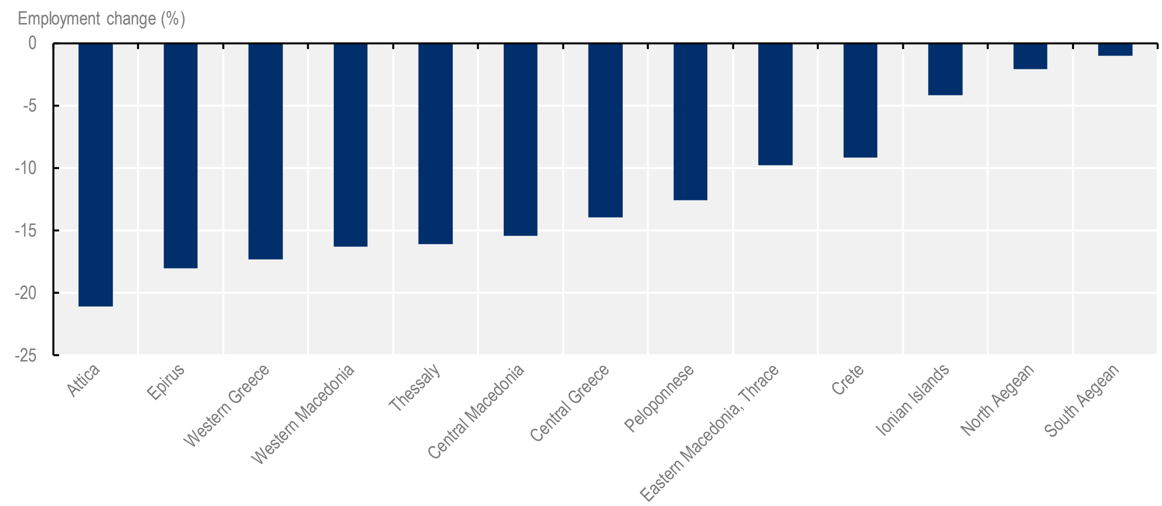
Uneven effects on employment in large regions

All regions except South Aegean employ fewer people today than before the crisis

The crisis brought about significant employment losses, amounting to about 725 000 jobs between 2007 and 2018. Ten out of 13 regions in Greece employ 9% to 20% fewer people than before the crisis (Figure 2.27). In absolute terms, the largest decreases in employment between 2007 and 2018 occurred in Attica (a loss of 370 000 jobs), followed by Central Macedonia (140 000 jobs) and Western Greece (46 000 jobs). The island regions had the smallest job loss in Greece, with 1% to 4% fewer jobs in 2018 in the North and South Aegean Islands, and the Ionian Islands. The large employment losses between 2007 and 2013 in Attica and Central Macedonia took place mostly in Athens (a decline of 17%) and Thessaloniki (a decline of 24%). By 2015, Athens added 36 000 employees, which represents a 1.3% yearly increase between 2013 and 2015. Thessaloniki grew their employed workforce by about 2.5% and 18 000 jobs between 2013 and 2015.

The economic crisis and long recovery impacted negatively the labour market of all regions and worsened their position relative to other OECD regions. In 2015, Epirus, Western Greece and Western Macedonia were among the 10% bottom OECD regions in terms of employment and unemployment rates. Even the highest-ranking region in Greece, the South Aegean, ranked as the 35th worse out of 388 OECD regions.

Figure 2.27. Employment change by region in Greece, 2007-18



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Regional unemployment rates and spells in Greece remain high for OECD standards despite recent improvements in the labour market

The increase in unemployment following job losses hit some regions harder than others, regardless of their pre-crisis employment performance. Nationally, the unemployment rate increased to 27.5% at its peak in 2013, and subsequently fell to 23.9% in 2016 and further to 19.6% in 2018. Regions which had 2007 unemployment levels in line with average OECD regions (7%-8%) experienced also smaller increases in unemployment compared to the national average: 6% in Eastern Macedonia and 7%-8% higher unemployment in Crete, the Ionian Islands, the Peloponnese region and South Aegean by 2018 (Table 2.5). Meanwhile, regions with the highest unemployment rates in Greece in 2007, Epirus and Western Macedonia, experienced different trends: Western Macedonia still had the highest unemployment across regions in 2018 but Epirus moved down the ranking from having the second-highest unemployment rate (10.2%) in 2007 to a mid-range unemployment region (20.5%) in 2018.

Table 2.5. Employment outcomes in Greek regions, 2007-18

	Employment rate (%)		Unemployment rate (%)		Long-term unemployment share (%)	
	2007	2018	2007	2018	2007	2018
Crete	65.1	59.4	5.6	13.6	29	50.4
Ionian Islands	60	58.9	9.1	16.5	28.4	54.1
South Aegean	58	57.4	9.6	17.3	21.7	32.6
Peloponnese	61	56.8	7.7	14.8	55.6	73.4
Attica	62.1	55.7	7.9	20.2	49.4	76
Eastern Macedonia, Thrace	60.4	55	10	16.3	55.8	68.1
Thessaly	61.1	54.6	8.1	19	48	71.1
Continental Greece	60.8	53.8	9.7	19.2	49.8	74.2
Central Macedonia	59.5	53.2	9.2	21	54.3	67.5
Epirus	59	53.1	10.2	20.5	59.9	77.4

	Employment rate (%)		Unemployment rate (%)		Long-term unemployment share (%)	
	2007	2018	2007	2018	2007	2018
Western Greece	57.5	50.9	10	24.6	51.2	72.5
North Aegean	56.9	50.6	8.2	23	42.2	67.5
Western Macedonia	55.7	50	12.3	27.5	63.4	71.5
Greece	60.8	54.8	8.6	19.6	49.7	70.3

Note: The rates are for the working-age population 15 to 64 years old. The share of long-term unemployment is the ratio of long-term unemployment in all unemployed individuals.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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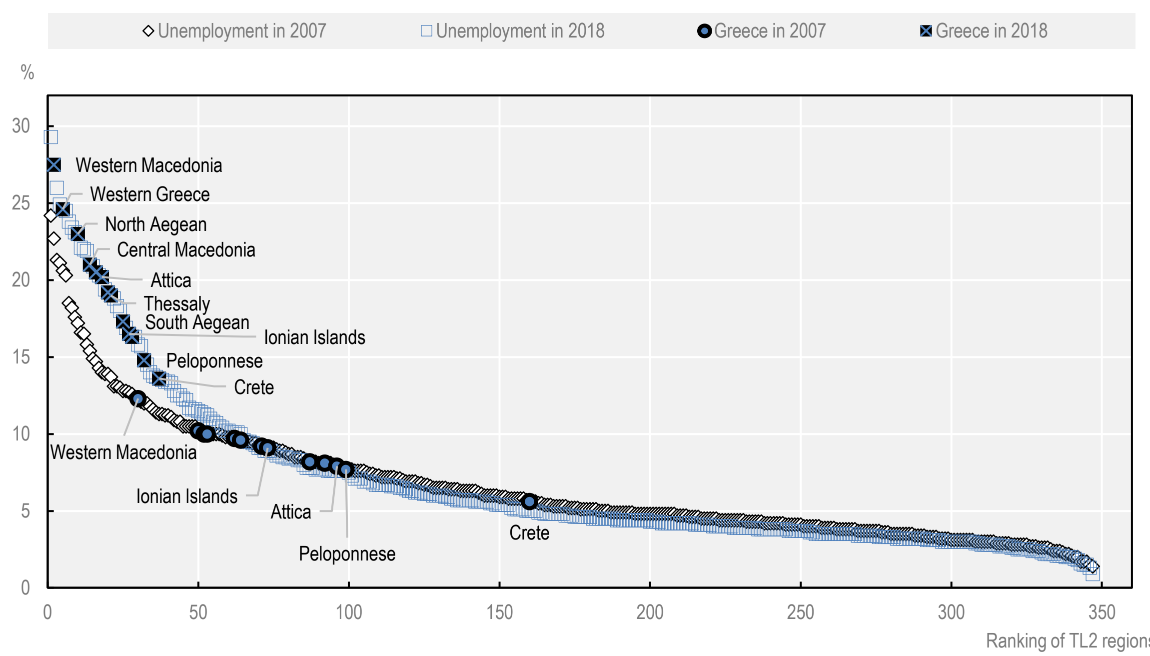
Because of widespread unemployment increases, by 2018, all Greek regions moved down to the bottom 20% OECD regions in terms of unemployment rates. In comparison, about less than half of large regions in the OECD have unemployment rates higher in 2018 than in 2007, while the remaining two-thirds have unemployment rates approximately 2% lower on average in 2018 than in 2007 (Figure 2.28). In fact, Western Macedonia had the second-highest unemployment rates across OECD regions in 2018, at 27.5%. Together with two French overseas regions, four Spanish regions and one Turkish region, Western Macedonia, Western Greece and the North Aegean belong to the top 10% of regions with the highest unemployment in OECD in 2018.

Figure 2.28. Unemployment in TL2 regions in OECD, 2007 and 2018



Note: All TL2 regions in OECD member countries for which the unemployment rate is available for both years are displayed. In 2016, there were 300 regions; for 2006, the data are available for 391 regions. Unemployment refers to unemployment rates.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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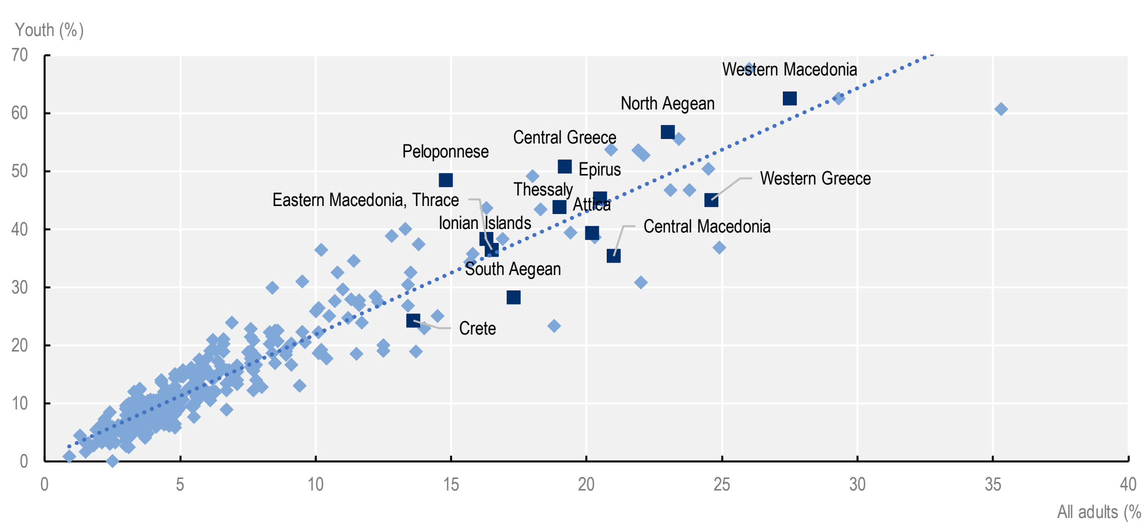
The crisis also had a considerable and long-lasting effect on average unemployment duration across regions. In 2018, 70% of the unemployed in Greece had not had a job for at least 1 year, compared to 32% in OECD countries. Already prior to the crisis, Greece had a higher share – about one-half – of long-term unemployed workers than the OECD average but, clearly, the crisis exacerbated the problem. Across all regions in Greece, long-term unemployment rates increased between 2007 and 2018, and in 2018, the highest share of long-term unemployed was in Epirus (77.4%) and lowest in the South Aegean (32.6%) (Table 2.5).

Long-term unemployment is problematic as the integration of unemployed persons into the labour market is harder after longer unemployment spells. A large share of the workforce being long-term unemployed underlines the structural weakness of the economy as well as the mismatch of the supply and demand of skills on the labour market. Re-employment probabilities of the long-term unemployed require active labour market policies, retraining and skill improvement. Finally, the prevalence of informal hiring has increased, although it is difficult to measure precisely to what extent (see Box 2.6).

In some regions in Greece, more than half of young workers are unemployed

Regional youth unemployment rates in Greece are among the highest in Europe and can be twice as high as the general unemployment rate. The youth unemployment rate across regions in Greece ranges from 24% to 62% in 2018. Regions in Greece, together with regions in French overseas territories, the south of Italy and Spain, have the highest levels of youth unemployment in Europe. Continental Greece, North Aegean and Western Macedonia, had 51% to 63% of their youth unemployed. On the other side of the spectrum, Crete and South Aegean had around one-quarter of their youth unemployed. Youth employment rates across regions mirror unemployment rates in the regions but, in some, are slightly lower than the trend across European regions would predict, given the unemployment rate of the working-age population (Figure 2.29).

Figure 2.29. Youth unemployment and unemployment in European TL2 regions, 2018



Note: Some data are reported having reduced reliability due to the sample size.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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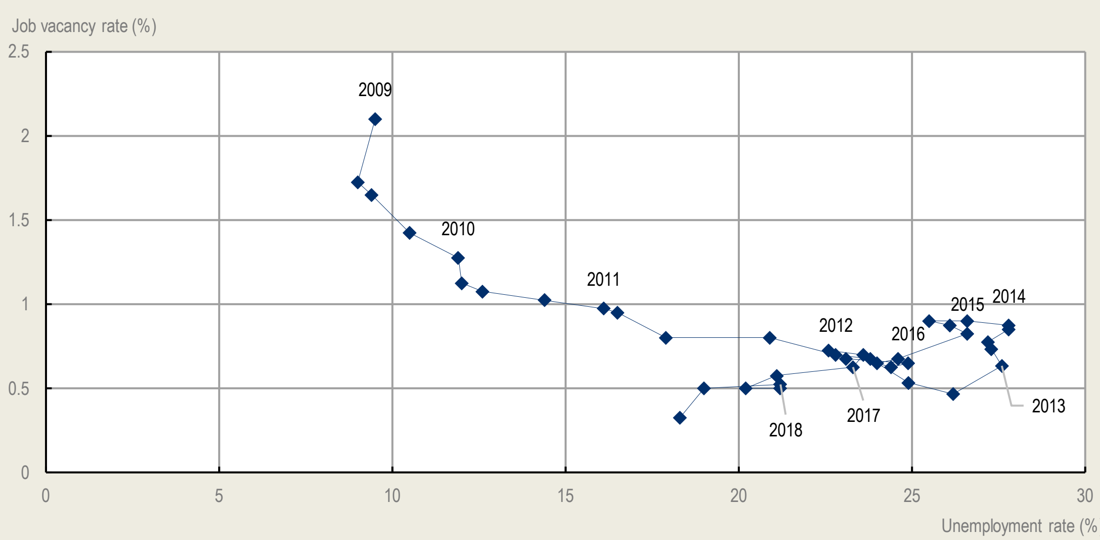
Box 2.6. Informal hiring and the Beveridge curve

Evidence on job vacancies points to an increase in informal hiring

Despite the falling unemployment rate, the job vacancy rate is at lower levels than the average job vacancy between 2011 and 2012 when the unemployment was about the same. Structural reforms were accompanied by an outward shift in the Beveridge curve with the unemployment increasing for the same level of job vacancies (Tagkalakis, 2016[5]). The Beveridge curve is a graphical representation of the relationship between unemployment and the job vacancy rate, portraying the current state of the economy. For example, periods of recession are generally accompanied by high unemployment and low vacancy rates, displayed in the lower part of the graphic. In times of recovery, the curve moves back to the original point of departure and, traditionally, recovery in unemployment rates lagging slightly behind the recovery in job vacancy rate. The curve moving outward over time displays the falling efficiency in the labour market as job seekers are not matched with the job offers, due to changes in education, population age, immigration or deterioration of skills.

In Greece, the unemployment rate fell during the recovery period but the vacancy rate continued to fall signifying no job creation and a possible result of outmigration rather than improved matching between unemployed and firms. Another reason might be that employers avoid posting vacancy offers through official channels and rather fill the post in an informal way or via their networks.

Figure 2.30. The Beveridge curve in Greece, 2009-18



Note: The job vacancy rate represents available job vacancies in industry, construction and services over the occupied posts. The curve is smoothed by calculating a 4-quarter running average. The unemployment rate corresponds to the percentage of unemployed of working age 15 years old and over.

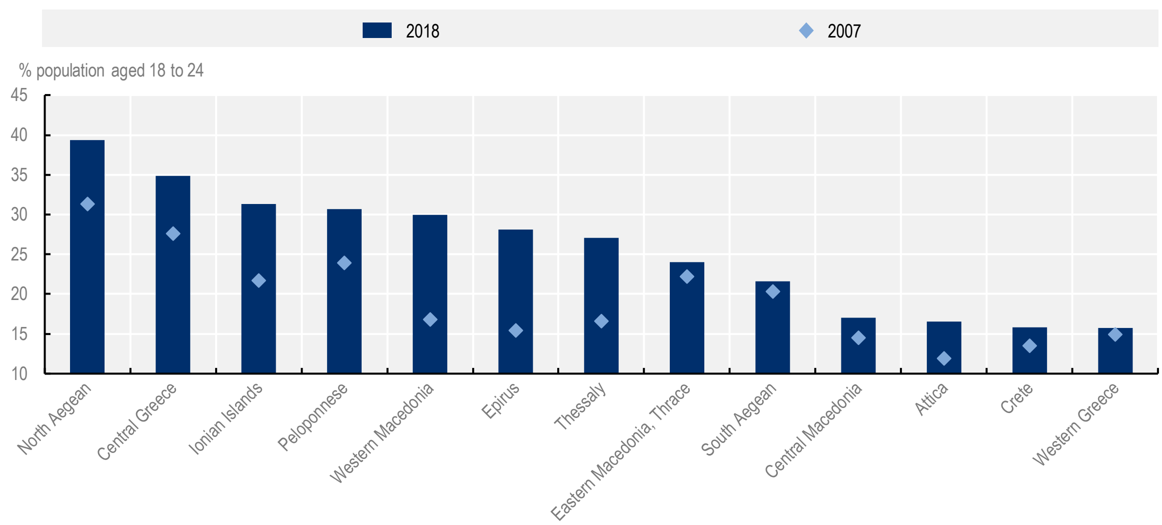
Source: (Eurostat, 2019[29]), *Job Vacancy Statistics*, https://ec.europa.eu/eurostat/web/labour-market/job-vacancies/database; (Hellenic Statistical Authority, 2019[30]), *Labour Force (Quarterly Data)*, http://www.statistics.gr/en/statistics/-/publication/SJO01/ (accessed on 13 March 2019).

StatLink https://doi.org/10.1787/888934166954

Increasing youth unemployment is consistent with increasing inactivity rates of young people. Across regions, average regional inactivity rates of young people increased by 7% by 2014 from 19% in 2007 (Figure 2.31). Attica, Crete and Western Greece have the most active youth, with about 16% of youth in these regions neither employed nor following any training or education. In Attica and Crete, inactivity almost doubled from 2007 to 2014 but, by 2018, stabilised to levels 2% higher than before the crisis. The regions with the most inactive youth populations are the North Aegean region, with 39%, and Continental Greece with 35% of its 18 to 24 year-olds inactive.

Figure 2.31. Regional share of inactive young people in Greece, 2007 and 2018

Rate of young people not in employment nor in any education and training



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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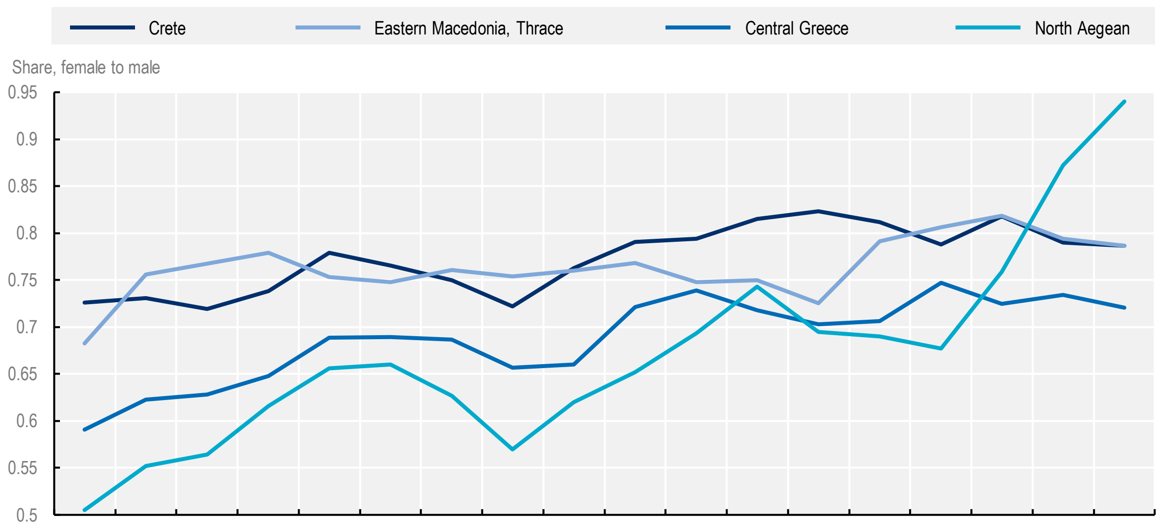
Female labour market participation sustained the share of employed to working-age population across regions after the crisis

The worsening of employment indicators in the post-period crisis coincided with increased female labour market participation. Nationally, female labour market participation increased from 55% to 60% of the total female working-age population between 2007 and 2018, while male participation fell in the same period by 0.5 percentage points from 77.3%. In 7 out of 13 regions, the share of males employed from the total male working-age population was still lower in 2018 in comparison with 2001. Female participation rose in all regions and disproportionally in regions with initially low shares of the female working population engaged in the workforce, such as Continental Greece and North Aegean (Figure 2.32).

Regions with the lowest female labour market participation had above-average employment rates for the male workforce in 2001. In Crete and Eastern Macedonia, where 59% and 55% of females worked, more than 80% of working-age males are employed. In North Aegean, where 2 out of 5 working-age females were engaged in formal employment, female labour market participation increased by 24 percentage points between 2001 and 2016, while male participation fell by 11 percentage points.

Figure 2.32. Female to male labour force participation ratio in selected regions in Greece, 2001-18

Ratio of participating as a share of the total working-age (15-64) population



Note: The displayed regions are selected by their highest (Crete, Eastern Macedonia and Thrace) and lowest (North Aegean and Continental Greece) female labour market participation in 2001 among Greek regions.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Uneven effects across economic sectors in large regions

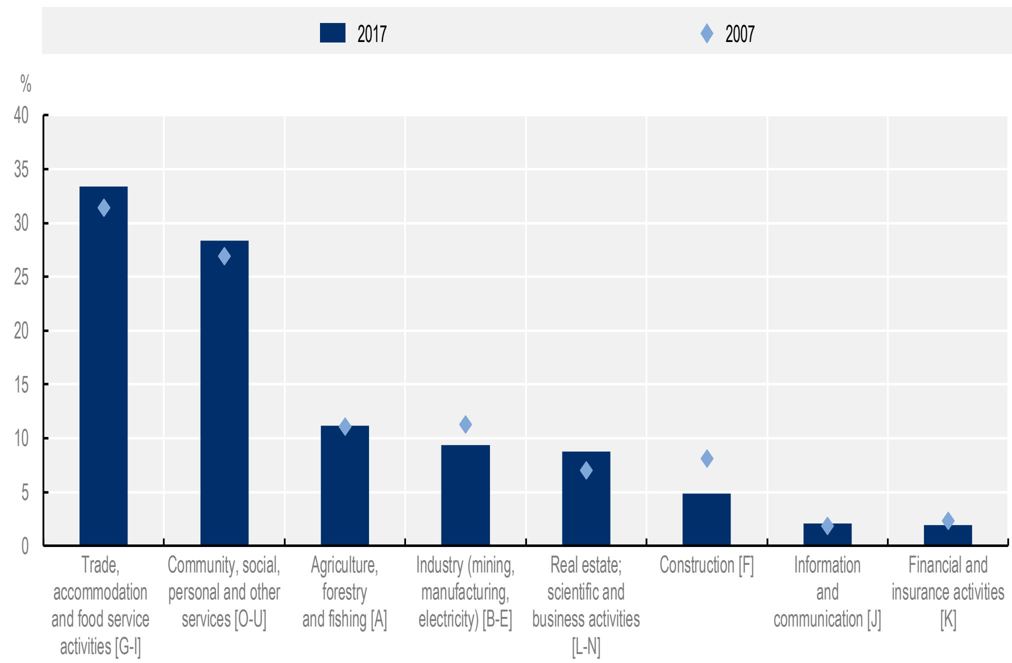
With the crisis, manufacturing lost importance in the economy in favour of tourism-related sectors

Across economic sectors, while the largest absolute losses occurred in the services sector, manufacturing lost relatively more importance in national employment shares. The share of national employment in industry sectors decreased from an already low level of 11% in 2007 to 9% in 2018, while employment share in all types of services increased from 70% to 75% (Figure 2.33). While all main economic sectors lost employment during the period, industry sectors lost a larger share of its pre-crisis employment (28% or 150 000 employees by 2018), compared to agriculture (13% or 70 000 employees) and services (7% or 241 000 employees). Construction lost half of its pre-crisis employment, equivalent to a total loss of 152 000 jobs.

Before the crisis, the top five sectors in terms of employment were wholesale and retail trade and accommodation and food services, community, social, personal and other services, and industry (including mining, manufacturing and electricity). By 2016, the top two largest sectors preserved and strengthened their status but the industry sectors lost their relative importance to agriculture and are closely followed by real estate and scientific and business activities.

Figure 2.33. Structural shifts in Greek industries, 2007 and 2017

Employment in the given industry as a share of total employment



Note: The full labels of the individual industries, shortened in the graphical representation, are as follows: Trade, accommodation and food service activities [G-I] (includes wholesale and retail trade, repair of motor vehicles and motorcycles [G], transportation and storage [H], and accommodation and food service activities [I]), community, social and personal services [O-U], agriculture, forestry and fishing [A], industry [B-E] (includes mining and quarrying [B], manufacturing [C], electricity, gas and water supply; sewerage, waste management and remediation activities [D-E]), real estate, renting and business activities [L-N], construction [F], information and communication [J], financial and insurance activities [K].
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Regions relying on tourism were more resilient to employment losses than regions hosting metropolitan areas

While manufacturing lost relative importance, tourism-related activities gained weight in the economy. Between 2007 and 2016, the share of employment in accommodation and food services sector increased from 6.6% to 8.4% following an increase of 30 500 additional jobs (a 10% increase). The only sector that created employment in the period was another tourism-related sector, real estate, renting and business activities (see Box 2.7).

Regions with a stronger reliance on tourism were more resilient to the crisis. Regions that saw smaller reductions in their employment, notably Attica, Crete, the Ionian Islands, North Aegean and South Aegean, had a larger share of GVA in tourism-related activities in 2017, including distribution, trade, accommodation and food service activities. They also had the highest number of nights spent in tourist accommodation per inhabitant (59.6 nights per inhabitant in the South Aegean, 53.4 in the Ionian Islands, 38 in Crete, 8 in North Aegean and 7.4 in Western Macedonia) (Eurostat, 2020[31]).

Box 2.7. The increasing importance of tourism in Greece

International arrivals almost doubled in the past decade but income from tourism remained stagnant

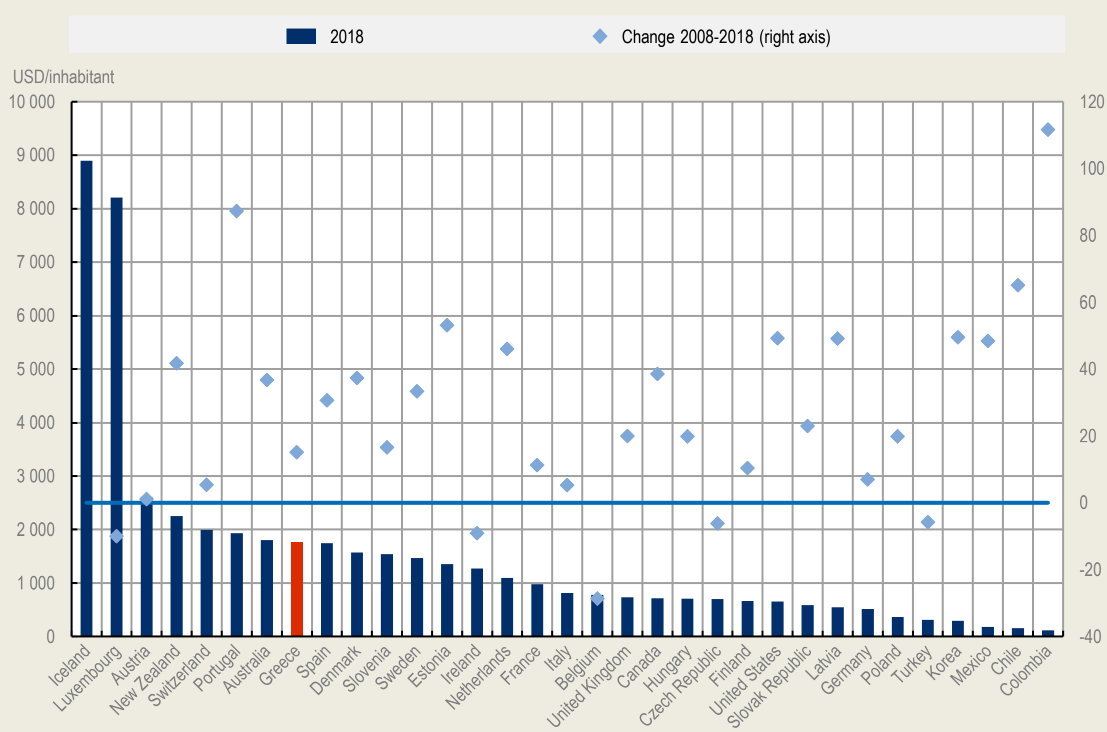
Tourism represents an important part of the Greek economy. In 2018, international receipts from tourism per inhabitant were equal to USD 1 770, and for every Greek, there were 2.6 international arrivals. This places Greece in the upper third of the distribution of OECD countries in tourism intensity (Figure 2.35).

Between 2008 and 2017, Greece nearly doubled the international arrivals to over 30 million. However, the value of international receipts rose only by 8%. In terms of GDP, tourism contributed by 5.8% of its value in 2018, an increase from its 5% share in 2008. Tourism in Greece plays a more important role in the 2018 national GDP only in Iceland and Luxemburg.

A higher share of the population depends on tourism for their income, while the share of GDP from tourism is relatively smaller. Tourism accounted for a larger share of employment; with almost 10% employed in the tourism industry in 2018, or 366 000 employees, 37 000 more than in 2008 (OECD, 2020[32]).

Figure 2.34. Tourism intensity across OECD countries, 2008-18

Total international receipts per inhabitant and their increase over the past decade



Note: Iceland growth rates at 380% is not displayed. International receipts are a sum of international travel receipts and international passenger transport receipts.
Source: (OECD, 2020[32]), *Industry and Services (database)*, https://www.oecd.org/statistics/data-collection/industryandservices.htm, (accessed on 19 February 2020).

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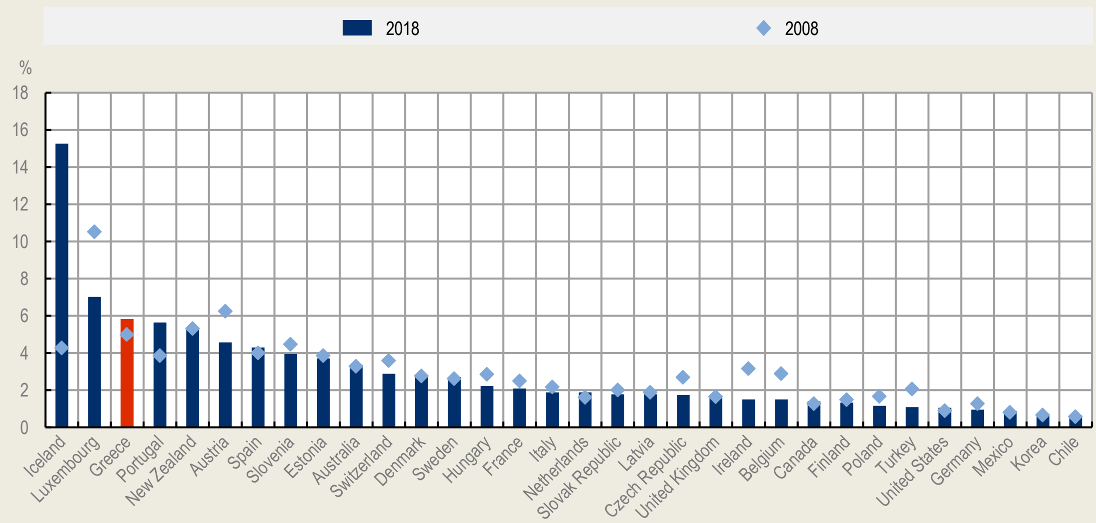
Figure 2.35. Tourism GDP as a share of total GDP, 2008-18



StatLink https://doi.org/10.1787/888934167068

Source (box and figures): (OECD, 2020[32]), *Industry and Services (database)*, https://www.oecd.org/statistics/data-collection/industryandservices.htm, (accessed on 19 February 2020).

The regions with dominant tourism also experienced a smaller fall or some gain in income and had higher employment rates in 2017 (Figure 2.36). The disposable household income grew between 2007 and 2017 only in two regions, the Ionian Islands and South Aegean by about 10%. The remaining regions had seen a drop in disposable income varying from 6% in Western Macedonia to 21% in Attica. Unlike the mining region of Western Macedonia, in the Ionian Islands and South Aegean, the relatively lower fall in income in 2007-17 is simultaneous with higher employment rates in 2017.

While tourism has been good news in terms of income and employment for regions in the post-crisis period, regions relying mostly on the tourism industry in Greece have higher levels of vulnerability because of the combined effect of seasonality and intensity of tourism (Batista e Silva et al., 2018[33]).

The public sector did not buffer employment losses despite being relatively large in some regions

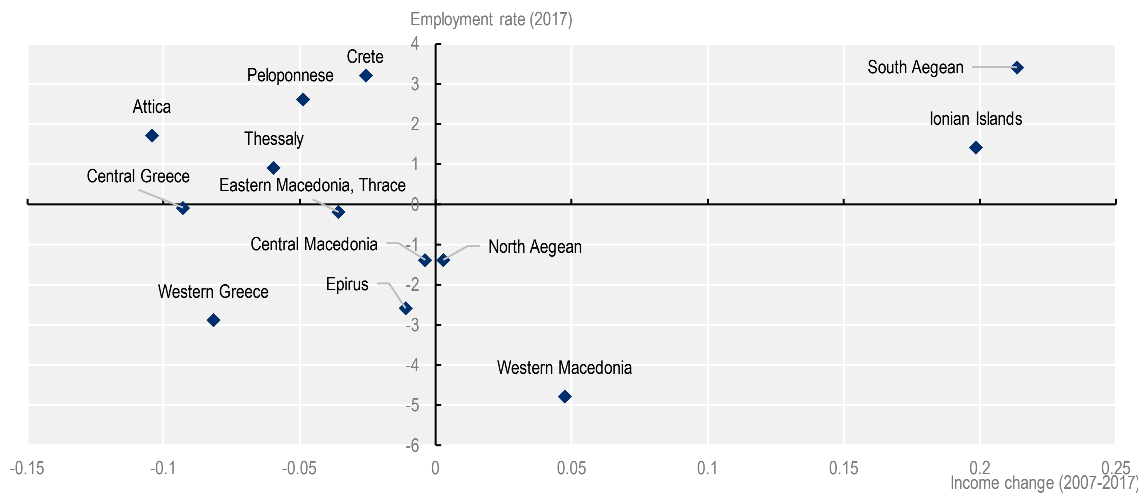
The variation of public sector employment as a share of total employment is large across Greek regions. The North Aegean region has the highest share of public sector presence across regions, with 27% of employees working in the public sector in 2015. Eastern Macedonia lags slightly, with a quarter of employees in the public sector. Continental Greece and the Ionian Islands are at the other side of the spectrum with 16% of employees working for the public sector.

Compared to 185 OECD TL2 regions, most Greek regions have a lower share of public sector employment than an average region at 25% in 2016. Five Greek regions belong to the bottom 10% of the OECD regions with the lowest public sector employment, among regions in the Czech Republic, Italy, Portugal, Slovenia and the Slovak Republic.

The shares of public employment in Greek regions remained stable between 2006 and 2016, increasing on average by about 1% over the period. This shows that public employment has not been a guaranteed workplace in Greece. As employment fell across regions, public sector employment fell as well, keeping the shares approximately constant.

Figure 2.36. Employment rate and change in household disposable income, 2007 to 2017

Indicators normalised to the across-region average.



Note: The index of performance is computed for each indicator in each region as the standard deviation from the mean. The higher the index, the better the region performs as compared to others.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Special focus: Regional productivity dynamics before and after the crisis

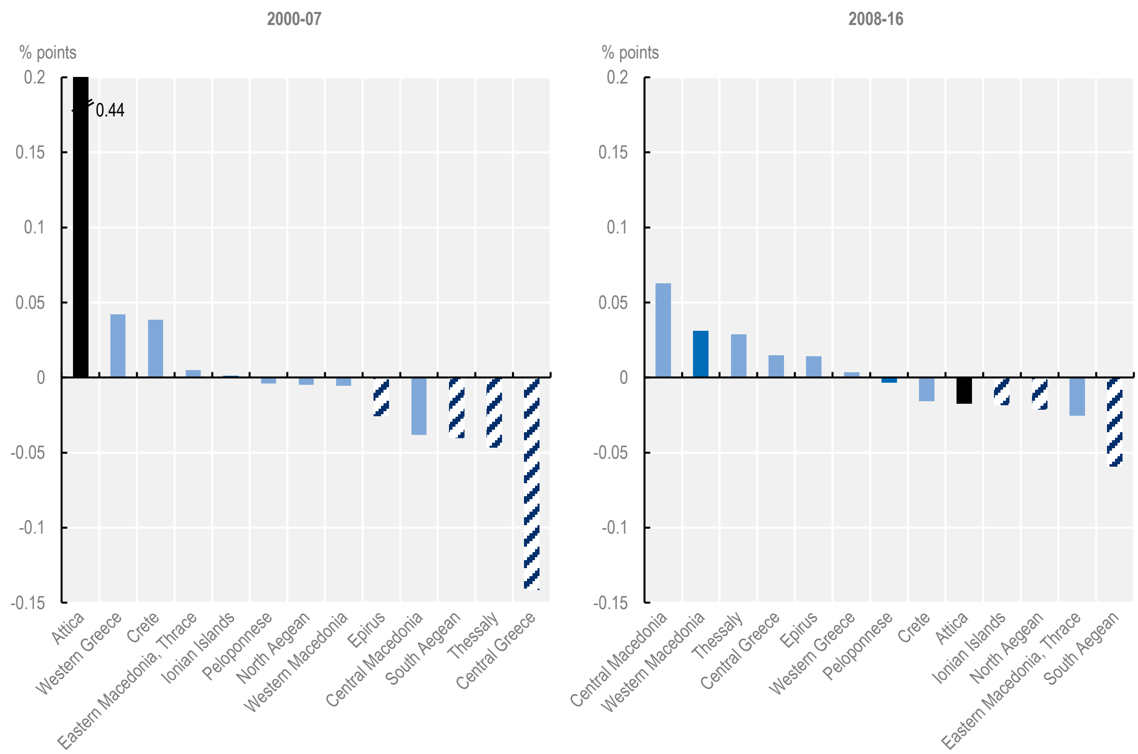
More regions caught up with the productivity frontier after the crisis but only because the frontier fell back

Regional dynamics can be analysed in light of the performance of regions with respect to “frontier regions”, defined as those that lead in a country in terms of labour productivity, measured by the real GDP per employee.[4] Regions can have 3 different statuses at any point in time in terms of productivity: catching up with the frontier region (growing 5% faster), further diverging (grow 5% slower) or keeping pace.

Over the period 2000-16, Greece was among 14 OECD countries where large regions at the “productivity frontier” (Attica) contributed more than 50% to the overall productivity growth in their country or had a so-called regionally concentrated productivity growth model (OECD, 2019[34]). Catching-up dynamics reversed in the post-crisis period compared to 2000-07. Back then, no region was catching up with the productivity frontier (Figure 2.37). In 2008-16, more regions in Greece were keeping pace compared to regions in 29 OECD countries (69% of regions compared to 31%) as opposed to those catching up (0.7% versus 38%) or diverging (23% versus 32%) (OECD, 2018[35]).

This reversal relates not so much to improved regional performance across regions but to the relative fall of the frontier region. Between 2008 and 2016, 40% of total employment losses and 49% of GVA losses occurred in Attica and the region actually decreased national labour productivity growth by 1.8%. Meanwhile, Central Macedonia also had sizable relative losses in terms of jobs (19% of national) and GVA (less than 14% of national) but unlike Attica, it actually made a positive contribution of 6% to national labour productivity growth (Figure 2.37). Athens contributed to the fall in productivity in Attica and had a worse positioning in terms of productivity compared to OECD cities of similar size (Box 2.8). The same trends hold at the level of small regions (Box 2.9).

Figure 2.37. Contribution to Greek national labour productivity growth, 2007-16



Note: Difference between national labour productivity growth as calculated with and without the indicated region. Attica, in black, is the frontier region in Greece. The bars highlighted in darker blue represent regions with the productivity converging with the levels at the productivity frontier, Attica. The light blue denotes regions that are keeping pace with the most productive region. Finally, the striped pattern highlights regions that are diverging from the productivity frontier.

Source: OECD (2019[36]), *OECD.Stat (database)*, http://stats.oecd.org (accessed on 28 January 2019).

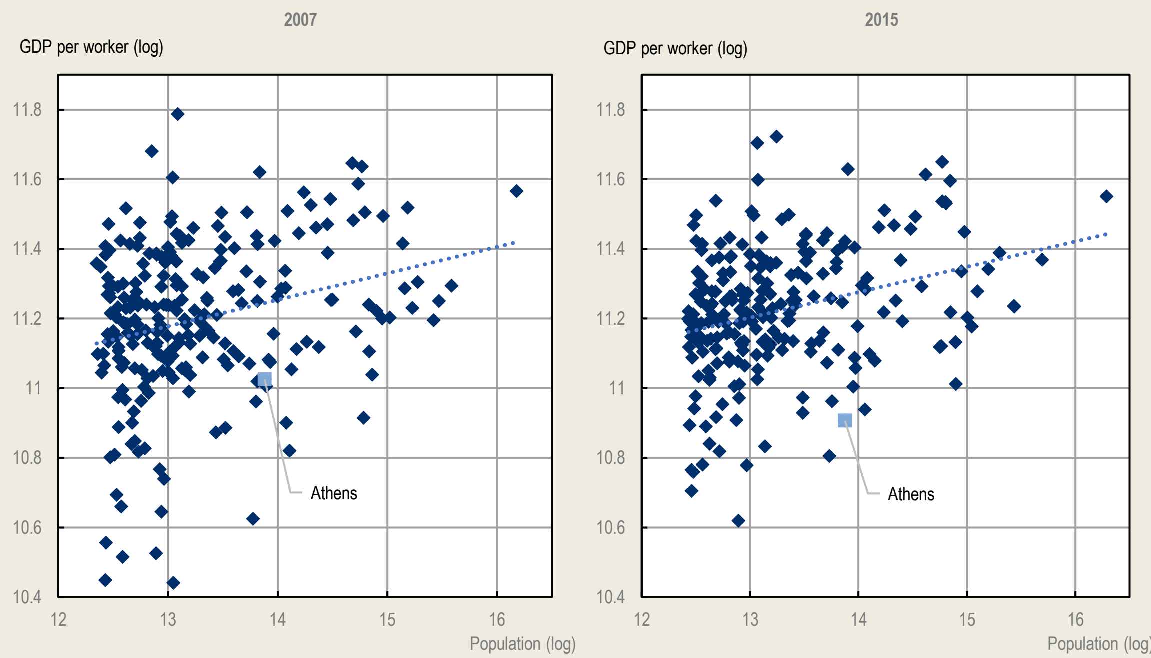
StatLink https://doi.org/10.1787/888934167106

Box 2.8. Productivity performance in Athens compared to similar OECD cities

After the crisis, Athens lost ground to OECD cities of similar size

In 2015, productivity in Athens was smaller than in OECD cities of comparable size. Average labour productivity in Athens dropped from USD 90 659 in 2007 to USD 79 014 in 2015. The drop in absolute productivity values was larger than in other OECD cities and implied a fall in productivity ranking from the 39th position in 2007 to the 83rd position in 2015 among 228 OECD cities. Compared to cities in the 3-million to 4-million population bracket, Athens lost ground to cities that had lower labour productivity levels in 2007. For example, Barcelona went in this period from having about 19% lower productivity than Athens to having 6% higher productivity (Figure 2.38).

Figure 2.38. Productivity versus city size across OECD FUAs, 2007 and 2016



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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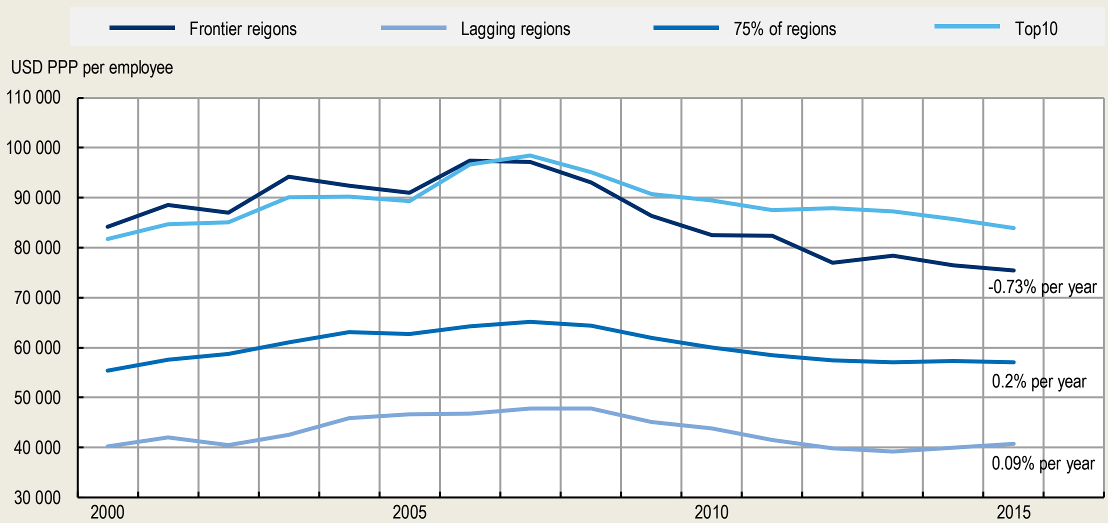
Box 2.9. Productivity dynamics in small (TL3) regions in the post-crisis period

Convergence in productivity in the post-crisis period occurred because of a fall in small frontier regions instead of robust growth in small lagging regions

In 2008-15, a relatively higher contribution of lagging regions to national productivity growth compared to small frontier regions translated into productivity convergence with the frontier region (Figure 2.39). Frontier regions in Greece at the TL3 level remain the most productive but their productivity fell by 0.73% per year since 2000. Meanwhile, productivity in lagging regions grew by 0.09% per year and the lagging regions at 75th percentile in terms of national employment rose by 0.2% a year.

Frontier small regions were 10% less productive in 2015 than in 2000. Meanwhile, lagging regions reached 2001 productivity levels in 2015 (Figure 2.40). Labour productivity grew faster in frontier as compared to lagging regions between 2000 and 2003. In 2004 and 2005, lagging small regions actually caught up with the productivity frontier. The subsequent years display a dominant convergence between frontier and lagging regions, while productivity fell in both types of regions but less in lagging regions. From 2013 onwards, productivity increased in lagging regions but fell further from the frontier (Figure 2.40).

Figure 2.39. Productivity level of frontier and lagging TL3 regions in Greece, 2000-15



Note: Productivity at the level of the small (TL3) region. Productivity is calculated as regional GDP over regional employment measured at the place of work. It is expressed in USD constant PPP, constant prices, reference year 2010. Frontier (lagging) regions are defined as those with the highest (lowest) productivity until the equivalent of 10% of national employment is reached. The "75% of regions" line refers to the lagging regions representing 75% of national employment.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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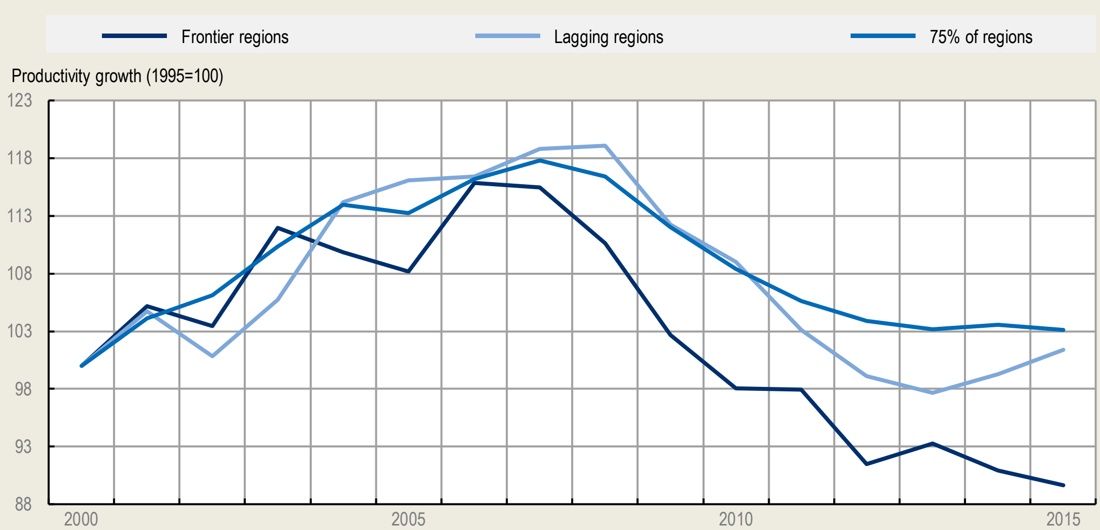
Figure 2.40. Productivity divergence of frontier and lagging TL3 regions in Greece, 2000-15



Note: Productivity at the level of the small (TL3) region. Productivity is calculated as regional GDP over regional employment measured at the place of work. It is expressed in USD constant PPP, constant prices, reference year 2010. Frontier (lagging) regions are defined as those with the highest (lowest) productivity until the equivalent of 10% of national employment is reached. The "75% of regions" line refers to the lagging regions representing 75% of national employment.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

StatLink https://doi.org/10.1787/888934167163

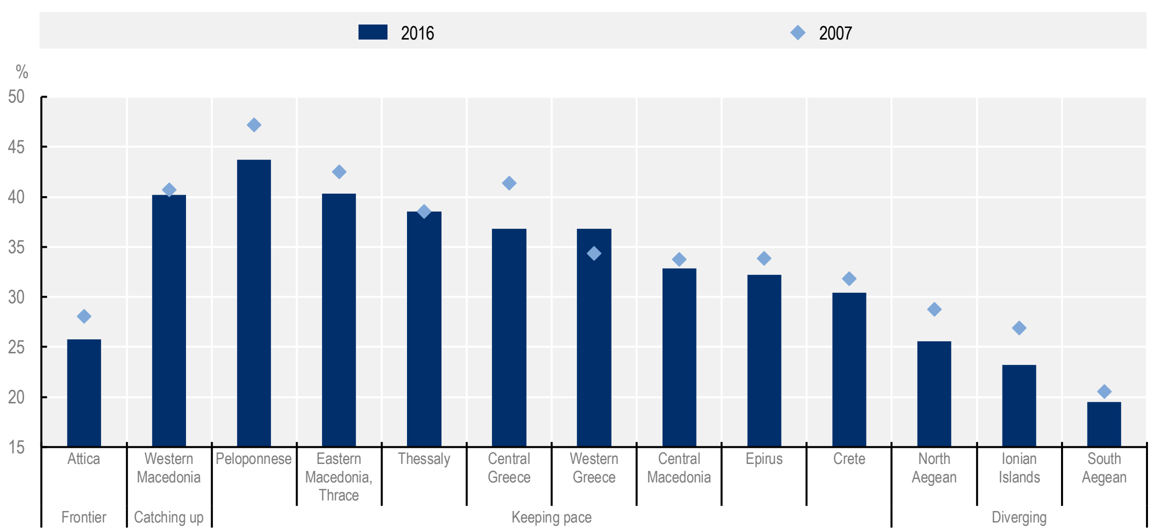
Tradeable sectors are less dominant in diverging regions

Tradeable sectors tend to innovate and upgrade their technology more frequently than sectors that are considered as non-tradeable, including governmental services, education, healthcare, construction sector and retail. Even if not all goods and services within tradeable sectors are traded, they tend to be exposed to international competition. In Greece, the importance of tradeable sectors increased since 2007 in some large regions, such as Central and Western Greece. On the other hand, diverging regions, but also some regions that were keeping in pace (Eastern Macedonia, Epirus and Peloponnese), had seen a drop in the share of tradeable sectors (see also Psycharis-Petrakos (2016[37])).

Attica is below the average of European frontier regions in terms of the importance of the tradeable sector, which decreased in terms of employment share from 28% in 2007 to 26.3% in 2015 (Figure 2.41). Other regions that were catching up or keeping pace between 2008 and 2015 had a larger share of employment in tradeable sectors (33%-45%) than diverging regions (20%-26%) (Figure 2.41). In contrast, tradeable sectors explained a higher share of GVA in catching up regions than in diverging regions across 22 European countries (OECD, 2018[35]).

Figure 2.41. Tradeable sectors intensity by region and its productivity convergence type, 2007 and 2016

Share of employment in tradeable sectors in TL2 regions



Note: Tradeable sectors group sectors: agriculture (A), mining, manufacturing, energy, electricity, water supply (BCDE), information and communication (J), financial and insurance activities (K), and other services (RSTU). Non-tradeable sectors are constructed as a sum of activity in sectors: construction (F), distributive trade, repairs, transport, accommodation, food services activities (GHI), business services (MN), and public administration (OPQ). Real estate activities sector (L) can be considered as non-tradeable services but is excluded in this figure.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

StatLink https://doi.org/10.1787/888934167182

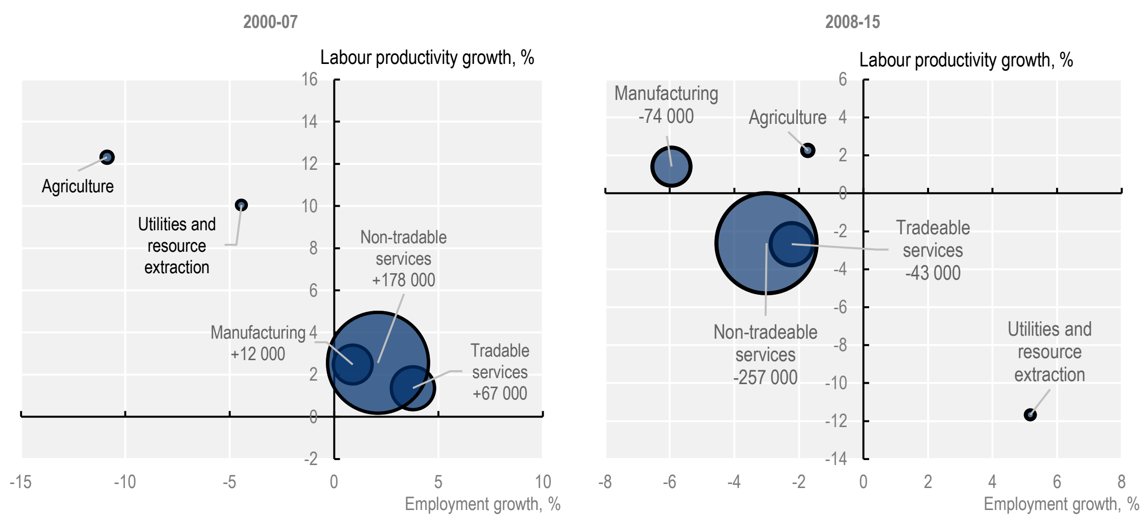
The share of the tradeable sector in GVA in regions that are keeping pace and catching up with frontier regions is also higher than the contribution of these sectors to the economy in diverging regions. In 2015, tradeable sectors in Western Macedonia, a catching-up region, contributed 60% of total GVA and 40% employment. Meanwhile, Continental Greece and Peloponnese, while keeping pace with frontier, had 53% and 46% of GVA produced by tradeable sectors and about 45% of employment. In comparison, regions that are keeping pace with frontier had smaller employment shares in tradeable sectors that were in any case higher than the corresponding shares in diverging regions.

Manufacturing sectors sustained productivity growth despite large employment losses

Between 2008 and 2014, manufacturing sustained regional productivity growth or at least decreased productivity less as compared to non-tradeable services. In some regions, this happened at the expense of employment. For example, Central Macedonia, a region that relies on manufacturing more than the average region in Greece, lost 36 000 manufacturing jobs between 2008 and 2014, yet experienced productivity growth of 1.48% in the same period (Figure 2.42). Attica lost 74 000 employees in manufacturing (a 5.9% decrease) and still, the sector drove productivity growth in the region.

Figure 2.42. Employment and productivity growth in Attica

Contribution of sectors between 2000-07 (left) and 2008-15 (right)



Note: Labour productivity is measured as real GVA in USD in constant 2010 prices and PPPs per worker. The size of the bubble indicates the size of the sector in terms of the number of employees in 2000, while the numbers at each bubble indicate the change of employment during the period. The sector clusters are composed of multiple individual sectors. Tradeable services refer to sectors: information and communication (J), financial and insurance activities (K), and other services (RSTU). Non-tradeable services are constructed as a sum of activity in sectors: construction, distributive trade, repairs, transport, accommodation, food services activities (GHI), business services (MN), and public administration (OPQ). The real estate activities sector (L) can be considered as non-tradeable services but is excluded in this figure. The size of the circle indicates relative share of employment in the assemble of given industries in 2000.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Even in the pre-crisis period, labour productivity in manufacturing increased at the expense of employment in some regions, including Eastern Macedonia, the Ionian Islands, Peloponnese and South Aegean. Other regions saw their manufacturing labour productivity fall between 2000 and 2007, including Continental Greece (a fall of 3%), which relies more on manufacturing in terms of value-added than other regions, and Crete (a fall of 0.8%).

Non-tradeable sectors were not immune to global shocks. Prior to the crisis, the non-tradeable service sector generated the largest employment gains across Greek regions. These gains turned out to be unsustainable in the period 2008-14 and employment loses in non-tradeable service sectors were larger than previous gains. In Attica alone, non-tradeable services were responsible for the largest share of employment loss, with 257 000 jobs lost in the 7 years after the crisis, more than pre-crisis job creation (178 000 jobs).

Agriculture was also a source of job losses and, in many cases, productivity growth across regions. Agricultural GVA in Thessaly and Western Greece, 2 regions for which the sector weights relatively more in the local economy, grew by about 3% between 2008 and 2014. However, productivity and employment in agriculture in Thessaly fell in the precedent period and Western Greece lost about 5.8% of jobs, yet the agricultural productivity in this region also increased by 2.7% between 2000 and 2007.

Enabling regional development

After reviewing the uneven effects of the crisis across regions in Greece, this section focuses on four main enabling factors for future regional growth: human capital, technology, social capital and environmental capital. The section identifies gaps in the allocation of human capital to productive activities, and the need to boost investment in innovation and technology in order to strengthen regional innovation systems that can serve as a backbone for regional development.

Human capital and innovation

Attica has one of the most educated populations across OECD regions

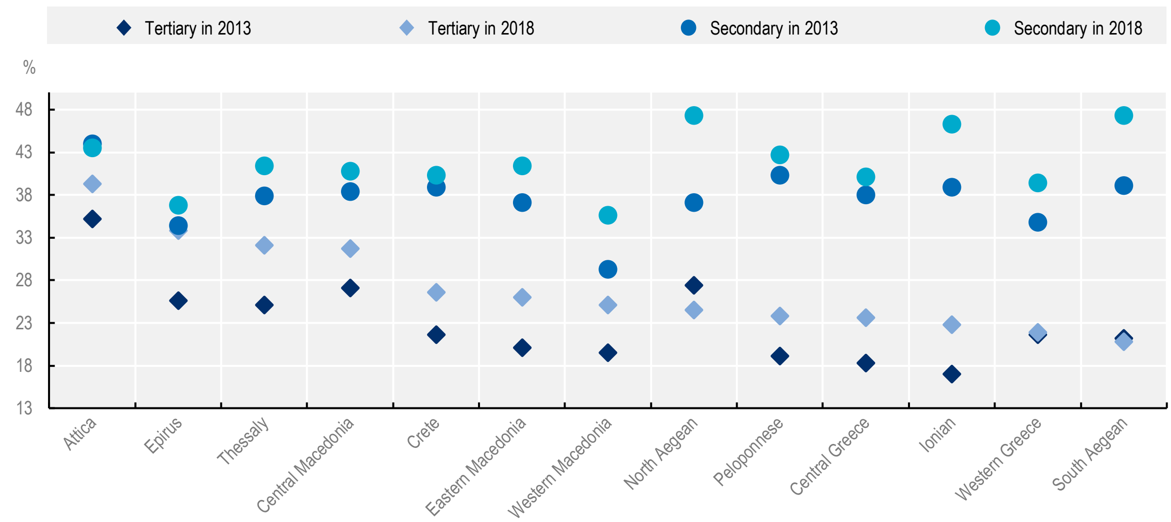
Educational attainment is the strongest predictor of the likelihood of having a job and earning a higher salary in Greece. In many countries, it is rather higher skills and proficiency that predict employment outcomes (OECD, 2018[38]). Educational attainment in Greece is around the OECD average, with 31% of adults holding a tertiary qualification and 42% a high school diploma. Most of those with university education are bachelor's degree holders and the proportion of people with master or doctoral education level is low (OECD, 2018[38]). This is different for the younger workforce. In the 25-34 year-old age group, 41% have a tertiary qualification. A large share of the population in Greece (27%) have completed schooling below upper secondary education level, above levels in Chile, Mexico, Turkey and other southern European countries including Italy, Portugal and Spain.

Within Greece, Attica is the region with the most educated population. In 2018, over 39% of adults had a university degree and 44% had a high school diploma (Figure 2.43). Epirus, Thessaly and Central Macedonia follow, with 34% to 32% of adults having obtained university degree, and at the same time slightly below Greece's average share of those with a high school diploma.

Inequalities in the distribution of workers with at least secondary education across regions in Greece are substantial. Across OECD regions, Attica, with 86.9% of the labour force with at least secondary education, ranks in the top third of OECD regions by this measure. The second largest region, Central Macedonia, ranks around the bottom half OECD regions with a share of 76.2%. The least performing region, Eastern Macedonia, had a 23 percentage-point lower share in secondary education than Attica.

Demographic change and migration can shift the shares of educational attainment of the population. Young people that entered the workforce between 2013 and 2017 may have been more educated than the base working-age population. At the same time, the working-age population may have increased if a higher share of people that left the region had low educational levels, and the effect of incoming migrants with lower educational attainment levels than locals would counterbalance this effect. For international migrants, this is indeed the case, as they have lower educational attainments than the local population across all regions: the educational gap between foreign-born and native-born residents and in terms of higher education attainment is 14 percentage points at the national level and the difference varies widely across regions (Figure 2.44).

Figure 2.43. Education attainment by region in Greece, 2013 and 2018



Note: Education attainment measured as a share of 25-64 year-olds. Sorted by the highest tertiary attainment in 2018.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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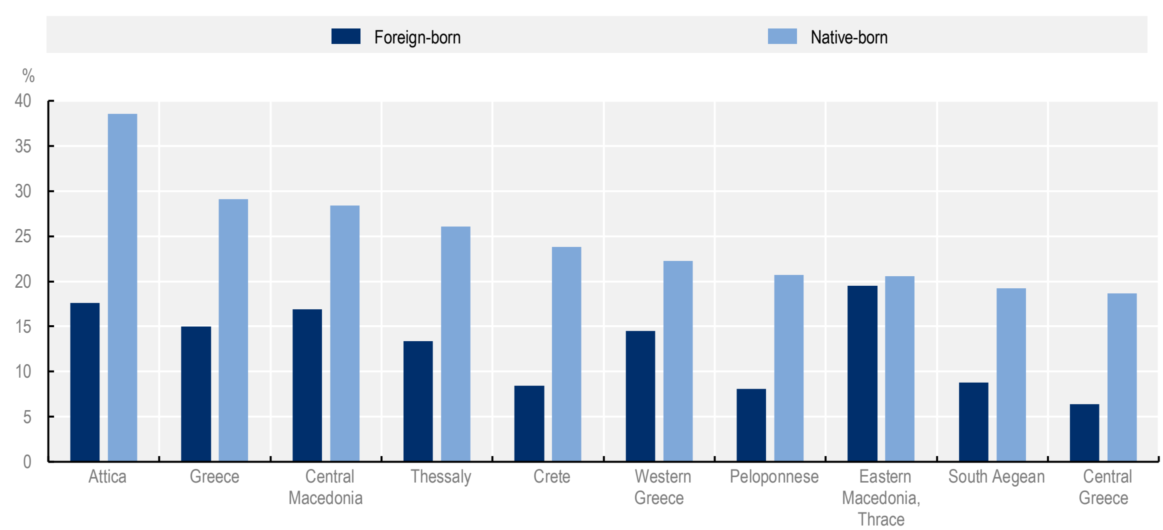
Figure 2.44. Higher education attainment across selected TL2 regions in Greece, 2015

Share of highly educated people (in percentage of the total population of the same group)



Note: Epirus, the Ionian Islands, North Aegean and Western Macedonia are not displayed because of missing data.
Source: OECD (2019[39]), *Migrants in OECD Regions: Foreign-Born Education (Database)*, https://stats.oecd.org/Index.aspx?DataSetCode=REGION_MIGRANTS, (accessed on 25 April 2019).

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Enrolment in education increased despite a falling premium to education

Despite the many years of schooling, the benefit of premium years of education on skills in Greece is lower than in other OECD countries. Those with tertiary education score 19 points higher in literacy than those with a high school diploma, compared to the OECD average that scores 33 points higher (OECD, 2018[38]). In addition, the quality of skills of higher education graduates lags behind market needs. On-the-job training and life-long learning are not yet frequent in Greece. In combination with outmigration, about 50% of firms report missing workers with skills they need to operate (OECD, 2018[38]).

In the aftermath of the economic crisis, employment outcomes for graduates are still poor. Greece also employs the lowest share of its tertiary-educated workforce among OECD countries. In 2017, only 72% of Greeks with a university degree were in employment, compared to 85% in OECD countries. Similarly, the employment situation of those with secondary education was at the last place in OECD countries. Only 59% of those with secondary education had a job, compared to 76% in OECD countries.

The lack of employment opportunities seems to have incentivised a switch from employment to education across regions. Between 2013 and 2018, educational attainment rose across all regions, with the highest increase of those with a university degree in Crete and Western Macedonia by 5-6 percentage points to about 27% and 26% of the population between 25 to 64 years of age. In turn, the share of the population with secondary education rose from 37% to 47% in the North Aegean and from 29% to 39% in Western Macedonia. Only the North Aegean region had a higher share of university degrees in 2013 than in 2017, falling from 27% to 25%.

Despite large increases in areas outside Attica, the region still concentrates a much larger percentage of the highly educated workforce. Attica's labour force is the most educated among Greek regions with 39% of the labour force holding a university degree (Figure 2.45). This is comparable to the most educated regions in Germany and Slovenia (Berlin region and Slovenia's West region), and countries such as Estonia and Lithuania, but also other countries' regions whose distribution of educated population is not concentrated in one region, such as Belgium, the Netherlands, Spain and the United Kingdom. On the other hand, the South Aegean region has about one-half of the share of university-educated workforce of Attica and only 53 out of 233 OECD regions with available data had a lower-educated workforce than the Ionian Islands. Other OECD countries with similar regional variation in shares of educated workforce include Denmark; Germany, Norway and Turkey.

Although the relatively high availability of educated workers in some regions could facilitate the speed of hiring, high qualification mismatches threaten possible benefits to productivity (see Box 2.10).

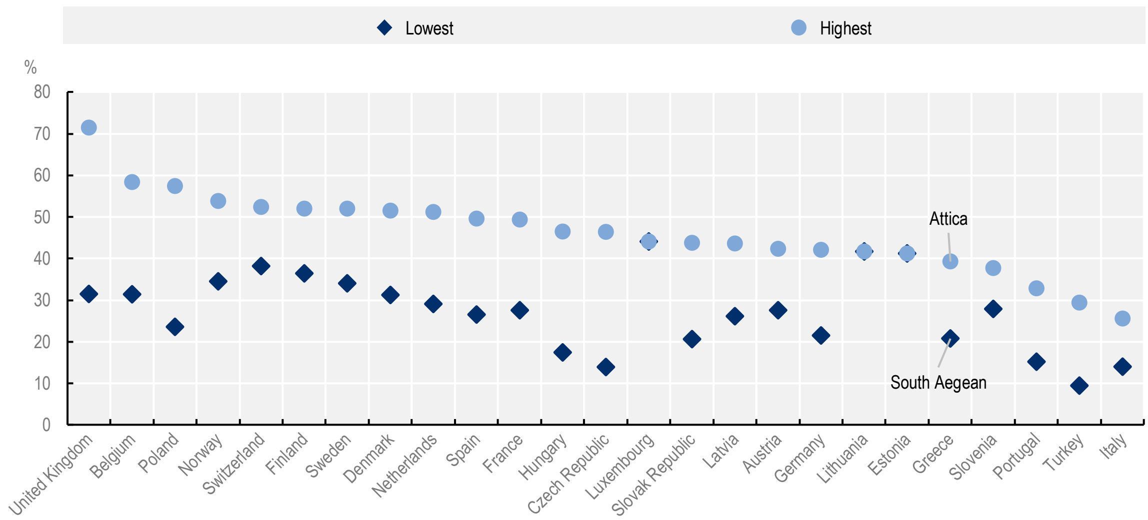
Box 2.10. Qualification mismatches in Greece in an OECD context

Greece is among the OECD countries with the highest qualification mismatch rates of their workforce

While the large number of unemployed persons means that the vacancy can be filled quickly, skill mismatch implies smaller productivity and slower firm growth. In 2016, 44% of workers in Greece did not match the qualification requirement of their position. Only Chile, Ireland and Mexico had a higher mismatch of qualifications.

Out of all workers, 23.6% were overqualified and therefore had a higher level of education than required by their job. Similarly, underqualified employees filled 20% of positions. Greek public employment service (OAED) engaged with about one-quarter of the unemployed and 4% of the newly employed found a job via the employment service (OECD, 2018[7]). Strengthening and supporting the role of OAED and similar job matching agencies can enhance the capacity to match the skills with available vacancies.

Figure 2.45. Share of university-educated workforce in OECD regions in 2018



Note: Latvia and Luxembourg have only one large region, thus a single observation.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Higher education opportunities are concentrated in Athens and Thessaloniki

Higher education opportunities are concentrated in Athens and Thessaloniki. Out of the 22 universities in Greece in the academic year 2014/15, 7 were in the Athens-Piraeus metropolitan area. Two out of 14 Technological Educational Institutes (TEIs) were located in the Athens-Piraeus area in the same academic year. Thessaloniki hosted three universities, with the highest-ranked university being the Aristotle University of Thessaloniki, and one TEI.

The National and Kapodistrian University of Athens, the Aristotle University of Thessaloniki and the National Technical University rank between the 300 and 500 best universities in the world in 2018, according to the Academic Ranking of World Universities (ARWU), based on the criteria of quality of education, quality of faculty, research output and per capita performance indicators (ShanghaiRanking, 2018[40]).

The number of higher institutions with presence across regions recently changed because of a reform to the higher education system that allows universities to offer two-year technical or professional education programmes. Within this transformation, the majority of TEIs were merged with existing universities in 2018 and 2019. As part of the reform, TEIs in Attica and Crete were transformed into new universities. The additional measures of this transformation of the education system include reduction of academic departments. In the academic year 2014/15, before the reform, 191 000 students attended universities and 100 000 TEIs. About one-quarter of 18- and 19-year-olds attended the first year of higher education in university and about one-tenth attended a TEI (OECD, 2018[3]).

Attendance grew faster than public expenditure in higher education in the post-crisis period

Expenditure in higher education in Greece sits below the OECD average and has decreased since 2010. In 2015, the share of higher education in R&D expenditure in GDP was 0.37%, below the OECD average of 0.43% (OECD, 2017[41]). About 70% of public spending on R&D was allocated to universities in the same year. However, fiscal consolidation introduced since 2010 reduced the budget allocated to higher education by 13.2% between 2009 and 2010, and an additional drop of 6% in the following year. Public expenditure per student fell by an estimated 50% between 2009 and 2015. These measures imply the reduction in faculty and personnel, reduction of salaries and a considerable reduction of operational expenses.

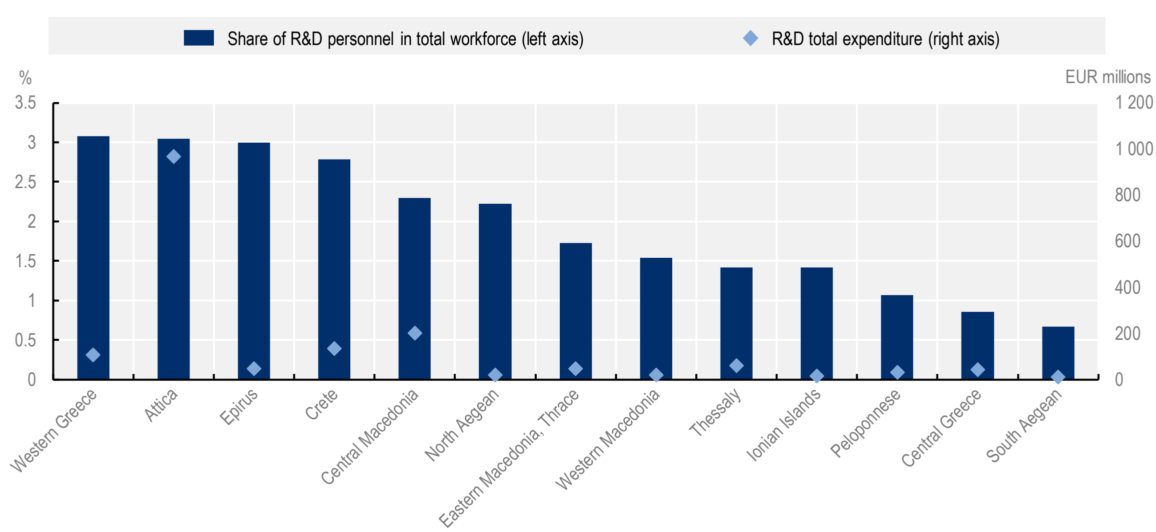
In parallel, the share of students in higher education in the 18 to 24 year-old population increased across all Greek regions over the period 2008 to 2012. Across regions, Western Greece increased the share of its university students from 104% in 2008 to 183% in 2012, the highest share of students in education as a proportion of university-age population in Greece. Epirus followed with a 40% increase to 162%. The lowest rates of student attendance are in the South Aegean region, at 21% (Eurostat, 2020[42]).

The decrease in funding had repercussions on the availability of teachers. University attendance increased between the academic years 2008/09 and 2014/15 by about 12% while teaching staff decreased by about 18%. TEI student enrolment fell by 12% in the same period and the teaching staff fell by 62% during the crisis period (OECD, 2018[3]).

Regions in Greece are among the least innovative across OECD regions

Besides human capital, R&D investment and an educational system conducive to innovation are the basis of a regional development strategy based on knowledge. In terms of R&D expenditure, regional levels are very low with the exception of Attica, where more than half (57%) of the national R&D expenditure in 2015 was concentrated. Despite their dissimilar shares of R&D investment, Epirus and Western Greece have similar shares of personnel working in R&D activities compared to Attica. These regions have about 3% of the total workforce employed in R&D in 2015 and have a 6% and 2.8% share in total Greek R&D spending respectively (Figure 2.48). Business enterprise is a major source of R&D expenditure growth in Greece, increasing by about 46% between 2014 and 2016.

Figure 2.46. R&D intensity in Greek regions in 2015



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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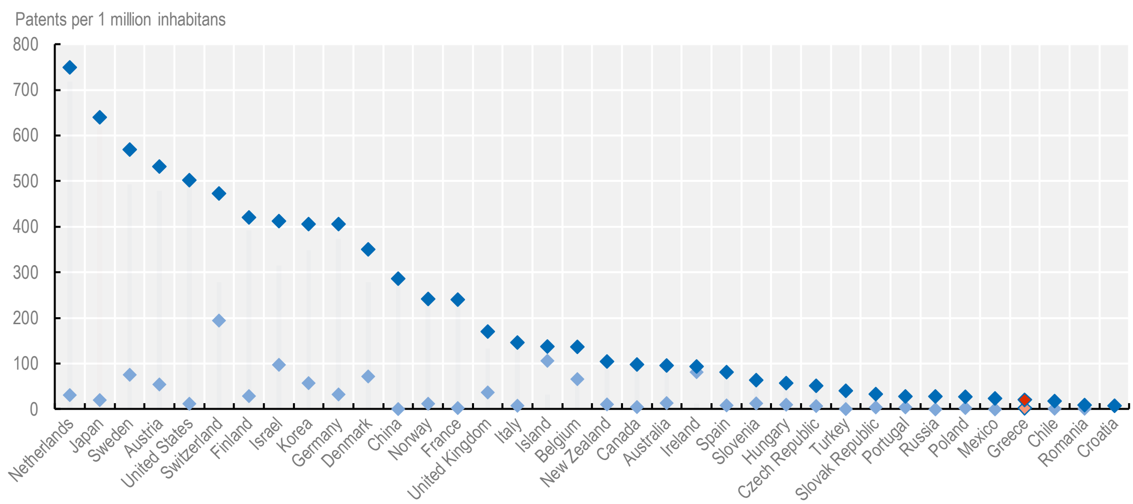
The availability of higher educational institutions, R&D investment and human capital in regions translates into a small and highly concentrated production of knowledge. Greek regions belong to the least innovative

OECD regions and can compare to regions in Chile, Mexico and Poland. As expected from the concentration of human capital and R&D investment, patent generation is also highly concentrated in Attica: the region generates about 20 patents per million inhabitants, the least innovative region by this standard, Western Greece, generates only 1.5. Yet, the least innovative regions in more than a dozen OECD countries produce more patents per capita than Attica (Figure 2.47).

Figure 2.47. Innovation intensity across OECD regions, 2015

Regions with the lowest and highest share of patent applications



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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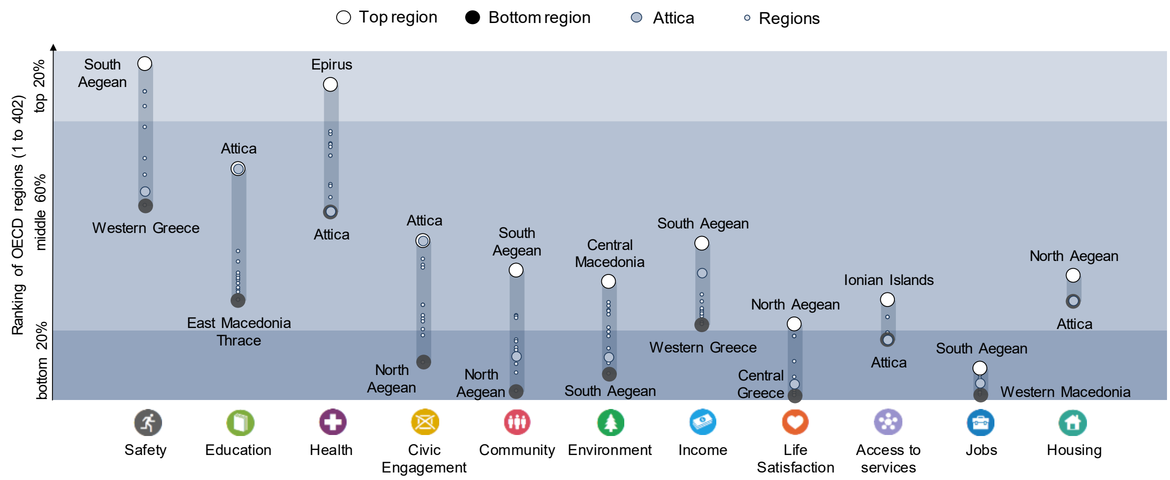
Health and safety indicators remained relatively high despite worsening economic conditions

The worsening economic conditions reflect on well-being dimensions of jobs, income and life satisfaction, in which Greek regions perform at the lowest level among OECD regions. Still, safety indicators for regions in Greece were high compared to other OECD regions. All regions in Greece are in the upper half among 395 OECD regions in terms of safety, measured by the homicide rate. South Aegean belongs to the top 10% safest regions and Epirus to the 10% healthiest OECD regions (Figure 2.48). Safety indicators actually improved or remained unchanged compared to their 2000 levels across regions.

Health is another dimension in which Greek regions fare relatively strong compared to OECD regions, both in availability and outcomes indicators. Regions in Greece have more physicians per capita than an average OECD region (Figure 2.50). Attica had 7.9 physicians per 1 000 inhabitants in 2017. Physician presence in Continental Greece, South Aegean and Western Macedonia is around its OECD regional average, with about 3 physicians for each 1 000 people, the lowest presence among the Greek regions. Attica and Thessaly also have the highest hospital beds per 10 000 people, with 51 and 54 beds in 2015. Other regions have on average 34 beds, which is below the average of 46 beds across OECD regions.

Life expectancy, a broad measure of health outcomes, is high across all regions in Greece. Life expectancy varies from 81 years in Attica to 83.4 years in Epirus. The life expectancy in Greek regions is similar to regions in Austria, Iceland, Norway and Sweden (Figure 2.51). The difference in life expectancy between the best and worst region in Greece is smaller than the average difference of OECD countries.

Figure 2.48. Regional well-being indicators for Greece, 2016



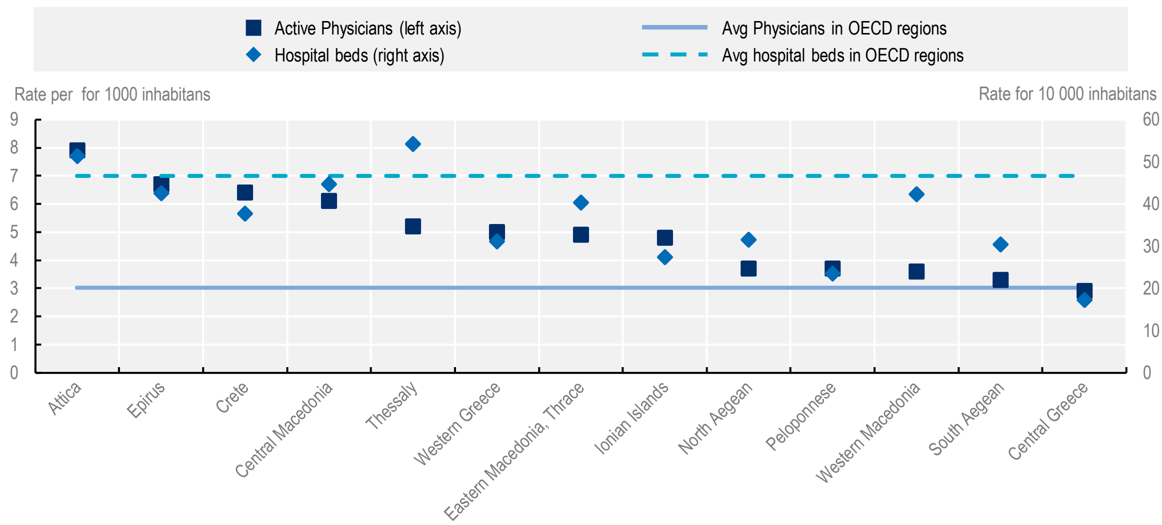
Note: Relative ranking of the regions with the best and worst outcomes in the 11 well-being dimensions, with respect to all 395 OECD regions. The 11 dimensions are ordered by decreasing regional disparities in the country. Each well-being dimension is measured by the indicators in the table below. For access to services and safety, Greek regions correspond to a higher geographic aggregation.
Source: (OECD, 2020[43]), *Regional Wellbeing (database)*, www.oecdregionalwellbeing.org, (Accessed on 13 March 2019).

Figure 2.49. Individual well-being indicators outcomes in Greek regions, 2016

	Country Average	OECD median region	Greek regions	
			Top 20%	Bottom 20%
Safety				
Homicide Rate (per 100 000 people), 2016	0.8	1.3	0.3	1.0
Education				
Labour force with at least upper secondary education (%), 2017	76.7	81.7	86.9	65.6
Health				
Life Expectancy at birth (years), 2016	81.5	80.4	82.3	81.0
Age adjusted mortality rate (per 1 000 people), 2016	7.5	8.1	7.0	7.8
Civic engagement				
Voters in last national election (%), 2017 or lastest year	63.6	70.9	69.5	54.9
Community				
Perceived social network support (%), 2013	81.1	91.4	85.5	74.7
Environment				
Level of air pollution in PM 2.5 (µg/m³), 2015	18.4	12.4	15.5	22.1
Income				
Disposable income per capita (in USD PPP), 2016	12 958	17 695	14 978	11 130
Life Satisfaction				
Life satisfaction (scale from 0 to 10), 2013	5.6	6.8	5.9	5.0
Access to services				
Households with broadband access (%), 2017	65.0	78.0	67.5	60.1
Jobs				
Employment rate 15 to 64 years old (%), 2017	53.7	67.7	55.8	50.7
Unemployment rate 15 to 64 years old (%), 2017	21.8	5.5	18.1	25.4
Housing				
Rooms per person, 2016	1.5	1.8	1.5	1.5

Note: Data in the first two columns refer to average values in regions at the top and the bottom 20% of the national ranking. OECD 34 weighted average.
Source: (OECD, 2020[43]), *Regional Wellbeing (database)*, www.oecdregionalwellbeing.org, (Accessed on 14 March 2019).

Figure 2.50. Availability of healthcare in Greek regions



Note: Data for hospital beds are from 2015, data on active physicians are from 2017, OECD averages are calculated for 2011. The average rate for hospital beds in 208 OECD regions in Austria, Canada, Chile, the Czech Republic, Denmark, Germany, Greece, Hungary, Israel, Japan, Korea, Mexico, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden and Switzerland. The average rate of physicians in OECD regions is based on 172 regions in the same countries and Latvia and with an exception of regions in Canada, Denmark, Japan and Sweden.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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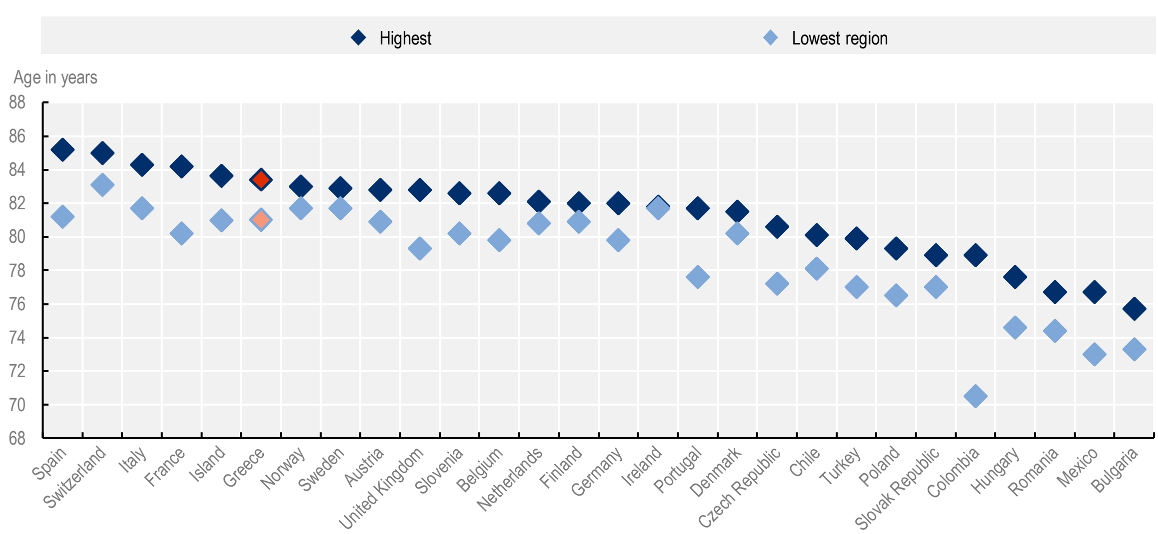
Figure 2.51. Life expectancy at birth in OECD regions, 2018



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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Despite recent improvements, Greek cities are amongst the most polluted in Europe

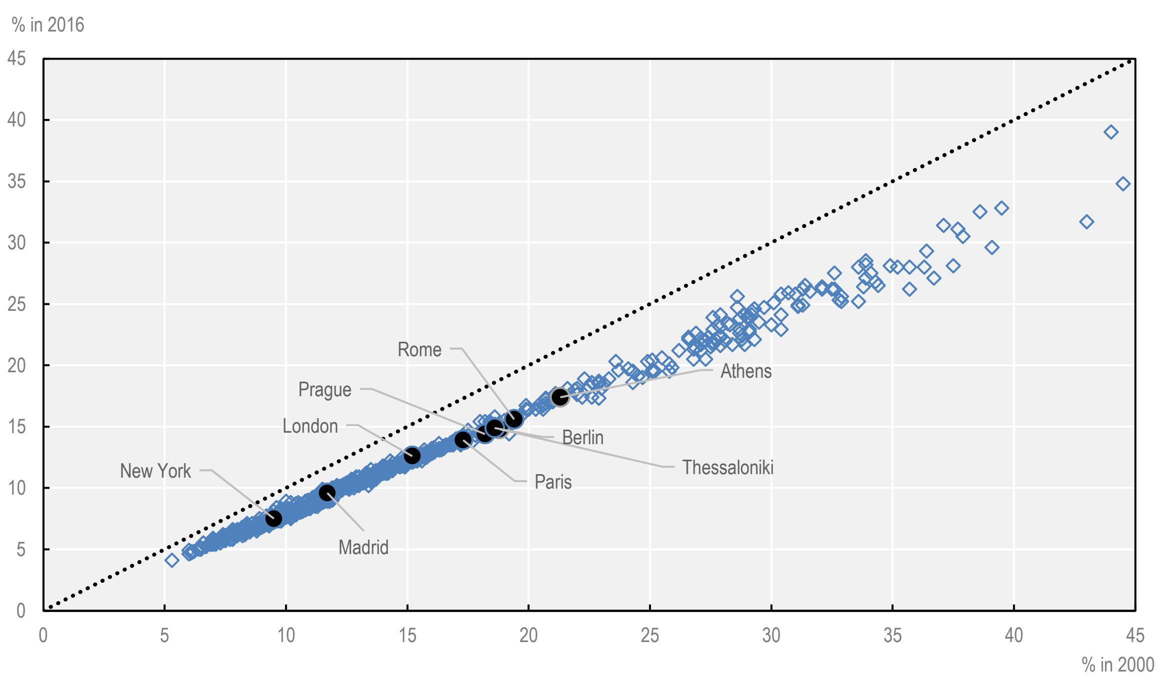
Athens and Thessaloniki remain among the most polluted European metropolitan areas despite recent improvements. Both cities decreased the pollution exposure of their population between 2000 and 2016 by 18% and 21% respectively. Pollution decreased by about 20% across metropolitan areas around the OECD countries, where North American cities show the highest percentage fall in exposure to fine particles pollution (Figure 2.52). Thessaloniki faced similar pollution exposure as Berlin and Prague, with an average level of fine particles (PM2.5) of about 14.8µg/m³ in 2016, down from 18.8 µg/m³ in 2000. Athens had higher levels of pollution, at 17.4µg/m³ in 2016, comparable to Budapest and lower than metropolitan areas in Colombia, Italy, Korea, Mexico and Poland.

Car emissions and residential heating are two major sources of ambient PM pollution that determine air quality of cities. Between 1991 and 2011, Greece put in place a ban on diesel cars in metropolitan areas, paving the way to lowering nitrogen dioxide emissions from traffic in Athens and Thessaloniki. Since lifting the ban, diesel car sales in Greece increased rapidly from 4% in 2010 to 40% of all new cars sold with a diesel engine in 2012, increasing even further to 63% in 2015 (ACEA, 2017[44]).

The economic downturn reflected negatively on the environmental performance of cities in Greece. The rising cost of heating oil, a common way of residential heating in Greece, resulted in a rise in burning biomass for heating during the winter months (Amato et al., 2016[45]). Further air quality checks during the winter months determined the presence of toxic chemicals, indicating the use of previously treated wood or combustible waste as heating fuel.

Figure 2.52. Air pollution experienced by the population in metropolitan areas, 2000-16

Average level of PM2.5 pollution intensity



Note: The 45-degree line indicates the unchanged exposure to pollution.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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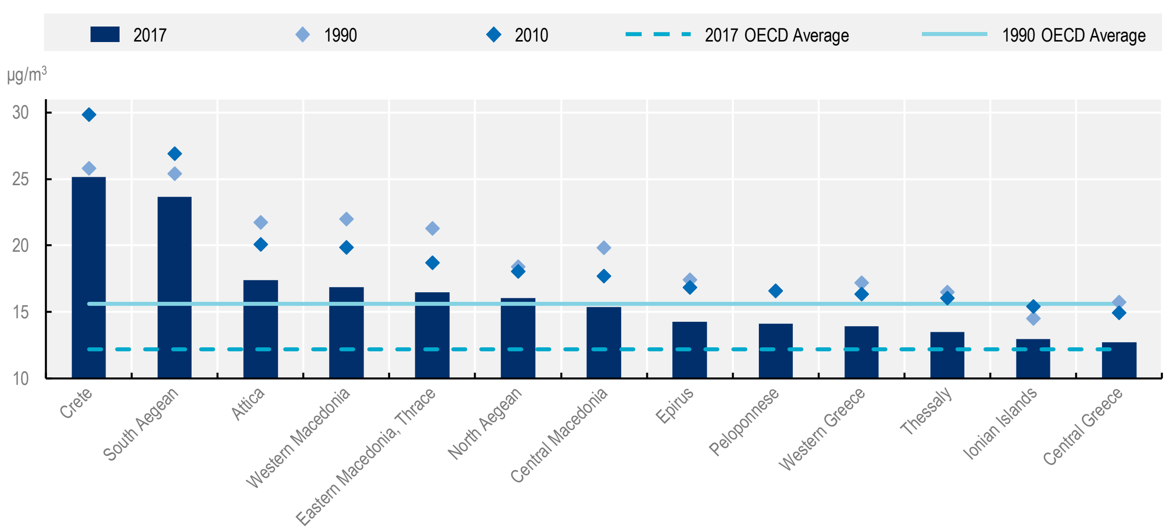
Pollution across Greek regions is high but decreased since 2010

Regional air pollution is not exclusive to metropolitan areas in Greece. Crete and South Aegean have had the highest pollution levels across regions over time, with a 25.1 µg/m³ of PM2.5 pollution level in Crete in 2017 and only slightly less, 23.7 µg/m³ in 2017, in the South Aegean Islands region (Figure 2.53). Other Greek regions experience considerably smaller exposure to pollution, with Continental Greece, the Ionian Islands and Thessaly being the least air-polluted regions in Greece, with the average pollution level between 12.7 to 13.5 µg/m³ in 2017. Yet, in 2017, all Greek regions have higher air pollution levels than an average OECD region.

A positive trend of reducing the air pollution is common across all regions in Greece by an average 2.7 µg/m³ drop, yet still lower than the decrease seen across OECD regions, 2.8 µg/m between 2010 and 2017. The 2 most polluted regions and the Ionian Islands saw an increase of pollution between 1990 and 2010, while other regions experienced a decrease in pollution by 6% on average, with Eastern Macedonia decreasing 1990 levels of pollution by the highest margin (12%). In this earlier period, Greece reduced pollution at a higher pace than an average OECD region and about half of Greek regions faced pollution levels close to the OECD average (Figure 2.53).

Figure 2.53. Air pollution in PM2.5 in Greek regions, 1990-2010



Note: The OECD 2017 average is calculated with 338 OECD regions. The 1990 average is across 323 OECD regions.
Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

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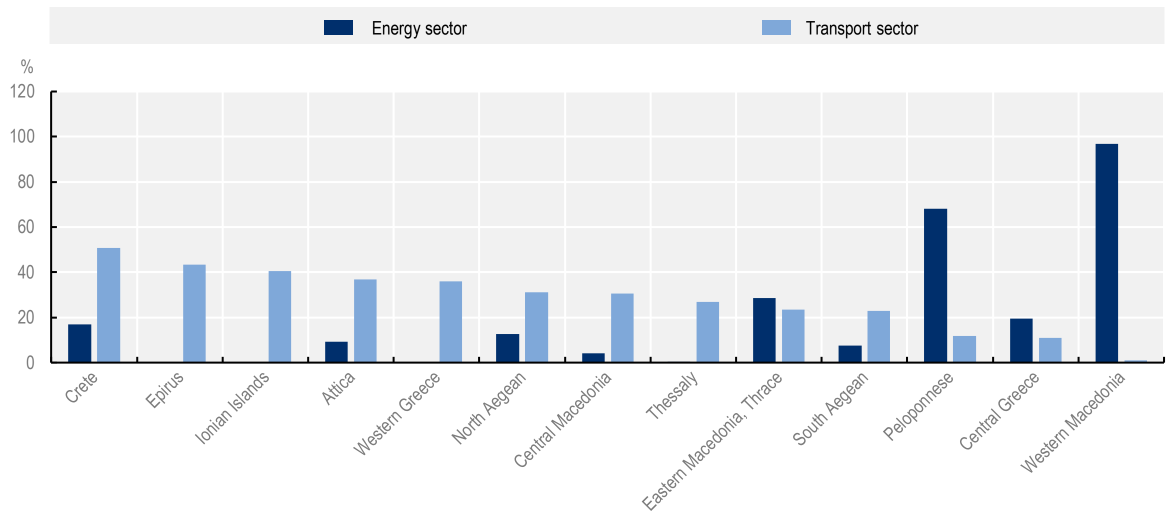
Almost all emissions in Western Macedonia come from the energy sector. Western Macedonia is specialised in mining and energy production with 35% of value-added in 2015. Similarly, the energy sector is the main emitter of CO_2 emissions in Peloponnese. In Attica, Central Macedonia, Crete, Epirus, the Ionian Islands, the North Aegean Islands and Western Greece, between 30% and 51% of emissions come from the transport sector, with the energy sector counting for 17% or less of the emissions in these regions (Figure 2.54). There are about three cars per four inhabitants of the Attica region, compared to one car per five inhabitants in Peloponnese. Car presence is also quite dominant in Central Macedonia, Crete and the Ionian Islands, all with about four cars per ten inhabitants in 2014

Figure 2.54. CO_2 emissions share by type of sector and region, 2008

As a percentage of total CO_2 emissions



Source: OECD (2020[8]), *Regions and Cities (database)*, https://stats.oecd.org/ (accessed on 19 February 2020).

StatLink https://doi.org/10.1787/888934167391

The allocation and macroeconomic effects of EU funds

Since the early 1980s, the European Union Structural and Investment Funds (ESIF) have provided financing aid to EU member countries to upgrade public infrastructure, strengthen human capital, accelerate the convergence between the EU regions but also lower poverty and inequality. Greece has been a large beneficiary of these funds as, according to data from the Ministry of Development and Investments, between 2000 and 2017, the EU structural funds disbursement to Greece amounted to EUR 66 billion.

This section assesses to what extent EU structural funds have helped the Greek economy during the long crisis. The evaluation of the impact used data since 2009 and therefore refers to the fourth and fifth programming periods of ESIF. 2009 is the first year when projects were financed in the context of the National Strategic Reference Framework 2007-13. The study includes the distribution of EU capital inflows to Greece and of amounts of EU co-financing (including state participation).

The remainder of the section is organised as follows: the second part includes a review of the literature on the effectiveness of EU funds with specific reference to Greece; the third part focuses on descriptive statistics about EU funds in Greece during the programming periods 2007-13 and 2014-20; the fourth starts with the presentation of the econometric models for estimating the impact of EU funds on the Greek economy. Then, the outputs of the estimations are presented, including the calculation and depiction of the impact of EU co-funded projects with a focus on the 2009-17 period.

EU Structural and Investment Funds represent an important share in Greek public investments

Public investments fell since the crisis, as Greece targeted debt reduction through a consolidation programme. Greece has received support from the European Commission through EU Structural and

Investment Funds (ESIF) (Table 2.6). During the crisis, EU funding in the fourth programming period represented the largest share of total public spending in Greece.

Table 2.6. EU Structural and Investment Funds in Greece

	MIP* (1986-89)	1st period (1989-93)	2nd period (1994-99)	3rd period (2000-06)	4th period (2007-13)	5th period (2014-20)
	1986 prices in ECU thousands	1989 prices in ECU thousands	1994 prices in ECU thousands	2000 prices in EUR thousands	2007 prices in EUR thousands	2014 prices in EUR thousands
Total budget	3 481 933	14 342 054	29 721 300	42 000 000	29 500 000**	25 565 000
National public contribution	695 740	5 802 196	7 069 900	9 700 000	2 600 000**	5 182 684
EU contribution	2 576 000	7 193 241	13 980 000	22 700 000	24 400 000	20 382 316
Private contribution	210 193	1 346 617	8 671 400	9 600 000	7 500 000	N/A

Note: MIP refers to Mediterranean Integrated Programmes. After 1989, MIP was included in the first structural funding. In the fourth period, due to the crisis and delays in executing spending plans, the national co-financing was reduced from EUR 11.5 billion to EUR 1.6 billion, reducing the total budget to EUR 29.5 billion.
Source: G. Petrakos. Compiled from http://www.hellaskps.gr and https://www.espa.gr/ 2019.

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Box 2.11. Priorities of EU Structural Funds in Greece

Since the early 1980s, European Union Structural Funds (SF) provided financing opportunities to EU member countries with the main aim of redressing regional inequalities. In the beginning, these funding initiatives were undertaken through the Mediterranean Integrated Programmes (MIP) (1986-89). Since the beginning of the 1990s, they are provided in the context of the so-called "programming periods". Specifically, these comprise the first Community Support Framework (CSF) (1989-93), the second CSF (1994-99), the third CSF (2000-06), the National Strategic Reference Framework (ΕΣΠΑ in Greek) (2007-13) and the current Partnership Agreement for the Development Framework (also ΕΣΠΑ in Greek) (2014-20).

In the last 30 years, Greece has been a major ESIF beneficiary, with tens of thousands of projects financed all over the country, in almost every sector of the economy, ranging from the construction of motorways to activities in the agricultural sector. These projects were mainly financed by the European Regional Development Fund, the European Social Fund, the Cohesion Fund and EU funds providing support to the agricultural sector. Specifically, in per capita terms, Greece is the EU country that received the highest amounts of ESIF between 1996 and 2015 (Tzifakis, Liargovas and Huliaras, 2015[46]).

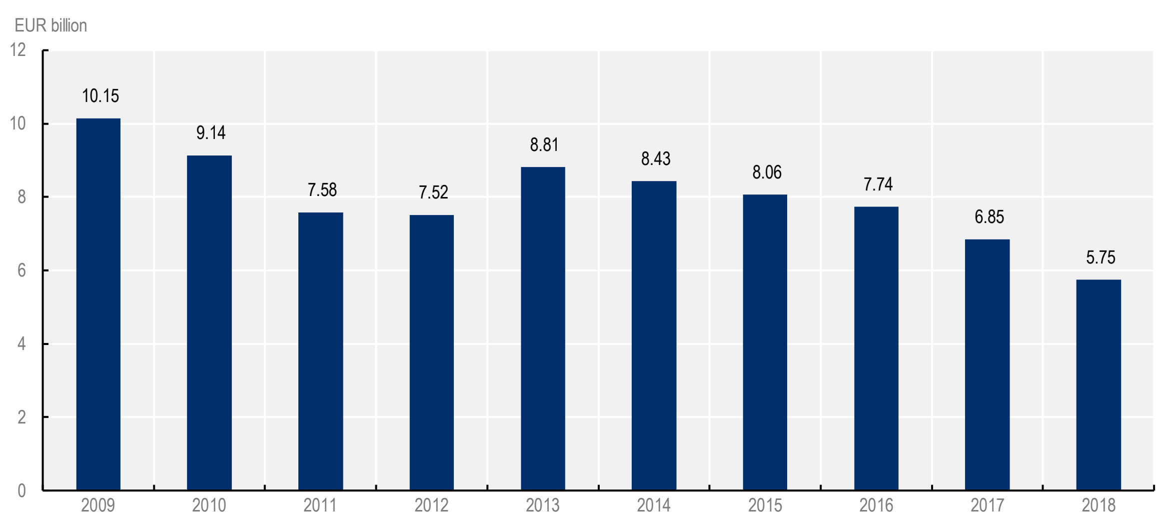
Source: Tzifakis, N., P. Liargovas and A. Huliaras (2015[46]), *Beyond "Absorption": The Impact of EU Structural Funds on Greece*, http://www.kas.de/greece.

Between May 2010 and August 2018, Greece underwent three Economic Adjustment Programmes, aiming to eliminate severe fiscal imbalances and improve the functioning of markets and international competitiveness. The structural reforms implemented in the context of the adjustment programmes have started to improve competitiveness and conditions for starting new businesses (OECD, 2018[47]). The fiscal adjustment was unprecedented as the state budget primary balance improved by 14.5% of GDP between 2010 and 2018. In the process, GDP fell by 23% between 2009 and 2013, stabilised from 2014 to 2016 before rising by 1.4% in 2017 and 1.9% in 2018. These developments, along with the inability of Greek governments to access financial markets from the second quarter of 2010 until 2017 and the Private Sector Involvement Programme in April 2012, led to a severe dearth of liquidity that persists. From May 2010 to October 2018, the outstanding amount of bank credit to the private sector of the Greek economy (businesses, households and non-profit institutions) almost halved, from EUR 259.9 billion to EUR 174.5 billion. In this context, ESF may have at least provided liquidity that would not be available otherwise.

On the expenditure side, the average annual total amount of EU and national co-financing in the period 2009-18, including investment, other projects and transfers to the agricultural sector, was EUR 8.0 billion, with the highest value, EUR 10.1 billion, recorded at the beginning of this period (Figure 2.55). In 2012, co-funded spending recorded a significant decline year-over-year by almost 26% to EUR 7.5 billion. It then rose by 17.2% in 2013. In the following 3 years, EU co-financing declined moderately, reaching EUR 7.7 billion in 2016. The downward trend intensified in 2017-18, with the relevant spending recording the lowest levels since 2009.

The uneven distribution over time of the spending of EU funds in countries where they account for a significant share of total public investment, as in Greece, makes macroeconomic management challenging (OECD, 2018[47]). That is because EU Structural Funds are not a tool of macroeconomic management and high spending in some years (such as 2010 in Greece) may be followed by low spending in the following years.

Figure 2.55. Total amount of EU co-funded expenditure per annum, 2009-18



Note: Amounts include capital and current spending.
Source: Ministry of Finance, State Budget review (2009-2018) – SGAAP (ΕΛΕΓΕΠ) balance sheets. Data processing: FEIR/IOBE.

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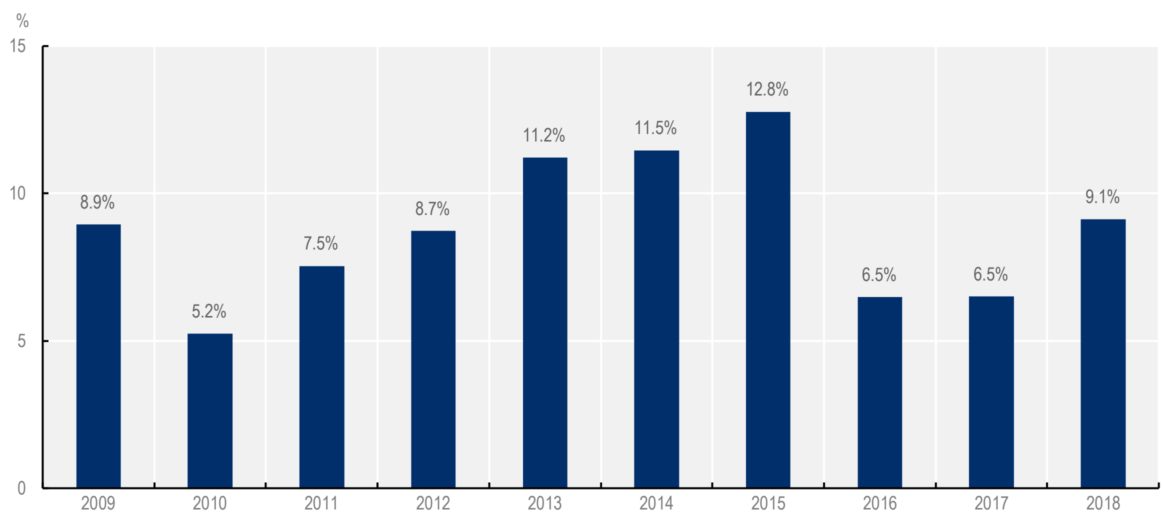
EU co-financing through the regional administrations amounted on average to EUR 706.5 million spanning the period 2009-18. Only, in 2015, this amount exceeded EUR 1.0 billion, recording its highest value in the examined period (EUR 1.03 billion). On the contrary, in 2017, the lowest amount of co-funded spending from regions was recorded, approximately EUR 445 million.

The share of EU co-financing through the regional administrations via the respective Operational Programmes (OPs) to total EU co-spending fluctuated significantly during 2009-18. Specifically, it stood on average at 8.8% (Figure 2.56). In 2010, the relevant share accounted only for 5.2% of total EU co-spending in Greece, the lowest value in the examined period and almost two-thirds of the previous year's proportion (8.9%). Subsequently and up until 2015, the share of expenditure made by regional administrations remained on an upward trend. In 2015, it reached its highest level (12.8%) but, as of 2010, it exhibited a sharp decline in the following year (6.5%) to its 2018 value of 9.1%.

Figure 2.56. Share of EU funds to regional administrations



Source: Ministry of Finance & Ministry of Development and Investments, Data processing: FEIR/IOBE.

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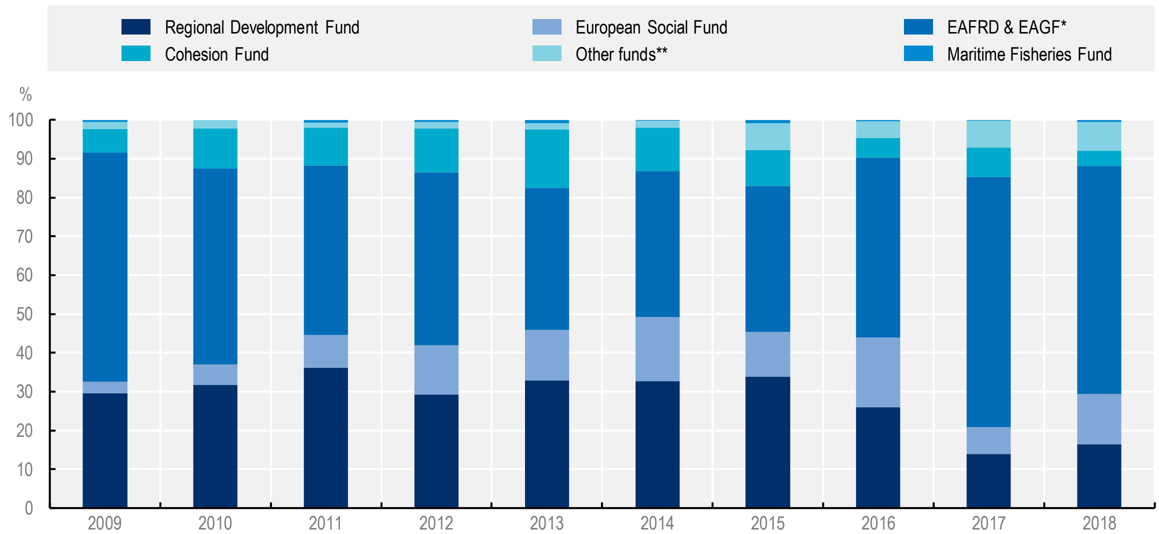
Regarding the allocation of EU capital inflows with respect to EU fund of origin, their major part – almost on average 48% during the period 2009-18 – was disbursed from the European Agricultural Fund for Rural Development (EAFRD) and European Agricultural Guarantee Fund (EAGF) (Figure 2.57). A significant amount of financing was drawn from the European Regional Development Fund (ERDF), with the respective average proportion to total EU funding amounting to 28.2% throughout the examined period. The respective average proportions to total EU funding from the European Social Fund (ESF) and the Cohesion Fund (CF) amounted to 10.9% and 9.0% respectively. However, the share of ESF inflows fluctuated considerably, whereas that of CF was relatively more stable.

The share of financing from the ERDF declined considerably through time, from 36.2% in 2011 to 16.4% in 2018. On the contrary, the participation of ESF resources recorded a significant increase, reaching 13.0% in 2018 from 2.9% in 2009. This development possibly linked to the urgency of tackling the social problems that the long and strong recession in Greece during 2008-13 caused. In 2018, the capital inflows from both the EAFRD and the EAGF amounted to 58.7% of total resources originating from the EU, the largest share since 2009.

Figure 2.57. Distribution of EU funds for investment projects



Note: EAFRD: European Agricultural Fund for Rural Development; EAGF: European Agricultural Guarantee Fund (EAGF).
Source: Ministry of Finance, State Budget Review, Data processing: IOBE.

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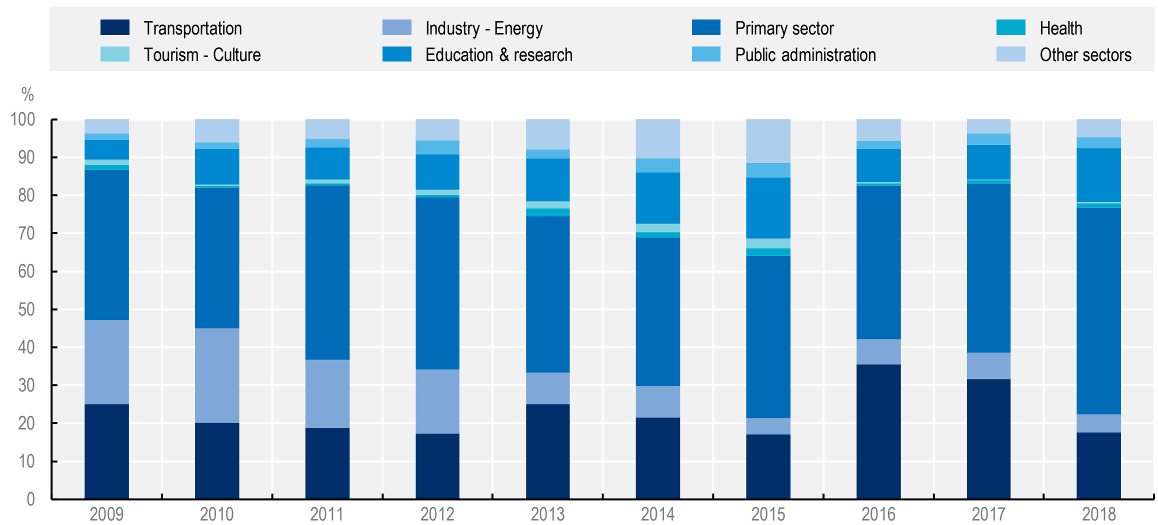
Concerning the allocation of total co-financing to activities and sectors of the Greek economy, on average the primary sector of the economy held the highest share, at a significant distance from the sector with the second highest share. Specifically, the primary sector's share of total EU funding was on average 43% during the period 2009-18. This mainly comprised subsidies granted by the EAGF (Figure 2.58). A significant amount of EU funds was allocated to the construction of transport infrastructure, with its average share reaching 23%. These capital inflows from EU funds were used mainly for the construction of highway networks. The share of EU funds allocated to projects concerning transport fluctuated significantly, reaching 18% in 2018, one of the lowest in the examined period, following a 35% share in 2016. Capital resources concerning the primary sector varied between 40%-45% of total EU funding but recorded a significant increase in 2018, to 54%.

Co-funded projects in the industry-energy sector, and in education and research are next in the classification with respect to absorption of EU funds, with an average share of 12% and 11% respectively. EU capital resources for the support of public administration amounted to 3% between 2009 and 2018. Public administration projects covered various purposes, such as digitalisation of public services, e-governance, restructuring of public services, etc. The smallest shares to EU capital flows were recorded in the health sector, as well as in the tourism-culture sector, with a magnitude of on average 1% for both, spanning the period 2009-18.

In order to assess the implementation of EU co-funded investment planning in Greece during the fourth and fifth programming periods, one can examine the absorption rate of capital resources per EU fund and in total. This information is derived from the ratio of disbursed co-financing to beneficiaries to the approved EU co-funding amounts. Concerning the National Strategic Reference Framework (NSRF) 2007-13, the average absorption rate among EU funds was 106.3%. Analytically, the absorption rate for EFRD reached 106.6%, for ESF reached at 106.2%, while for the Cohesion Fund, the absorption rate stood at 105.3%. Similarly, concerning the Partnership Agreement 2014-20, up to the first semester of 2017 (latest data available), the absorption rate amounted to 9.9%. The absorption rate of EU funds from the EFRD, the ESF and the CF was 10.1%, while the respective rate for EAFRD amounted to 9.1%.

Figure 2.58. Distribution of EU investment co-financing by sector



Source: Ministry of Finance, State Budget review – Public Investment Division (Ministry of Economics) - General Government Accounting Division (Ministry of Finance), Data processing: FEIR/IOBE.

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To increase the absorption and use of EU funds in Greece, the technical support of the European Commission's Structural Reform Support Service (SRSS) – now DG Reform – is providing help to improve administrative capacity for the design and implementation of reforms concerning the use of EU funds. Moreover, simplification measures were carried out in the legislation and implementation of EU structural funds, including clarifying the demarcation between political and administrative tasks, enhanced co-ordination of funds as well as reinforcement of anti-fraud measures. Greece also set up an inter-ministerial committee with the aim to lift bottlenecks in the implementation of projects and took legislative action to simplify the payment circuit of projects in order to increase absorption. A number of countries have passed reforms to improve the management and spending effectiveness of EU funds. These experiences indicate that improving capacity, greater use of electronic applications, simplified processes and greater co-ordination can help to speed up implementation (Box 2.12).

Box 2.12. Selected example of reforms to improve the spending of EU funds

Bulgaria

Initial weakness resulted in a low absorption rate, which was mitigated by increasing advanced payments, applying electronic application and reporting procedures, simplifying and unifying tender processes, and strengthening the role of international financial institutions and banks in project preparation, evaluation and monitoring.

Czech Republic

Significant steps have been taken to improve co-ordination, capacities and framework conditions for the 2014-20 period. "Standing conferences" have been established at the national and regional levels (using the eight regional groupings channelling EU funding). These conferences include important territorial stakeholders and will prepare action plans that form the basis for calls for tender. There is also a stronger focus on integrated strategies within regions and community-led local development. The number of programmes has been reduced, procedures for managing the programmes have been simplified and a uniform methodology applied across all programmes.

Poland

A forum has been introduced for the co-ordination of strategic planning for the EU-funded investments. Project management and transparency of execution have improved as part of efforts to better absorb EU funds. Technical assistance funds have been used to train regions and beneficiaries of project funds in performance monitoring. An information system for monitoring and controlling structural and cohesion funds was put in place to highlight the financial and physical progress of projects co-financed by EU funds throughout their implementation, which was meant to facilitate the certification process for release of EU funds. Each such project was also assigned a monitoring committee that carried out systematic progress assessments over the life of the project.

Slovak Republic

Some steps have been taken to improve the administration of EU funds, such as the semi-annual publication on the implementation of EU funds that allows the authorities to react promptly in case of identified problems regarding absorption of the funds. Administrative procedures have also been simplified and allow the managing authority to request only partial project documentation upon the application submission, the rest of the documentation being required only after projects are selected. Following 2014 and 2015 government resolutions, it was decided to significantly increase the number of employees working in entities responsible for ESIF. The Analytical Unit of Central Coordination Body was created in June 2015. The main aim of this body is to provide input for evidence-based policymaking, with a special emphasis on the study of the effectiveness of EU funds. An electronic system to exchange data between managing authorities and EU fund beneficiaries has been put in place to monitor and evaluate the whole process. The managing authorities started to collaborate with regional offices to offer technical assistance and free consultations to help applicants with the application process. The recently adopted National Public Procurement Package is supposed to facilitate the application and disbursement process.

Slovenia

The government has implemented inter-ministerial co-ordination, which organises meetings with potential applicants and advises smaller companies. Slovenia has also simplified procedures for payments and improved the timeliness of public tender announcements.

Lithuania

Since joining the EU in 2004, Lithuania has taken steps to improve planning and implementation of public investment projects, particularly those financed by EU funds. To deal with an expanding pool of potential project applications to use EU funds, a competition-based project selection procedure was introduced, which meant that public entities and public service providers had to apply for financing on an equal basis and follow well-defined criteria and procedures.

Source: OECD (2018[47]), *OECD Economic Surveys: European Union 2018*, https://dx.doi.org/10.1787/eco_surveys-eur-2018-en;.

EU funds have significantly increased Greek economic performance

In order to analyse the impact of cohesion policy, some studies have used the QUEST III[5] model, developed and used by the Directorate-General for Economic and Financial Affairs (DG ECFIN), supplemented by a second model, RHOMOLO.[6] The latter is designed to estimate the impact of policy at the NUTS 2 regional level. The results of this model for the programming period 2000-06 show an unambiguously positive impact of EU Structural Funds financing on the GDP of member states, especially in the Greek economy. Specifically, the results of the model simulation suggest that co-funded investments during the period 2000-09 have potentially on average increased GDP in Greece by up to 1.4% annually, relative to the baseline scenario on (Figure 2.59).

Box 2.13. Literature analysing EU funding impact on the economy

Disentangling the effect of EU funds from other factors driving economic growth is not evident. It should be recognised, however, that in many countries – Greece included-, financing from the EU structural funds has amounted to a high share of public investment, which is a key driver of economic growth in less developed regions (EC, 2018[48])

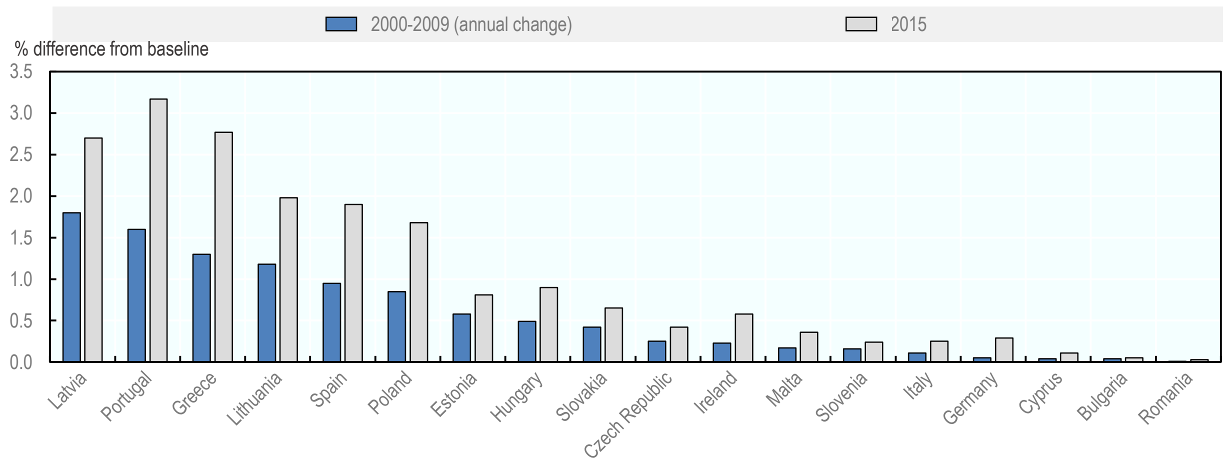
Many studies on the impact of Cohesion Policy funding on growth have found significantly positive effects (Puigcerver-Penalver, 2007; Lima & Cardenete, 2008). A small part of these studies has found positive but only mild effects (Mohl & Hagen, 2010) while some other studies found an either small or statistically insignificant impact (Ederveen, Groot, & Nahuis, 2006; Bradley, Morgenroth, Untiedt, Bradley, & Morgenroth, 2003). Most of the studies carried out after 2005 usually rely on larger datasets that could capture the long-run effect of Cohesion Policy and find that EU co-funding has had broadly positive results

Starting with the impact of the second CSF 1994-99 on Greece, EU funds contributed to the creation of nearly 400 000 jobs (Beutel, 2002[49]). The effects of capital inflows in the context of the EU Cohesion Policy on the Greek Economy during the period from 2000 to 2006 were positive, contributing to an increase in GDP by 2.8% (Tzifakis, Liargovas and Huliaras, 2015[46]). They also boosted technological innovation, through investment in 23 000 enterprises and 7 000 start-ups. Moreover, it was estimated that EU funds in the third programming period generated 14 000 new jobs per year, provided vocational training for 257 000 people and improved infrastructure and accessibility to the labour market.

During the 2007-13 programming period, EU funds provided Greece with EUR 6 billion to improve transport infrastructure, EUR 5.5 billion to boost environmental condition, EUR 3.6 billion to support R&D and EUR 2.2 billion for vocational training. These financial resources led to the creation of more than 2 400 businesses and contributed to investment in over 30 000 small- and medium-sized enterprises (SMEs) (Tzifakis, Liargovas and Huliaras, 2015[46]). Moreover, 21 000 job positions were created, most of them in SMEs. Thanks to EU funding, 800 000 citizens gained access to broadband Internet and there was an improvement in urban transport, to the benefit of over 86 000 people.[7] Investment in water supply and management benefitted 450 000 people (REMACO, 2014).[8]

Source: (Beutel, 2002[49])*The Economic Impact of Objective 1 Interventions for the Period 2000-2006*, https://opus.htwg-konstanz.de/frontdoor/deliver/index/docId/21/file/FH-orschung9.pdf (accessed on 25 July 2019); Tzifakis, N., P. Liargovas and A. Huliaras (2015[46]), *Beyond "Absorption": The Impact of EU Structural Funds on Greece*, http://www.kas.de/greece; (Puigcerver-Penalver, 2007[50]), (Lima & Cardenete, 2008[51]), (Mohl & Hagen, 2010[52]), (Ederveen, Groot & Nahuis, 2006[53]), (Bradley & Morgenroth, 2003[54]), (REMACO, 2014[55]).

Figure 2.59. Estimated impact of Cohesion Policy financing on GDP for the 2000-06 period (3rd CSF)



Source: QUEST European Commission macroeconomic model 2014. Data computation with WebPlotDigitizer.

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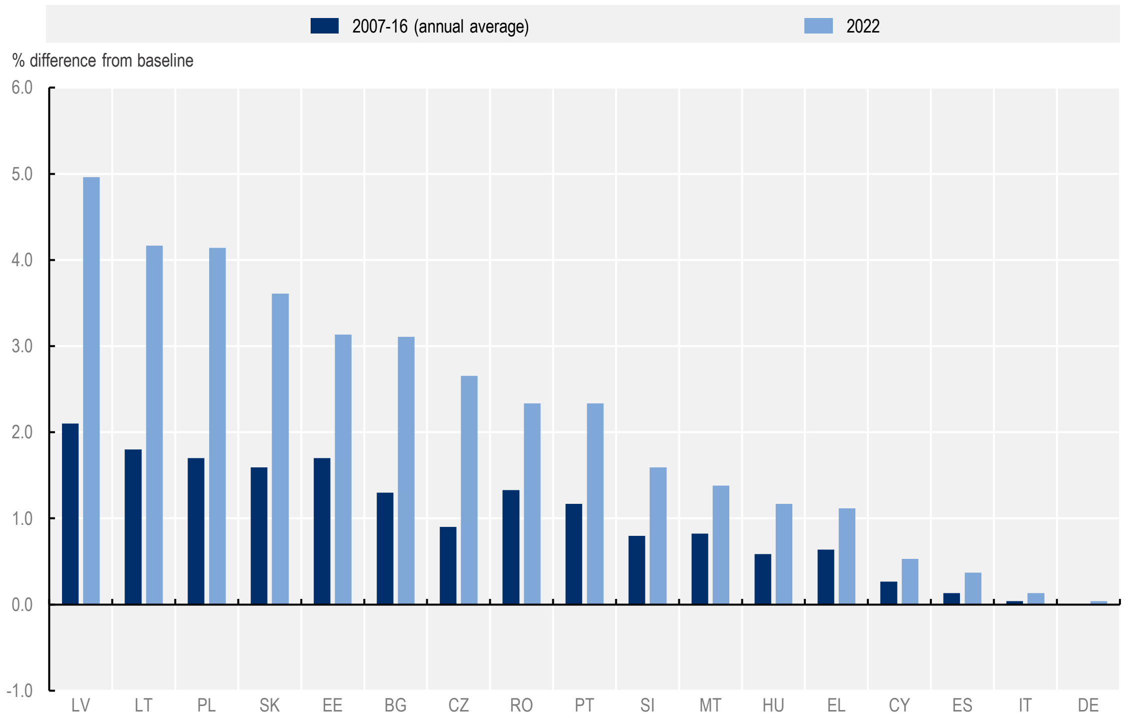
In the programming period 2007-13, funding was provided to many companies helping them to overcome the tight borrowing conditions, because of the sovereign crisis in Greece. For example, in the context of the JEREMIE financial instrument scheme, 1 300 SMEs were financed. Almost 730 000 people were given access to broadband Internet as a result of ERDF financing, the majority of them in the Macedonia and Thrace regions, which are 2 of the least developed in Greece, thus contributing to the narrowing of digital hysteresis. Using the aforementioned model, Cohesion Policy co-funded investments in Greece during the period 2007-13 were estimated to have average growth potential of 0.5 GDP percentage points annually, relative to the baseline scenario (

Figure 2.60). Although a boost to economic activity was estimated, this is significantly milder compared to that of the previous programming period. This outcome is partly attributable to GDP contraction due to the 2010 sovereign crisis in Greece.

ESIF can also positively impact environmental and social outcomes. During the 2007-13 programming period, an additional 5.9 million people were connected to new or improved water supply networks, 1.6 million of whom were in EU-12 countries and 3.7 million in convergence regions in the 4 southern EU-15 member states (Table 2.7). The majority were living in Spain and Greece, 1.93 million and 1.4 million respectively. Additionally, 6.9 million more people were connected to new or upgraded wastewater treatment facilities, 1.9 million of whom were in EU-12 countries and 4.6 million in the 4 southern member states, of which 370 800 in Greece.

Figure 2.60. Estimated impact of Cohesion Policy on GDP for the 2007-13 period



Source: QUEST European Commission macroeconomic model 2014. Data computation with WebPlotDigitizer.

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Table 2.7. Additional population served by water and wastewater projects co-financed by the ERDF and Cohesion Fund, 2007-13 (up to end of 2014)

	Water projects (thousand)	Wastewater projects (thousand)
Czech Republic	371.3	490.3
Estonia	13.7	15.8
Hungary		478.1
Lithuania		78.5
Latvia	672.2	90.1
Poland	262.2	537.3
Slovenia	291.6	194.2
Slovak Republic	33.0	44.2
Spain	1 929.0	2 172.3
Greece	1 455.5	370.8
Italy		825.0
Portugal	359.8	1 270.0
Germany		213.0
France	514.6	101.4
EU-12	1 644.0	1 928.5
EU-4	3 744.3	4 638.1

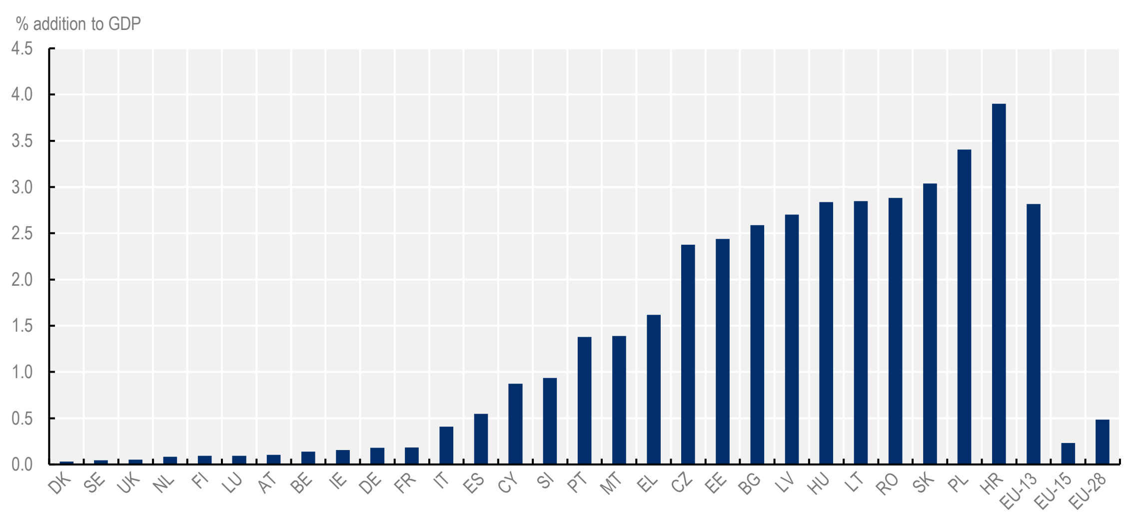
	Water projects (thousand)	Wastewater projects (thousand)
EU-15 Other	514.6	314.4
EU	5 902.9	6 880.9

Note: EU-4 = Greece, Italy, Spain and Portugal.
Source: DG-REGIO. Derived from Annual Implementation Reports for 2014.

StatLink https://doi.org/10.1787/888934167543

In the current programming period 2014-20, with means of a RHOMOLO model estimation, GDP in EU-13 countries in 2015 was estimated to be 2.8 percentage points higher than it would have been without EU co-funded projects (Figure 2.61). In terms of the magnitude of the impact until 2023, Greece ranks among the middle range of EU countries, with a 1.6 percentage points higher GDP growth rate compared with the case of absence of ESIF for the programming period 2014-20. The year 2023, beyond the fifth programming period, was chosen as a benchmark, because some cohesion funding, such as that for innovation process, has medium- or even long-term impact on the economy, which in some cases is higher than its short-term impact.

Figure 2.61. Impact of 2014-20 EU funding on member states' GDP, until 2023



Source: QUEST European Commission macroeconomic model 2014. Data computation with WebPlotDigitizer.

StatLink https://doi.org/10.1787/888934167562

A characteristic of the impact of ESIF is the hysteresis effect these projects can have on the local economy. Some categories of interventions have an immediate impact on employment, such as transport infrastructures, but others could affect the economy in the medium and long terms, such as R&D projects or education (Plaskovitis, 2006[56]; Tzifakis, Liargovas and Huliaras, 2015[46]). Financial support for this type of project is higher in Greece in the context of the 2007-13 and 2014-20 programming periods compared with previous ones. This may lead to higher GDP growth rates in the long run. The impact of EU co-financing on Greece's real GDP reached 6% for the period 2000-06 (Funck and Pizzati, 2003[57]). This result came from using Hermin model simulations and comparing the GDP growth rate of the Greek economy versus a baseline scenario GDP growth rate, not including the effect of EU funds. In this study, it is assumed that structural funds had a beneficial impact on social and institutional capital, as well as through increasing the efficiency of public administration. However, it is not easy to capture the latter effect on the economy.

The impact of EU funds on GDP is sizeable and robust

The effects of the EU co-funded projects on the Greek economy were approached by means of two econometric models, a Vector Error Correction Model (VECM) developed by the Foundation for Economic and Industrial Research (IOBE) and a version of the Global Integrated Monetary and Fiscal (GIMF) model. For the calibration of the latter, recent simulation results of the National Institute Global Econometric Model (NiGEM) for Greece, produced by the OECD, were taken into account. The former model was used for estimating the one-off short-term impact of EU funds on GDP during 2009-18, whereas the latter for calculating the medium-term multiplier for the same period and the long-term multiplier of EU co-funded projects (2009-23).

Specifically, assuming that the average share of national (state) participation to all EU co-funded projects, for investment and consumption purposes, was 20% over the period 2000-18, the VECM estimation result was that each euro of EU co-financing, excluding national participation, has led on average to another 64 cents of GDP (at 2008 values). This is equivalent to a claim that each euro of EU funds, including national participation, has led on average to 51 cents of GDP creation. Accordingly, 0.51 is the value of the short-term growth multiplier of EU funds. In the event the average national participation share was 14%, then the impact of each euro of co-funding on GDP would be 59 cents. Assuming that the average national participation rate is 20% and the confidence interval is close to 95% (+/- 2 standard deviations), the result is that each euro of EU funds increased GDP by a range between 17 and 111 cents (or a range between 16 and 103 cents if the average national participation was 14%).

During the whole period 2000-18, the average one-off short-term contribution of EU co-funded projects to Greek GDP was 2.0 percentage points. This outcome results in a cumulative boost of GDP by EUR 76.9 billion (in 2008 volumes), without accounting for the impact of the private sector capital resources that were mobilised due to EU co-funded projects. The impact of EU funds on GDP is robust and of similar magnitude when focusing on the sub-period 2009-18, which relates to the disbursements in the context of the fourth (2007-13) and fifth (2014-20) programming periods. Due to the lower average level of GDP during 2009-18, the average first-year contribution of co-funded projects to economic activity has been slightly higher during 2009-18, around 2.1 percentage points of Greek GDP (circa EUR 4.0 billion in 2008 chain-linked volumes [CLVs]). This translates into a cumulative increase of GDP by EUR 40.0 billion during 2009-18.

According to the GIMF estimation output, the medium-term cumulative effect of the EU co-financed investment on the Greek GDP (period 2009-18) was EUR 71.0 billion in 2008 chain-linked volumes. Therefore, given that total EU co-financing of investment and other projects for this period was EUR 79.1 billion, the average multiplier of the EU funds on the Greek GDP over this period is 0.9, implying that each euro of EU funds boosted on average the country's GDP by 90 cents. The medium-term multiplier is higher than the short-term multiplier because it *inter alia* captures the cumulating positive effect from productivity gains.

The same cumulative amount of EU funds was estimated to cause a cumulative increase of the Greek GDP in the entire period 2009-23 equal to EUR 122.3 billion in 2008 CLVs. This implies a long-term multiplier close to 1.55, which is more than double the short-term effect.

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Notes

[1] Values from the Greek Tourism Organisation. Numbers can vary with island size definition.

[2] "Refugees" are those who have successfully applied for asylum and have been granted protection in their host country, including those who are recognised on the basis of the 1951 Geneva Convention Relating to the Status of Refugees but also those benefitting from national asylum laws or EU legislation (Directive 2011/95/EU), such as the subsidiary protection status. "Asylum seekers" are those who have submitted a claim for international protection but are awaiting the final decision. (OECD Glossary of statistical terms).

[3] Only the following countries with available data are considered: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain and Sweden.

[4] In some countries the leading region accounts for a small percentage of the total workforce. Where this is the case, the frontier is the weighted average of regions with the highest labour productivity levels accounting for 10% of the country's total employment (OECD (2018), Productivity and Jobs in a Globalised World: (How) Can All Regions Benefit).

[5] The model used to carry out this impact assessment is an extension of Quest III containing a representation of the effect of investment in human capital and endogenous technological change, which makes it particularly suitable for the evaluation of cohesion policy type of structural interventions. It also includes explicit cross-country linkages through bilateral trade relationships to capture spill-over effects and the interaction between EU member states.

[6] RHOMOLO is used extensively for impact assessments of the European Structural and Investment Funds, such as ERDF and ESF, and it is used together with the European Investment Bank (EIB) for the evaluation of the macroeconomic impact of the EIB group. This model has been developed by the Joint Research Centre-Institute for Prospective Technological Studies and the DG Regional Policy.

[7] Executive Unit of ESPA of the Ministry of Infrastructure and Transport: i) Annual Report 2013 of the Operational Program for Environment and Sustainable Development; an ii) Final Report of March 2017 of the Operational Programme of the Attica Region.

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Annex 2.A. New estimations of the effects of EU funds on the Greek economy

VECM estimation of EU funds' effects

Data set

The choice of variables for this section's empircal estimation builds upon existing literature on VECM calibration to a country's macroeconomic outlook, including (Anderson et al., 2002[58]) on the United States economy, (Christofides et al., 2006[59]) on Cyprus, (Lyhagen et al., 2015[60]) on Sweden, and (Thanasis, 2017[61]) on Greece. This calibration considers long-term relationships among real GDP, inflation rate and employment, while adding proxies for labour productivity and the intensity of the Greek sovereign debt crisis, as measured by the government bond spread. The model assumes that all macroeconomic variables are endogenously determined and allows examining how exogenous shocks stemming from EU funds affect each endogenous variable. The data set consists of variables on a quarterly frequency during the period 2000-18. Those are presented in Annex Table 2.A.1. The proxy for EU funds is derived from the total amount of spending for EU co-funded projects, as they are mainly recorded in the state budget and state budget review.[1] The EU funds series hence comprises both national and EU contribution to EU co-funded projects (expenditure codes 8300, 5300 and 5400, classified mostly under the Public Investments Programme, as well as transfers to the agricultural sector, disbursed by the Payment and Control Agency for Guidance and Guarantee Community Aid [ΟΠΕΚΕΠΕ in Greek]), while it excludes private sector investment for these projects. Such co-financing data is available annually; we hence construct its quarterly path following the within-year seasonality of public investment, proxied by the general government's gross capital formation.

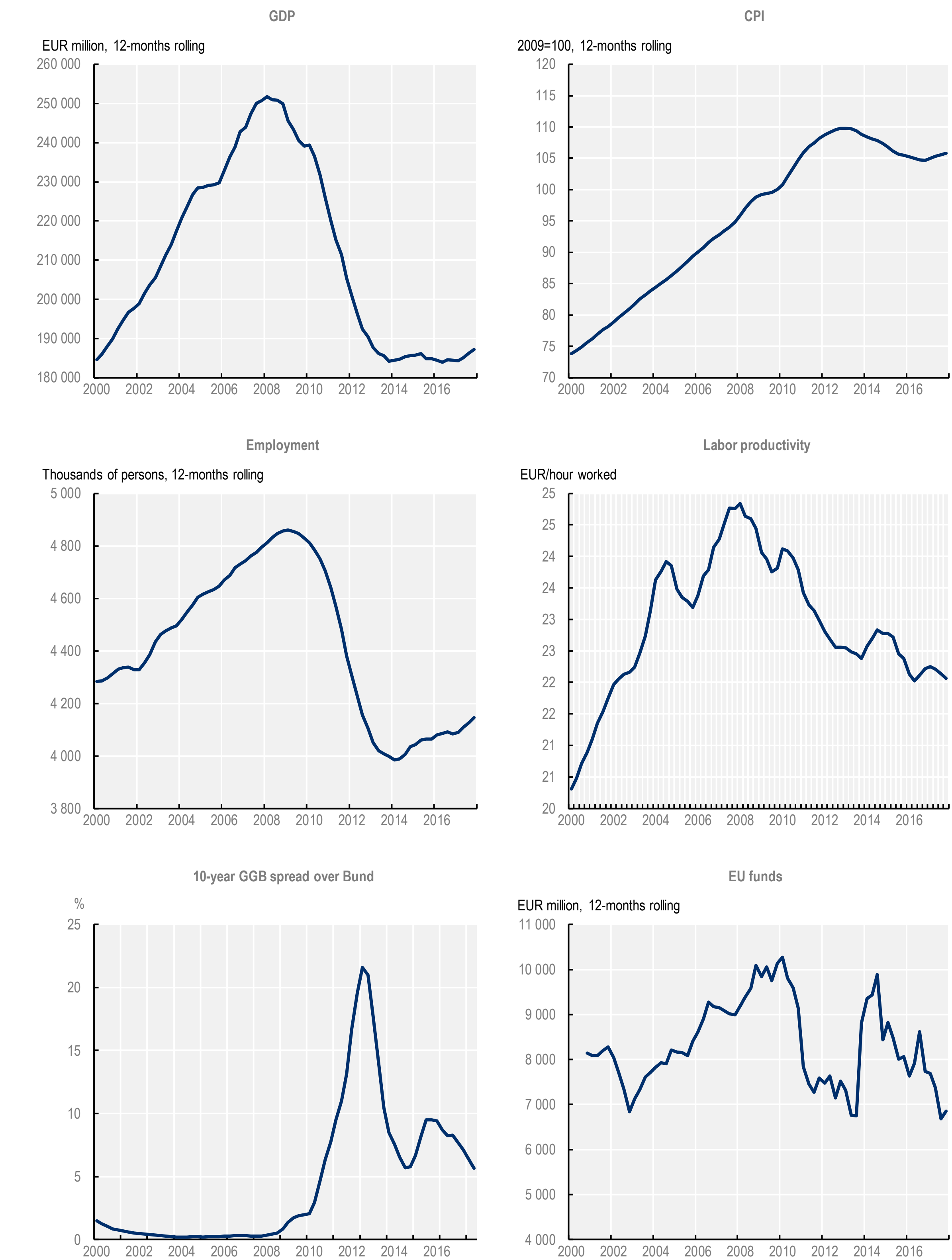
Annex Table 2.A.1. Variable definitions for VECM estimation

Variable	Abbreviation	Definition	Source
Real GDP	GDP	Constant prices 2008, n.s.a.	ELSTAT
Inflation	CPI	Consumer Price Index, 2009='100'	ELSTAT
Employment	Empl	Number of persons employed, n.s.a.	ELSTAT
Labour Productivity	lp	Real GDP/number of hours worked	Eurostat
GGB spread	GGB	10-year Greek Government Bond (GGB), spread over bond	ECB
EU funds	EUfunds	Public spending for EU co-funded projects, cash basis, budget codes 8300, 5300 and 5400, agricultural transfers through EAGF & EAGGF	Ministries of Finance, Economics, PCAGGA (ΟΠΕΚΕΠΕ)

Note: n.s.a.: Not seasonally adjusted.
Source: ELSTAT, European Central Bank, Ministry of Finance, Ministry of Economics, Special Agricultural Products Guarantee Account (ELEGEP) balance sheets. Data processing: FEIR/IOBE.

Descriptive statistics for the main variables are presented in Annex Table 2.A.2. For the purpose of the Vector Error Correction Model estimation (VECM), the variables' quarterly percentage change (quarter-over-quarter) was used, measured by the first difference of their logarithmic values. For the government bond spread (GGB variable), the first difference of its percentage level across quarters was used. In Annex Figure 2.A.1, the annualised variables' trend during the examined time span is presented.

Annex Figure 2.A.1. VECM variables trend during 2000-18



Source: Foundation for Economic and Industrial Research (IOBE) estimates.

Annex Table 2.A.2. VECM quarterly data set descriptive statistics

Variable	Units	Mean	Units	Mean	Standard deviation
Δ(GDP)	EUR million (2008 prices)	50 843	q-o-q (%)	0.11%	0.06
Δ(CPI)	Index 2009=100	96.92	q-o-q (%)	0.49%	0.01
Δ(Empl)	Number of persons (million)	4.41	q-o-q (%)	-0.02%	0.01
Δ(lp)	Euros/hour worked	22.92	q-o-q (%)	0.10%	0.02
Δ(GGB)	Percent	4.61	q-o-q	0.04 ppts	1.65
Δ(EU funds)	EUR million	2 051	q-o-q (%)	0.51%	0.60

Note: q-o-q: Quarter-over-quarter.
Source: FEIR/IOBE estimates.

Model specification

In order for the VECM estimation to be well specified, a necessary condition is for the endogenous variables to be cointegrated. The general formulation of a VECM expresses a dynamic relationship between the vector Y_t of endogenous variables that are cointegrated (long-run relationship) and the vector of exogenous variables X_t affecting the endogenous variables.[2] Indicatively, a VECM can be written in the following algebraic form:

$$\Delta y_t = c + \mathrm{A} y_{t-1} + B \sum_{i=1}^{p} \Delta y_{t-i} + \Gamma \Delta X_t + e_t$$

where $\mathrm{A} y_{t-1}$ depicts one or more cointegration relationships among the endogenous variables, $B \sum_{i=1}^{p} \Delta y_{t-i}$ expresses the short-term adjustment coefficients and ΓX_t represents the contemporaneous impact of exogenous variables.

Following Johansen's cointegration rank test, we find that our set of endogenous variables exhibits one cointegrating relationship at the 95% confidence level, concerning the GDP (maximum eigenvalue criterion). We choose two as the number of optimal lags for the endogenous variables following a combination of information criteria (FPE, AIC, LR, Schwarz Information Criterion, Hannan-Quinn). Hence, the VECM specification including one cointegrating relationship among the endogenous variables and two lags is written as follows:

$$\begin{aligned}\Delta GDP_t = c_{GDP} &+ \alpha_{1,1}\left(\mu_{1,0} + \mu_{1,1} GDP_{t-1} + \mu_{1,2} CPI_{t-1} + \mu_{1,3} Empl_{t-1} + \mu_{1,4} lp_{t-1} + \mu_{1,5} GGB_{t-1}\right) \\ &+ \beta_{1,1}\, \Delta(GDP)_{t-1} + \beta_{1,2}\, \Delta(CPI)_{t-1} + \beta_{1,3}\, \Delta(Empl)_{t-1} + \beta_{1,4}\, \Delta(lp)_{t-1} + \beta_{1,5}\, \Delta(GGB)_{t-1} \\ &+ \beta_{1,6}\, \Delta(GDP)_{t-2} + \beta_{1,7}\, \Delta(CPI)_{t-2} + \beta_{1,8}\, \Delta(Empl)_{t-2} + \beta_{1,9}\, \Delta(lp)_{t-2} + \beta_{1,10}\, \Delta(GGB)_{t-2} \\ &+ \gamma_{1,1} \Delta(\text{EUfunds})_t + e_t^{RGDP}\end{aligned}$$

$$\begin{aligned}\Delta CPI_t = c_{CPI} &+ \alpha_{2,1}\left(\mu_{1,0} + \mu_{1,1} GDP_{t-1} + \mu_{1,2} CPI_{t-1} + \mu_{1,3} Empl_{t-1} + \mu_{1,4} lp_{t-1} + \mu_{1,5} GGB_{t-1}\right) \\ &+ \beta_{2,1}\, \Delta(GDP)_{t-1} + \beta_{2,2}\, \Delta(CPI)_{t-1} + \beta_{2,3}\, \Delta(Empl)_{t-1} + \beta_{2,4}\, \Delta(lp)_{t-1} + \beta_{2,5}\, \Delta(GGB)_{t-1} \\ &+ \beta_{2,6}\, \Delta(GDP)_{t-2} + \beta_{2,7}\, \Delta(CPI)_{t-2} + \beta_{2,8}\, \Delta(Empl)_{t-2} + \beta_{2,9}\, \Delta(lp)_{t-2} + \beta_{2,10}\, \Delta(GGB)_{t-2} \\ &+ \gamma_{2,1} \Delta(\text{EUfunds})_t + e_t^{CPI}\end{aligned}$$

$$\begin{aligned}\Delta Empl_t = c_{Empl} &+ \alpha_{3,1}\left(\mu_{1,0} + \mu_{1,1} GDP_{t-1} + \mu_{1,2} CPI_{t-1} + \mu_{1,3} Empl_{t-1} + \mu_{1,4} lp_{t-1} + \mu_{1,5} GGB_{t-1}\right) \\ &+ \beta_{3,1}\, \Delta(GDP)_{t-1} + \beta_{3,2}\, \Delta(CPI)_{t-1} + \beta_{3,3}\, \Delta(Empl)_{t-1} + \beta_{3,4}\, \Delta(lp)_{t-1} + \beta_{3,5}\, \Delta(GGB)_{t-1} \\ &+ \beta_{3,6}\, \Delta(GDP)_{t-2} + \beta_{3,7}\, \Delta(CPI)_{t-2} + \beta_{3,8}\, \Delta(Empl)_{t-2} + \beta_{3,9}\, \Delta(lp)_{t-2} + \beta_{3,10}\, \Delta(GGB)_{t-2} \\ &+ \gamma_{3,1} \Delta(\text{EUfunds})_t + e_t^{Empl}\end{aligned}$$

$$\Delta lp_t = c_{lp} + \alpha_{4,1}\left(\mu_{1,0} + \mu_{1,1}GDP_{t-1} + \mu_{1,2}CPI_{t-1} + \mu_{1,3}Empl_{t-1} + \mu_{1,4}lp_{t-1} + \mu_{1,5}GGB_{t-1}\right) + \beta_{4,1}\,\Delta(GDP)_{t-1} + \beta_{4,2}\,\Delta(CPI)_{t-1} + \beta_{4,3}\,\Delta(Empl)_{t-1} + \beta_{4,4}\,\Delta(lp)_{t-1} + \beta_{4,5}\,\Delta(GGB)_{t-1} + \beta_{4,6}\,\Delta(GDP)_{t-2} + \beta_{4,7}\,\Delta(CPI)_{t-2} + \beta_{4,8}\,\Delta(Empl)_{t-2} + \beta_{4,9}\,\Delta(lp)_{t-2} + \beta_{4,10}\,\Delta(GGB)_{t-2} + \gamma_{4,1}\Delta(\mathrm{EUfunds})_t + e_t^{lp}$$

$$\Delta GGB_t = c_{GGB} + \alpha_{5,1}\left(\mu_{1,0} + \mu_{1,1}GDP_{t-1} + \mu_{1,2}CPI_{t-1} + \mu_{1,3}Empl_{t-1} + \mu_{1,4}lp_{t-1} + \mu_{1,5}GGB_{t-1}\right) + \beta_{5,1}\,\Delta(GDP)_{t-1} + \beta_{5,2}\,\Delta(CPI)_{t-1} + \beta_{5,3}\,\Delta(Empl)_{t-1} + \beta_{5,4}\,\Delta(lp)_{t-1} + \beta_{5,5}\,\Delta(GGB)_{t-1} + \beta_{5,6}\,\Delta(GDP)_{t-2} + \beta_{5,7}\,\Delta(CPI)_{t-2} + \beta_{5,8}\,\Delta(Empl)_{t-2} + \beta_{5,9}\,\Delta(lp)_{t-2} + \beta_{5,10}\,\Delta(GGB)_{t-2} + \gamma_{5,1}\Delta(\mathrm{EUfunds})_t + e_t^{GGB}$$

Estimation Results

The model's estimation output is presented in Annex Table 2.A.3. In relation to the endogenous variables, the cointegrating equation reveals a positive long-term relationship between real GDP on one hand and employment, labour productivity but also government bond spreads, and a negative relationship between real GDP and inflation. Annex Figure 2.A.2 shows how shocks of one standard deviation magnitude on the endogenous variables affect GDP over 10 quarters. The results are intuitive in the sense that shocks in inflation and spreads negatively affect real GDP, as opposed to shocks in employment and labour productivity, which positively affect GDP.

Annex Table 2.A.3. VECM estimation output

Cointegration relationship										
GDP(-1)	1									
CPI(-1)	0.046									
Empl(-1)	-1.600	***								
lp(-1)	-0.759	***								
GGB(-1)	-0.008	***								
c	4.775									
Error correction	**GDP**		**CPI**		**Empl**		**lp**		**GGB**	
Cointegr. Rel.	0.125		0.084	***	0.199	***	0.154*		5.751	
GDP(-1)	-0.428	***	-0.081	**	-0.215	***	-0.058		-4.545	
CPI(-1)	-0.758	***	-0.188	***	-0.115		-0.030		16.265	
Empl(-1)	1.042	***	-0.075		0.276	***	-0.185		-7.126	
lp(-1)	0.403	***	0.133	***	0.223	***	-0.221	*	-3.257	
GGB(-1)	-0.001		0.001		-0.001		0.001		0.693	***
GDP(-2)	-1.009	***	-0.008		-0.191	***	-0.086		-3.239	
CPI(-2)	0.351		0.567	***	-0.142		-0.088		15.160	
Empl(-2)	0.920	***	-0.187	*	-0.038		0.122		5.959	
lp(-2)	0.709	***	0.062		0.117	*	0.001		-2.268	
GGB(-2)	0.002		0.001	*	0.001	*	0.001		-0.196	
c	0.002		0.003	**	0.001		0.002		-0.116	
EUfunds	0.020	***	0.005	***	0.003		0.007		-0.569	
R^2 (%)	86.3		78.4		73.8		13.9		40.5	
LogL	**827.8**									

Note: The asterisks *, **, *** denote the parameters' statistical significance at the 90%, 95% and 99% confidence levels respectively.
Source: FEIR/IOBE estimates.

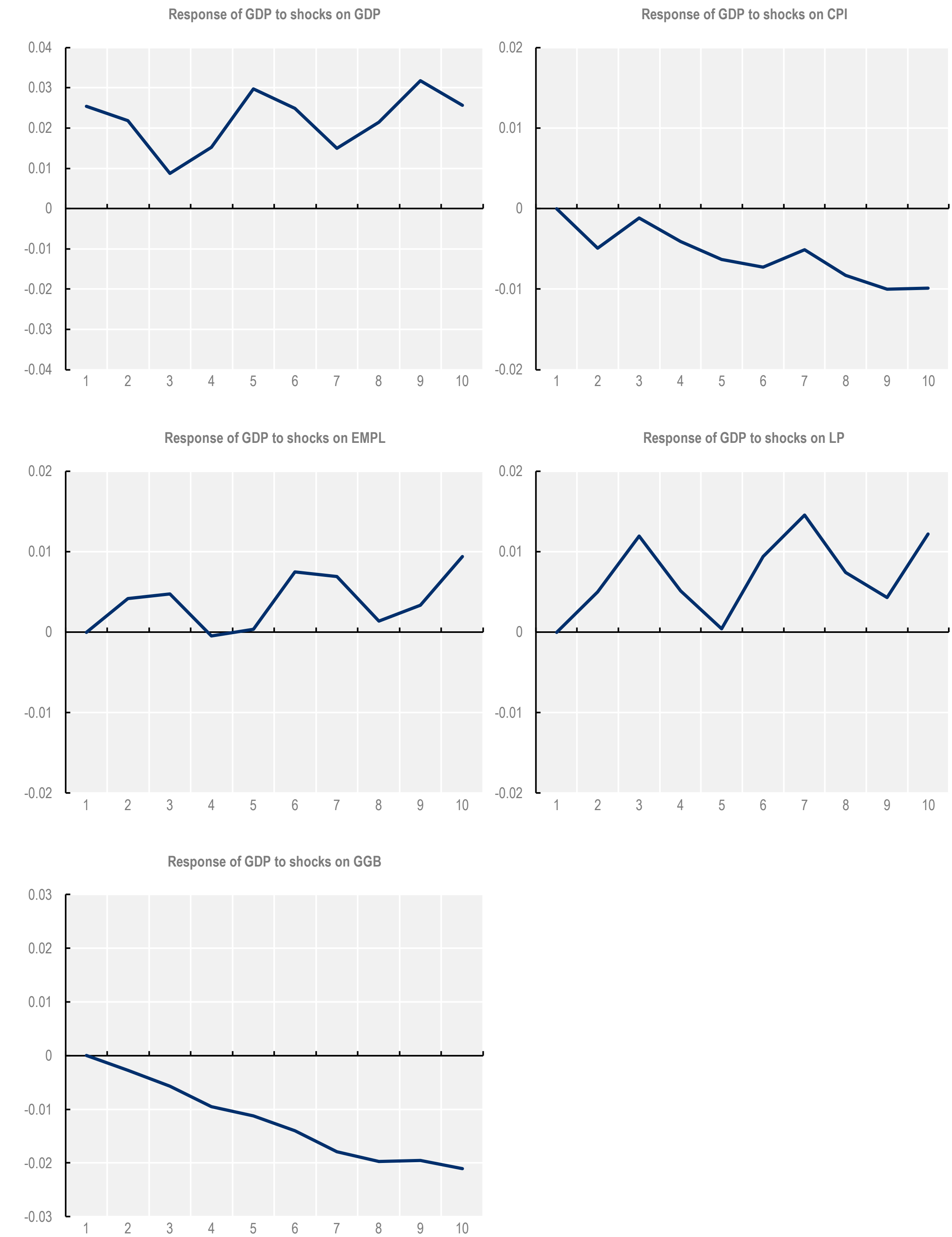
The Variance Decomposition Analysis reveals that shocks in labour productivity and government spreads explain an increasing share of real GDP variance over time, accounting for up to 10% and 23% of GDP variance respectively after 10 quarters. The share of GDP variance, which is due to shocks in its lagged values dissipates over time, to reach 61% after 10 quarters.

After controlling for the model's predictions in relation to the endogenous variables, the main question of interest is how does EU funding affect GDP? The estimation output (Annex Table 2.A.3) reveals that EU funds have a significant positive short-term impact on GDP. Every 1% increase of EU co-funded projects to Greece during the 2000-18 period increased on average its contemporaneous real GDP by 0.02%. Given that the average annual spending on EU co-funded projects was EUR 8.2 billion during the examined period, one can approximate the impact of EU funds in terms of the value of GDP per annum. The VECM estimation shows only the one-off short-term impact of EU funds on GDP and does not capture any dynamic effects.[3]

Assuming that the average share of national participation to EU co-funded projects was 20% over the period 2000-18,[4] then each euro of EU inflows, excluding national participation, has led on average to 64 cents of GDP creation (at 2008 prices). This is equivalent to claim that each euro of EU funds including national participation, has led on average to 51 cents of GDP creation.[5] If the average national participation share was 14%,[6] then the impact of each euro on GDP, combined with the attached national funds, would be 59 cents. Based on an average national participation rate of 20% and a confidence interval of close to 95% (+/- 2 standard deviations), we conclude that 1 euro of EU funds, combined with national participation, increased GDP by a range between 17 and 111 cents (or a range between 16 and 103 cents if the average national participation was 14%). The low and high range estimates stemming from the VECM on the impact of EU funds in percentage points of annual GDP are depicted in Annex Figure 2.A.3.

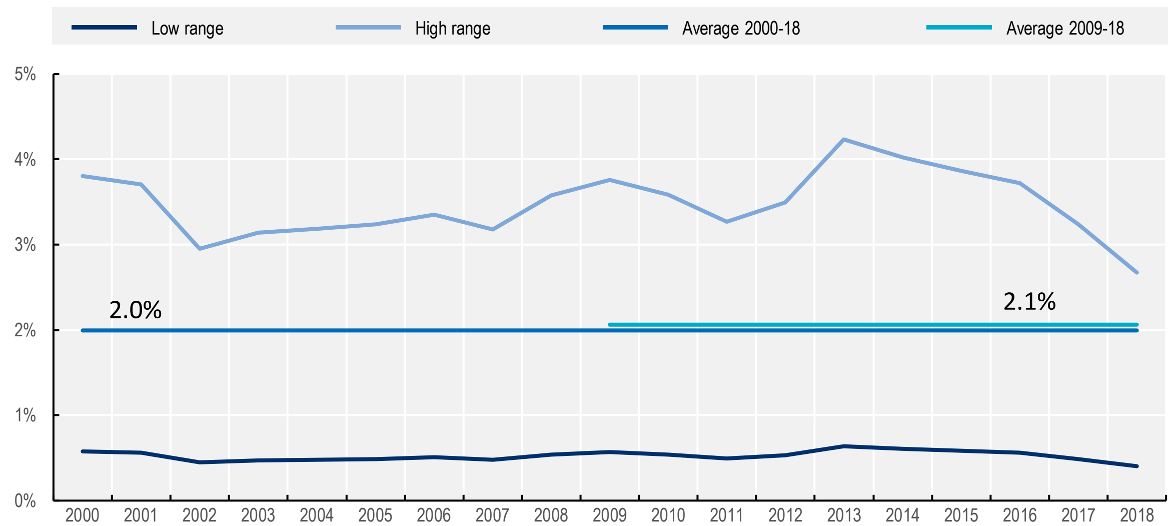
During the whole period 2000-18, the average annual contribution of EU co-funded projects to Greek GDP was 2.0 percentage points. This translates into a cumulative boost of GDP by EUR 76.9 billion (at 2008 prices), without accounting for their dynamic effects or the impact of the private sector capital resources that were mobilised due to the EU co-funded projects. Importantly, the positive impact of EU funds on GDP is robust and of similar magnitude when focusing on the sub-period 2009-18, which relates to the disbursements from the fourth (2007-13) and fifth (2014-20) programming periods. Due to the lower average level of GDP during 2009-18, the average annual contribution of co-funded projects to economic activity has been slightly higher, around 2.1 percentage points of GDP. This translates into a cumulative increase of GDP during 2009-18 of EUR 39.5 billion (at 2008 prices). On average, during this period, the one-off short-term effect of EU funds on real GDP was around EUR 4.0 billion (2008 prices) per annum. Besides the findings on GDP, the results in Annex Figure 2.A.3 point out on a positive impact of EU funds on employment and labour productivity, as well as a negative impact on government bond spreads. However, these results are not statistically significant (they are significant at an 80% confidence level only).

Annex Figure 2.A.2. GDP impulse response to shocks on the endogenous variables



Note: GDP impulse responses are estimated during an interval of ten quarters, following one standard deviation shock on each of the endogenous variables, following Cholesky's method.
Source: FEIR/IOBE estimates.

Annex Figure 2.A.3. EU co-funded projects' estimated contribution to annual GDP (in GDP ppts)



Source: FEIR/IOBE, VECM estimation.

GIMF estimation of EU funds' effects

The effects of EU funding on the Greek economy were also approached by means of a structural macroeconomic model. Specifically, a simulation of the Global Integrated Monetary and Fiscal (GIMF) model, which is a dynamic stochastic general equilibrium macroeconomic model developed by the IMF, was carried out.[7] A version of the model with three regions was applied, calibrated to represent Greece, the rest of the Euro Area (i.e. the Euro Area excluding Greece) and the rest of the world. The simulation was carried out in Matlab, with DYNARE. In order to examine the impact of EU financing that Greece received over the period 2009-18, that is during the previous and the current EU programming period, on the Greek GDP, the capital inflows from the EU funds headed towards co-financing projects in Greece were treated as part of the Greek Public Investment Programme.

Simulation setup

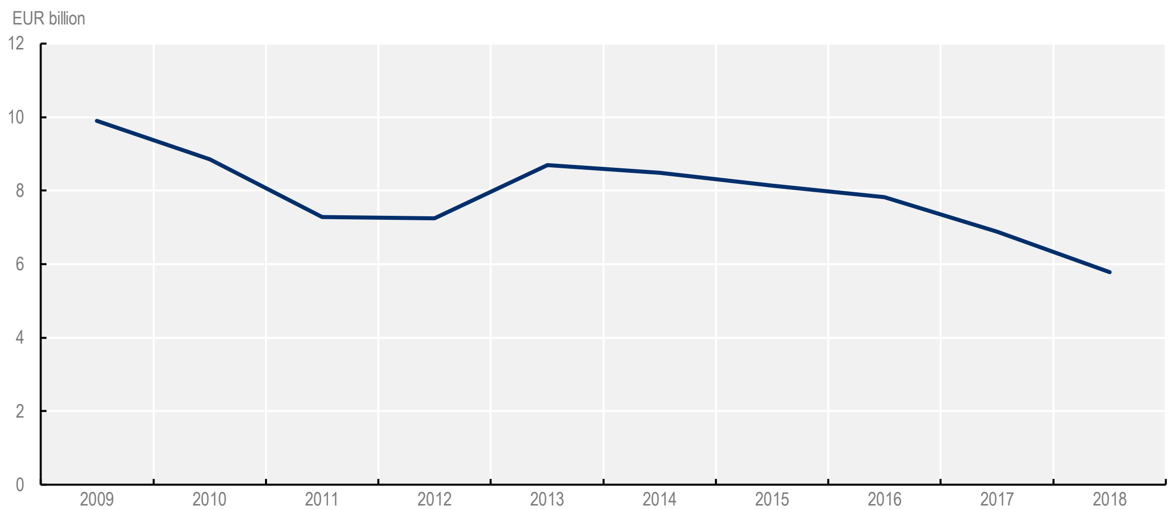
In order to capture the effect of the EU funds on the Greek economy after 2009, the model was first calibrated to the parameters of economic activity in Greece, the rest of the Euro Area and the rest of the world, as they were in the year 2008, the last year before the period of interest, using national accounts data, trade data and other statistics from Eurostat, data from the calibrations of (Kumhof et al., 2010[62]) (Anderson et al., 2013[63]), while also taking into account recent simulation results for Greece produced by the OECD using the National Institute Global Econometric Model (NiGEM).[8] Throughout this exercise, just as in the VECM estimation in the previous section, EU funds are defined as the total public expenditure for projects co-financed by the EU, including both capital resources transferred from the EU Structural Funds to Greece and Greek state resources tied to these EU transfers.

To account for the fact that Greece used EU funds in 2008, the state in which the Greek economy would have been had there not been any EU funds in the country in 2008 was calculated. This state of the economy is the base, against which comparisons will be made later in the analysis. Starting from the base state, the response of the Greek economy to an exogenous change to Greek public investments, by the amount of EU co-financing in the years 2009-18 was calculated.[9] The estimation of the effect of the EU co-funded projects to the Greek economy was approximated by the difference of the model-calculated Greek GDP, prompted by this exogenous shock, from the GDP in the base state.

In specific, the state in which the Greek economy would have been in 2008, had there not been for that year's EU co-financed projects, was calculated and this hypothetical state of the economy was used as the base state.[10] The model was simulated starting from the base state of the economy (a steady state) and treating public investments in Greece as an exogenous variable. Public investments were initially set to be equal in 2009 to the base level plus the annual amount of EU co-financing in that year. The same methodology was followed for 2010 and so on, up to 2018.

For each year in the simulation, the model-calculated GDP approximates the level of activity embodying the impact of EU co-financed projects and transfers. The difference between this level and the base level of GDP depicts the response of the Greek economy to EU co-financing. Annex Figure 2.A.4 illustrates the amounts of EU co-funded investment added to the base level of public investments over the ten-year period of interest.

Annex Figure 2.A.4. EU project co-funding including national co-financing quota, 2008 chain-linked volumes



Source: FEIR/IOBE.

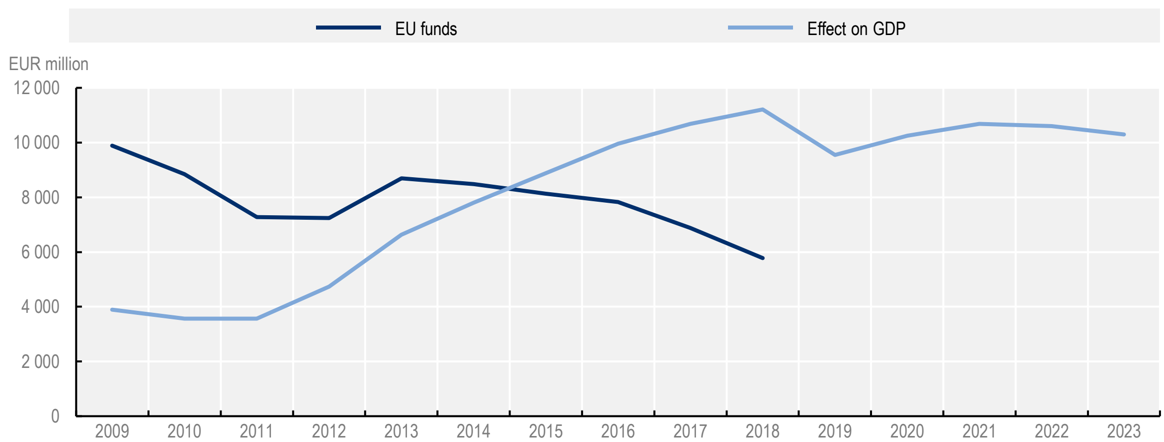
Simulation results

The effects of the EU funds on the Greek economy over the period 2009-23 were examined. This period includes years 2009-18, for which it is assumed that Greece receives EU funds, as well as years 2019-23, during which it is assumed that no EU funds are disbursed to Greece. Extending the period examined from 2018 to 2023 and assuming that Greece stops receiving transfers after the former year, allows for the estimation of the long-term effects of the EU funds disbursed during 2009-18 on the Greek economy.

Annex Figure 2.A.6 illustrates the effect of EU co-funded projects on GDP over the period examined, as well as the amounts of EU co-financing. The effect on the Greek GDP increases remarkably after the first few years of the examined period, reflecting the productivity gains in the Greek economy due to the accumulated additional public investments triggered by the investment and other projects co-financed by the EU. The cumulative effect of EU funds on the Greek GDP over the period 2009-18 was estimated at EUR 71.0 billion, in 2008 based chain-linked volumes. Since the total amount of EU co-financed projects over the period 2009-18 in 2008 based chain-linked volumes was EUR 79.1 billion, the average multiplier of the EU funds on the Greek GDP over this period is 0.9, implying that each euro of EU funds boosted on average the country's GDP by 90 cents. This medium-term multiplier is higher than the short-term multiplier of 0.51 estimated in the previous section (VECM) because it *inter alia* captures the cumulating positive effect from productivity gains.

Annex Figure 2.A.5. EU co-financing and effect on the Greek GDP, in the period 2009-23

2008 chain linked volumes

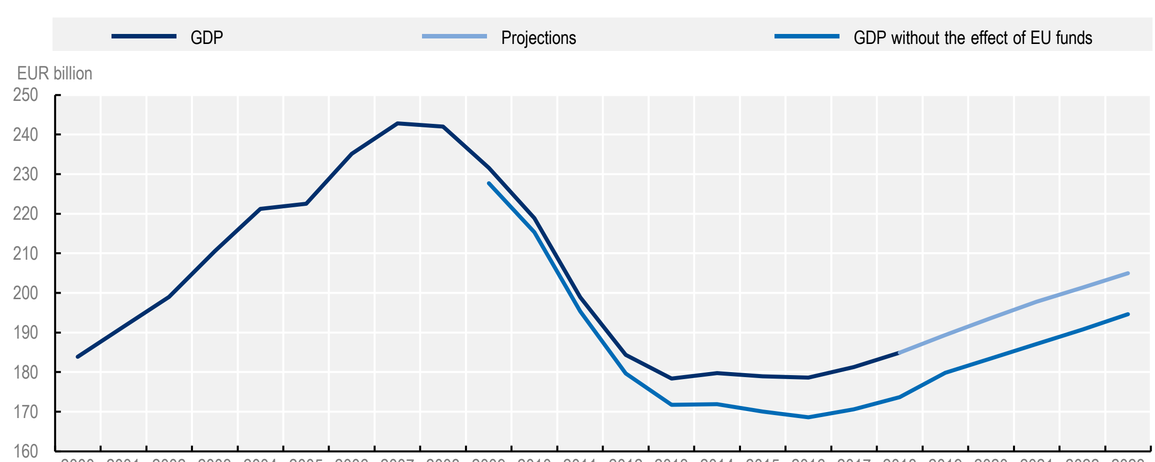


Source: FEIR/IOBE

Both short-term and medium-term multiplier estimates can be compared with a long-term multiplier, calculated over the entire period 2009-23. The same cumulative amount of EU funds (EUR 79.1 billion in 2008 chain-linked volumes) was estimated to cause a cumulative increase of the Greek GDP in the entire period 2009-23 equal to EUR 122.3 billion in 2008 CLVs. This implies a long-term multiplier close to 1.55, which is higher than both short-term and medium-term multipliers due to the dynamically cumulating positive effect of EU funds. The sustained increase of the Greek GDP, even after the Greek economy is assumed to stop receiving financing aid from the EU, is caused chiefly by the productivity gains achieved by the increased economic activity made possible by EU financing.

Annex Figure 2.A.6. Actual Greek GDP versus the counterfactual of the estimated level of the Greek GDP

Without the effects of the EU co-financing in the period 2009-18



Source: FEIR/IOBE.

Notes

[1] Data for 2000-18 are based on ex-post state budget evaluations.

[2] For the appropriate VEC model specification, a stability test was applied on the underlying VAR specification, White test for the heteroscedasticity of residuals and LM test for autocorrelation.

[3] The dynamic effects of EU funds on GDP growth are estimated in the following section, which presents a dynamic stochastic general equilibrium framework.

[4] According to data from the Ministry of Economy, the effective national participation rate for EU co-funded projects during the 2000-06 programming period was 31%, while the arithmetic average of national participation for co-funded projects approved up to July 2018 for the 2014-20 programming period is 23%. During the 2007-13 programming, due to considerable pressure in the budgets of some countries (Greece, Hungary, Ireland, Latvia, Portugal and Romania), the European Commission provided in August 2011 an option for increasing the co-financing rate to 95% (http://europa.eu/rapid/press-release_IP-11-942_en.htm). This option was activated by Greece, thus reducing national participation to 5%. The equally weighted average participation rate across the 3 programming periods is 19.7%.

[5] The value of 0.65 can hence be interpreted as the short-term growth multiplier of the EU funds series.

[6] According to data from the Ministry of Finance, if one excludes the 2000-06 programming period, the equally weighted average of national participation rate during the fourth and fifth programming period is, up to July 2018, 14%.

[7] For the detailed description of the model, see (Kumhof et al., 2010[62]). For an extensive study of the properties of the model, see (Anderson et al., 2013[63]).

[8] The NiGEM is an estimated New-Keynesian macro-econometric model developed by the British National Institute of Economic and Social Research on behalf of the OECD, and regularly used by the OECD for macroeconomic assessment and forecasting. In this study, NiGEM results were used primarily for consistency checks, e.g. see (Barrel et al., 2012[67]) for estimated fiscal multipliers for Greece.

[9] Data for 2009-18 are based on *ex post* state budget evaluations.

[10] The estimation of the base state of the economy was the result of a separate simulation of the model, starting from the calibration for 2008 (a steady state), treating public investments in Greece as an exogenous variable, setting public investments at a level equal to their 2008 actual level minus the amount disbursed in that year for EU co-funded projects and keeping public investments steady for a large number of periods, so that a new steady state is reached.

3 Policies and strategies for place-based development and inclusive growth

Greece has undertaken an impressive number of nation-wide structural reforms since the 2008 global financial crisis. New development priorities for Greece include fostering digitalisation, improving entrepreneurial and business ecosystems, and addressing environmental challenges. Addressing these challenges will contribute to tackling existing social issues and mitigate rising inequalities. However, this ambitious national strategy should be complemented by a new place-based development strategy. This chapter examines how territorial policies in Greece are currently delivered, the place-based impacts of sectoral policies both in terms of design and delivery and how they could be strengthened both now and post 2020. Integrated actions to foster business development and innovation, including maritime, blue growth and sustainable tourism, to support quality employment and social inclusion as well as enhance connectivity and sustainable development, would indeed sustain Greece's economic recovery from the global financial and COVID-19 crisis and seize long-term development opportunities.

Summary

All aspects of Greek society, economy and policy have been under immense stress since the 2008 economic crisis. Successive structural reforms have sought to stabilise the economy while at the same time Greece has ushered in an entirely new architecture for regional policymaking by establishing regions as an independently elected level of government. Greece has implemented a large number of reforms under extremely adverse conditions in a short period of time – from pension and tax reforms to justice, labour market policies, public investment, infrastructure and privatisation, education, social policy, energy and environmental policies. The rapid pace of administrative and regulatory reform alongside fiscal austerity has presented a challenging environment for governments, businesses and society.

Although the effects of the crisis have been felt by all Greeks, some regions have weathered the effects of the crisis better than others. In particular, the capital region, Attica, Greek's main engine for growth, experienced an important brain drain during the aftermath. Restoring the competitiveness of Attica will be key to accelerate the national recovery period and this will necessitate a co-ordinated place-based approach. Equally important will be to develop a strategy for remote but also rural and intermediate regions.

Territorial policy in Greece is now at a turning point. Greece exited the fiscal bailout conditions in August 2018 and has recently prepared its own National Growth Strategy to guide the country's development (Hellenic Republic, 2018[1]). Although the current COVID-19 outbreak is slowing down Greece's recovery efforts, in the coming years, as the economy improves, Greece needs to stimulate investments, improve entrepreneurial and business ecosystems, build resilient labour markets and address environmental challenges while tackling pressing social challenges, reducing inequalities and improving the inclusiveness and quality of jobs and education. Delivering on these objectives requires a deep understanding of how policies interact at different levels and how different policy levers can be combined for maximum impact. Regions, municipalities and rural communities have an active role to play in meeting these objectives by delivering quality public investments and services that fit local needs and the public, private and third sector[1] need to pool know-how to galvanise local development. This is a central challenge for the future.

European Union (EU) co-financed projects have been the largest part of public investment expenditures in Greece and will remain important in the coming years. However, going forward, national resources need to be better leveraged alongside private investments and foreign direct investment (FDI). Regional governments also need to further develop their own strategies and ensure they are co-ordinated with national priorities. Institutional capacity and effective multilevel governance are fundamental to deliver effective place-based policy. This chapter examines how territorial policies in Greece are currently delivered, the place-based impacts of sectoral policies both in terms of design and delivery and how they could be strengthened both now and post 2020.

How is regional policy organised in Greece and why is it important

As highlighted in Chapter 2, looking through a regional lens has implications for national recovery and sustainable development. The crisis had sizeable consequences for Greece's economy and it has not come equally across Greek regions. The greatest declines in productivity occurred in remote islands but also in Attica and Western Greece, where the economic decline was so sharp that lagging regions are now converging to Attica's current productivity, a "wrong kind" of convergence. Restoring productivity in Attica and Central Macedonia and, more generally, encouraging the benefits of agglomeration in Greece's urban areas and cities to create additional economic hubs generating positive spill-overs into neighbouring regions and territories is key to foster Greece's regional economies and national growth. Recovery, however, must go beyond a simple focus on Attica. The concentration of the crisis' effects on the Athens region has revealed the Greek economy's vulnerability to structural adjustment and demonstrates the importance of promoting a more balanced growth model. It is thus critical to develop differentiated and tailored regional development strategies to address different needs.

A number of factors are affecting the growth and productivity potential of Greek regions with a number of explanations and solutions to low economic growth or high unemployment, notably: heavy regulatory procedures, scarce integration in global value chains, credit constraints for small- and medium-sized enterprises (SMEs), skills mismatch with market requirements (particularly at the local level). Greece's unique geography (e.g. islands and remote locations) and composition of the population (e.g. low population densities) create challenges for accessibility and service provision. Rural (and remote) regions can benefit from "borrowing" agglomeration benefits from nearby cities if they are well-connected. This includes but is not limited to physical transport connections, as digital and information and communication technologies (ICT) connections, for example, are crucial (OECD, 2018[2]).

To address many of these challenges, a full-scale place-based development policy is needed. The combination of regional policies and structural reforms will enable Greece's regions to capitalise on their strength and fully contribute to national performance. To achieve this, it will be crucial to advance in a number of parallel tracks to foster productivity and competitiveness in Greek regions according to their characteristics and needs. Actions to foster the outward orientation of the regional economies, such as the agricultural, agro-food, tourism, transport, logistics and high-tech sectors, including through the full development of regional smart specialisation strategies and the transition to a "digital state", would indeed help foster regional growth and well-being in Greece.

This section examines the institutional environment for regional policy including its central challenges, the main strategic priorities, how policies are elaborated and delivered and actors involved. It summarises how the policy environment has been evolving in Greece in recent years and the main directions of reform.

National priorities for regional development in Greece

Emerging from the crisis, new development priorities are taking shape

Across the country, EU funding for cohesion policy has been making an important contribution to improving Greece's economic performance and EU funds continue to make up a major share of public investments. Between 2010 and 2018, three successive bailout programmes set Greece's strategic priorities for development. Those Economic Adjustment Programmes are aimed at eliminating severe fiscal imbalances and improve the functioning of markets and international competitiveness. Structural reforms have primarily focused on the labour market and controlling pension spending. Since 2017, reforms have gained pace, especially in product markets and social protection, and there have been improvements to competitiveness and conditions for creating new businesses.

In 2018, Greece exited the bailout conditions and prepared a National Growth Strategy to set the country's overarching development objectives. The strategy seeks to build on recent reforms to deliver growth and competitiveness across all regions, setting out a range of measures to address social and economic challenges. In line with those goals, the current Greek government is determined to pursue a strong pro-growth and investment policy agenda in concert with EU-funded measures. Although EU policies and Structural and Investments Funds (ESIF) remain critical for Greece's development in the coming years, there are opportunities to strengthen domestic policies, placed-based policies and the capacities of regional and local actors to elaborate and implement them.

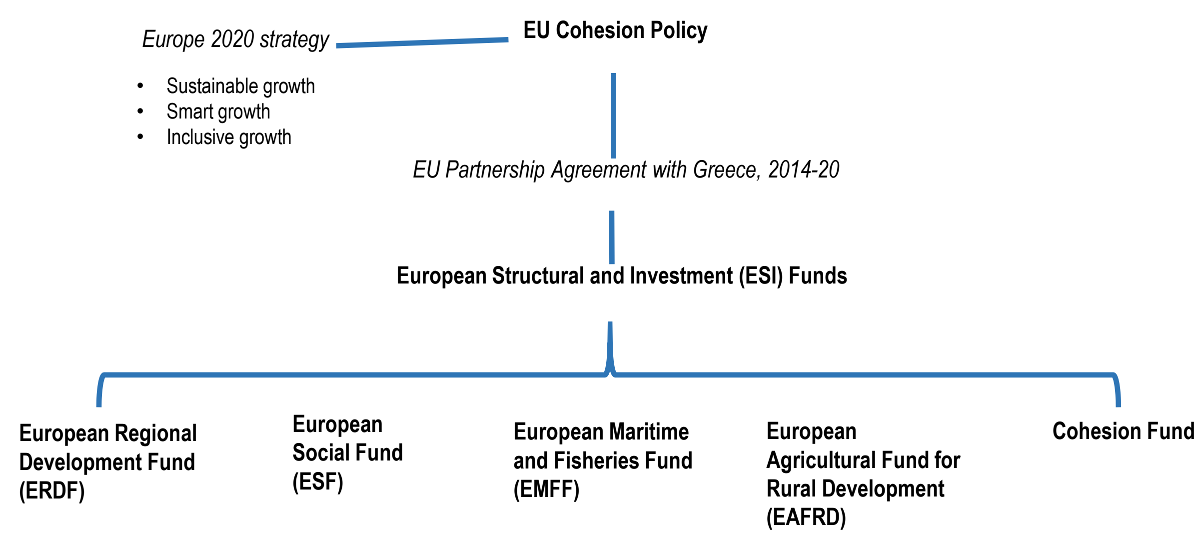
EU Cohesion Policy in Greece – Delivering on the Europe 2020 Strategy

Cohesion policy[2] remains the European Union's main investment policy to enhance economic and social development, eliminate regional imbalances and contribute to meet the targets outlined in the Europe 2020 Strategy for smart, sustainable and inclusive growth.[3] Approximately 32.5% of the EU budget 2014-20 (equivalent to EUR 351.8 billion over 7 years at 2014 prices) is allocated to the financial instruments which support the cohesion policy and which invest large sums (up to 4% of gross domestic product [GDP] in some countries) that are managed and delivered in partnership between the European Commission (EC), the member states and stakeholders at the local and regional levels, within specific regulatory frameworks.[4]

Within the EU Cohesion policy framework, there is scope for country members to determine their own complementary priority areas and as such, Greece's policies are a mix of both EU and national priorities (involving the co-financing and co-management of funds). Two strategic documents mainly guide Greece's national development – the EU Partnership Agreement with Greece for 2014-2020 (ESPA 2014-2020) and the recently adopted National Growth Strategy.[5] Both strategies have important implications for territorial policy and investments across the country.

Cohesion policy intervention is financed by the ESIF[6] and it is translated into priority targets which have been elaborated in Partnership Agreements between the EC and EU countries[7] (Figure 3.1). The Partnership Agreement with Greece 2014-2020 (ESPA 2014-2020) presents a vision for the country's growth based on "outward-looking, innovative and competitive entrepreneurship and on the basis of reinforcing social cohesion and the principles of sustainable development".

Figure 3.1. EU Cohesion Policy in Greece, 2014-20



Given that a central purpose of EU Cohesion Policy is to promote social and economic cohesion and to address regional inequalities, EU Structural Funds[8] are targeted at different regions depending on their levels of development, with those that are less developed receiving more support. According to their level of development, regions in Greece can be ranked as follows:

- Less developed regions (Central Macedonia, Eastern Macedonia and Thrace, Epirus, Thessaly, Western Greece).
- Transition regions (Continental Greece, Crete, Ionian Islands, North Aegean Islands, Peloponnesus, Western Macedonia).
- More developed regions (Attica, South Aegean Islands).[9]

The Partnership Agreement (ESPA 2014-2020) also defines the financial allocations for Cohesion policy in the country. For 2014-20, Greece has been allocated approximately EUR 16.5 billion (2014 prices) as follows: EUR 7.1 billion for less developed regions, EUR 2.8 billion for transition regions, EUR 2.5 billion for more developed regions, EUR 3.2 billion from the Cohesion Fund, EUR 0.37 billion for European Territorial Cooperation, EUR 0.51 billion for the Youth Employment Initiative. In addition, for the same period, the European Agricultural Fund for Rural Development has allocated EUR 4.7 billion, whereas the allocation under the Fisheries and Maritime Policy amounts to EUR 389 million.[10]

In the current Cohesion policy programming period, which covers the years 2014-20, the ESIF funds are targeted at 11 thematic objectives. Allocation of funding across thematic areas is partly a reflection of Greek priorities and partly a reflection of the thresholds set by the EC. Some of these thematic targets do not explicitly aim to enhance the competitiveness of the regions but address overall development objectives (Table 3.1).

Table 3.1. European Structural and Investment Funds (ESIF), by thematic priority, Greece, 2014-20

Thematic area	Sum of total funding in EUR (EU and national)	Percentage out of total
Environment Protection and Resource Efficiency	5 713 447 678	21
Competitiveness of SMEs	3 551 113 681	13
Network Infrastructures in Transport and Energy	3 099 940 798	12
Low-Carbon Economy	2 703 542 276	10
Sustainable and Quality Employment	2 639 205 340	10
Social Inclusion	2 013 240 984	8
Educational and Vocational Training	1 822 491 064	7
Climate Change Adaptation and Risk Prevention	1 635 369 665	6
Research and Innovation	1 370 112 034	5
ICT	1 098 627 767	4
Technical Assistance	799 797 077	3
Efficient Public Administration	333 465 294	1
Total	**26 780 353 657**	**100**

Source: ESIF (2019[3]), *Open Data Portal for the European Structural Investment Funds*, https://cohesiondata.ec.europa.eu/countries/GR (accessed on 20 May 2019).

The overarching strategic objectives agreed in the Partnership Agreement (ESPA 2014-2020) are broken down into 7 sectoral Operational Programmes (OPs) – 4 of them are multi-fund, 1 is specific to the European Social Fund, 1 is specific to the European Maritime and Fisheries Fund (EMFF) and 1 to the European Agricultural Fund for Rural Development (EAFRD) – and 13 (multi-fund) Regional Operational Programmes (Figure 3.2). These OPs identify investment priorities, specific objectives and concrete actions. National OPs typically include horizontal project types, multi-regional projects or large national interest projects, while Regional Operational Programmes include the projects and initiatives that apply only in the geographical boundaries of a region. Greece also participates in European Territorial Cooperation programmes which are held in co-operation with the countries bordering Greece as well as others.[11]

For each national or regional OP, the Ministry of Development and Investments,[12] as the National Co-ordination Authority, has appointed one Managing Authority, which manages the OP, ensures that conditions for awarding grants have been met and regularly checks that spending plans are adhered to. Managing Authorities lay down selection criteria, organise selection committees and – via a project tendering procedure open to all – decide which projects will receive European funding (within the structure set by the corresponding OP). Private firms and public institutions can apply for project funding and the managing authorities select promising projects. A more in-depth discussion is provided in Chapter 4.

Figure 3.2. Operational Programmes of the EU Structural and Investment Funds, 2014-20

	ERDF	ESF	CF	EAFRD	EMFF
Competitiveness, Entrepreneurship & Innovation	☑	☑			
Transport Infrastructure, Environment & Sustainable Development	☑		☑		
Human Resources Development, Education & Lifelong Learning		☑			
Public Sector Reform	☑	☑			
Technical Assistance	☑	☑	☑		
Regional Operational Programmes (13)	☑	☑			
"European Territorial Co-operation" OPs	☑				
Rural Development				☑	
Fisheries & Maritime					☑

Multi-fund programmes | Single-fund programmes

Source: National Co-ordination Authority for ESIF, Ministry of Development and Investments.

The national Growth Strategy of Greece – Reversing deindustrialisation and restoring productivity growth and competitiveness

In the wake of successive bailout programmes, a central prerogative for the future is to leverage a combination of national and EU funds in order to maximise the impacts of investments and to activate regions and municipalities and other actors (private and third sector) in meeting national, regional and local development objectives. In June 2018, Greece introduced a new National Growth Strategy to help deliver on these objectives. The strategy aims to build on the momentum of recent reforms and to deliver growth and competitiveness across all regions. The strategy offers a prescient assessment of the central challenges facing Greek society and its economy, and proposes a range of measures to address them. It has five main policy objectives and multiple sub-goals (Table 3.2). Greece's next Partnership Agreement with the EU for Cohesion Policy (ESPA 2021-2027) shall be informed by these development objectives.

The national government's main priorities for regional development are to reduce regional inequalities (as described in the National Growth Strategy) (Hellenic Republic, 2018[1]). Engaging regional and local governments and the third sector[13] is central to releasing these aims and to this end, the national government is establishing 13 regional conferences on "production reconstruction" in order to identify and elaborate sustainable growth enhancing-measures based on the comparative advantages of each region. Once the regional conferences have been completed, a number of follow-up measures will be developed in order to integrate local and regional actions into the national strategy. Beyond this, the strategy emphasises the specific needs of Greek islands as part of its regional development priorities. It identifies the need to improve the islands' accessibility, protect their unique natural environments, upgrade infrastructure (including broadband connectivity), develop the farming and fisheries sector, build on Greece's maritime tradition and strategic advantages and improve access to healthcare.

Table 3.2. Greece's National Growth Strategy

Main policy goal	Sub-goal
Ensuring fiscal sustainability	• Public finance reforms and sustainability • Tax policy and tax administration • Debt sustainability
Fostering sustainable growth	• Creating more and better jobs • Enhancing productivity • Improving the business environment and boosting investment
Structural conditions for growth	• Infrastructure and networks • Management of state assets
Fair and inclusive growth	• Promoting a socially-oriented economy • Guaranteeing regional development and cohesion • Ensuring inclusive education • Providing universal and effective healthcare • Strengthening and upgrading social protection • Focusing on youth
Financing growth	• Public investment programme • Mixed funding • New Development Law • Establishing a development bank • Financial sector

Source: Hellenic Republic (2018[1]), *Greece: A Growth Strategy for the Future*, http://www.mindev.gov.gr/wp-content/uploads/2018/09/Growth-Strategy.pdf (accessed on 2 June 2019).

The National Growth Strategy will inform the negotiation of the Partnership Agreement for the next programming period of the EU (2021-2027) and will be used to harmonise national and EC goals and national policy directions. A strong view on regional policy must be part of this since there is a wide range of sectoral strategies that are important to regional development and that have place-based impacts across culture, tourism, digital technologies, etc.

Greece's Public Investment and National Development Programmes

The Public Investment Programme

The Public Investment Budget (PIB) is a discrete category of the state budget, which is voted on in parliament plenary and is executed through the Public Investment Programme (PIP), according to the legal framework under the jurisdiction of the Ministry of Development and Investments. The PIP aims to finance the development policy of the country and consists of: i) the national part; and ii) the co-financed part. The latter concerns co-financed projects, in particular the ones relating to the financing of Cohesion Policy in Greece (ESPA) by the ESIF and has been adapted to the EU's programming rules. The PIP's national part is financed solely from national resources.[14]

Regardless of the (limited) amount of national resources available, the PIP is a crucial instrument for national and regional development in Greece, since it: i) implements national and regional growth policies; ii) complements the ESIF intervention allocating resources to objectives or sectors non-eligible for EU financing; and iii) targets inequalities in particular between island and continent regions/municipalities.[15] In 2019, the Ministry of Development and Investments has taken a legislative initiative to reform the operational framework for the national resources of the PIP, in order to support growth by fully utilising the funds available for public investment (Law 4635/2019).

The National Development Programme

The National Development Programme (NDP) is a new policy framework scheduled to become operational from January 2021 and intends to provide the mid-term policy planning for the national part (non-EU) of the resources dedicated to finance the PIP.[16]

The planning, management and monitoring/control system of the NDP will follow the procedures applied for the EU co-financed programmes. The Ministry of Development and Investments has a key role in planning and co-ordinating the NDP, to whose preparation and implementation line ministries, regions and other (public and private) entities have been called to contribute, e.g. drawing and submitting sectoral and regional development plans, which will complement the ESIF intervention. The operational budget for these plans will be allocated to "managing authorities" in competent ministries/regions, which will work under the guidance of the Ministry of Development and Investments. The NDP will also include Special Purpose Programmes of Development or Investment Interventions targeting specific development needs or opportunities.[17]

Greece's development laws

In 2016, Greece adopted a new development Law 4399/2016 "Regulatory framework for the establishment of state aid schemes for private investments for the regional and economic growth of the country", proposed by the Ministry of Economy, Development and Tourism (now Ministry of Development and Investments), which sets out rules and regulations for national public investments that complement the ESIF. The law, which is funded by the PIP, provides incentives to the private sector (e.g. risk equity financing, tax exemptions and cash grants, leasing or job creation subsidies) and promotes investments to encourage efficiencies and higher-value-added activities in Greek firms (e.g. mergers, investments in innovation and extroversion).[18] Law 4399/2016 also established a "development council" in the Ministry of Economy, Development and Tourism tasked with advising on development planning and policies.[19]

In 2019, Greece partially amended Law 4399/2016 with a new Law 4635/2019 entitled "Invest in Greece and other provisions", also proposed by the Ministry of Development and Investments, and funded by the PIP. The law introduces reforms covering a wide range of fields with the scope to improve the business environment and facilitate productive investments.[20] The law is expected to become operational and be fully implemented by the end of 2020.[21]

Regionally-led development in Greece

Beyond the national priorities for regional development, there are those strategies that are developed by the regions themselves. Decentralisation in Greece is relatively new and responsibilities are evolving, including responsibilities for elaborating and delivering regional policy.

The EU Cohesion Policy is a major force driving regional policy in Greece and was a primary reason for the creation of regions in 1986 with Law 1622/1986, evolved with the more recent reforms in 2010 (Kallikratis) and 2018 (Kleisthenis). A more in-depth discussion is provided in Chapter 4. Throughout the five EU programming periods (1989-2020), the regions have elaborated their own Regional Operational Programmes (ROPs) with increasing responsibility. This allowed a learning time to get to their new functions, including the management of ROPs, which were assigned to the regions for the 2014-20 period.[22] The decentralisation reforms were undertaken during the crisis and as such, elements of centralisation remained due to the key role of the national government in managing all aspects of responses the crisis (Hlepas, 2018[4]).

Greece is one of many countries across the OECD that exhibits the trends towards regionalisation. The central logic underpinning these reforms is for regions to take advantage of economies of scale in public service provision, better respond to widening functional labour markets, improve co-ordination between municipalities and intermediary levels of government, and increase competitiveness. Relative to local governments, regions are expected to have more resources to implement effective regional development strategies, and the ability to foster intra-regional co-ordination and implement integrated territorial planning. They should be able to better target regional comparative advantages through access to local knowledge as compared to the national government, or smaller local governments.

Regional Development Strategies vs. Regional Operational Programmes vs. Regional Spatial Frameworks

The Partnership Agreement (ESPA 2014-2020) foresees 13 ROPs, one for each Greek region. They are the regional component of the Cohesion Policy of Greece and form the *de facto* regional development strategies in the country. They set the strategic objectives for regional development over the programming period 2014-20, present an assessment of the central challenges facing the region and provide an overview of how investments should be targeted. In some EU countries, it is common to have both ROPs and a separate overarching regional development strategy that is not directly tied to the use of EU funds but, in Greece, the ROP acts as the main regional strategy.

ROPs resemble regional strategic planning documents but differ from them in a few important ways. Like regional strategic plans, ROPs present a diagnosis of central challenges and opportunities in a region. While they guide development in their respective regions, they differ in scope and content from overarching regional strategic plans that set strategic objectives in the medium and longer terms. Such strategies are commonly elaborated through a large public engagement process in order to set a vision for the future and build a consensus for action. ROPs are relatively short-term (seven-year timeframe) technical documents focused on the use of the ESIF and associated regulations. Overall, ROPs focus on covering European regulation requirements; they do not represent (or should not substitute) an integrated development strategy for the region.

In addition to the ROPs, each region analyses its spatial structure and provides guidelines for land use planning and the development of urban transport networks. A 2016 law (4447/16) has mandated that both national and regional spatial plans must contain forward-looking elements. As such, they will need to be updated with population and planning scenarios and the spatial visions should be complementary to the regions' development objectives. This planning framework is implemented under the framework of the Ministry of the Environment and Climate Change.[23]

Regional Smart Specialisation Strategies

Both the national government and each region in Greece also elaborate a Research and Innovation Strategy for Smart Specialisation (RIS3).[24] The smart specialisation's approach combines industrial, educational and innovation policies to suggest that countries or regions identify and select a limited number of priority areas for knowledge-based investments, focusing on their strengths and comparative advantages. The concept of smart specialisation is grounded in the idea that public investments for research, technology and innovation should be focused on regional knowledge strengths in order to mobilise those assets and transform them into higher-value-added activities. The ultimate aim is to leverage private research and innovation expenditure and enable co-ordination among the above-average performing actors of national and regional research and innovation systems.[25]

In Greece, the results of the consultation exercises in each region and the respective regional RIS3 strategies were combined into the national RIS3 strategy. The National Research and Innovation Strategy for Smart Specialisation 2014-2020 was introduced in 2014 as the successor of the National Strategic Plan for Research and Development 2007-2013. National co-ordination is ensured by a Smart Specialisation Strategy Board, which is directly involved in the design and implementation of RIS3, consisting of representatives of ministries[26] (at the level of General Secretaries) and Greek regions.

The new National Smart Specialisation Strategy of Greece aims to promote links between research and industry and accelerate the dissemination of innovation. According to the strategy, gross expenditure on research and development (R&D) is expected to amount to 1.2% of GDP by 2020. The strategy has identified 8 target sectors for development: agro-food; ICT; environment and sustainable development; energy; health and pharmaceuticals; materials and construction; transport and logistics; culture, tourism and creative industries (GGET, 2019[5]). Regionally, the priorities may differ but are generally aligned with the national strategy.

Box 3.1. Success factors for Smart Specialisation Strategies: Evidence from across the OECD

The process of designing a specialisation strategy is normally initiated by lead actors or institutions that are strongly committed and well-positioned to mobilise other stakeholders and resources and to set the strategic framework for further actions. These lead actors may arise, for example, from companies, research institutions, national or regional authorities. The mobilisation and empowerment of key stakeholders and institutions to realise their potential as leading contributors are essential elements to transform traditional regional innovation strategies into regional innovations strategies for smart specialisation.

Research on the successful adoption of Smart Specialisation Strategies in the OECD finds that the key success factors needed to ensure an efficient contribution from all relevant socio-economic actors involved in the designing of the smart specialisation strategy include:

1. The participation of the leading institutions of knowledge: universities and institutions of research and innovation with sound expertise for the skills, scientific and technology frontiers that exist in a country or region.
2. The participation of highly skilled experts in the process, given the increasingly cross-sectoral, cross-technology and cross-border dimension of entrepreneurship and innovation activities.
3. The need to build trust and reciprocity among all socio-economic actors involved.
4. The need to increase transparency on how stakeholders are selected and involved and, especially, what role (empowerment) they are provided during the process.

Source: OECD (2013[6]), *Innovation-driven Growth in Regions: The Role of Smart Specialisation*, https://www.oecd.org/sti/inno/smart-specialisation.pdf.

Delivering investments through project-based funding

The priority areas identified in all ROPs in Greece are translated into various actions that are then set out in calls for proposal/tenders in order to be delivered. These calls can be answered by a variety of actors; they may be regional or municipal governments, social organisations, universities, colleges or businesses, among others. Managing Authorities (MAs) in each region are responsible for managing this process, are separate entities from the elected regional governments (although they report to them) and refer for their work to the Ministry of Development and Investments which co-ordinate and monitor the implementation of ESIF across the country. MAs can in some cases shape the types of projects that are funded due to their role in determining the calls for proposals. There are regular checks, monitoring, audits and evaluations in order to ensure that funds are being spent appropriately. This is a short summary of what is in fact a very complex process, which is described in Chapter 4.

The EU Cohesion Policy has been critical for regional development in Greece. According to OECD estimates, between 2009 and 2018, each euro of Structural Funds in Greece, excluding national participation, generated an extra 64 cents of GDP (in the short term at 2008 values) (Chapter 2); regions have very limited funding to undertake initiatives beyond those funded through the ROP (European Social Fund [ESF] and European Regional Development Fund [ERDF]). However, the reliance on cohesion policy for regional development and the absence of other core funding leads to some specific characteristics:

- *Time lags in delivering investments*: Between one programming period and the next, there is a time lag (mainly as an effect of the EU regulatory framework) wherein the new architecture is being set up. Thus, the seven-year programming period is not in fact fully used to deliver projects and calls for proposals can take place two or even three years into that period. This can make it hard for organisations that are reliant on this funding to manage the in-between periods and to deliver initiatives in a timely way.
- *Challenge to build organisational capacity and longevity*: Local organisations that deliver programmes often speak of funding precarity. While some have institutional longevity and have built capacity over time, it is hard for many to have long-term staff and build capacity due to a reliance on project-based funding. Beyond this, regional and local governments express that MAs hold disproportionate control in shaping requests for proposals which in effect drives much of the subnational public investment in the country.
- *Delivering impactful projects:* Greece has commonly received the critique in past programming periods that actions have focused too much on delivering basic infrastructure investments and not enough on competitiveness and social cohesion actions (Bartzokas, 2007[7]). The quality and complexity of projects are related to the robustness and capacity of local institutions and this is something that is built over time. Also, the tendering process entails many reporting requirements and can be quite complex and lengthy – requirements that increase the more complex the project is. Given this environment, it can be challenging to put together complex initiatives, particularly for actors that are new to the field. As previous experience matter, incumbents have an advantage.

As regional policy in Greece evolves and the economic environment improves, regions will likely go down the path of other countries of being able to target complementary actions with own-source revenues and strengthen local institutions and local capacity. This will reinforce the effectiveness of Cohesion policy.

A new place-based approach to regional development

Delivering growth to all regions

The crisis and long recovery period had sizeable consequences for the economy and its regions so that Greece's GDP is today one-fourth smaller than in 2007 and young people have left their country to seek better opportunities elsewhere; poor economic conditions have had a very hard impact on all aspects of peoples' lives (Chapter 2). The central challenges facing Greece are well known: businesses have low value-added activities, limited innovation and are poorly integrated into regional and external markets. Post crisis, enterprises indebted with limited access to finance and low FDI attraction. Furthermore, with the exception of Attica and Thessaloniki, there is a very low level of investment in R&D (both private and public) and low levels of innovation. Traditional business organisations dominate, especially in farming and SMEs (OECD, 2018[8]). Finally, long-term unemployment has increased, especially among those with less education and skills (Chapter 2) (OECD, 2018[8]) and a poor skills match in many regions (OECD, 2019[9]).

Regional policy supports job creation, competitiveness, economic growth, improved quality of life and sustainable development. Mainstreaming regional, urban and rural development policy approaches with economy-wide structural policies, including better targeting and implementation of public investment is key to national strategies and shall be a priority for the years to come.

Box 3.2. The territorial impact of the current COVID-19 pandemic

In less than 3 months in the first quarter of 2020, the COVID-19 crisis developed into a global pandemic, contaminating almost all countries and infecting more than 1 million people around the world. Half of the world's population experienced a lockdown with strong containment measures. Schools and universities were closed for around one billion students of all ages. Beyond the health and human tragedy of the coronavirus, the crisis has already profoundly affected economies, unemployment and the sustainability of public finance. All economic sectors are affected though disrupted global supply chains, weaker demand for imported goods and services, a decline in international tourism and a decline in business travel. SMEs and entrepreneurs will be particularly hard hit by measures to contain the virus' spread. Unemployment and the number of aid seekers have started to increase significantly. The OECD estimates that for each month of strict containment, there will be a loss of 2 percentage points in annual GDP (OECD, 2020[10]).

The COVID-19 global crisis has a strong territorial dimension. First, the regional and local impact of the crisis has been highly asymmetric within countries – some regions have been harder hit than others, at least during the early stage of the pandemic. In economic terms, the impact of the crisis will also differ across regions depending on their exposure to tradable sectors, exposure to global value chains and type of specialisation. Overall, regions specialised in tourism and metropolitan regions seem at higher risk of job disruption than other regions. Second, subnational governments – municipalities and regions – have been at the frontline of managing the crisis, as they are responsible for critical aspects of contention measures, healthcare, social services, economic development and public investment. The management of the public health aspect shows that the combination of national and subnational measures and an ability to work together are fundamental for an effective response in a context of emergency. Managing the economic and social crises also requires effective co-ordination, adequate regional policy responses and robust governance and finance tools. The combined economic, social and political challenges related to the COVID-19 outbreak make effective multilevel governance and finance mechanisms more important than ever before.

Note: The OECD has created a Digital Hub on Tackling the Coronavirus (COVID-19), which includes policy briefs and country-by-country COVID-19 economic measures and it is intended to grow and be continuously updated. Consult www.oecd.org/coronavirus/en.
Source: OECD (2020[10]), *The Territorial Impact of COVID-19: Managing the Crisis Across Levels of Government*, http://www.oecd.org/coronavirus/policy-responses/the-territorial-impact-of-covid-19-managing-the-crisis-across-levels-of-government-d3e314e1/.

Greece's new National Growth Strategy is focused on delivering growth to all regions. Territorial policies are central to achieving a wide number of the policy goals in the strategy, and regional and local governments are critical to their implementation. However, these territorial dynamics are not fully elaborated in the document. While the national strategy's section on regional development stresses how regions need to identify their own strengths and opportunities, the diagnosis of challenges focuses solely on the unique characteristics of the island regions. There are other regions in Greece – e.g. mountainous regions, those experiencing industrial transition – who equally require targeted solutions and unique policy instruments. As such, the strategy does not offer a comprehensive view of regional development and does not discuss the various policy mechanisms that can be used to implement regional policies. Moreover, there is a wide range of sectoral policies for which a territorial lens is absent.

However, beyond the National Growth Strategy, a regional development policy does not seem to be explicitly stated at the national level. In the absence of a specific document, regional development is implicitly served through the regional allocations and programmes of the European Structural and Investments Funds (ESIF) and to some extent, Greece's own Public Investment Programme (PIP), as articulated in 2016 “Development” Law (4399/2016) and 2019 “Invest in Greece” Law (4635/2019). While the first is a scheme financed by PIP which provides incentives to enterprises for investments, the latter covers a wide range of fields but with the single purpose to improve the business environment. However, there is no predefined allocation of resources for each region associated with this funding and limited resources have been available, with most being used for the national co-financing support of ESIF Funds.

Thus, at present, the national government’s Public Investment Programme (PIP) does not play a large role in delivering targeted regional investment policies, though it may evolve to take on this role in the future and, as a permanent mechanism for dialogue between local and regional authorities and social partners, will submit proposals on development planning. Greece’s approach to regional development is thus most similar to Cyprus, Ireland, Malta, Portugal and Slovenia – smaller countries, with GDP below the EU average per capita, for which regional development policy is focused on national development and competitiveness, and wherein internal disparities (e.g. peripherality, insularity) may be significant and are gaining policy attention (Bachtler, Méndez and Vironen, 2014[11]).

Effective territorial policies are key to delivering on Greece’s growth objectives. Actions are required on multiple fronts. The analysis from Chapter 2 shows that although Greek regions each have their specific strengths and weaknesses, there are a number of regions with similar economic characteristics that require different policy responses. In broad terms they can be divided into four main categories accordingly:

1. *Metropolitan regions* with developed research and technology capabilities and a potential to further diversify knowledge-intensive manufacturing and services (Attica, Central Macedonia). Greece’s two metropolitan regions concentrate most of the country’s population and economic activity. Yet, these areas were less resilient than others during the economic crisis. Attica went from leading productivity growth in the pre-crisis period to dragging the recovery in the post-crisis period and it has lost ground with all other OECD cities of similar size, including those over which it held an initial advantage (e.g. Barcelona, Manchester and Naples). While these regions experience the benefits of agglomeration, they are also suffering the negative impacts (e.g. air pollution, traffic congestion, sprawl) and growing segregation/spatial inequality (Balampanidis et al., 2019[12]).
2. *Regions with a manufacturing base*, gathering traditional industry sectors with a low level of innovation capabilities (Continental Greece, East Macedonia-Thrace, West Macedonia). These resource-rich regions face the challenge of modernising their industrial base, in order to generate higher-value activities and quality jobs and diversifying their economies. These regions are also rich in environmental amenities which have not been fully exploited (e.g. ecotourism).
3. *Rural regions with local services and primary activities,* including livestock and aquaculture, food processing and potential for innovation in the agro-food industry (Epirus, Peloponnese, Thessaly,[27] Western Greece). These regions also have a growing presence in tourism with opportunities to link the development of the food sector to tourism.
4. *Insular regions* with strengths in quality tourism and specialised agricultural products (Crete, Ionian Islands, North Aegean, South Aegean). These regions are well known worldwide as tourism destinations. A central challenge of these regions is to diversify their economies, to prolong the tourism season and to enhance the quality of visitor experiences (attracting higher-value activities). These regions need to manage seasonal populations in delicate ecosystems. Moreover, as insular regions, it can be very challenging to provide adequate services and infrastructure to some parts of the territory.[28]

Table 3.3 identifies economic opportunities and policy priorities for these four categories of regions, taking stock of the analysis undertaken in Chapter 2.

Table 3.3. Economic opportunities and policy priorities across four categories of regions in Greece

	Economic opportunities	Policy priorities
Metropolitan regions	• Restoring economies of agglomeration • Promoting functional linkages to nearby areas to spread agglomeration benefits to the surrounding area • Mobilising pool of talent with low cost in European markets • Capacity to attract professionals in creative industries	• Integrating transportation, housing and spatial planning at the functional scale • Ensuring access to quality and affordable housing in cities • Improving transport accessibility inside the functional urban area • Ensuring the relevance of university training for specific skills needs of regional employers
Regions with a manufacturing base	• Linking universities and research institutes to local firms • Reskilling and internationalisation support for SMEs • Value chain integration of SMEs • Promoting entrepreneurship and competition, access to finance	• R&D support for industries with growth potential • Support for the regional innovation ecosystem • SME support services and incubators • Better match of training and job candidates with local opportunities that utilise their skills
Rural regions	• Adding more value in primary activities (agro-food, mining) and focusing on high-value niche markets (e.g. in tourism, healthcare services) • Upscaling and modernising local services, especially in tourism activities	• Land consolidation • Digital infrastructure • Bringing the technology of higher education institutions to rural areas • Support services to rural firms • Improving the quality of education delivery to reduce the number of school drop-outs in rural areas and vocational education and training (VET)
Insular regions	• Physical and digital connectivity • Developing ecosystem of remote service delivery • Managing seasonality • Upscaling and modernising local services, especially in tourism activities	• Investing in digital and physical infrastructure • Forward planning for delivery of quality services • Support for social innovation and other alternatives for service delivery • Physical infrastructure

Enabling locally-led development through modern regional policy

Greece's regional development strategies benefit from a place-based approach where sectoral policies (support for private investment, infrastructure and human capital policies) meet and interact in each place, generating multiplier effects. Place-based policies also help to ensure that growth benefits reach different population groups and places – from continental, mountainous and island localities.

Modern place-based regional policy is characterised by a set of co-ordinated policy measures involving a broad range of stakeholders that is adapted to the specific conditions of a region (OECD, 2019[13]). Instead, modern regional policies should enable regions to reach their economic potential by focusing on their comparative strengths and ensuring the right framework conditions are in place. Table 3.4 provides an overview of the key characteristics of modern place-based policies for regional development.

The capacity of regions and other local actors to identify their strengths and opportunities and to build on them is fundamental to the success of modern regional policies.

Table 3.4. Characteristics of modern place-based regional policy

	Regional policy characteristics
Problem recognition	Low productivity (levels and growth); underused regional potentials; lack of regional competitiveness; inter-regional and inter-personal inequality
Objectives	Increasing productivity growth; delivering high quality of life and well-being to people across economic, social and environmental dimensions
General policy framework	Tapping underutilised regional potentials through regional programming; building on existing strengths; developing regional innovation systems
Spatial orientation	All regions within a country are targeted with policies adapted to each region
Actors	All levels of government; relevant non-governmental stakeholders (public, private, academia, non-governmental organisations [NGOs])
Unit for policy intervention	Interventions should consider both administrative and functional geographies where appropriate. Functional geographies cover the areas in which people live, work and interact (e.g. rural-urban linkages, functional urban areas, cross-border regions, etc.)
Time dimension	Should provide a stable long-term policy environment while responding adequately to newly emerging challenges and opportunities
Policy fields	Context-specific; considering all relevant policy areas and regional characteristics (economic, geographic, demographic, social, cultural, etc.)
Focus	Endogenous development based on local assets and knowledge
Instruments	Broad range of instruments, including targeted investment in human capital (e.g. higher education, vocational training, early childhood education, etc.); infrastructure investments; support for business development (e.g. business incubators, credit provision, etc.); research and innovation support; co-ordination between non-governmental actors (businesses, universities, etc.)
Operational approach	Encourages policy co-ordination across sectors, levels of government and jurisdictions; and promotes participation and dialogue with private stakeholders and citizens

Source: Revised and updated from OECD (2010[14]), *The OECD Innovation Strategy: Getting a Head Start on Tomorrow*, https://dx.doi.org/10.1787/9789264083479-en.

Policies that either target or impact "place"

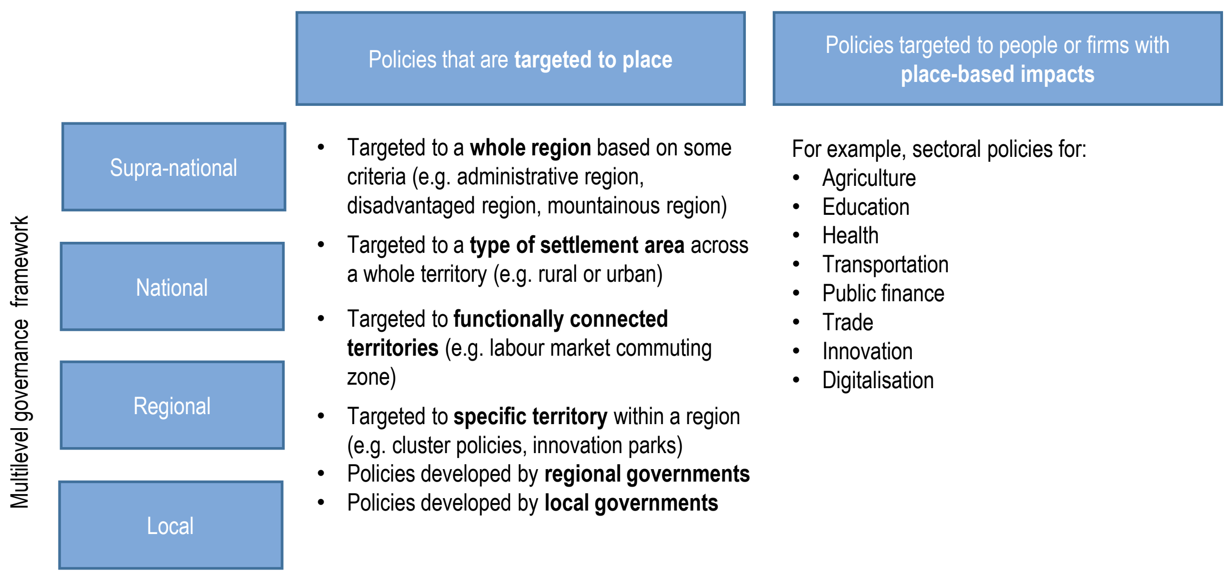
Place-based policies – differentiating between two main forms: i) those policies that *intentionally target* "place"; and ii) the wide range of policies that do not intentionally target place but that have important place-based consequences (Figure 3.3). Within those set of policies that *intentionally* target place, territories can be targeted in different ways. Policies may be targeted at an entire region based on some characteristics (as Greece has done with its "Islands' policy"); targeted at a type of settlement such as rural or urban areas; targeted at functionally connected territories (e.g. labour market commuting zones); or targeted at a specific territory within a region such as cluster policies or innovation parks. They can also be elaborated by regional or local governments directly. Greece has a wide range of policies that target place such as special investment policies for mountain areas, places facing population decline and islands. There is also the wide range of EC policies which target place by allocating more funds to disadvantaged regions or by targeting functional territories (e.g. labour market communising zones).

In terms of policies that do not intentionally target place but for which there are place-based impacts – these take many forms, for example: tax incentives for home ownership which can lead to an increase in urban sprawl; education funding based on student thresholds which can make it harder to provide services to rural areas; and national renewable energy policies which may only be feasible in some places due to natural endowments.

A key point for policymakers is to not be “space blind” in the design of sectoral policies but to inherently consider how policies may impact different places differently within the incentives or the criteria that they establish. Delivering on this requires an understanding of local and regional conditions. It requires quality territorial data and a reflection on how different local communities and economies work.

Policy complementarity – combining investments to have a greater impact and be mutually reinforcing – is thus an important element of place-based policy. For example, a region that bases its development strategy on a culinary tradition needs to ensure that the right infrastructure is in place to ensure that perishable goods can reach important markets on time. It also has to adapt its education system to train skilled workers in the food processing industry. In parallel, it might have to offer advice and training to small food producers on how to export; and it needs to foster the creation of business associations that can market food from the region nationally and internationally. Successfully delivering on this requires a deep knowledge of local institutional actors and conditions, and necessarily involves a wide range of stakeholders from within and outside the region. Thus, institutional capacity and effective multilevel governance are fundamental to delivering effective place-based policy.

Figure 3.3. A typology of place-based policies



The importance of institutions for regional and local development

Institutional capacity and well-functioning multilevel governance are fundamental to delivering effective place-based policy. Regions need greater responsibility and accountability, that is, there needs to be greater ownership of policies at the regional and local levels. Place-based policies require governance arrangements that facilitate co-ordination and integration of sectoral policies, as well as co-ordination arrangements that allow delivering regional policies and investments at the relevant scale and bring together relevant public, private and civil society actors. Regions and municipalities need to have sufficient capacities – administrative, financial and professional – to deliver (OECD, 2019[15]).

Table 3.5 provides an overview of the distribution of responsibilities between local and regional governments. Chapter 4 will provide an in-depth discussion of multilevel governance and ESIF management and control systems in Greece.

Table 3.5. Distribution of powers, local and regional governments

Deconcentrated administration authorities	Regions	Municipalities	Metropolitan regions	Insular municipalities	Mountain municipalities
Town and urban planning	Planning, development	Development	Spatial planning and urban regeneration	Works, urban and spatial planning and environment	Support for local community and economy
Environmental policy	Public works, spatial planning, environment	Environment	Environment and quality of life	Natural resources, energy and industry	Energy, water and forestry
Forest policy	Agriculture, livestock, fishery	Rural development-livestock – fisheries	Civil protection and security	Agriculture, livestock and fishery	Agriculture and livestock
Citizenship policy	Natural resources, energy-industry	Quality of life and proper functioning of cities and settlements, including municipal transport	Transport and communication	Transport and communication	
Migration policy	Employment, trade, tourism	Employment		Employment, trade and tourism	
	Transport and communication	Social protection and solidarity			
	Health, education, culture, sports	Education, culture and sports			
	Civil protection, logistics	Civil protection			

Source: Elaborated from Council of Europe (2012[16]), *Structure and Operation of Local and Regional Democracy - Greece - Situation in 2012*, https://www.eetaa.gr/en_pages/Structure_and_operation_Greece_2012.pdf (accessed on 14 May 2019).

In an effort to address these issues, Greece has ambitiously developed a new architecture for regional policy and new regulations that aim to simplify processes and make government at all levels more efficient and effective. In the coming years, it is critical to continue in this direction, finalise the ongoing reforms and that regional and local governments continue to build their internal capacity so that they can help catalyse local development efforts. They need the right data and skillsets to fulfil this role. There is work to be done to galvanise networks of public, private and third sector actors and to build economies of scale in programmes and services. Regional policies are not just the sum of policy instruments – they are about building a culture of working together to leverage local development. This is a new role for them and it will take time to develop.

Given this, some of the central issues that regional policy in Greece needs to tackle in the coming years are:

- *Strengthening institutional and administrative capacity.* Greece has low planning capacity, cumbersome bureaucratic procedures and lack of experienced staff (Huliaras and Petropoulos, 2016[17]). Regional and local governments have weak administrative capacity and insufficient human and financial resources with which to undertake investments and deliver services (Oikonomou, 2016[18]). Almost all European Union Structural Fund /ESIF evaluations in Greece have noted that beneficiaries such as municipalities have insufficient expertise and that this has led to delays or even projects being cancelled (Huliaras and Petropoulos, 2016[17]). This is a common issue across many EU states and efforts are made to address it through initiatives under the Technical Assistance Operational Plan. In the case of municipalities, a lack of the right technical expertise among staff is well acknowledged and they have been struggling under rules limiting the hiring of permanent public service staff that have been imposed since 2010.[29] One consequence of a lack of internal capacity has been an overreliance on external consultants. Public bodies urgently need to build internal capacity to carry out their functions. A reliance on external consultants is one of the reasons that regional and local development has been delivered on a project by project basis absent of connections to integrated medium- to longer-term development strategies. Another factor is the tendency of Managing Authorities to choose mature projects over the more significant ones to sustain absorption and, in the long run, avoid the n+2 rule resulting in decommitment of funds.

- *Strengthening the public legitimacy of regional policies and delivering them on a comprehensive and strategic medium- to long-term planning*. In the past decade, many policies have been imposed on the Greek state through bailout conditions and this has impacted public trust in politicians and European institutions alike.[30] Greece's current National Growth Strategy also notes the negative impacts of certain political clientelism on the country's development – a finding echoed by others (Hellenic Republic, 2018[1]).[31] The current regional and local policies are mainly shaped by EU policies but are often delivered through the sum of many small projects which leads to duplication, high administrative costs and lack of co-ordination – including a lack of co-ordination between local and regional governments (Oikonomou, 2016[18]; Huliaras and Petropoulos, 2016[17]). This is because local and regional governments have struggled to think of policies in an integrated way that is connected to medium- and long-term development visions. This vision is needed to galvanise local development and involve a broad array of local actors across the public, private and tertiary sectors. Local and regional development cannot be driven by government alone. Building local and regional institutional capacity for responsive and engaged governance forms a central challenge for the future. At the national, regional and local levels, there are efforts to build a stronger culture of regional development planning and public engagement supported by open data and online consultations. This needs to continue and, despite ongoing budgetary pressures, should be viewed as a worthwhile investment, fundamental to the success of many policies and reforms.
- *Shifting away from an overreliance on EU funds*. Greek national and regional authorities have been relying almost exclusively on EU fund revenues for infrastructure projects in absence of incentives to seek better ways of raising development finance (Huliaras and Petropoulos, 2016[17]). ESIF funds are sometimes being used to provide services that should instead be part of core government public expenditures. For example, the ESF has been used to cover the long-term funding needs of Greek childcare centres which is a part of basic social welfare, "thus freeing up significant state funds to be utilised in areas often related to clientelist ends" (Huliaras and Petropoulos, 2016[17]). The reduction of nationally funded public investment constitutes one of the reasons for the reduction in the total volume of public investment in Greece (Psycharis, Tselios and Pantazis, 2018[19]). As a society that is just now coming out of austerity, the high degree of reliance on EU funds for regional policy is understandable and necessary. However, it will be important to break this logic going forward because these funds have restrictions imposed upon their use, they flow on a project by project basis and can be a poor fit to meet the needs of cities and regions. In the words of one Greek mayor interviewed for this project: "it is as if we have been given a suit to wear with all of the wrong measurements".

Better data for regional policymaking

Greece has been working to improve the quality and usefulness of its public data across various levels of government (e.g. ministries, regional administrations, municipalities, etc.). However, the quality of data to understand local and regional issues and to support decision-making remains underdeveloped. Dedicated action is needed. Examples include:

- *The Hellenic statistical authority should improve the quality and accessibility of its territorial data sets to ensure common structure, consistency and transparency*. For example, the structure across types of data should be harmonised (a system is in place but not across all types of data and, according to the majority of interviewees, not user-friendly). The consistency of the data sets over time should need to be improved e.g. so that the name of regional units does not change over time. Also, many datasets are not ready to be statistically processed, especially for disaggregated data (e.g. often entries are not filled with all variables/identification field). In terms of transparency and usability, more and better information should be provided, e.g. on how measures are defined, collected, aggregated and what they refer to.
- *The Hellenic statistical authority's firm-level and employee-level database should keep track of individuals.* Doing so would help to understand what policy works, where the gaps are, what the conditions to grow and develop are, what can help, etc. The aggregation of correct data gives a precise value for the full economy. Harmonised identifiers could be used across all individuals and firms. For example: i) individuals from social security registers reported by firms (such as in France) or by social security agencies (Germany, Hungary); ii) firm-level identifiers (e.g. financial statements of the firm from business registers or income statements); iii) import/export data (e.g. the traditional reporting includes value and volume of exports and imports of highly disaggregated products [8-digit level] per country of origin or destination and firm).
- *The thematic range of existing open government data sources needs to be expanded.* Presently it mostly focuses on economic/financial datasets and, to a lesser extent, social and natural resources and legal datasets). More data is needed on government spending, economic activity and firms and on agriculture, tourism and the environment (Alexopoulos et al., 2018[20]).
- *Open data sources need to be redesigned to be more functional and usable*. There is a need for more advanced tools mainly for data discovery, data visualisation (e.g. maps and charts) and users' feedback. More emphasis should be placed on the use of structured and machine-processable file formats in publishing datasets, and metadata (adopting existing metadata standards) (Alexopoulos et al., 2018[20]). Doing so would enable more effective browsing and discovery of datasets, and also linking and combining open government data from multiple sources. Positively, the national government's website to track the implementation of the National Strategic Reference Framework (NSRF) 2014-2020.[32] The website provides information on the number of projects that have been approved to date and their budgeted amounts by region. It also includes helpful summary data visualisations on the thematic areas and beneficiaries by region and the source data are downloadable. However, the utility of this data is diminished because "regional" data and thematic summary data is not readily available through its interface.

Strengthening the territorial dimension of Cohesion policy

As described in Chapter 2, Greece's settlement structure and mountainous and islands geography present unique challenges for urban and rural policies. Its two metropolitan areas, Athens and Thessaloniki, concentrate most of the country's population and economic activity. About 33% of the national population lives in metropolitan Athens (with 3 562 538 people); 10% in the metropolitan Thessaloniki (with 1 054 673 people); 6% in 6 medium-sized urban areas (250 000 to 0.5 million inhabitants); and 8% in 6 small urban areas (50 000 to 250 000 inhabitants). The remainder of the population – around 43% – live in small municipalities with a population of around 50 000 people or less. Thirty-two percent of the population in Greece lives in rural regions, while the average in the rest of the OECD countries is 25%. Greece has the third-largest share of the rural population in remote regions across OECD countries (Chapter 2, OECD regional typology).[33] Long-term population trends suggest that the larger cities will grow somewhat but that medium-sized and smaller ones will lose population over time, with the greatest declines expected in intermediate and rural regions. A combination of population ageing, low fertility rates and negative net migration flows have heightened these trends.

While the metropolitan areas of Athens and Thessaloniki dominate in terms of economic activity, they were less resilient than others during the economic crisis, which aggravated urban degradation – particularly in the core – as investment declined and people migrated elsewhere for jobs. Between 2000 and 2012, Greece experienced a strong pattern of sub- and peri-urbanisation (OECD, 2017[21]). Already in the pre-crisis phase, deindustrialisation had led to the formation of abandoned brownfields, often in the immediate vicinity of degraded housing areas. Similarly, rural areas have been under intense economic and social stress. Many firms and activities that existed post-crisis may not return to rural areas or may take new forms. Meanwhile, some areas are facing industrial transition such as Western Macedonia where the lignite industry is being phased out.

Given these trends, a diversity of strategies or integrated strategies are needed. In some places, there will be a need to deliver services in new ways – e.g. mobile services, e-services – in order to more effectively meet the needs of this population and ensure that older persons can effectively age in place. In other places, rural areas may need strategies to consolidate services and manage decline as existing capital assets and infrastructure are not used. Intentional strategies are needed to make the most of public investments and plan for the future.

Integrated strategies for urban development

The OECD defines "urban policy" as a co-ordinated set of policy decisions to plan, finance, develop, run and sustain cities of all sizes, through a collaborative process in shared responsibility within and across all levels of government, and grounded in multi-stakeholder engagement of all relevant urban actors, including civil society and the private sector.[34]

Urban development policies play an important role in delivering smart, sustainable and inclusive growth. Greece's urban policy is mainly focused on spatial planning considerations, along with sustainable development. Urban policy is also implemented through the ESIF, aiming at the sustainable economic and social development of cities (OECD, 2019[13]).

Box 3.3. The impact of COVID-19 on cities

In less than three months in the first quarter of 2020, the COVID-19 crisis developed into a global pandemic, which brings with it a halt in production in affected countries, hitting supply chains across the world, a steep drop in consumption and, finally, a sharp decline in services that reflects the consequences of lockdowns and social distancing, especially in urban settings. More than half of the global population live in cities and this share is expected to rise to 70% by 2050. Cities may be better equipped than the rest of their country to respond to the COVID-19 crisis due to their well-developed healthcare facilities. However, cities are densely populated places where people live and gather, thus at risk of spreading the virus due to the close proximity among residents and challenges in implementing social distancing. Large and secondary cities, in particular, often act as hubs for transnational business and movement, with the potential to amplify the pandemic through increased human contact. In addition, cities marked with inequalities and a high concentration of urban poor are potentially more vulnerable than those that are better resourced, less crowded and more equal.

The OECD is collecting policy responses in cities experiencing the outbreak to help other cities prepare for the spread of the virus. As of April 2020, few observations can already be derived from a number of policy responses. These will be further developed to draw lessons and enhance cities' resilience and capacity to recover from shocks. They are:

- Cities are not equal in their capacity to respond to the COVID-19 crisis, across and within countries. This uneven capacity depends on various factors including the allocation of public service delivery (e.g. healthcare tends to be more centralised), population size (cities of a smaller size seem to have paid greater attention to inclusion), regulatory frameworks, fiscal capacity or the infrastructure in place.
- Cities are undertaking a wide range of responses, from immediate measures to provide information, protect their citizens (e.g. hygiene), minimise social contacts and support businesses (e.g. finance) to measures designed to address a longer-term impact (e.g. workplace reforms).
- COVID-19 provides a unique opportunity to upscale innovation and the use of online/digital tools in cities. From many examples, Internet and smartphone applications are playing a critical role in communication, awareness-raising, teleworking but also learning and skills development.
- Although most actions focus on short-term crisis management, some cities are already looking beyond the crisis to the recovery efforts that will be required after the COVID-19 outbreak.

Note: The OECD has created a Digital Hub on Tackling the Coronavirus (COVID-19), which includes policy briefs and country-by-country COVID-19 economic measures and it is intended to grow and be continuously updated. Consult www.oecd.org/coronavirus/en.
Source: OECD (2020[22]), *Cities Policy Responses*, http://www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff/.

Land use planning and spatial development

Land use and spatial planning are one of the two main pillars of Greece's urban development policy. Spatial planning systems structure how policies interlink at the local level through development investment and land use regulations. These activities are connected to much broader agendas such as the transition to a low-carbon economy, reducing social-spatial inequality and creating opportunities for economic growth and prosperity. Spatial planning is therefore linked to policy ambitions at multiple scales, extending across sectoral issues and involving an ever-wider array of actors in structures of governance. A challenge for planning systems in this context is to adapt both formal institutional rules and informal roles and ways of working to take a comprehensive view of how spatial considerations are linked to a wide range of policy issues important for urban development.

The 2014 and 2016 spatial planning reform in Greece

The Second Economic Adjustment Programme for Greece[35] included, under the heading "Planning Reform" (Law 4024/2012), the obligation for Greece to revise the spatial and urban planning legislation in order to ensure greater flexibility in private investments in real estate and simplify and accelerate the implementation of spatial plans. A new law for "Spatial and Urban Planning Reform" (Law 4269/2014) was instituted in 2014 and, after a short period of partial implementation, in December 2016, it was substituted by Law 4447/16, which made minor revisions to the previous law and which came into force under the push of the Third Economic Adjustment Programme[36] in an attempt to accelerate spatial planning implementation in the country.

Law 4447/16, which is currently in force, organises spatial planning in Greece in a four-level top-down hierarchical framework where the two first levels (national-regional) have a strategic role and the third and fourth ones, the local, have a regulatory character (Figure 3.4). Thus, the current legislation provides for:

- The National Spatial Strategy, which is a policy text of principles and includes basic directions of spatial organisation, the main axes, medium- and long-term spatial development objectives at the level of the general government and its individual bodies, as well as the proposed development measures and actions for its implementation. The National Spatial Strategy is the basis for the co-ordination of the strategic spatial frameworks, the individual investment plans and programmes of the state, of the local authorities and plans and programmes that have significant impacts for the development and cohesion of the national space.[37]

- The Special Spatial Frameworks, which are meant to provide directions for the national growth poles and axes, the urban system, the spatial organisation of specific economic sectors or infrastructure of national importance and the spatial development of specific categories of space, (coastal zones, maritime spatial planning, zones with growth problems etc.) and the promotion of programmes and projects of major importance. These will be binding on lower-level frameworks and plans.
- The Regional Spatial Frameworks, which promote the developmental and spatial characteristics of each region for its equal integration into national, EU and international space, setting out guidelines for the spatial organisation model, for the spatial structure of the productive sectors, for the transport and infrastructure networks, for the residential network, for the protected areas, including also approved large-scale public or private investment plans. For the Attica region, the New Master Plan of Athens-Attica (Law 4447/16) replaces the Regional Spatial Framework.
- Local Spatial Plans (LSPs), setting specific regulations and defining the allowed land uses and planning restrictions in urban and rural areas; these should be aligned with the directions of the upper strategic level frameworks.
- Special Spatial Plans (SSPs), a new category of plans, to facilitate and speed up investments. SSPs are at the same hierarchical level as LSPs but on a smaller scale, focusing on specific sectors to attract strategic investments. SSPs concern territories across administrative boundaries, of a supra-scale or strategic importance. SSPs can also be developed for urban regeneration or environmental protection programmes or for dealing with the consequences of natural disasters.
- Urban Implementation Plans.
- Moreover, a reform of the categories of land uses for urban space and the establishment of uses for rural areas institutionalised in 2018.

Additional restrictions on activities or land use also derive from sector-specific and environmental protection regulations (e.g. in relation to the natural, cultural or manmade environment).

Box 3.4. Maritime spatial planning

Greece currently lacks a legally binding national maritime spatial plan. Maritime planning issues are addressed in the national Spatial Planning Framework. Sectoral plans for aquaculture and tourism (under modification) include spatial planning guidelines for coastal and marine segments of each sector. Additionally, the renewables framework sets strategic guidelines for offshore wind parks.

A new spatial planning framework for marine and coastal areas was adopted in 2018, and maritime spatial plans are expected to be completed by 2021. Revised Regional Spatial Planning Frameworks (for 8 out of 13 regions) have been broadened to include protection of coastal areas. Evaluation of all regional spatial planning frameworks has been completed. Evaluation of sectoral-specific spatial planning frameworks is underway.

The development of the National Maritime Spatial Strategy in 2020, along with the updated Spatial Planning Framework for Tourism, could lead to the more effective management of coastal and marine areas.

Source: (OECD, forthcoming[23])

Responsibilities in the current planning system

In the four-tier spatial planning system, the national government has the most important competencies as it approves all spatial frameworks and plans, with the "decentralised administrations" being responsible for the approval of lower-level plans, the implementation of urban plans and their modifications. The regions and the municipalities have an advisory role in the approval of spatial and land use plans (OECD, 2017[24]; Vezyriannidou and Portokalidis, 2019[25]). In this context, the region of Attica is an exception as its spatial plan is approved by law by the Greek parliament.

A special role is played by Enterprise Greece (the official business promotion agency of the Greek state, under the auspices of the Ministry of Foreign Affairs) that has the authority to fast track strategic investment projects. It is involved in the preparation and approval of Special Spatial Development Plans of Public Properties and Special Spatial Development Plans of Strategic Investments. Both plans can override regular plans and can also speed up environmental licensing. Due to these functions, Enterprise Greece is arguably more important for land use decisions than any level of subnational government in Greece (OECD, 2017[24]).

Significant lags exist in the transition to the new planning system

To date, all the institutionalised Strategic Spatial Frameworks are under amendment for the necessary updating. Until these new frameworks are in place, the older ones remain in force. Also, as of June 2019, although a number of Special Spatial Plans have been adopted and are being implemented, no plan has been completed, 2 are underway and 353 remain to be executed (EC, 2019[26]).

While the objective to facilitate private investments was achieved through the establishment of Special Spatial Plans, the second objective to simplify and accelerate the spatial planning process has been seriously delayed. The time needed for the completion of the sequence of plans which define binding land uses inside town plan boundaries is extremely lengthy and the large number of different types of plans can lead to overlapping responsibilities and contradictions. Moreover, several aspects of the planning system are ineffective.

For example, an important issue in Greek land use governance is the question of enforcement. Generally, a large number of illegally constructed buildings exist in Greece. In most cases, developers face no or only mild fines and it is unusual that the demolishment of illegally constructed structures is enforced. Partly, the reason for this is the absence of any administrative permitting procedure that confirms that a new construction is in accordance with existing land use plans (OECD, 2017[24]). Density increments have been established as a form of value capture mechanism[38] to legalise irregular construction and channel the resulting fines into a "Green Fund" (Law 3889/2010) in order to finance urban environmental improvement projects. A drawback of this approach is that developers and property owners may continue to choose to ignore planning and building regulations and simply pay the fines (Karadimitriou and Pagonis, 2019[27]). The General Secretariat for Regional Planning and Urban Development is setting up regional observatories and an e-database of construction to monitor for illegal construction, however, this action does not address the matter of lax enforcement. The timeframe has been set, within which the cycle of arrangements for arbitrary constructions will be closed (Laws 4178/2013 and 4495/2017). In order for the settlement to take effect, the interested parties must also proceed with the electronic registration of their property, in the electronic register, i.e. in the acquisition of electronic identity. After 30 June 2020, an electronic ID will be a prerequisite for completing the settlement process.

Figure 3.4. Spatial planning in Greece: Law 4447/16

Source: Ministry of the Environment and Energy, Directorate of Spatial Planning (2020).

Box 3.5. Spatial planning challenges: Example of Crete

The island of Crete, which has delicate environmental areas, ancient historical sites and a large seasonal tourism industry, urgently needs to more effectively manage its space. Crete has a regional spatial framework from 2003 (the first such plan to be approved in Greece) that was last updated in 2017 and which describes the key sectors of tourism, industry and energy. However, only a third of municipalities have approved land use plans. Local spatial plans are needed for all of Crete and if there is a new regional framework approved, all of the statutory urban plans will need to be updated. There is also an urgent need to organise old industrial areas into modern business parks and to address growing land use conflicts in the coastal areas of the island.

A challenge in developing and implementing this new spatial planning system is the lack of financing for urban designs and modern surveying. Another challenge is the length of time and sequencing of plans. Zoning plans take many years to be approved at present as does the regional spatial framework (6 years). The sequencing between plans at the different scales in Greece has meant that upper-level plans have not been in place to inform lower-order ones. For example, the regional zoning planning for Crete was approved in 2003; the strategic spatial frameworks in 2001, 2008, 2009 and 2011 and the national spatial framework in 2008; but this should have occurred in the opposite order so that the higher-level plans can inform the lower-level ones. Some efforts are currently being made to digitise the local spatial plans in Crete with vector models and there are efforts to develop a geographic information system (GIS) with the statutory land uses in order to inform citizens of the services for environmental licensing.

Source: Territorial Review: Regional Policy for Greece post-2020 – Answers to questionnaires and research interviews Crete, 2019.

Recent reforms strengthen some aspects of the planning system but the implementation of integrated perspectives remains lacking

In the wake of the economic crisis, Greece has adopted a number of laws to help spur large-scale investments to support recovery. There were two central pillars to this strategy: i) the establishment of institutions for the sale of public property; and ii) revisions to the spatial planning framework to open up areas of public property to private investment (Vitopoulou and Yiannakou, 2018[28]). The newly created Hellenic Republic Asset Development Fund's (TAIPED) strategy to attract private investment has focused on "transferring property rights (ownership, surface) to and/or adopting long-term leases and concessions by the private sector (sale and leaseback, leasing, etc)" (Vitopoulou and Yiannakou, 2018[28]). Greece has established a fast track approval process for projects of strategic importance. These reforms have established a parallel planning framework that bypassed the existing planning system and that transfers power to central government (Ministry of Finance, Ministry of Development and Investments and Prime Minister's Office) (Karadimitriou and Pagonis, 2019[27]). Greece has also made efforts to streamline its building permits process by applying strict time limits for handling permit applications at the municipality level and is developing a national cadastre (Box 3.6).

While these reforms seek to enhance efficiencies in the planning system, there remains a need to better connect spatial planning to overarching development objectives and sectoral investments (e.g. housing, transportation, energy, water, agriculture, tourism, economic development – all of these sectoral issues affect how land is used).

Box 3.6. The development of cadastral registration in Greece

The lack of basic land management tools and reliable data to inform policy decisions, such as a national cadastre, has for a long time plagued the Greek planning system. Despite considerable effort from both the Greek government and the European Union, only 40% of the national territory is currently covered by the national cadastre. In the remaining 60% of the national territory that has yet to be surveyed, a very heterogeneous property system exists with no certainty that private property is administered correctly, while coastal and forest zones and public property are not registered at all. The incomplete land registry often delays land acquisition. For instance, in 2016, delays in issuing permissions, relating for instance to archaeological reviews, halted works in the Ionian Highway and triggered hefty penalty payments from the government to contractors (OECD, 2018[8]).

In 2014, work started again towards the completion of the cadastral registration in Greece and is scheduled to be completed by 2020. The necessary information technology (IT) infrastructure was been set up, using EU funding for the digital conversion of Greece. Some 126 older survey projects are now being implemented and 28 new survey projects were tendered in October 2013. A new board and management have been put in place at the National Cadastre and Mapping Agency. The total cost of the project is estimated at EUR 1.5 billion, which will not be entirely publicly funded since an owner also pays EUR 35 per registered deed and 1 per mille over the value of the property. A new feature will be added in order to enable all transaction prices to be recorded in the cadastral database. A link is also being built between the cadastral database and the taxation database in order to develop a more comprehensive and fair taxation system, with an expected improvement of property tax revenues. As of June 2019, 42 cadastral offices are operating throughout the country to serve persons that are unable to declare their properties electronically and a major cadastral office has opened in Athens to facilitate the process (EC, 2019[26]).

Source: OECD (2015[29]), "Athens-Attica, Greece", https://doi.org/10.1787/9789264226500-8-en; EC (2019[26]), *Enhanced Surveillance Report*, http://dx.doi.org/10.2765/93517; OECD (2018[8]), *OECD Economic Surveys: Greece 2018*, https://doi.org/10.1787/eco_surveys-grc-2018-en.

Sustainable economic and social development of cities

The second set of Greece's urban policy actions stem from the EU Cohesion Policy under the general co-ordination of the Ministry of Development and Investments.

In 2014-20, the EU enhanced the urban agenda,[39] strengthening the urban dimension of Cohesion policy by earmarking a minimum amount of resources (set at 5%) under the ERDF to be spent on integrated projects in cities – on top of other spending in urban areas.[40] In addition, the Common Provision Regulation (CPR) for the 2014-20 programming period of ESIF introduced the Integrated Territorial Investment (ITI) instrument to deliver investments under more than one thematic priority or more operational programme for a certain territory or functional areas. This investment strategy – bundling funding from several priority axes and programmes – can take the form of an integrated strategy for urban development or inter-municipal co-operation. The implementation can be delegated from the managing authority to a local authority to ensure that investments are undertaken in a complementary manner.[41]

The main targets of sustainable urban development projects in Greece are:

- Integrated development interventions in urban centres for economic revitalisation.
- Reversing the social and environmental degradation of urban areas, especially in areas where there is a concentration of disadvantaged social groups, the degraded shopping centres of major cities and abandoned industrial, craft and professional areas.

- Directly tackling the social consequences of the crisis, revitalising SMEs that create jobs and reconstructing social infrastructure.
- Promoting the link between innovation and entrepreneurship in the urban environment.
- Reversing urban sprawl by promoting "compact cities" and the integration of the central core, suburban and peripheral regions.
- Recovering public space, developing the social economy and housing structures with the active involvement of citizens.

ITIs were applied in Greece in a flexible manner in order to better fit the needs of smaller places. This is a successful example of adapting policies to local needs and conditions. ITI funding requires two documents to apply for funds – a strategic diagnosis of the issues facing the area and a joint development strategy. In Greece, these kinds of actions are planned through Sustainable Urban Development Plans. However, in practice these plans are often conducted for a specific area in a city as opposed to the whole city due to budget limitations; this has limited their effectiveness as an integrated planning tool (URBACT, 2017[30]).

While a major rationale behind ITIs is for them to tackle joint projects across functionally connected municipalities, many projects in Greece have not been based on this functional view. Regional authorities could provide a template for partnership contracts between municipalities applying jointly for such funding in order to ensure a clearer division of tasks and responsibilities and thus reduce the risks involved for the project leader. This might strengthen the functional perspective and help institutionalise these practices in the future (beyond the use of ITIs). Beyond this, it is noted that lengthy preparatory phases at the start of the programme period and the unfamiliarity of new mechanisms have led to delays in the implementation of ITIs in Greece; some ITI strategies still await approval as of 2018 (Ferry, Kah and Bachtler, 2018[31]). Municipalities need increased capacity to deal with the functions that have been allocated to them. Furthermore, while there are ongoing efforts to streamline services for businesses and residents, the national government needs to consider the consequences of overly onerous regulatory burdens (Antonopoulos, 2018[32]).

Policy challenges

Overall, Greece is not making the most of its spatial planning system and instruments, and integrated perspectives are not being implemented

An integrated planning perspective should be reflected in national, regional and local spatial planning documents and good planning principles such as the prevention of urban sprawl, the need for the balanced development of the urban system with the creation of regional development poles, the need to develop brownfield sites over greenfield and strategies to manage population decline in small towns should be widely reflected in spatial strategies.

As has been noted, Greece has established a new spatial planning framework, which should help better set strategic spatial objectives and link them to economic development; however, this planning system has not yet been adequately implemented.

Actions are needed on multiple fronts:

- *Developing and implementing regional spatial frameworks as "living" documents.* Greece has set the framework for a new approach to integrated regional spatial planning. These strategic documents set development ambitions and help to co-ordinate and prioritise public investments. It is important that all regions transition to this new system in a timely manner and adopt plans. It is equally important that they are implemented through concrete actions and monitored on an ongoing basis. These plans should be elaborated by regions themselves through a strong process of public consultation. The new Regional Spatial Frameworks have been subject to a consultation process at the central, regional and broader public levels. A Strategic Environmental Assessment was also conducted for the spatial regional frameworks. Nevertheless, formal concrete tools are needed to mobilise the knowledge of all relevant stakeholders around a shared set of policy priorities on an ongoing basis. Planning should be viewed as an integral part of economic and social development and should meaningfully engage a wide range of stakeholders, including the broader public.

- *Delivering integrated spatial strategies for urban development*. Integrated spatial strategies combine a range of factors impacting urban development for a comprehensive view of how to connect spatial planning considerations with broader economic, social and environmental goals and objectives. Doing so can help align strategic investments in a wide range of policy areas – health, education, transport, energy investments and infrastructure – with land use considerations. Such strategies can also play an aggregation role calling for the co-ordination of actions of functionally connected municipalities around common policy objectives. While an integrated perspective is apparent in regional spatial frameworks, implementation is weak and this type of strategic planning is underdeveloped in many municipalities across Greece.
- *Co-ordinating land use with ROPs.* Contradiction sometimes arises between the eligibility criteria for financing private and public projects through ROPs and the spatial frameworks and plans (both strategic and detailed land use plans). This lack of co-ordination can make it difficult to promote projects that are eligible for financing due to non-permitting land uses.
- *Aligning policy instruments with spatial planning objectives.* Many developments remain uncoordinated leading to costly and inefficient outcomes – e.g. sprawl, land use conflicts, higher transport and infrastructure costs. Tax policies can provide incentives on how to use land and affect patterns of development (Worrall, Leah; Runkel, 2017[33]). For example, property taxes could be used to steer land use, e.g. differentiating between desirable and undesirable land uses. Other fiscal instruments dedicated to steering land uses (such as brownfield redevelopment incentives, transfers of development rights and historic rehabilitation tax credits) are presently underused in Greece. As the economy recovers, there is a growing potential to employ land value capture instruments which can be used to help build welfare-enhancing infrastructure.
- *Managing vacant and unused properties.* Greece has a large number of vacant and unused properties as a result of the crisis, where up to 1 million people have been impacted by foreclosures (Hope, 2018[34]). These empty properties form a blight and detract from the attractiveness of an area and pose environmental costs. In some cases, these assets may be turned to productive uses but are left empty because of many reasons, often because ownership cannot be determined. The auctioning of foreclosed assets, which was an imposed condition of the bailout programme, is a very contentious issue in Greece. The Greek government created a system of e-auctions to accelerate the process, replacing sales in specially convened courts, but there have been large protests against this system.

A key point for Greece is to develop an explicit and well-targeted national urban policy, strengthening the role of municipalities in economic development

A clearly formulated national urban policy can help ensure policy cohesion at the national level. Of all 150 national urban policies around the world, economic development together with spatial structure are the most commonly addressed thematic priorities (OECD/UN-Habitat, 2018[35]).

Actions are needed on different fronts:

- *Making the most of Greece's metropolitan areas*. Athens and Thessaloniki have been less resilient in the wake of the crisis and exhibit some of the negative aspects of agglomeration such as growing congestion and sprawl (Chapter 2). More effective metropolitan governance and integrated planning are needed in order to deliver multi-sectoral strategies that would help to strengthen their resilience and foster development. The 2010 Kallikratis law established both Athens and Thessaloniki as metropolitan areas. Athens has a spatial plan but not a metropolitan plan.[42] After the abolition of ORSA (Organisation for Planning and Environmental Protection of Athens), there are no co-ordinating bodies in Athens. One possibility to address this is to integrate the multiple bodies currently invoked in metropolitan planning within the region of Attica's metropolitan committees to consolidate both inter-municipal and cross-sectoral co-ordination. This could also serve to strengthen their role as an interface with the national and EU levels. Thessaloniki's metropolitan plan covers 8 municipalities and is governed by a 12-member monitoring committee (the mayors of 8 municipalities and 3 regional representatives). However, the municipalities involved have limited capacity to implement the metropolitan plan and as such, it is being implemented by the intermediate body – which puts out requests for funding to fulfil the mandate of the plan.

- *Enhancing the network of small- and medium-sized cities.* Beyond metropolitan areas, there is a need to strengthen inter-municipal co-operation more generally across Greece, including between small- and medium-sized municipalities and rural areas. Greece's dispersed settlement structure highlights the importance of the network of small- and medium-sized cities for the country's development. These hubs provide key economic and service delivery functions across the territory, including linkages between rural and urban areas. These cities face diverse pressures such as managing population decline and enhancing services for ageing populations and they need instruments in place to successfully address them. Thus, strengthening incentives for inter-municipal co-operation becomes essential. As a general delineation, such co-operation may entail informal partnerships or more formal ones embedded in legal-institutional arrangements. Municipal and regional authorities can create co-operation networks and sign: i) inter-municipal contracts; and/or ii) inter-municipal co-operation agreements. However, there are no strong incentives to use these tools. Small municipalities can create common technical services among themselves (joint technical units) but many report needing support the implementation. The regional and national governments should provide more financial incentives whereby municipalities can access higher funding amounts for joint projects/shared services. Other than the aforementioned mechanisms in national laws, the main mechanisms supporting inter-municipal co-operation and rural-urban partnerships is EU-driven Community-Led Local Development (CLLD) and Integrated Territorial Investments (ITIs). Both can be jointly funded by the ERDF and EAFRD and can thus support rural-urban linkages. But broader institutionalised practices are needed beyond these funding mechanisms.

Box 3.7. The need for improved metropolitan governance in Athens

Athens-Attica is the largest metropolitan area of Greece with a functional urban area (FUA) of around 3.5 million inhabitants (according to the OECD definition). It consists of 53 municipalities, with the municipality of Athens only hosting about 19% of the metropolitan area's total population while the rest is distributed in multiple small- and medium-sized urban municipalities. The metropolitan area of Athens-Attica encompasses about 90% of the population of the region of Attica, which includes semi-urban and rural areas as well as islands.

In the face of rapid urbanisation, the role of urban planning has traditionally been weak in Greece, limited until the country's EU accession to "a posteriori rationalisation of informally developed areas through their subsequent incorporation within the official town plan boundaries with an additive logic" (Pagonis, 2013[36]). Waves of internal migrants in search of employment opportunities settled predominantly in the western suburbs, close to the industrial plants. Uncontrolled growth of small self-promoted housing in a car-dependent model led to traffic congestion, air pollution and the degradation of the urban environment.

Effective metropolitan planning is essential to the region's success. While mechanisms for metropolitan-wide co-ordination and planning currently do exist, they all face specific institutional and operational limits.

- The **Regional Association of Municipalities of Attica (PEDA)**[43] offers a platform for dialogue and exchange of information among all municipalities in the region but it has generally not played an active role. It brings together 66 municipalities of the region of Attica and from the islands of the Saronic Gulf. PEDA is run by a 25-member governing council formed by mayors of member municipalities. A few other specialised thematic associations of municipalities also exist, such as the Association of Municipalities in the Attica Region which oversees solid waste management but that has failed to bring about inter-municipal consensus on new landfill sites.
- The **Organisation for Planning and Environmental Protection of Athens (ORSA)** (established in 1985) is a special agency of the Ministry of the Environment which serves as an advisory council to municipalities. One of its main responsibilities consisted of the implementation and revisions of the Regulatory Master Plan of Athens (1985) and its subsequent update (Law 4277/2014). Despite its unique metropolitan-wide mandate, ORSA had limited formal competencies, insufficient implementation powers and the structural deficiencies of the Greek planning system (Chorianopoulos I. et al., 2010[37]). Recently, parallel to the new Law on Regulatory Master Plan of Athens/Attica, ORSA was abolished as an organisation and its responsibilities were transferred to the Ministry of the Environment and Energy (Directorate for Designing Metropolitan, Urban and Suburban Areas). The Athens Master Plan is approved by the parliament and, as a result, all municipal plans in Attica must be compatible with it.
- The region of Attica operates four sectoral **"metropolitan committees"** (environment and quality of life; spatial planning and urban renewal; transport and networks; civil protection and security). These committees meet on an ad hoc basis for deliberative purposes, but they hold no decision-making power. In addition, municipalities are not systematically represented in the committees, although they are occasionally requested to provide data on relevant topics under discussion.

Despite these efforts to guide urban growth at a more functional and comprehensive scale of planning, there remains a gap between spatial planning and socio-economic planning. At the central government level, the General Spatial Plan is disconnected from the major national economic plans and the partnership agreement (ESPA 2014-2020). At the regional level, the Regulatory Master Plan of Athens-Attica was elaborated with little co-ordination between the economic development strategy at a corresponding scale. At the municipal level, the General Urban Land Use Plan must be sent to the Ministry of the Environment for approval and remains disconnected from the five-year local economic strategic plan that municipalities are expected to elaborate at the beginning of the municipal political mandate.

One possibility to address some of these issues is for the region of Attica to integrate or strictly connect all the existing metropolitan committees and agencies in order to consolidate both inter-municipal and cross-sectoral co-ordination, while serving as an interface with the national and EU levels. Concrete tools to mobilise the knowledge of all relevant stakeholders around a shared set of policy priorities will be instrumental to build and implement a coherent strategy for a more competitive, attractive and liveable region of Athens-Attica.

Source: OECD (2015[29]), "Athens-Attica, Greece", https://doi.org/10.1787/9789264226500-8-en; (Pagonis, 2013[36]); (Chorianopoulos I. et al., 2010[37]).

- *Developing more and better data for municipalities and communities to understand their functional linkages and monitor trends.* Local governments need better knowledge about the conditions in surrounding communities in order to identify and prioritise areas of joint action. Upper-level governments have a role to play in facilitating this by establishing the platforms to share such information and encouraging its use. For example, many countries in the OECD have digitised their planning documents (e.g. France, the Netherlands) – a move which benefits residents and investors as well. France's urban planning agencies provide advice and expert assessment on planning and land management issues and develop planning documents. They are a centre of expertise on spatial planning and are linked to a national federation which shares best practices, tracks major trends and provides opinions on major national and European debates related to spatial planning. This type of expertise is particularly important for smaller municipalities that have more limited capacity. This issue of needing better local data is further addressed in the final section of this chapter.
- *Further developing smart cities*. Greek cities are increasingly focusing on becoming "smart cities" (using technology to improve services, increase transparency and become more efficient) and on pursuing urban development in an integrated way – across the multiple elements of well-being (social, environmental, cultural, and economic) (Box 3.8). As such, they are moving beyond the role of service and infrastructure providers towards integrated development strategies. This is the aim. However, the tools with which to realise these actions are sometimes limited. For example, most Greek municipalities do not have the purview to attract investment or to create conditions for research and innovation. Instead, their actions tend to focus on promoting general conditions for such development, such as sustainable urban mobility, the enhancement of digital networks, the provision of public spaces, the organisation of land use, etc.
- *Strengthening capacity across municipalities of all sizes*. Greek cities have been under a great deal of financial and institutional stress in recent years, needing to deliver actions on multiple fronts while adapting to ongoing administrative and policy reforms. Under the Law for Local Administration 3852/2010, Greek municipalities have taken on a range of responsibilities for social policy, environmental protection, improving living conditions and city management, rural development, local economic development, civil protection and facilities for culture, education and sports. During the crisis, municipalities have played a key role in implementing social policy actions and developing a safety network for marginalised residents, particularly in the wake of the high number of irregular and asylum seekers who concentrated in large cities and islands since 2015 (OECD, 2018[38]). The next EU Cohesion Policy period will call for an enhanced territorial dimension of ESIF implementation (new Objective 5: "Citizen's Europe"). A key challenge for the future is to strengthen the capacity of municipalities of all sizes to address integrated urban development including better links to regional and rural development.
- *Clarifying the responsibilities of each level of government.* Beyond the issues outlined above, there is a need to address a lack of clarity on the division of responsibilities between municipal and regional governments. Regional and local governments are both directly elected tiers of government and there is no hierarchy between them. Greek regions and municipalities share responsibilities with the central government in some areas, notably on education, health and transport. This is an issue that the national government is well aware of and is seeking to resolve in the coming years (see Chapter 4 for discussion).

Box 3.8. The unlikely “smart city” of Trikala, Greece

The city of Trikala (81 355 inhabitants in 2011) set in north western Thessaly’s agricultural heartland was Greece’s first “smart city” – named so in 2004 by Greece’s Ministry of Economy and later voted one of the top 21 smart cities globally. EU-funded projects have spurred the city’s digitisation of services and have helped to make it an attractive test site for local tech companies. Tikala participated in a pilot project for driverless busses, adopted smart sensors to significantly reduce the energy consumption of its street lights and developed an e-complaints system for local public services.

The city’s development company (e-Trikala) has been instrumental in spurring a culture of digitalisation. Some of the city’s achievements include:

- A fibre network linking 40 buildings with 8 neighbouring communities was established in 2004 through a co-operative (e-Trikala).
- Free access to 12 Wi-Fi nodes was introduced in 2008 by e-Trikala. Access required onsite registration at one of e-Trikala’s offices, where staff can explain the technology and assess the user’s skill level. The network quickly gained 10 000 users.
- To build usage, e-Trikala has launched online services including public policy fora, telehealth and a Web portal connecting customers to Trikala businesses. The wireless network also controls information displays for the bus network, improving service and increasing ridership.

A key component of the city’s success has been to combine investments in digitisation and e-services with a focus on culture and use – making sure that its residents make the most of these investments. E-Trikala pursues more than smart city initiatives. It acts as the municipalities’ development agency and has, for example, maintained the operation of reception places for asylum seekers and refugees referred by the United Nations Refugee Agency (UNHCR) for accommodation and provides with comprehensive assistance (including psychosocial support, interpretation, transportation arrangements and referrals/ accompaniment to medical/legal aid actors).

Trikala has joined a consortium to take part in the EU’s Activage programme, which tests smart houses that monitor elderly residents’ health by detecting movement and food consumption. It also has plans to partake in a project on agricultural modernisation that uses new technologies to grow ancient medicinal plants for the pharmaceutical industry.

Source: ICF (2019[39]), *Trikala - Intelligent Community Forum*, https://www.intelligentcommunity.org/trikala (accessed on 2 June 2019); E-Trikala (2019[40]), *e-Trikala Power*, http://www.e-trikala.gr/ (accessed on 2 June 2019); Rainey, V. (2019[41]), “Inside Greece’s first smart city: ’Now you don’t need to know a politician to get something done’”, https://www.theguardian.com/cities/2018/sep/04/trikala-greece-first-smart-city-dont-need-to-know-a-politician-to-get-something-done (accessed on 2 June 2019).

Rural economic diversification and resilience

Rural areas are of key importance to Greece’s national development

This section examines the landscape of rural policies in Greece, offering recommendations in three main areas: i) the modernisation of the agriculture and agro-foods sector; ii) rural economic diversification; and iii) strengthening national and regional co-ordination on rural polices. Other elements important for rural development such as environmental management, tourism, infrastructure and digital connectivity are discussed in other sections of this chapter. Overall, it is argued that Greece’s rural development policies should be better connected to regional and local development.

The main sectors of the Greek rural economy

In the past decade, Greece experienced a dramatic loss of income in rural areas as in the whole country. Gross value added (GVA) in Greece's predominantly rural regions (Continental Greece, Epirus, North Aegean, Peloponnese and Western Macedonia) dropped by 21% between 2005 and 2015 and employment dropped by 9% (TL3 regions) (Table 3.6). In terms of GVA, all industries saw declines over this period in rural areas except for the real estate sector which increased by 42%.[44] The largest declines in GVA were experienced in the construction and ICT sectors (which declined by 57% and 36% respectively between 2005 and 2015). Meanwhile, employment in predominantly rural regions declined in most sectors except for real estate, other industries, professional, scientific and technical activities, and administration services saw increases. The sectors that saw the largest employment declines over this time were construction (which declined by 38%) and financial and insurance activities (which declined by 28%).

Table 3.6. Percentage change in employment and GVA, 2005-15, predominantly rural regions, Greece (TL3)

	Employment (%)	GVA (%)
Agriculture, forestry and fishing	-10	-15
Industry	-23	-30
Construction	-38	-57
Wholesale and retail trade, transport, accommodation, food	-2	-34
ICT	-22	-36
Finance and insurance	-28	-11
Real estate	54	42
Professional, scientific, technical activities, administration	9	-35
Public administration	-4	-14
Other industries	16	-11
Total	**-9**	**-21**

Note: GVA in USD purchasing power parity [PPP] base year 2010.
Source: OECD Regional Database.

While these figures demonstrate the greatest changes over this period, they are not an indication of the relevant importance of these sectors to rural economies.

In terms of GVA, the wholesale and retail trade, transport, accommodation and food sectors are the largest share for both rural remote regions and rural regions close to cities in Greece (2015).[45] Public administration is the next largest followed by the real estate, industry and finally, agriculture forestry and fishing sectors in both types of regions. The agriculture, forestry and fishing sector is of greater importance in rural remote regions (10% of GVA in 2015) than in those close to the cities (at 6%) meanwhile, public administration is a larger share of GVA in rural regions close to cities (26% versus 20%) (Table 3.7).

Table 3.7. Share of employment and GVA, 2015, predominantly rural regions, Greece (TL3)

	Employment PRR	Employment PRC	GVA PRR	GVA PRC
Agriculture, forestry and fishing	26	13	10	6
Industry	9	11	17	14
Construction	6	6	3	5
Wholesale and retail trade, transport, accommodation, food	30	30	23	22
ICT	1	1	1	1
Finance and insurance	1	1	2	3
Real estate	0	0	17	16
Professional, scientific, technical activities, administration	5	7	2	2
Public administration	18	25	20	26
Other industries	5	5	4	4

Note: GVA in USD PPP base year 2010.
Source: OECD Regional Database.

While this provides an overall view, it is important to note regional differentiation. Rural island economies are dominated by tourism but also have fisheries, food production, services, etc. Western Macedonia in is the midst of a transition from one industrial base – lignite mining and energy production – to potentially an entirely new one. Many central regions have strengths in agriculture and other primary industries.

In terms of employment, the wholesale and retail trade, repairs, transport, accommodation and food services sectors remain important – at around a third of employment in both types of rural regions. In predominantly rural remote regions, the agriculture, forestry and fishing sector is the next large share of employment (at 26% in 2015), while for rural regions close to cities, public administration follows (at 25%).

Box 3.9. Implications of Coronavirus (COVID-19) crisis for rural development

In less than three months in the first quarter of 2020, the COVID-19 crisis developed into a global pandemic, which is creating risks for rural regions but may also create new opportunities. Rural businesses and dwellers are vulnerable to economic shocks, including from the ones emerging from the pandemic crisis and associated containment measures. Demographic characteristics (a higher share of the elderly population) and geographic features (larger distances to access healthcare centres) coupled with reduced healthcare staff and facilities can hamper the ability of rural regions to respond to the pandemic. The overall slowdown in demand is already affecting the agro-food sector and expected further slowdown in trade and global demand can hit rural economies severely given their higher reliance on tradable activities, such as mining, or those specialised in vulnerable sectors such as tourism and transportation. In terms of rural regions specialised in manufacturing, their vulnerability will depend on the participation in global value chains (GVCs).

Although the primary sector, especially agriculture, has typically been classed as an essential activity and therefore maintained during the crisis, high labour-intensive sectors that are critical for rural economies are experiencing labour shortages including from seasonal and temporary workers. In addition, rural industries offer fewer opportunities to work from home to maintain economic activity. Lower levels of broadband connection in rural regions might also add to the adaptability of economies to confinement measures. Rural regions also face important challenges to deliver public services, with public health services being particularly an issue in small rural areas. This could be exacerbated by the extra demand if urban dwellers temporarily swell the rural population.

Nevertheless, as a consequence of this crisis, social and policy preferences can favour improved services of proximity, greater local consumption and recovery of strategic industries. If well planned, this shift can benefit rural communities in many forms. There may be a shift in buying habits to favour small local businesses. Better-equipped and accessible public services can increase rural well-being. Similarly, in some OECD countries, the repatriation of strategic industries that were once delocalised (i.e. raw materials) can reactivate rural economies as a host of those industries. Furthermore, this crisis offers rural communities an opportunity to mobilise and strengthen their local networks and co-operative structures to face the economic shock.

Countries have put in place a number of measures targeting people, businesses and places that are relevant for rural areas. Some of these measures are economy-wide ones with differentiated effects on rural areas and other measures directly target rural areas. In April 2020, these include:

- Risk management: e.g. catastrophic insurance for the agricultural sector. Sanitary customs to protect rural regions with low infection cases. Food prices stabilisation.
- Government responses: e.g. adoption of e-government platforms. Exchange between regions on hospital capacities, including cross-border exchanges.
- Community responses: e.g. networks of local producers to deliver food, and healthcare in remote rural areas. Implementation of a Broadband Fund to support universal access to the Internet, enhance distance-learning and healthcare e-services. Provision of cloud services to SMEs to support alternative types of work including telecommuting.
- Economy: e.g. support rural businesses by providing them access to credit and capital. Grant payments to inhabitants of rural areas. Deferral of financial obligations and payment of liabilities. Strengthening digital infrastructure.

Note: The OECD has created a Digital Hub on Tackling the Coronavirus (COVID-19), which includes policy briefs and country-by-country COVID-19 economic measures and it is intended to grow and be continuously updated. Consult www.oecd.org/coronavirus/en.
Source: OECD (2020[42]), *Policy Implications of Coronavirus Crisis for Rural Development*, http://www.oecd.org/coronavirus/policy-responses/policy-implications-of-coronavirus-crisis-for-rural-development-6b9d189a/#section-d1e47.

Rural policy implementation and financing

The Ministry of Rural Development and Food has the primary responsibility for rural development issues in Greece and co-operates with other relevant ministries across sectoral priorities.[46]

Greece's rural development policy is formatively shaped by the EU's Common Agricultural Policy (CAP), which is composed of two pillars. The first, funded through the European Agricultural Guarantee Fund (EAGF), is targeted at: i) the common organisation of the markets in agricultural products; and ii) direct payments to farmers. The second, financed through the European Agricultural Fund for Rural Development (EAFRD), is targeted at sustaining the rural development policy, which is designed to support rural areas of the union and meet the wide range of economic, environmental and societal challenges of the 21st century. The EC has established three overarching priorities for rural development policy: i) fostering agricultural competitiveness; ii) ensuring sustainable management of natural resources and climate action; and iii) achieving balanced territorial development of rural economies and communities, including the creation and maintenance of employment.[47] Rural policy in Greece are also shaped by funding measures set out in the Development Law (4399/2016) which includes specific categories of financial aid to the mountainous, border and insular areas and in areas facing population decline, and by a range of sectoral policies that have implications for rural development (e.g. educational, transport, health).

Greece's rural development policy has the main objectives to promote sustainable and multifunctional rural areas and to create a strong, competitive and viable agro-food system. EU states can choose from a menu of 20 measures[48] to serve the priorities they have identified in their rural development programmes, which are implemented through the EAFRD and national funds. Greece has chosen to implement all of these measures (Table 3.8).

These objectives are mainly achieved by:

- Strengthening the competitiveness and productivity of the agro-food system and increasing the value-added of domestic agricultural products.
- Upgrading human capital and strengthening the entrepreneurial culture.
- Protecting and managing natural resources and biodiversity, and mitigating and adapting to climate change.
- Providing basic services to improve the quality of life in the countryside.
- Diversifying the economic base and strengthening social cohesion in rural areas (Ministry of Rural Development and Food, 2019[43]).

This last priority is also identified as LEADER (a bottom-up local development approach pursued by local stakeholders) and community-led local development (CLLD).

Table 3.8. European Agricultural Fund for Rural Development (EAFRD), Greece, 2014-20

Measure	Description	EAFRD contribution (EUR)	EAFRD contribution (%)
1	Knowledge transfer and information actions	55 000 000	1.17
2	Advisory services, farm management and farm relief services	125 000 000	2.65
3	Quality schemes for agricultural products, and foodstuffs	40 470 000	0.86
4	4.1 Investments in agricultural holdings	378 249 076	8.02
	4.2 Investments in the processing, marketing and/or development of agricultural products	208 732 511	4.42
	4.3 Investments in infrastructure projects related to the development, modernisation or adaptation of agriculture and forestry	454 856 540	9.64
	Other investments in infrastructure projects	106 538 575	2.26
5	Restoring agricultural production potential damaged by natural disasters and catastrophic events and introduction of appropriate prevention actions	40 000 000	0.85
6	Farm and business development	374 374 279	7.93
7	Basic services and village renewal in rural areas	84 401 320	1.79
8	Investments in forest area development and improvement of the viability of forests	251 265 500	5.33
9	Setting up of producer groups and organisations	25 000 000	0.53
10	Agro-environment-climate payments	372 023 776	7.88
11	Organic farming	600 875 000	12.74
12	Natura 2000 and Water Framework Directive payments	7 500 000	0.16
13	Payments to areas facing natural or other specific constraints	950 005 216	20.13
14	Animal welfare	10 000 000	0.21
16	Co-operation	70 000 000	1.48
19	CLLD/LEADER	400 000 000	8.48
20	Technical assistance	50 000 000	1.06

Source: Ministry of Rural Development and Food (2019[43]), *Rural Development Programme of Greece 2014-2020*, https://ead.gr/home-en/grdp-en/ (accessed on 9 June 2019).

The total budget of the Rural Development Programme (RDP) in the 2014-20 period is EUR 5 880 000 of which the EU funds approximately 80% through EAFRD, the remainder coming from national funds. Among these priorities, the largest share of funds (42% out of total) has been dedicated to restoring, preserving and enhancing ecosystems related to agriculture and food while the second-highest priority is promoting resource efficiency and supporting the shift towards a low-carbon economy (20% out of total). Strengthening farm viability and competitiveness is the third-highest priority (at 16% out of total RDP funds).

The current national RDP (2014-20) is delivered through the Rural Development Operational Programme,[49] which covers the whole Greek territory. The target areas are the rural regions defined by the typology of EU urban-rural regions in 2010 based on a revised OECD methodology. Specifically, rural regions are defined by the intermediate and predominantly agricultural regions. The metropolitan regions Attica and Thessaloniki are excluded from the programme; however, there are rural areas with important primary production within these regions that are eligible for some specific RDP interventions. Overall, the defined rural areas cover 94.3% of Greek territory (82.2% rural and 12.1% intermediate) and about half of the total population (54.5%).[50]

Greece's RDP is partially linked with the overall regional development policy as it entails components that support the growth and competitiveness of regions, and a spatially balanced regional development pattern. It is for example associated with the regional strategic smart specialisation, which has highlighted specific sectors (some related to agriculture), in which research and innovation could contribute to developing an important competitive edge. Moreover, the reduction of disparities in agricultural productivity and farm size, or of the significant inter-regional variation in the age structure of farmers, constitute policies of the RDP that aim at reducing spatial or socio-economic disparities and at contributing to economic prosperity. There are specific measures to support the development of local agricultural production and to allay transport cost in smaller Aegean islands.[51]

Beyond the RDP, direct payments (EAGF) have been a key safety net and a driver for the modernisation of agricultural holdings. Greek farmers' income is based on a large degree on CAP subsidies (nearly 70% according to data of the Payment and Control Agency for Guidance and Guarantee Community Aid).

Future reforms of the CAP are planned. Post 2020, CAP will prioritise small- and medium-sized farms (by providing a higher level of support per hectare) and place a cap on payments for fairer redistribution (EC, 2019[44]).[52] Future reforms also plan a set aside of 2% of funding for young farmers, to encourage them to join the profession. Other reforms include more ambitious environmental and climate action (e.g. soil preservation, crop rotation and diversification). There are however risks for the future. The gradual decline of CAP subsidies (due to the external convergence of the Basic Payment Scheme, the establishment of a single Common Organisation of Agricultural Markets, the abolishment of quotas and Brexit) along with the problems that the Greek agricultural sector faces (low productivity, single-cultivation, low self-sufficiency, high imports, small farm size, low quality of products and high state taxes) could lead to serious turbulence in the sector and a decline of farming income in the future. Greek agriculture needs to be more competitive to be sustainable.

While both of the CAP funds (EAGF and EAFRD) are clearly targeted at rural areas through support for farmers and rural development, there are also other European Structural and Investment Funds (ESIF) that are important for rural development. The Partnership Agreement (ESPA 2014-2020) stipulates that 6.7% of non-EAFRD allocations must be rural-specific. Beyond national policies that directly target rural areas or sectors, there are a number of policies that may not specifically target rural locales but that impact them nevertheless. For example, policies regarding the delivery of education and healthcare can impact access in rural areas depending on how they are configured, e.g. regulations about school size and facilities can lead to larger schools at greater distances in rural areas. Similarly, environmental policies, such as the protection of watersheds and forests, can disproportionality impact rural areas since they constitute the largest share of land in the country. Fisheries and maritime policies are also relevant for rural areas, e.g. improving the competitiveness of aquaculture and processing sectors (Box 3.10).

The national government's rural policies therefore in practice extend much beyond those that are labelled as "rural" if one considers the place-based impacts of policies broadly. A territorial lens on such overarching policies can help ensure that they are adequately tailored to place.

Box 3.10. Fisheries and aquaculture

The Greek government seeks to foster the production of high-quality and high-value-added agricultural and fishery products in less-favoured areas or areas with permanent natural handicaps such as rural areas and islands. The Greek Operational Programme for 2014-20 under the European Maritime and Fisheries Fund (EMFF) has two main priorities: sustainable fisheries and sustainable aquaculture. The priority on sustainable fisheries envisages investments in the modernisation of fishing ports, auction halls, landing sites and in the construction of fishing shelters, innovation in fisheries, the creation and monitoring of artificial reefs, and protection and restoration of marine biodiversity. The aquaculture priority aims at fostering environmentally sustainable, resource-efficient and knowledge-based aquaculture. The EMFF supports productive investments in aquaculture, actions to improve innovation in the sector, such as developing technical, scientific or organisational knowledge and the introduction of new aquaculture species with good market potential and new or improved products and processes.

All OECD countries are advancing reforms in their fisheries management systems to improve the profitability and sustainability of the sector. They are also working actively to promote the development of aquaculture, which is seen as the future of fish production. These efforts include regulatory improvements and increased spending on research, as well as cost-sharing with the private sector to encourage investment. Aquaculture has been one of the fastest-growing forms of food production for many years and growth in aquaculture can provide jobs and development opportunities in territories with few economic alternatives. The emphasis is shifting from stimulating growth to putting the sector on a sustainable footing for the future by addressing environmental limits and focusing on new production technologies to increase competitiveness. To do so, most countries provide now support to general services to the sector, rather than transfers to individual fishermen. Governments invest a significant amount of resources to this kind of support, which includes management, enforcement, research, infrastructure, marketing, community support, education and training, research and development, and management of resources.

Source: (OECD, forthcoming[23]) (OECD, 2017[45])

Policy challenges: Opportunities for future growth

Agriculture is important in Greece – it is one of just four countries in the EU for which employment in agriculture is above 10% of total employment.[53] The relatively low rate of decline in the number of farm holdings over the crisis compared to many other European countries demonstrates the importance of agriculture as a social safety net (Giannakis and Bruggeman, 2018[46]). It is further notable that agricultural income increased from 2014 onwards compared to wages and salaries in other sectors of the Greek economy (EC, 2018[47]). Despite this, it is clear that Greece is not meeting its agricultural potential. Over half of the country's 723 010 agricultural holdings have less than 2 hectares and are characterised by small and fragmented land parcels (EC, 2015[48]). Among EU member states, Greece has the lowest value produced per agricultural co-operative (Iliopoulos and Valentinov, 2012[49]). The vast majority of Greek farm managers have no formal training – most only have practical experience (EC, 2019[50]). Other barriers to the agricultural industry include a lack of a skilled workforce, low value-added, low levels of innovation as well as of R&D in the agricultural sector, and limited economies of scale given the small farm sizes. Finally, investments in fixed assets, machinery and new technologies declined post crisis, also reducing the competitiveness of the agro-food industry (Vassakis, Lemonakis and Voulgaris, 2016[51]).

Greek food production and manufacturing is a strength – but the sector needs to enhance its competitiveness. A quarter of Greece's overall industrial production is in agro-food and it is estimated by the National Bank of Greece that Greece's agricultural and food sector could bring an additional EUR 12.2 billion per year into the economy and create 200 000 new jobs if it was brought up to modern standards.

- Greece's regionally unique olive oil is a globally competitive product that could gain added-value by shifting from bulk or low-branded to high-branded sales and by adopting regionally differentiated products.
- The wine and dairy industries are ripe for restructuring and would benefit from economies of scale including partnerships to expand the distribution network (e.g. food sales through co-operatives in Greece are less common than in other Mediterranean states). Greek wines have been on an upward quality trajectory in the last decade and their export potential is underexploited (Vlachos, 2017[52]).
- Fruit and vegetable production needs significant investments in production technology and expanded distribution networks in order to be competitive.
- Organic agriculture is increasing in Greece; however, the sector has lacked technical support, information on consumer demand and a strong certification system supported by marketing and applied research.

These dynamics are different in every region. The competitiveness of these sectors can be enhanced by better co-operation on R&D with universities and research institutes and, critically, high quality agricultural advisory services which are only very recently being developed. Beyond this, there is a need to strengthen the system of product certification and standardisation. Employees and managers need continuous training and specialised technical support given the comparatively low skills in the sector.

A key factor for Greece is accelerating the digital transformation of the economy. According to the EC Digital Economy and Society Index (DESI) for 2019, Greece ranks 26th among the 28 EU countries, as evidenced by Greece's weak performance in terms of fast broadband connectivity and basic digital skills. This implies a high risk of technological lag and digital illiteracy and of a low-productivity trap (Bank of Greece, 2019[53]). The performance of Greece in the digital infrastructure is uneven and underdeveloped, especially in rural and remote areas. In terms of connectivity, SMEs lag in their high-speed broadband connections compared to large firms. In 2018, Greece had the poorest penetration rates in the OECD; less than 10% of all firms with more than 10 employees were connected to a fixed high-speed broadband (OECD, 2019[54]). Some important action was taken by the government[54] but overall digital infrastructure need to be strengthened and digital transformation of the economy sped up.

Another issue for Greece is to boost the export capacities for goods. Greece is less export-oriented than other economies of a similar size. For example, Greece's share of domestic value-added embodied in foreign final demand stood at 22% in 2014, which is below that of Italy, Portugal and Spain (at 24%-30%) (OECD, 2018[8]). Greece's export market is dominated by basic commodity goods such as aluminium, marble, olive oil, olives, feta cheese and fish from aquaculture farming. SMEs in the food sector (e.g. yoghurt, smoked fish) present significant potential for value-added in export growth. Just 11% of SME sales are exported compared to 18% across the EU (National Bank of Greece, 2018[55]). Greek SMEs were hard hit throughout the crisis years as domestic demand dropped and access to credit tightened. Fortunately, more than half of all export-oriented SMEs in Greece were able to increase their exports over this time and as such, exports are driving growth in these tradeable sectors.

The tourism industry has proven resilient and could expand niche offerings in rural areas (World Travel and Tourism Council, 2018[56]). The share of high-income tourists has declined in recent years and the sector is highly seasonal compared to similar touristic destinations. More could be done to cater to different segments of the tourism market and to develop new areas – e.g. ecotourism and agritourism. Further, the linkages with Greece's food sector could be strengthened. Some commonly reported barriers to the tourism industry in these regions include poor public investments, high interest rates for borrowing, licensing delays and inadequate tourism education training (Magoutas, Papadoudis and Sfakianakis, 2018[57]).

Beyond these sectors, it is important to recognise that Greece has a rich natural landscape and unique ecosystems that require protection. A large share of Greek territory is mountainous or forested and as such, not suitable for agriculture. Greece is placing an increasing emphasis on managing these resources and on protecting biodiversity and ecosystems (Law 3937/2011).

Overall, rural areas in Greece are diverse. While agriculture is important, it is by no means a sole activity in many parts of the country. Taken together, some main issues for rural policy in Greece to tackle include:

- Strengthening agricultural productivity and the competitiveness of the agro-food sector.
- Strengthening the tradeable sector in rural areas through value-added activities and linking up to export markets.
- Supporting the development of rural tourism in key locations through touristic offerings and by linking up to local food industries.
- Strengthening the environmental management of rural areas and the valorisation of rural amenities and ecosystem services.
- Anticipating and adopting strategies to manage population decline in rural areas with respect to how services and infrastructure are delivered.

The competitiveness of agriculture and the agro-food sector should be strengthened from the bottom up

The agricultural and agro-food sector has been identified as a key development opportunity in rural areas. The economic crisis, while devastating, also encouraged farmers to improve the quality and marketing of their products (i.e. design, packaging, marketing, broaden value chains or exporting markets) in order to direct to greater market size and to achieve higher profits (Tsiapa, 2019[58]). However, serious impediments continue to undermine agricultural productivity. Greece has largely adopted a policy of status quo in an effort to maximise CAP payments. There has been no concerted effort to transform the agricultural production system by, for example, favouring large farms or certain crops. There are ongoing debates about the future of agriculture in the country and how productivity can be increased. Should Greece focus its efforts on larger scale agriculture which produces higher volumes at lowers costs or should it focus on strengthening smaller farms that produce high quality and niche products at a higher cost? To what extent should Greek agriculture focus on internal versus external markets for these commodities? What is the future of agriculture in Greece and how can the country be more strategic with its investments?

Greece would do well to adopt a middle ground between these approaches by strengthening larger commercial farms where they are possible and focusing on increasing the potential of smaller- to medium-sized ones where they are not. Greece is not characterised by the types of large farms that exist in France or Italy for the most part and as such is not competitive in many parts of the country on high-volume low-cost crops (there are exceptions such as Greek cotton production). Greece's comparative advantage is that it is small, diverse and has a large number of customers who come to the country every year for tourism. In effect, an external market is brought to the country. In 2016, Greece received a record number of international tourist arrivals for the fourth consecutive year, totalling 28 million visitors, an increase of 7.5% in 2015 (OECD, 2018[59]). To date Greece has not adequately taken advantage of these linkages –

local supply chains catering to tourism are weak. While some parts of Greek agriculture can grow in volume, other parts need to grow in value and need to be better connected to the domestic tourism market.

Key strategies to strengthen Greek agriculture and agro-food competitiveness are threefold:

- New measures are needed to preserve and strengthen agricultural land.
- Systematic and professional farm extension and advisory services are needed to strengthen innovation.
- Producer groups and co-operative enterprises are needed to promote value-added processing, production and marketing and to capitalise on Greece's rich agricultural diversity.

These initiatives will not be successful if they are applied in a top-down manner. In order for the Greek agricultural and agro-food system to innovate and build economies of scale so that smaller producers can deliver high-value goods to local and international markets, local actors need to be galvanised in this collective work and place-based initiatives are needed, focusing on locally and regionally specific assets.

Agricultural and farmer's organisations need to be rebuilt to be effective partners in the sector's development. Inter-branch organisations (IBOs) need to be strengthened. These are organisations of farmers and processors or traders in the supply chain supported by the EU. IBOs carry out many activities for their members and provide a means of allowing dialogue between actors in the supply chain, and in promoting best practices and market transparency. As of 2017, Greece has seven recognised IBOs for a variety of food products (e.g. wine, olive oil, tobacco). Recognition of IBOs is optional in most sectors but is mandatory in the olive oil, table olives and tobacco sectors. Beyond these actors, LEADER's local action groups (LAGs) could play a stronger role in supporting the agro-food sector and connecting this to local tourism strategies.

Preserving and consolidating agricultural land

Around 55% of Greece's total land area is agricultural land and most of the country's agricultural land is located in the plains of Macedonia, Thessaly and Thrace (FAO, 2015[60]). Greek agricultural holdings are characterised by small and fragmented plots such that even small farms of a few hectares can be split up into multiple plots. This makes them inefficient to manage and means that equipment needs to be moved greater distances. Economies of scale offered by modern farming practices have limited impact on the small plots of land typically used in Greece and other investments in productivity enhancements will have little impact if farm sizes remain very small and it will be harder to attract a new generation of farmers. It bears noting that Greek data on land fragmentation needs to be interpreted with caution due to the common practice of renting land to others and of farming under different registered names and tax numbers across multiple plots. What may look like a fragmented land tenure system may in fact be managed by one farmer. This does not make the issue of farmland consolidation less important; rather, it has arisen as a strategy to make agricultural production feasible.

Land consolidation is difficult and entails decreasing the number of separate and non-adjacent plots and improving the spatial configuration and location of these plots relative to dwellings and service structures. The consolidation and management of land in this way can help to establish larger plots, thus reducing the number of small-scale and inefficient farms. Land consolidation and exchange can also be used to counteract the ongoing fragmentation of the agrarian structure – thus offering the opportunity to create diverse landscapes with conditions for multifunctional development of rural areas, including recreation and tourism. Greece has had several policies to prevent the abandonment of rural areas and to improve land consolidation dating back to the 1950s (EC, 2013[61]). The main measures to date are:

- The subdivision of agricultural land below the minimum parcel size of 0.4 hectares is not permitted (since 1979).

- There are tax exemptions on the transfer and purchase of farmland for farmers under 40 years of age and those purchasing land adjoining agricultural land already owned by the buyer.

Despite this, progress in land consolidation has been slow. Regional authorities in Greece are responsible for land re-parcellation – but this is not a well-resourced function and, as such, has not produced results in most places. Regions need to be better resourced to fulfil these roles. Creating markets for the exchange of fields among farmers in a community is a complex process. Options to address this include establishing co-operatives to amass this land and cultivate it jointly or to facilitate long-term leases between parties that have land with adjoining borders as a first step to assemble large contiguous parcels of land. There should be targeted strategies to consolidate fragmented land in areas that show the most potential and which are well connected to markets and infrastructure.

Even where land re-parcellation occurs, these changes will be undermined by the tax exemptions offered by the inheritance or inter-generational transfer of agricultural land and by rules that allow the land to be inherited in different pieces. Agricultural landowners pass on their plots of land to their children, reducing the size of the plots and this is encouraged by the tax system. Other countries have rules about breaking agriculture plots of land into pieces and instead stipulate that the land must be transferred to someone who will farm it. It is estimated that around half of the agricultural land in Greece is rented to others, though there is no official data on this matter.

Beyond farm size, the preservation of agricultural land in good condition is also an issue in Greece. Greece has the third-highest loss of agricultural productivity in the EU due to soil erosion (after Slovenia and Italy) (Bilas et al., 2016[62]). More effective spatial management in rural areas should be implemented to protect prime agricultural lands and prevent soil erosion. Greece's Ministry of Agricultural Development and Food has recently developed a national geodatabase of soil data for all agricultural areas of the country in support of a multi-purpose master plan for agricultural land management (Bilas et al., 2016[62]). The integrated system is expected to provide important electronic services and benefits to farmers, private sector and governmental organisations. The Master Plan for Agricultural Land Management includes soil quality maps for 30 agricultural crops, together with maps showing soil degradation risks. This new database shall provide the tools for soil conservation and sustainable land management; however, the system of managing agricultural land needs to be strengthened in order for these tools to be put to good use. Countries across the OECD have adopted a range of approaches to address these issues. For Greece, France's national Society for Land Development and Rural Settlement (SAFER) may be of interest. SAFER has adopted a broad mandate which is connected to local economic development (Box 3.11).

Box 3.11. National institutions to manage agricultural land: France

France's national Society for Land Development and Rural Settlement

The French national programme – the Society for Land Development and Rural Settlement (*Société d'aménagement foncier et d'établissement rural*, SAFER) – was established in 1960 to purchase farmland when it comes up for sale to help existing farmers increase the size of their farm to boost efficiency and facilitate new entrants into farming. SAFER is a non-profit agency with a mandate to assist in farm reorganisation, make farmland more productive and encourage young people into the profession. Today its mandate is a bit broader, with a focus on protecting farmland and the natural environment and supporting the development of the local economy. The organisation purchases agricultural land for resale to farmers or public authorities in order to maintain a specific pattern of land use in an area. It can also rent land for agricultural purposes, take on projects to maintain local landscapes and conduct studies on agricultural land prices. By law, SAFER is offered the right of first refusal to purchase agricultural land in order to maintain farms of a specific desired size

(Articles L. 143-1 and L. 143-2 of the Rural Code). SAFER has regional offices throughout France. Agricultural land management is regulated by the state through regional departments of agriculture together with SAFER.

Source: OECD (2017[21]), *The Governance of Land Use in France: The Cases of Clermont-Ferrand and Nantes Saint-Nazaire*, http://dx.doi.org/10.1787/9789264268791-en.

Strengthening demand-driven farm advisory and extension services

Agricultural advisory and extension services share research and innovative practices and create sets of farming practices tailored to the needs and abilities of farms in a particular region. Such services are all the more important in Greece because of the low innovation of Greek agriculture. Innovation is the main means by which farms increase their productivity over time through new crop varieties, new inputs and new production technologies. The current EU financial perspective (2014-20) places a special emphasis on programmes to support agricultural innovation.

Farm advisory and extension services are a key part of agricultural innovation. These services are underdeveloped in Greece (Michalopoulos, 2017[63]), highly fragmented and scarcely effective with national organisations largely focused on bureaucratic administration related to CAP and a lack of specialised local services that meet the demands of modern agriculture (Konstantidelli et al., 2018[64]). Informal agricultural education and training are provided by the Organisation of Agricultural Vocational Education, Training and Employment (DEMETRA) which is supervised by the Ministry of Rural Development and Food. There are 71 branches across Greece which offer educational programmes which mainly offer one-month educational programmes intended for farmers eligible for participation in various EU programmes (e.g. modernisation schemes and the establishment of young farmers).[55] These are sometimes viewed as a rubber stamp for EU funding eligibility (Karantininis, 2017[65]). Training programmes are also provided by local co-operatives and private agencies, such as farm equipment/supply companies and certification bodies which certify quality systems in agricultural production or private agronomists. In some countries, local action groups (LAGs) have played some role in these types of services but, in Greece, LAGs have been very infective in this regard (Koutsouris, 2014[66]).

Overall, Greece's current system of advisory and extension services is not adequately connected with modern agricultural developments. There are a number of options to strengthen agricultural advisory and extension services in Greece across public, private and hybrid models. The Ministry of Rural Development and Food has announced at the beginning of the programming period the putting out of tenders for agricultural advisory services to deliver formal training and accreditation through a national system of farming councillors who will support producers irrespective of co-financed programmes. This system aims to be more flexible and responsive to farmers' needs but it does not address connections to R&D and remains an advisory, not an extension service. Advisory registers are foreseen in existing legislation (see Law 4214/2014, article 28 paragraph 8) but the majority are inactive.

In terms of the potential of private agricultural advisory services, the current Greek situation with a large share of very small low-income farms makes paying for advisory services challenging. Private services at present mostly cater to larger farms and often focus on developing grant applications for EU subsidies since they can be paid from the proceeds. While EU financial support can be a source of improved farm productivity, it is more likely to occur if a farm is provided with comprehensive advice, including innovative solutions. Private services are also provided by large agrochemical corporations that have a clear conflict of interest in the services that they provide. An independent system would be more effective.

Further, Greece urgently needs to strengthen the connections between advisory and extension services and scientific academic and research institutions – this could form a hybrid model with some fee-paying services (e.g. the Institute of Agro-biotechnology, the University of Thessaly, the Food Industrial Research and Technological Development Company (ETAT). Digital technologies could help better link up the value chain. Public policies should promote collaborative schemes involving digital technologies. A particular challenge in many OECD countries is linking advice in agronomic practices to farm financial management.

Promoting local producers' groups and co-operatives

Smaller-scale Greek agriculture needs some kind of co-operative organisation to build scale in order to be competitive and to market on the basis of quality and regional identity. Small-scale producers have difficulty developing a marketing channel for their products. An individual small farm has a relatively small amount of surplus production that can be sold after household consumption is met and it is usually hard to develop a relationship with a broker, distributor or processor that allows the residual production to be sold. The typical fall-back option is to rely on direct marketing either through a farm stand or through a farmers' market. Commercial food distribution channels cannot easily deal with individual small farms due to: high fixed costs of contracting for a small volume of product, potential problems with the farmer meting required quality standards and intermittent supply from a single farm. While a large-scale farm may be able to contract directly with a processor or distributor, small-scale farms require an intermediary which can aggregate small amounts from multiple producers to obtain a large enough amount of uniform quality to be attractive to the processor or distributor. However, introducing an aggregator adds significant cost that is reflected in lower prices to the farmers. The aggregator has costs, associated with identifying farmers, assembling products from diverse sources and verifying quality, that can be significant. Further, unless there is a large enough quantity of output that is produced over multiple months, the marketing interval may not be long enough to justify setting up as an aggregator. As the number of farms increases and the amount of production of individual farms declines, the viability of an aggregation business also declines.

Market imbalances in bargaining power between small farmers relative to large food processing companies is a sensitive policy issue. One possible solution is for farmers to form a production and marketing co-operative that provides advice to farmers on production methods to ensure uniform and high-quality products, and pools production to facilitate sales to distributors and processors. Because the farmers own the co-operative, it has no incentive to extract a profit margin, which should maximise benefits to the individual farmer. However, while co-operatives are in principle attractive solutions to the marketing challenge of small-scale farms, they have been found to be difficult to operate due to low volume, large numbers of producers and challenges in maintaining consistent quality. All of these add costs that have to be spread across all producers, which can reduce a farmer's interest in participation. In Greece, an additional residual issue is the distrust many farmers have of external agencies that impose management conditions, even if they are collectively owned and not part of the state.

The public sector can play an important role in both strengthening collective initiatives and encouraging them where they are less prevalent by creating platforms to share knowledge between groups and determining best practices in order to better understand the risks involved in setting up and participating in such groups and the benefits they can bring to members. A strong national agricultural product marketing initiative, complemented by region-specific initiatives, can help export more of its output. A modern and efficient network of producers' groups strengthens market access for Greek agricultural products. Beyond this, public policy has a role to play in strengthening the attractiveness of co-operatives. Greece has huge untapped potential in the area of co-operatives when compared to other EU countries: 39% of food sales are done by co-operatives in the EU as a whole and 42% in the Mediterranean bloc but this figure is only 17% in Greece (Georgiopoulou, 2018[67]). It is reported that changes in agricultural and tax policies in Greece have acted as a disincentive for farmers to organise in co-operatives as it becomes impossible to forecast the expected profit (Michalopoulos, 2017[63]). Furthermore, the national law on co-operatives has been revised multiple times over the past six years. Co-operatives need a consistent legislative environment in order to be effective.

Box 3.12. The co-operative model in Trentino, Italy

The farming structure in the Autonomous Province of Trento (Italy) has always been characterised by the presence of a large number of small enterprises, family-based and endowed with relatively small portions of land. Each farm has on average an extension of 1.5 hectares and this condition had a negative influence on the productive structure. Economies of scale were precluded with adverse effects in efficiency and performance. The solution was found in the co-operative system.

Co-operatives account for 80% of the provincial agricultural production and manage almost all the marketing and distribution activities of local producers. The evident positive performance of the agricultural co-operatives in Trentino is due to the idea of vertical integration and concentration (economies of scale), implemented over time by the Federation of Trentino Cooperatives and the Autonomous Province of Trento.

This means that the first level co-operatives, spread over the territory, have a direct link between members and the co-operative structure, offering advice and resources to the small producers.

The second level co-operatives, namely the consortia, are governed by a pact among co-operatives to develop all marketing functions and relations with the value chain. Mastering on the accumulated experience, the second level consortia organised their strategic goals to increase market shares in final product markets through aggressive sales efforts. They were supported by aggregation, facilities operating at optimal scale and efficient managerial functions, enabling co-operatives to reach economies of scale. Consortia focus their marketing strategy on quality factors, in particular those involved in production and reflecting the consumer’s preferences, instead of using discounts or promotions to underbid competitors. They avoid to pressure on product prices and address their strategic design and incentives on members to innovate in quality and sustainable production techniques. Being able to capture part of the increased marketing margins, the gains return to the active owners preserving their entrepreneurial responsibility.

The third level, the Federation of Trentino Cooperatives, is at the centre of the system composed of first- and second-level co-operatives. It unites, represents, protects and promotes the interests of the associates. The federation is a legally recognised organisation that brings together over 500 companies, active in all productive sectors, and a social base consisting of about 280 000 people. This is an element that distinguishes the co-operative movement in Trentino from others. All sectors of entrepreneurship and all the merchandise areas in which the Trentino co-operation operates find in the federation a unitary centre of representation and assistance. An integrated group of rural and co-operative banks support the system.

Source: OECD (2014[68]), *The Co-operative Model in Trentino - Italy*, https://www.oecd.org/cfe/leed/150202%20The%20cooperative%20model%20in%20Trentino_FINAL%20with%20covers.pdf.

Rural economic diversification should be fostered

Greece’s Rural Development Programme (RDP) focuses on enhancing farm viability and competitiveness, preserving and enhancing ecosystems and promoting local development in rural areas across a wide range of measures such as water and soil management, modernising agricultural holding, marketing and investment support for developing short supply chains and agro-food businesses and training for farmers and other rural businesses (EC, 2015[48]). While Greece’s rural development goals are not entirely confined to agriculture or natural resources, they remain largely focused on these sectors and the vast majority of funds under the RDP are allocated to these activities. Greece’s rural economies are diverse and efforts are needed to strengthen entrepreneurship, innovation and extroversion for sustainable job creation. This is also a goal of RDP funds that can be more adequately targeted towards these ends.

A case in point is LAGs which are part of the EU LEADER programme. The LEADER programme, which was first adopted in the 1990s, has played a critical role in reorienting rural development beyond agricultural policies only across Europe. The approach has been so successful in rural areas that it was subsequently expanded to three additional EU funds under CLLD (ESF, EMFF and ERDF).[56] In rural areas, LAGs are established at the initiative of local governments, entrepreneurs and civil associations within a certain territory or community in order to implement objectives related to the LEADER programme. LAGs are a form of "special association" where, at the decision-making level, private partners and associations must make up at least 50% of the local partnership. LAGs decide the direction and the content of the rural development strategy and take decisions about the different projects that are financed under the LEADER programme – there are 70 such groups in Greece which are referred to as development authorities associated with a particular area. In many EU countries, these are used to galvanise holistic local development strategies around key assets and local competitive advantages. For example, in Poland, LAGs are named according to the focus of their development strategy, often valorising local assets, culture and cuisine.

In Greece, LAGs have focused more on delivering basic services. These are important functions but do not form a multi-sectoral local development strategy. In the current programming period, integrated spatial development is one of the implementation tools meant to strengthen rural-urban partnerships. LAGs are responsible for the main strategy design, the proposal submission, and the management and implementation of the project but interviewees have expressed several times that these initiatives have been quite slow to get off the ground. Greece's LEADER/CLLD network reports that the administrative burdens and financial requirements associated with the programme are very high and that this has hampered the efforts of these actors to focus on implementation and local innovation (Lampropoulos, N.; Elanidou, 2018[69]). It has also led to delays in the implementation of the programme. For example, just two years before the official end of the programme programming period, no LAG had managed to publish a call for proposals in Greece (Lampropoulos, N.; Elanidou, 2018[69]).

LAGs are meant to have public, private and third sector involvement. In Greece, as in some other countries across the EU, initiatives have been disproportionately driven by local governments. In the forthcoming period, there should be a concerted effort to build economies of scale among LAGs and to more greatly involve private sector partners in determining local development priorities and shaping initiatives that can have a longer-term impact. The LAG "Finest Greek Tastes" is a positive example of how to create such inertia; it was established in the 2007-13 programming period and has continued to operate as an NGO (Box 3.13). The LAG has focused on marketing and promotion, but efforts are also needed to support product development through, for example, food incubators that provide commercial-grade kitchens and that help individuals meet health and safety requirements and food regulations. LAGs could be more effectively used in Greece to support business development in key sectors and help smaller firms grow and diversify their products and services. They need private sector partners to deliver on these objectives.

Box 3.13. Building scale through LEADER – A collaborative network to promote quality Greek products

As LAG groups are small, one of the key strategies to strengthen the impact of their initiatives is to develop multi-stakeholder co-operation projects. The LAG "Finest Greek Tastes" is an example of this. The LEADER co-operation project which took place over the 2007-13 period involved 21 LAGs and more than 50 municipalities, working together to promote quality Greek products based on local culinary traditions and culture. The partnership was used to showcase quality Greek products but also the full range of skills, knowledge, rituals, symbols and traditions for producing, preparing and even consuming food in Greece. Around 5% of the project funding was private. This initiative led to the establishment of the Finest Greek Tastes Network made up of LAGs, municipalities and institutions from across Greece which focus on research and scientific presentation of the values of Greek cuisine; and promotion and marketing of quality Greek products to international markets, including through a marketing plan, videos, website, events and publicity material. Finest Greek Tastes is now an autonomous non-profit entity, giving it a firmer basis to continue its work beyond the project funding.

The groups focus on marketing and promotion benefits existing companies. LAGs can also play an important role in helping new business develop as well. In the food sector, food incubators are particularly important as they help individuals access commercial-grade kitchens and meet food regulations.

Source: ENRD (2019[70]), *Finest Greek Tastes*, https://enrd.ec.europa.eu/projects-practice/%E2%80%98finest-greek-tastes%E2%80%99_en.

Rural innovation should be pursued

The underlying logic of smart specialisation is to support activities that result in tradable goods or services and while each region focuses on its opportunity to export, it must also assess the possibility that other regions may be better positioned and are more likely to capture market opportunities. This discussion is particularly relevant for Greece's rural regions where the usual approach of expanding formal research in high-technology industries to increase the role of these fast-growth sectors in the local economy is much less relevant. Very little of the economic base of most rural regions can be characterised as high-tech, advanced manufacturing or ICT-related. A relatively small share of the local workforce has an advanced degree or even a tertiary education. Low population density, small and dispersed settlement over a large geographic area limit interaction among people and firms. Similarly, small local markets and a small labour force make diversification and the opportunity for "related variety" innovations limited.

However, in a rural context, smart specialisation can become a way to facilitate a stronger exogenous growth process. If the scope of the opportunities for support is expanded beyond the usual format of export-oriented high-technology products and formal research then the concept becomes more generally applicable. As noted by Charles, Gross and Bachtler (2012[71]), "smart specialisation should not be seen as being about technologies as such but about knowledge and its application, and this applies to all sectors, even agriculture and craft-based industries". A large share of the firms in rural regional economies are SMEs with no formal R&D activity but, in some cases, they have considerable ability to innovate, although in ways that are not easily detected since, for example, no patent is filed. Process innovations, innovations protected by trade secrets or innovations that remain hidden because the firm is far from competitors can be locally significant but do not neatly fit into a smart specialisation strategy. Innovations in the delivery of services or in goods that are not export-oriented are also not captured but can lead to increased productivity and improved quality of life (Box 3.14).

Box 3.14. Entrepreneurship and innovation in rural areas

Innovation in rural areas relies to a great extent on the action of local entrepreneurs. While some innovations are imported from urban places either by the local branch plants of large multinational companies or by the transfer of ideas developed for initial use elsewhere, these innovations tend not to be fully embedded in the local economy. By contrast, innovations that come from local people are more likely to be based on better uses of local resources or on new ways to solve problems for which an existing solution is not available.

The key issue for public policy is identifying ways to stimulate latent entrepreneurs to act on their ideas and to develop better support mechanisms for them when they do choose to act. There are two distinct motives for rural entrepreneurs that must be recognised. The first is a simple profit motive where the entrepreneur perceives that there is a current gap in the market that can be filled by his or her actions. The second is known as “user innovation”, where an individual has a problem in their life or business for which no adequate solution is available, so they invent one. It is only after the invention that the idea of becoming an entrepreneur occurs.

Essentially, support for innovative rural entrepreneurs takes two forms. The first entails ensuring that existing support for innovation does not discriminate against rural entrepreneurs. Forms of discrimination include: a focus only on formal innovation systems where science-based research and development activity is a prerequisite for support, focusing support only on innovations that have the potential for rapid growth (gazelles), requiring that innovation be novel in a national or international context before it can be supported, establishing high minimum funding levels and complex application procedures that can be difficult for individuals or small firms to deal with, and concentrating efforts to promote innovation in urban areas. The second is broader-based support for small rural business, including assistance in moving from identifying an idea – the latent entrepreneur – to then acting on that idea and developing a business plan and to actually starting a business. In rural areas, the first of the three steps can be the most difficult. In many rural areas, there is not a strong tradition of entrepreneurship, and in almost all rural areas, there are few peers who can be looked to by someone interested in starting an innovative business.

Financing a start-up can be a particular challenge in rural areas because the financial intermediation system is weak. Incomes are lower in rural areas, leading to less ability for the entrepreneur to raise equity funds from own sources or family and friends. Banks tend to be less capable of assessing business plans and are more risk-averse. Start-up costs can be higher in rural areas because facilities may have to be constructed rather than rented and equipment must be imported. Mainstream venture capital is designed to bridge this gap but is primarily designed for high-growth/high-return ventures which are also not normally evident in rural areas. Many rural areas have bridged this gap through the creation of community development finance institutions (CDFI) which provide revolving loan funds to local SMEs and start-ups. The initial capital for the institution may be raised from the local community, other financial institutions and government. CDFIs can be banks, credit unions, loan funds, microloan funds or venture capital providers. CDFIs are normally accountable to their local community and operate on a not-for-profit basis with legislative and funding support from governments.

Source: Elaboration based on US Treasury (2016[72]), “Community Development Financial Institutions Fund”, www.cdfifund.gov/Pages/default.aspx (accessed 9 January 2016).

Co-ordination of rural, regional and agricultural policies should be strengthened

The Ministry for Rural Development and Food has largely focused its efforts on the agricultural sector and the maximisation of the CAP financial resources and their distribution to farmers (Koutsouris, 2014[66]). This is a common critique of CAP policies, particularly when they are driven by a national agriculture-focused ministry as in the case of Greece. Rural development is shaped by a range of additional policy areas – from transportation and ports to the provision and accessibility of education and health services. A rural lens on these policies from a range of national ministries is important. At present, the Greek national government has a number of policies that address the rurality and peripherality of small islands. There are compensating measures to help deliver services and reduce transport costs for these areas. But there is no overarching rural development strategy apart from the EU Cohesion Policy/ESIF intervention. The question is how to adapt current rural strategies, which are often sector-based, to take into account the different development needs of rural regions, many of which are based on exploiting specific local resources. Designing rural development policy for different communities or territories involves pooling the knowledge held by a wide variety of public and private actors. Adjustments are thus needed both at the central and local government levels and between the different levels of government.

This process requires political commitment to overcome sectoral tendencies and an overall clarification of roles and responsibilities of different ministries or agencies in the field of rural development. Consistency is required to ensure that individual policies are not contradictory and that they converge in a coherent strategy. Co-ordination is needed between the central government, between the central and subnational governments and at the local level to integrate sectoral approaches, to involve private partners and to achieve the appropriate geographic scale.

Various co-ordination options may include special high-level units, integrated ministries, "policy proofing" and inter-ministerial co-ordination via working groups and formal contracts.

At present, Greece's representatives of regional authorities or of other public bodies, which are responsible for issues of state aid, employment, environment, tourism, culture, health, research and innovation, public administration, etc. can participate in the Monitoring Committee which is set up to monitor the implementation of the program in agreement with the Managing Authority for the Rural Development OP. Furthermore, regional and local bodies compose the National Rural Network together with the members of the Rural Development Programme Monitoring Subcommittee, composed by social-economic partners and civil society. However, this network's vast number of members (almost 200) means the level of engagement between actors is mostly focused on communications rather than shaping policy actions.

Some countries have established a specific Council of Ministers with a rural mandate in order to address this issue but in meetings of equals, there can be no leading authority. Finland has adopted a unique approach to co-ordinating rural policy across sectors – one that combines elements of the broad rural policy along with forms of vertical and networked governance. Finland's Rural Policy Committee is a 35-member co-operation body appointed by the Finnish government which draws its membership from national ministries, regional co-operation bodies, trade unions, the federation of higher education and training institutions, the association of local authorities, the ombudsman for the LEADER programme, associations of producers of agriculture and forestry products, and the Village Action Association of Finland. The committee is presently led by a representative of the Ministry of Agriculture and Forestry. Seven thematic networks also support the work of the Rural Policy Committee and the realisation of Finland's National Rural Policy Programme 2014-20.

An alternative approach to the co-ordination of national policies that impact rural areas is "rural proofing", which was first adopted in the English context. Rural proofing entails considering the likely impact of policy decisions on rural areas, and, where necessary, adjusting the policy to take into account the particular needs of those who live in, work in or enjoy the countryside. This approach encourages the early assessments of expected or likely impacts in rural areas. Canada adopted a similar approach at the end of 1990s with a "rural lens" – a checklist of considerations to determine if a policy or programme addresses priorities for rural Canada. The effectiveness of such approaches is a matter of debate, with some arguing that it can act as a form of tokenism that does not in fact adequately inform policy development at an early stage (Shortall and Alston, 2016[73]). Rural proofing is only as effective as underlying commitments to rural development.

There is no one best solution to overcoming inherent divisions between regional, rural and agricultural policies. The type of network approach that Finland has adopted is enmeshed in its culture of decentralisation and multilevel governance. Similarly, rural proofing does not offer a one-size-fits-all model. However, beyond governance structures, the inherent silos between these policy domains can be addressed at an organisational level as well. For example, relationships and knowledge sharing between ministries can be strengthened through opportunities for short-term secondments and co-ordinating professional development opportunities and staff training.

Fostering productivity, competitiveness and job creation

Greece faces two competitive pressures and a strategic choice. On the one hand, Greece – at the European Union's periphery – faces competition in goods and services from countries with low labour costs such as Turkey. On the other hand, Greece also faces competition within Europe from countries with higher labour costs but considerably stronger technological and productive capacities. A general challenge for Greece is to strengthen value-added services and activities in enterprises and to scale up and cluster activities in order to boost productivity and generate employment. Raising labour productivity is not only essential for long-term economic prosperity but also the only way to ensure sustainable wage growth. Beyond economic output and income levels, productivity matters for many other dimensions of well-being (OECD, 2018[2]).

Regional development strategies should, therefore, address not only a substantial increase in economic activity and employment but also the reallocation of resources to more productive uses, for example fostering sectors and areas of competitive advantage in order to shift towards more dynamic and innovative ones that have higher added-value and that can compete in the EU and international markets.

Business development and innovation

> *Strengthen SMEs and value-added activities in enterprises is a priority to increase productivity and generate employment*

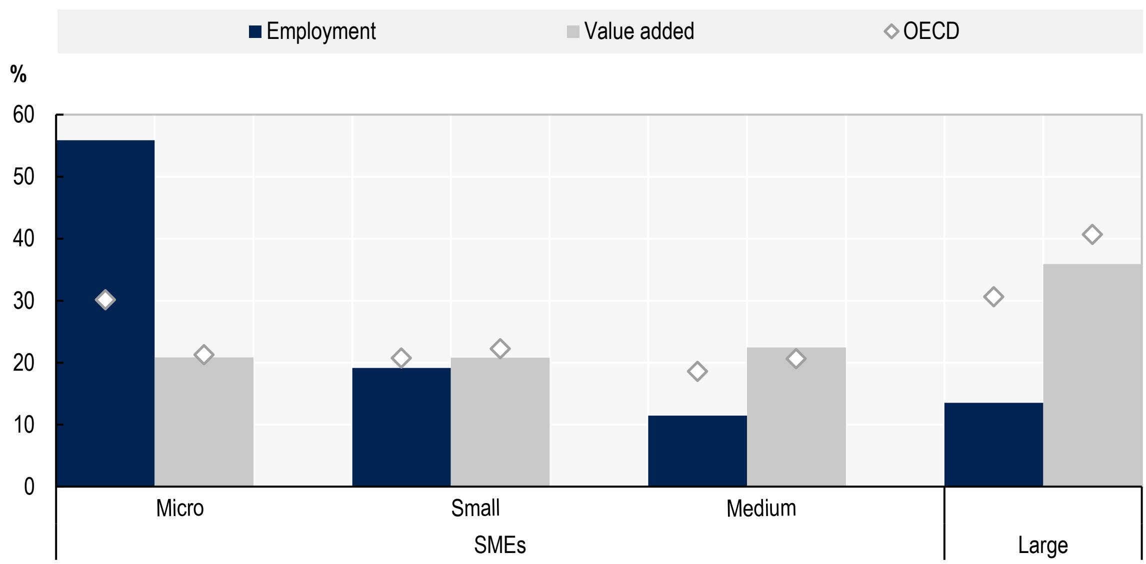
The vast majority (99.9%) of enterprises in Greece are small- to medium-sized – i.e. firms with less than 250 employees. SMEs constituted approximately 86.5% of employment out of the total business economy in enterprises but just 54% of value-added in 2018 (OECD, 2019[54]). Greece's business landscape is particularly dominated by microenterprises. Among all SMEs, microenterprises with between 1-9 employees are the largest share of all business types in Greece at 56%, which is significantly above the OECD average of 30% (Figure 3.5). These small firms have limited banking access, limited access to capital markets, no venture capital and weak business planning. Meanwhile, Greece also has a much lower share of employment in medium- (10-49 employees) and large-sized enterprises (50-249) compared to the OECD average. Social entrepreneurship in Greece is low (only 1% compared to 6% in the EU) (OECD, 2019[54]). Between 2010 and 2016, labour productivity among Greek SMEs declined in all sectors and size classes, with the exception of medium-sized wholesale and retail trade firms. The drop was especially pronounced in professional, scientific and technical activities, and in micro-firms in the manufacturing, and wholesale and retail trade sectors (OECD, 2019[54]).

There are low levels of innovation and R&D except for Attica and Thessaloniki. Concerning the spatial allocation of research, technology and innovation (RTI) activities, the national system has been highly centralised, as it is clear that the capital region of Attica represents the vast majority of RTI performance. Nevertheless, when regional GDP is taken into account, the region of Crete, which hosts the University of Crete, the Technical University of Crete and the Foundation for Research and Technology, shows the highest research and technology intensity in Greece (Chrysomallidis and Tsakanikas, 2017[74]). Greece lags behind the OECD average both in business and government spending on R&D activities, which amount to 0.28% and 0.54% of GDP respectively (in 2015) (OECD, 2018[8]). While the number of researchers in Greece is above the OECD average, research productivity in terms of the number of patents per researcher and R&D spending is low. Because Greek businesses are small, they tend to buy technology (mainly imported from abroad). There tends to be poor co-operation among private companies and insufficient research potential in firms. While the innovation performance of Greek SMEs is in line with the OECD median, medium-sized firms exhibit a sub-par performance in R&D and SME participation in R&D has declined since 2010 (OECD, 2019[54]). Greek SMEs lag in knowledge-based capital investment and firms were negatively impacted by the brain drain that occurred during the crisis. There are important skills deficiencies. These are related to both level of education but also very low workplace training (OECD, 2019[54]).

Credit conditions in Greece have not recovered to the pre-crisis levels. In 2017, 23% of Greek SMEs reported finance as their most pressing problem against the EU28 average of 7% and the number of SMEs applying for bank financing more than halved between 2010-17. The internationalisation performance of Greek SMEs remains one of the weakest in the EU with less than 10% of Greek SMEs currently exporting (OECD, 2019[54]). FDI tends to concentrate on a limited number of locations, self-selecting into regions and sectors of high productivity and thus acting to heighten existing spatial imbalances.

Figure 3.5. SME employment and value-added

Percentage of total employment (value-added), 2016



Source: OECD (2018[75]), *OECD Structural and Demographic Business Statistics Database*, http://dx.doi.org/10.1787/sdbs-data-en.

Box 3.15. The impact of COVID-19 on SMEs

In less than three months in the first quarter of 2020, the COVID-19 crisis developed into a global pandemic. Preliminary OECD analysis (April 2020) shows that there are several ways the coronavirus pandemic is affecting the economy, especially SMEs. On the supply side, companies experience a reduction in the supply of labour. Measures to contain the disease by lockdowns and quarantines lead to severe drops in capacity utilisation. Furthermore, supply chains are interrupted leading to shortages of parts and intermediate goods. On the demand side, a dramatic and sudden loss of demand and revenue for SMEs severely affects their ability to function, and/or causes severe liquidity shortages. Furthermore, consumers experience loss of income and heightened uncertainty, which in turn reduces spending and consumption. These effects are compounded because workers are laid off and firms are not able to pay salaries. The impact of the virus could have potential spill-overs into financial markets, with further reduced confidence and a reduction of credit. These various impacts are affecting both larger and smaller firms. However, the effect on SMEs is especially severe, particularly because of higher levels of vulnerability and lower resilience related to their size.

Businesses, including SMEs, will bear the brunt of a reduction in global demand for their products and services. This impact may particularly be felt in specific sectors such as tourism and transports, but also amongst those SMEs catering for local markets where containment measures have been introduced. SMEs are particularly vulnerable to the disruption of business networks and supply chains, with connections with larger operators and the outsourcing of many business services critical to their performance. Costs for prevention as well as requested changes in work processes, such as the shift to teleworking, may be relatively higher for SMEs given their smaller size but also, in many instances, the low level of digitalisation and difficulties in accessing and adopting technologies. If production is reduced in response to the developments, the costs of underutilised labour and capital weigh greater on SMEs than larger firms. Given the limited resources of SMEs, and existing obstacles in accessing capital, the period over which SMEs can survive the shock is more restricted than for larger firms.

Many countries are urgently deploying measures to support SMEs and the self-employed during this severely challenging time, with a strong focus on initiatives to sustain short-term liquidity. Such policies take various shapes. Some countries have focused on more general policies that have the potential to cushion the blow for the economy and all businesses. For instance, in many countries, central banks have stepped in to support lending by alleviating monetary conditions and enabling commercial banks to provide more loans to SMEs. In April 2020, many countries have introduced SME specific policy measures:

- Several countries have introduced measures related to the shortening of working time, temporary lay-offs and sick leave, some targeted directly at SMEs. Similarly, governments provide wage and income support for employees temporarily laid off or for companies to safeguard employment. In many cases, countries have introduced measures specifically focused on the self-employed.
- In order to ease liquidity constraints, many countries have introduced measures towards the deferral of tax, social security payments, debt payments and rent and utility payments. In some cases, tax relief or a moratorium on debt repayments have been implemented. Also, some countries are taking measures regarding procedures for public procurement and late payments.
- Several countries have introduced, extended or simplified the provision of loan guarantees to enable commercial banks to expand lending to SMEs. In some cases, countries have stepped up direct lending to SMEs through public institutions. Several countries are providing grants and subsidies to SMEs and other companies to bridge the drop in revenues.
- Increasingly, countries are putting in place structural policies to help SMEs adopt new working methods and (digital) technologies and to find new markets and sales channels to continue operations under the prevailing containment measures.

Note: The OECD has created a Digital Hub on Tackling the Coronavirus (COVID-19), which includes policy briefs and country-by-country COVID-19 economic measures and it is intended to grow and be continuously updated. Consult www.oecd.org/coronavirus/en.
Source: OECD (2020[76]), *SME Policy Responses*, http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/.

Policies for business development and innovation

Strengthening entrepreneurship, supporting business development and enhancing the innovativeness of businesses have been top priorities for Greece’s national and regional governments for some time. For example, enhancing business competitiveness and extroversion, shifting to qualitative entrepreneurship spearheaded by innovation and higher domestic added-value is a priority both in the National Growth Strategy and for the Partnership Agreement (ESPA) 2014-2020. As such, two main national policies address this issue:

- Greece's Development and Investment Laws, which are financed by the Public Investment Programme and framed by the National Development Programme, currently: i) Law 4399/2016 "Regulatory framework for the establishment of state aid schemes for private investments for the regional and economic growth of the country"; and ii) Law 4635/2019 "Invest in Greece and other provisions", which will be fully implemented from the end of 2020 and introduces reforms covering a wide range of fields with the scope to improve the business environment and facilitate productive investments.
- The national sectoral Operational Programme for Entrepreneurship, Competitiveness and Innovation (EPAnEK) within the European Structural Funds financing.

Beyond this, there are also Regional Operational Programmes (ROPs) for each region which address these priorities mainly within the respective Regional Smart Specialisation Strategies. EPAnEK and the ROPs are expected to contribute to the proposed shift in the growth model of the Greek economy from non-tradable into tradable sectors, and cluster development of innovative and out-turned sectors with a sustainable competitive advantage.

EPAnEK is managed by the Ministry of Development and Investments and covers the whole of Greece. Just over half of the funds (EUR 4.72 billion public – EUR 3.69 billion EU contribution) are directed towards research and innovation activities in sectors with competitive potentialities/advantage (agro-food, energy, supply chain, cultural and creative industries, environment, tourism/culture, ICT, health, material/constructions). Around a third of the funding is expected to contribute to upgrading the country's infrastructure related to business development and innovation through investments in research centres, broadband and NGA infrastructures and energy efficiency interventions. Around 18% of the funding is allocated to skills development and labour market matching and the remainder is for technical assistance. Taken together, the national sectoral OP for Entrepreneurship, Competitiveness and Innovation delivers a mix of hard and soft investments and are funded by a mix of ERDF and ESF.

The national Development Law 4399/2016 and EPAnEK are generally complementary – e.g. both focus on enhancing the competitiveness of SMEs and improving the technological development and competitiveness of firms (Table 3.9). However, there may be some potential issues. For example, the national Development Law advocates for the re-industrialisation of the country while EPAnEK includes supporting a shift to a low-carbon economy. The two may need to be aligned, depending on what kind of re-industrialisation is supported.

In previous EU Cohesion Policy programming periods, investments in SMEs and industry were often focused on physical infrastructure over priorities for long-term growth-generating R&D and human capital projects (Medve-Bálint, 2018[77]). The current 2014-20 programming period places a concerted effort on increasing the knowledge and building networks to support more innovative and productive businesses. In effect, EPAnEK has ushered Greece in a new development paradigm that showcases the key role of productive, competitive and export-oriented sectors, such as tourism, agro-food, as well as processing and high added-value services. It has focused attention on the need to increase the scale/size of production units, accelerate the introduction of new products/services that create a competitive edge to Greece and the individual regions and incorporate new knowledge, producing high-quality products that are competitive on a global scale. Smart specialisation strategies at the national and regional levels have arisen as a key feature of this approach. The following section describes these strategies and how they could be strengthened in the future.

Table 3.9. Policy priorities for entrepreneurship, business development and innovation, Greece

Law 4399/2016, 2016	National Sectoral OP for Entrepreneurship, Competitiveness and Innovation, EPAnEK, 2014-20
• Openness and innovativeness • Job creation • Developing the country's human resources with an emphasis on the employment of trained human resources to reverse the current exodus of young scientists • Attracting foreign direct investments • High added-value • Improving the technological level and the competitiveness of enterprises • Smart specialisation • Developing networks, synergies, co-operative initiatives and generally supporting the social and solidarity economy • Encouraging mergers • Developing sections and interventions to enhance healthy and targeted entrepreneurship with a special emphasis on small and medium entrepreneurship • Re-industrialisation of the country • Supporting areas with reduced growth potential and reducing regional disparities	• Strengthening research, technological development and innovation • Enhancing access to, and use and quality of, ICT • Enhancing the competitiveness of SMEs • Supporting the shift towards a low-carbon economy • Preserving and protecting the environment and promoting resource efficiency • Promoting sustainable transport and improving network infrastructures • Promoting sustainable and quality employment and supporting labour mobility • Investing in education, training and lifelong learning • Improving the efficiency of public administration

Source: National Development Law, 2016; National Sectoral OP Entrepreneurship, Competitiveness and Innovation, EPAnEK, 2014-2020.

Policy challenges

Strengthening and mobilising networks of entrepreneurs and researchers

The Entrepreneurial Discovery Process (EDP) entails collecting and analysing diverse information held by entrepreneurs or embedded in firms and public institutions. Incentives and instruments for disclosing this information (e.g. through stakeholder consultations, public-private partnerships) are key to the success of this approach. This entails working with entrepreneurs to identify their knowledge-based strengths at the regional level and in a more exploratory approach in which public decision-makers listen to market signals using a range of assessment tools (e.g. Strengths, Weaknesses, Opportunities, Threats [SWOT] analysis, surveys) and mechanisms such as public-private partnerships, technology foresight and road-mapping to name a few.

National and Regional Research Councils of Innovation were created in Greece to support the EDP. While at the national level many interviewees have reported that Greece's National Council for Research and Innovation has functioned well, at a regional level they have not always been fully resourced and operationalised. These councils are formed by members from the research, academic and business sectors (the national ones also include two members from the regional councils). These entities could, if well-resourced, determine areas of focus, co-operate with other regions, including those with other countries and better connect academia and businesses to encourage investments in innovation rather than purchasing it.

Targeted policy intervention should support actions for Greek regions in:

- *Strengthening their Entrepreneurial Discovery Process (EDP) and mobilising regional networks* in a meaningful way in order for their smart specialisation strategies to be successful. These networks will look different in every region. Some regions have more developed formalised research institutions in the public sector while in others, this is more business-led. The RIS3 strategies need to be outward-facing and based on local intelligence.

- *Ensuring that Regional Councils for Research and Innovation do not form a new layer of bureaucracy.* They should be a flexible network that galvanises action to implement the RIS3. They should work to build trust among key actors and break down some of the well-recognised silos that currently exist between different research institutes and between the public and private sectors.
- *Developing additional network structures*. While Regional Research Councils are one important mechanism to strengthen the connections between research centres, universities, large enterprises and start-ups, other structures such as digital hubs, innovation districts etc. are also needed and should be set up on regional and inter-regional bases.
- *Enhancing capacity in regions to formulate their own studies*. For example, Greek regions lack systematic data on scientific research and institutional mapping of their entrepreneurship ecosystem.

Some regions are already taking positive steps. For example, Central Macedonia and Crete are making a priority focusing on facilitating ties between industry and research bodies as well as developing regional databases of entrepreneurship and stakeholders.

Better linking research to the needs of businesses

Greece has extensively used EU Structural Funds to finance research (ERDF) as national public funding is not sufficient. This has all its restrictions and length imposed by the regulations on the structural funds (e.g. categories of regions, predefined targets etc.). Moreover, the scarcity of public funding for research has contributed to an opportunistic supply-driven research system.

At present in Greece, research and innovation are distanced from enterprises. Universities and research centres do not tend to pay enough attention to business needs and the national innovation system has been dominated by established institutions that used to operate in isolation (mostly financed by the Horizon 2020 programmes). For example, Greece is a number one country in shipping but there is no specialised support for the shipping sector. At the same time, co-operation and financing of, mostly, public research centres and universities by the private sector face stiff resistance (OECD, 2018[8]). In sum, there are limited connections between businesses and the private sectors.

Target policy intervention should support actions for:

- *Developing a comprehensive programme (e.g. Industry 4.0) with specific measures to support SME research and development needs*. Greece has recently established the Hellenic Foundation for Research and Innovation with an initial budget of EUR 240 million over the next 3 years from public funds and the European Investment Bank (EIB). The foundation has been created to promote scientific quality and excellence financing research projects and researchers. The foundation could be used to put out special calls that are aligned with the Smart Specialisation Strategies and that include specific incentives for partnerships (Box 3.16). The 2016 and 2019 Development Laws establishing state aid schemes for private investments also provide financial incentives to boost R&D and foster collaboration between industry and R&D centres. All these measures may be uniformed and united in a single strategy.
- *Strengthening the “knowledge triangle”* (education, research and innovation) through dedicated policies and aligned incentives (e.g. tax exemptions or tax incentives)[57] that promote research, technology diffusion, entrepreneurship and foster closer ties between businesses, research centres and universities. This would further contribute to increasing R&D spending and the ICT sector’s share in GDP. Overall, a strengthening of the knowledge triangle would lead to the digital transformation of the economy, an increase in the stock of knowledge and productive capital, the development of outward-oriented sectors and, more generally, to a knowledge economy and society (Bank of Greece, 2019[53]).

- *Simplifying procedures and speeding up time for financing from EU Structural Funds*. Major shortcomings for the utilisation of Structural Funds from SMEs are the issues of complexity of procedures and timing. Very few private firms have the internal capacity to instruct dossiers for funding and no firm would wait for a year or so before they know if they have obtained the financing to develop something related to their strategic growth. While attempts to simplify procedures are ongoing, late payments could be addressed by adopting an open season with revolving calls.

Box 3.16. Interfaces and platforms for technology transfer

Germany - Joint Initiative for Research and Innovation (renewed in 2016) and High-Tech Strategy (since 2014)

It puts emphasis on research commercialisation and academia-industry partnerships. This is on line with the recent emphasis given to the creation of user-oriented environments and tighter public-private co-operation.

Portugal - Interface Programme (2017)

It aims to enhance Portuguese products through innovation, increased productivity, value creation and technology incorporation by supporting Technological Interface Centres and SMEs, enhancing their linkages to the innovation system and providing incentives for hiring researchers and qualified staff. It also includes the creation of Collaborative Labs across the country and Suppliers' Clubs to facilitate the integration of Portuguese SMEs into GVCs. The Interface Programme provides EUR 1.4 billion to technology transfer and cluster certification.

Source: OECD (2019[54]), *OECD SME and Entrepreneurship Outlook 2019*, https://doi.org/10.1787/34907e9c-en.

Strengthening and expanding business services for SMEs

While Smart Specialisation Strategies are a key part of regions' entrepreneurship and innovation strategies, equally important are core services for businesses. This is particularly the case given the structure of Greek businesses and the preponderance of microenterprises. Greece does not have a well-developed system of business advisory services. There is a strong need for active face-to-face support in terms of mentoring, training, advisory and counselling services that can help business navigate regulations, access finance and connect to the relevant networks and expertise. Such services can support value-added in business activities, encourage firms to grow and access new markets and help smaller firms access local value chains.

These services need to be staffed by very knowledgeable people who can help businesses access a range of supports in a fluid way. One emerging best practice is to have business clients of one-stop-shops providing integrated services greeted by a business navigator who is able to discern the types of services that the client needs to access as opposed to requiring the client to navigate this themselves.

Other complementary strategies to business services include:

- *Expanding e-services.* Greece has strengthened its e-services for firms in recent years (e.g. value added tax [VAT] can be filed electronically) and there are new Citizen Engagement Programme (CEP) citizen service centres. E-CEP services could further strengthen the ease of doing business and reduce operating costs.
- *Increasing the availability of incubators for small firms.* Microenterprises are smaller than the EU average and have higher interest rates and higher operating cost. These small firms have limited banking access, limited access to capital markets, no venture capital and no corporate governance

in mind. They need incubators for providing what microenterprises cannot afford by themselves, including training for corporate governance.

- *Adopting specific measures to boost export capacities.* This is a real priority which needs dedicated measures. For example, Italy has adopted a unique approach to helping SMEs overcome barriers to accessing foreign markets through a programme that supports the costs of hiring a temporary export manager (as part of the 2015-17 Special Plan for the Made in Italy Promotion). The programme helps SMEs to hire a full-time or part-time temporary employee to work in the small business in order to help them establish marketing, sales, accounting, information technology and other processes needed to export to a new market. There is an element of training involved in the programme as well. Once the individual has developed systems to support or enhance a firm's export capacities, this knowledge is passed on to existing staff in the business and the temporary export manager goes on to support other small businesses. The programme entails two components: a training programme for temporary export managers and a voucher for SMEs to partially cover the cost of employing a temporary export manager. This programme serves to both help firms access new markets and build their internal capacity to continue to do so through employee training.
- *Developing dedicated support for social enterprises.* A social enterprise is any private activity conducted in the public interest, organised with an entrepreneurial strategy, but whose main purpose is not the maximisation of profit but the attainment of certain economic and social goals and which has the capacity for bringing innovative solutions to the problems (OECD, 2017[78]). Social enterprises require business support. However, a one-size-fits-all approach to business support that expects social enterprises to require the same services as entirely commercial enterprises is likely to be suboptimal if the offer of information, advice and consultancy and so on fails to acknowledge the social dimensions which are central to the creation of social enterprises. "Braided support", which incorporates both general business support and support specifically tailored to meet the needs of social enterprise, can be more effective for the start-up and development of social enterprises.

Developing a broader view of innovation – Beyond the traditional science and technology-based model

While the national government is focused on technology and science-driven innovation as the core of smart specialisation strategies, demand-driven innovation in the form of applications, entrepreneurship, user-driven innovation, and innovation in services and organisations is equally important for Greece. While the production of inventions may continue to be concentrated in a small number of metropolitan regions, all regions can benefit from adopting these inventions in the form of regional innovations. It is the ability to adopt and adapt new and existing knowledge that separates higher growth regions from slower growth ones.

Thus, some key lessons for Greece in formulating regional smart specialisation strategies in regions that do not have a strong science and technology-based innovation system include the following:

- It is important not to focus on the level of technology when identifying target sectors but on sectors that have future growth potential in the region. This could be in: primary industries, such as forestry, fishing, mining or agriculture; manufacturing, whether it is traditional heavy industry, boat building or specialised components; or services including tourism, healthcare delivery or job training.
- The selection has to reflect an existing competency, not simply an aspiration. It is also important that the projected demand for a particular good or service be large enough that providing it will have a noticeable impact on regional output and employment. There need not be an immediate increase but there should be clear potential for significant growth over time.

- Regions should build on existing capabilities. By extending the local demand for input or by using a by-product from the production of current output, the local economy can grow organically without having to establish a completely new production process.

There is considerable opportunity in traditional industries for future economic growth, and regions with a strong comparative advantage in these industries should carefully assess how they can invest in increasing the competitiveness of local firms as a central element of their smart specialisation strategy (Wintjes and Hollanders, 2011[79]). While these sectors may not benefit from the push effect of formal R&D investments, they can benefit from the demand for product or process improvement, and there are opportunities for small-scale innovations by entrepreneurs and existing SMEs based on local knowledge. Finally, the importance of regions importing inventions and knowledge developed elsewhere and using it for local innovations cannot be overemphasised as a way to increase the competitiveness of local firms.

Overall, innovation strategies that are grounded in “mixed modes” of innovation (i.e. R&D and non-R&D driven) can better capture the value that innovation offers. Such strategies support the R&D dimension and promote associated product and process innovations, without ignoring the value of new marketing or organisation methods. It should be noted that the relationship is somewhat circular as new organisational methods can facilitate the introduction of new production processes or new products, which can eventually lead to additional developments in organisational methods, etc. (OECD, 2018[80]).

A broader definition of innovation can generate a series of “how to” questions that should be considered when designing an innovation policy. These include: how to localise R&D and science to push forward change and create value; how to encourage innovation; how to shift demand and reduce cost; how to use existing knowledge in new ways and generate new knowledge; and how to manage the uncertainty associated with promoting innovation, as outcomes are never guaranteed – a factor that affects investment and investment potential (OECD, 2018[81]).

OECD countries are increasingly shifting away from innovation-based predominately on R&D activity towards a more diverse definition and broader innovation approach (OECD, 2018[81]). Industrial policy is also evolving across the OECD through greater regional-level involvement, for example through regional development agencies, subnational government collaboration with local universities and companies, and more actively engaged citizens. Finally, the instruments used to support innovation are also adapting. For example, start-up laws are being introduced, there is increased support for targeted groups (e.g. lagging companies), financing mechanisms are expanding to include grants as well as tax incentives, policy supportive procurement is taking hold and more private sector funding is underway. Reliance on competitive and co-operative mechanisms, such as science funding, networks, clusters, platforms and public-private partnerships (PPPs), is also on the rise, as is the digitalisation of innovation policies. All of these shifts underscore the multifaceted nature of innovation and innovation policy and highlight the need for an attractive innovation ecosystem (Box 3.17).

Box 3.17. OECD principles and characteristics of an enabling environment for innovation

The OECD identifies five policy principles and four characteristics of an enabling environment for innovation that can help guide policymakers as they think through innovation policies and programming.

Innovation policy principles

1. Empowering people to innovate.
2. Unleashing innovation in firms.
3. Creating and applying knowledge.
4. Applying innovation to address global and social challenges.
5. Improving the governance and measurement of innovation policies.

Characteristics of an enabling environment for innovation

- *A skilled workforce* – one that has the knowledge and skills to generate new ideas and technologies, to bring them to the market and to adapt to technological changes across society.
- *A sound business environment* – one that encourages investment in technology and knowledge-based capital, and that also enables innovative firms to experiment with new ideas, technologies and business models, helping them to grow, increase their market share and reach scale.
- *A strong and efficient system for knowledge creation and diffusion* – one that engages in the systematic pursuit of fundamental knowledge, and that diffuses this knowledge throughout society through a range of mechanisms, including human resources, technology transfer and the establishment of knowledge markets.
- *Policies that encourage firms and consumers to engage in innovation and entrepreneurial activity* – more targeted innovation policies that can help strengthen markets for innovation and focus policy on specific challenges and opportunities, e.g. green growth, including at the regional or local level. Moreover, well-informed, dynamic, engaged and skilled consumers are important for innovation and their role can be facilitated by specific consumer policies.

Source: OECD (2010[82]), *The OECD Innovation Strategy: Getting a Head Start on Tomorrow*, http://dx.doi.org/10.1787/9789264083479-en.

Maritime and blue growth

Maritime and blue growth play a very important economic and strategic role for Greece. Blue growth is the EU long-term strategy to support sustainable growth in the marine and maritime sectors as a whole. Seas and oceans are drivers for the European and Greece economy and have great potential for innovation and growth. It is the maritime contribution to achieving the goals of the Europe 2020 strategy for smart, sustainable and inclusive growth. The strategy consists of three components:[58]

- Develop sectors that have a high potential for sustainable jobs and growth, notably: aquaculture, coastal tourism, marine biotechnology, ocean energy.
- Essential components to provide knowledge, legal certainty and security in the blue economy: i) marine knowledge to improve access to information about the sea; ii) maritime spatial planning to ensure efficient and sustainable management of activities at sea; iii) maritime surveillance to give authorities a better picture of what is happening at sea.
- Sea basin strategies to ensure tailor-made measures and foster co-operation between countries (Adriatic and Ionian Seas, Arctic Ocean, Atlantic Ocean, Baltic Sea, Black Sea, Mediterranean Sea, North Sea).

The Blue Economy includes all those activities that are marine-based or marine-related sectors (EC, 2020[83]):

- “Established” sectors include: marine living resources, marine non-living resources, marine renewable energy, port activities, shipbuilding and repair, maritime transport and coastal tourism.
- “Emerging and innovative” sectors include some marine renewable energy (i.e. ocean energy, floating solar energy and offshore hydrogen generation), blue bio-economy and biotechnology, marine minerals, desalination, maritime defence and submarine cables.

“Emerging” sectors offer significant potential, especially as regards renewable energies where the EU is in the lead, hosting 70% of global ocean energy (wave and tidal) installed capacity in its waters. The maritime defence sector accounts for over 177 000 jobs in the EU and within blue bioeconomy sectors, the algae sector generated an estimated turnover of over EUR 350 million. Desalination continues to be a key sector for those countries that are more likely to suffer water shortages (e.g. Greece, Spain), not least as a result of climate change, even if with important side effects (brine, energy consumption, etc.) (EC, 2020[83]).

The blue economy is linked to many other economic activities and its impact goes beyond the above-mentioned sectors and encompasses all sectoral and cross-sectoral economic activities based on or related to the oceans, seas and coasts:

- Marine-based activities: include the activities undertaken in the ocean, sea and coastal areas, such as marine living resources (capture fisheries and aquaculture), marine minerals, marine renewable energy, desalination, maritime transport and coastal tourism.
- Marine-related activities: activities which use products and/or produce products and services from the ocean or marine-based activities like seafood processing, biotechnology, shipbuilding and repair, port activities, technology and equipment, digital services, etc.

In 2018, the contribution of established blue economy sectors to the overall EU economy was 2.2% in terms of employment (down slightly from 2.3% in 2009) and 1.5% in terms of GVA (down from 1.7% in 2009). Established blue economy sectors in Greece employ around 533 5470 people and generate over EUR 8.4 billion in GVA. Overall, blue economy jobs decreased by 7.4% and GVA by 36.1% compared to 2009. Nonetheless, the share of the blue economy in the Greek national economy continues to be substantial: in terms of jobs, in Greece, it contributes 14.2% of all national jobs, the highest share in the EU. In terms of GVA, Greece ranks fourth with the blue economy contributing to 5.2%. Greece's blue economy is dominated by coastal tourism, which contributed 85% to blue jobs and 69% to blue GVA in 2018. Maritime transport is also a large contributor, with 13% of the GVA and 3.8% of the employment, while marine living resources generates around 7% of jobs and GVA (EC, 2020[83]).

According to the Union of Greek Shipowners,[59] 2016-17 saw the first signs of improved market conditions for global shipping after a long and deep recession. Greek shipping continues to hold the first position internationally. Greek shipowners control 36% of the world's oil tanker fleet, 48.6% of the world's ore and bulk carrier fleet and 6.5% of the world's chemical and products tanker fleet.[60] As such, Greek shipping plays an indispensable role in world seaborne trade including the EU's export-import trade and in particular in securing the EU's energy needs through the provision of sea transportation. The contribution of Greek shipping to the country is multifaceted and not limited to the receipts in the balance of payments (BOP) from maritime transport services. It ranges from indirect economic investments to employment opportunities and raising the profile of the country internationally by being a strategic trade (EC, 2020[83]).

Box 3.18. The EU Integrated Maritime Policy

The EU Integrated Maritime Policy seeks to take account of the inter-connectedness of industries and human activities centred on the sea and to provide a more coherent approach to maritime issues, with increased co-ordination between different policy areas.

It focuses on:

- Issues that do not fall under a single sector-based policy, e.g. "blue growth" (economic growth based on different maritime sectors).
- Issues that require the co-ordination of different sectors and actors, e.g. “marine knowledge”.

It specifically covers these cross-cutting policies:

- Blue growth.
- Marine data and knowledge.
- Maritime spatial planning.
- Integrated maritime surveillance.
- Sea basin strategies.

Source: EC (n.d.[84]), *Integrated Maritime Policy*, https://ec.europa.eu/maritimeaffairs/policy_en.

Policy implementation and financing

Helping finance the Blue Economy

The EU is making increasing use of mechanisms to leverage the financial support that it provides from its own funds with investment from other public or private sources. In 2014, former EC President Juncker announced the Investment Plan for Europe. EUR 21 billion in guarantees coming from the European Institutions (EU budget and EIB own funds) leveraged a European Fund for Strategic Investment (EFSI) of EUR 315 billion (later extended to EUR 500 billion based on EUR 33.5 billion guarantees). Up to the end of 2019, EFSI has contributed with over EUR 1.4 billion in funding to EUR 8 billion worth of offshore wind projects as well as substantial support to other parts of the blue economy including port development and clean shipping (EC, 2020[83]).

Besides large projects like the wind farms, the EFSI also focuses on stimulating access to finance for SMEs, which make up a substantial part of the blue economy – up to 70% of the added-value in shipbuilding for instance. It is these companies that are capable of delivering the innovations needed to compete on the global market and meet the growing demand for low-emission, environmentally friendly products and services. The largest sectors were the blue bioeconomy and renewable energy, a broad category covering ideas to make aquaculture more efficient or more respectful of ecosystems or to produce new products such as nutraceuticals. In this context, the EC and the European Investment Fund (EIF) decided to set up a BlueInvest Platform for SMEs in 2019. This encompassed a package of measures including coaching for investment readiness and grants up to EUR 22 million in 2019 and EUR 20 million in 2020, for the final steps of the new business plans (e.g. demonstration, certification, marketing, etc.). In line with the EU's move towards leveraging its support, the grants were made conditional on letters of intent from investors – either from the public or the private sector. In addition, EUR 75 million worth of liquidity from the EIF (with a 95% guarantee from EFSI) was made available in 2020 for investing equity in funds specialising entirely or mostly in the blue economy or co-investing in particular companies (EC, 2020[83]).

The OP for support from the European Maritime and Fisheries Fund in Greece

The Operational Programme "Fisheries and Maritime 2014-2020" for support from the European Maritime and Fisheries Fund in Greece (EMFF OP) aims to achieve key national development priorities alongside Europe 2020 objectives. The OP addresses the general reform of the Common Fisheries Policy (CFP) and fully supports the priorities defined in the EMFF regulation. The main objectives of the OP aim at enhancing the viability of the sea fisheries sector, the competitiveness of aquaculture and processing sectors and the sustainable development of traditionally fishery-dependent areas. The programme also addresses the need for protection and rehabilitation of the marine environment and its living resources, the control of fishery activities, the collection of fishery data and aims at fostering the implementation of the Integrated Maritime Policy (IMP).

The OP has a total budget of approximately EUR 522 888 660 (EUR 134 110 746 the national co-financing) and it is managed by the Ministry of Rural Development and Food. Funding priorities include:

- Fostering the viability and the sustainable development of the Greek fisheries sector as well as the protection of the fishing/marine resources (33.6% of total OP allocation).
- Fostering environmentally sustainable, resource-efficient, innovative, competitive and knowledge-based aquaculture (15.9% of total OP allocation).
- Fostering the implementation of the Common Fisheries Policy (CFP) by improving the collection and management of data as well as with provisions of support to monitoring, control and enforcement (17.6% of OP resources).

- Promoting the maintenance of the economic and social sustainability of the Greek fisheries and aquaculture areas, the creation of jobs and the diversification within and/or outside the fisheries and aquaculture sectors and the implementation of community-led local development (CLLD) strategies (13.5% of OP resources).
- Fostering marketing and processing of fishery and aquaculture products (15.0% of OP allocation).
- Fostering the implementation of Integrated Maritime Surveillance, with particular focus on the development of part of CISE (Common Information Sharing Environment) (1.1% of OP allocation).
- Technical assistance (3.3% of OP resources).

Policy challenges: Building on Greece's maritime tradition and strategic advantages

Benefitting from a large merchant fleet, a long maritime tradition, a strategic location for sea trade and hosting top sea tourism destinations, Greece is well placed to chart ambitious maritime policies that boost growth and employment. The country's growth strategy aims at capitalising on the shipping industry's strength to expand its economic benefits, developing the port and shipbuilding sectors through privatisations and fully exploiting its competitive advantage in sea and coastal tourism. Already a significant European gateway for Asian seaborne trade, Greece has the potential to develop into a major intermodal transport hub with sizeable port cluster and logistics sectors. The National Action Plan for Logistics supports the country's goal to become a leading logistics hub by increasing transit and developing value-added services. Concerning sea transport, initiatives are taken to enhance shipping efficiency and maritime operations. The revision of the National Ports Strategy also seeks to enhance competitiveness, through the upgrade of port technologies and the promotion of cruises, sea tourism and the greening and digitisation of ports. Maritime transport is vital for Greece's territorial cohesion and therefore upgrading commuting and communication between the islands and the mainland is a further priority (Government of Greece, 2019[85]).

To ensure continued and sustainable growth and well-being in Greece's regions and islands, a number of challenges regarding blue growth and maritime policies need to be addressed. They include:

- *Shipping*. Shipping's contribution to the national economy is estimated at around 7% of GDP in 2017. The Greek-owned fleet is placed 1st on a global scale (about 4 536 vessels) and 8th considering only the 670 vessels under the Greek flag. While Greece represents only 0.15% of the world population, Greek-owned ships represent almost 21% of the global tonnage, 53% of the EU deadweight tonnage (DWT). The Greek shipping cluster is a successful bright spot in the Greek economy. More than 1 430 shipping companies – active in ocean-going shipping – and an additional 3 674 maritime companies – mainly active in cabotage, fishing, maritime support services and short-sea shipping – operate in Greece. This highlights Piraeus as a worldwide maritime centre and a base of expertise in the technical and commercial management of vessels. These companies offer direct employment to over 16 000 employees and constitute the driving force for the entire maritime cluster, employing, directly and indirectly, 190 000 people. The receipts in the services' BOP from maritime transport are estimated at 9% of the national GDP for 2018.[61] The inflow of service payments from maritime transport is estimated at around EUR 17.3 billion for 2019, an increase of 2.3% compared to 2018 when the corresponding inflows reached EUR 16.6 billion. The shipping contribution includes, among other things, indirect financial investments, employment opportunities and the promotion of the country's image at the international level, as an important commercial and strategic partner. One of the top priorities of the Ministry of Maritime Affairs and Insular Policy is to attract more vessels to the Greek flag, increase the number of shipping companies and promote Piraeus as a ship-management centre of global scale. This is achieved by a range of measures to reduce red tape, increase digitisation and simplify procedures for registering vessels. A relevant key requirement, which is intended to result in a significant reduction in the national unemployment rate, is to attract more Greeks to maritime professions by upgrading maritime education as well as improving the image of the maritime profession among young Greeks (Government of Greece, 2019[85]).

- *Shipbuilding and repair.* The once-thriving shipbuilding industry of Greece, currently plagued by complex legal, market and technical issues on account of past mismanagement, is potentially a source of sizeable growth and a target for significant investment. Efforts are continuing to unlock the productive potential of main shipyards such as Elefsina, Neorion, Perama-Piraeus, Salamina and Skaramangas. The necessary legal framework was set up to allow for the development of small shipyards for wooden tourist vessels (Government of Greece, 2019[85]).
- *Port policy.* The port industry, which is closely tied to the logistics sector and the wider field of intermodal transport, is of vital importance to the national economy. The upgrade of rail and road links in Northern Greece and the Balkans, which is already underway, will expand the hinterland of Greek ports to Central Europe. The privatisation of the port of Thessaloniki was concluded in 2018, following that of Piraeus. In 2017, the port of Piraeus jumped from 44th to 38th place in the Lloyd's List Global Ports Top 100. Meanwhile, Piraeus holds the top position in Europe in terms of passenger traffic. Legislative measures (Law 4504/2017) have resulted in limiting bureaucracy and the provision of mechanisms/tools to port authorities in order to finally legalise certain port installations. The ministry is working towards enacting a new sustainable national port management system. Apart from the latter and in line with the ongoing revision of the national ports' strategy, during the next decade, priority is expected to be given to the implementation of planned and remaining projects for the ports belonging to the Greek part of Orient East Med Corridor. Key priorities are also the enhancement of ports' connectivity and the promotion of port logistics' hubs, the marine tourism sector's upgrade, the sustainable reorientation of the cruise sector towards addressing local needs and the insular character of the country, the revitalisation of port-city relationships, the integration of the port dimension in the national marine spatial planning and the boosting of green and ICT investment technologies in ports (Government of Greece, 2019[85]).
- *Maritime education.* Greece is investing in maritime education in order to meet a large part of the excess demand for officers and crew projected for the coming decade. An extensive programme of upscaling Greek Maritime Academies is underway, which focuses on combatting understaffing and upgrading buildings and equipment. Furthermore, virtually all maritime academies have signed memoranda of understanding (MoUs) for co-operation with local universities offering maritime education courses. Recent legislation (Law 4205/2017) provides for the establishment of another two Vocational Training Centres for Captains and Ship Engineers as well as a School for Rescue and Firefighting Means. Lastly, a study assigned by the ministry to develop a framework law for national maritime education is currently underway (Government of Greece, 2019[85]).
- *Sea tourism.* The development of homeporting in Greece remains the top priority of the National Coordinating Committee for the Cruise Sector, established in 2016. In 2017, the Ministry of Maritime Affairs undertook an initiative to combat the illegal chartering of tourist vessels, which had grown over the past years. A recent lifting of restrictions, *inter alia* in crew composition, has resulted in the liberalisation of the market for mega-yacht chartering, which is expected to attract both domestic and EU charterers and to elevate island tourism further (Government of Greece, 2019[85]).

Box 3.19. The Greek new government's plan to boost domestic shipping

Greece's newly elected government (2019) is developing a threefold plan to boost the domestic maritime industry.

The first part of the initiative will comprise measures to make the Greek flag more attractive to Greek shipowners, who control the world's largest merchant fleet (20% of the global fleet in DWT).

The second part concerns bringing investment into the country's ports and particularly to Piraeus.

The third part of the plan is to promote marine tourism, such as yachting and other activities that have the potential of bringing in significant revenues.

The plan integrates actions to promote maritime and shipping professions to the younger generations. Moreover, under a new bill which will be enacted shortly, Greece will for the first time develop a National Strategy for the Integrated Maritime Policy (IMP) in the islands, introducing innovative financial tools to support *inter alia* innovative entrepreneurship in the fields of blue growth and blue economy.

Source: Safety4Sea (n.d.[86]), *Homepage*, https://safety4sea.com; Ministry of Maritime Affairs and Insular Policy (2020).

Attractiveness and sustainable tourism

Tourism is a central pillar of Greece's economy

In 2018, Greece received a record number of international tourist arrivals for the sixth consecutive year, totalling 33.1 million visitors, an increase of 9.7% on 2017. Overnight stays in Greece totalled over 230.7 million, compared to 213.5 million in 2017. Visits from EU countries accounted for almost two-thirds of all arrivals and saw an overall growth of 15.1% over 2017 (OECD, 2019[87]). As far as the cruise sector is concerned, 4 093 cruise ship arrivals were recorded in 2016 (4 375 in 2015), while the number of cruise passenger visits was stable at 5.1 million (OECD, 2019[87]). Domestic tourists in Greece in 2018 were 5.7 million, 3.6% up over 2017. The vast majority of these trips (over 95%) were for leisure purposes, however about two-thirds (65.8%) of total nights were spent in non-commercial accommodation (OECD, 2019[87]).

In 2017, direct tourism GVA was estimated to be EUR 10.7 billion, which represented 6.8% of national GVA (OECD, 2019[87]). INSETE[62] has estimated the contribution of tourism in Greece to be 11.7% of national GDP in 2018. According to an IOBE[63] study in 2012, tourism had a multiplier effect on the Greek economy of 2.2[64], while KEPE[65], in a similar study in 2014, considered that the multiplier of tourism activity amounted to 2.65 (INSETE, 2019[88]).[66]

There is also a strong regional element in Greece's tourism activities as the economy of 3 island regions (Crete, the Ionian Islands and South Aegean) is heavily dependent on tourism while, at the same time, 8 of the 13 NUTS II Regions have a much smaller share of the "tourism pie" in Greece. Despite a lack of data on the regional distribution of total tourism expenditure, INSETE has estimated[67] a 47.2% contribution of tourism to the GDP of Crete, 71.2% for the Ionian Islands and 97.1% for South Aegean region. Excluding Attica, South Aegean has the highest per capita GDP in Greece, while Crete and the Ionian Islands are among the highest (INSETE, 2019[88]).

Aside from its major contribution to Greece's GDP, tourism is also an important contributor to employment. In 2018, tourism directly employs 381 819 people, accounting for 10% of total employment in Greece (OECD, 2019[87]). INSETE has estimated that the total employment generated by tourism at peak season (third quarters) of 2018 was 650 000 workers or 16.7% of employment and overall (directly and indirectly) between 36.7% and 44.2%, while it had a key contribution in reducing unemployment (INSETE, 2019[88]).

The positive impacts of tourism are widely recognised, however, the increasing number of tourists at the most popular regions and attractions, often exacerbated by the peaks and troughs of seasonality, has also led to increased pressure on local communities. These impacts can be direct or indirect and can take the form of increased traffic congestion and pollution, and higher pressure on public services and infrastructure (e.g. water, waste management, and public transport); all of which, individually or combined, can negatively impact resident perceptions of tourism. For instance, the island of Santorini, a major tourism destination, has been suffering from over-tourism during recent years, with significant pressure on transport infrastructure and on the everyday life of the local community. Furthermore, in certain urban centres, the expansion of tourism's sharing economy has become a major problem for residents. According to the region of Attica, in the district around the Acropolis in Athens for example, the proliferation of Airbnb holiday rentals resulted in a significant rise of household rentals.

Regions with a stronger reliance on tourism were more resilient to the crisis

Even during the crisis, the tourism industry in Greece has been one of the mainstays of economic growth and employment, with continued growth in tourist arrivals and revenues. The productive structure of Greece has changed as a response to the shock of the crisis. In the post-crisis period, resources shifted towards tourism-related sectors, allowing island and more touristic regions to buffer the effects of the crisis in terms of employment and incomes (Chapter 2). Regions that saw smaller reductions in their employment, notably Attica, Crete, the Ionian Islands, North Aegean and South Aegean, had a larger share of GVA in tourism-related activities, including distribution, trade, accommodation and food service activities. They also had the highest number of nights spent at a tourist accommodation per inhabitant (59.6 nights per inhabitant in South Aegean, 53.4 in the Ionian Islands, 38 in Crete, 8 in North Aegean and 7.4 Western Macedonia) (Chapter 2). The regions with dominant tourism also experienced a smaller fall in income and had higher employment rates in 2015. South Aegean is the only region where disposable household income grew between 2007 and 2015 by 7%. The remaining regions had seen a drop in disposable income varying from 10% in the Ionian Islands to 43% in Attica. Unlike the mining region of Western Macedonia, the relatively lower fall in incomes in 2007-15 in the Ionian Islands and South Aegean translated into higher employment rates in 2015 (Chapter 2).

During the 10 years of economic crisis in Greece (2009-18), incoming tourism contributed in excess of EUR 125 billion to the Greek economy. In addition, incoming tourism revenues increased from EUR 10.5 billion in 2012 to EUR 16.1 billion in 2018. This performance significantly contained the crisis and its effects. Over the same time and at a period when Greece's image in the international media was often very negative, approximately 230 million people visited Greece and the majority by far left with a very positive opinion.[68]

Box 3.20. The impact of COVID-19 on the tourism economy

The COVID-19 pandemic is an unprecedented crisis for the tourism economy. In April 2020, preliminary OECD estimates on the COVID-19 impact point to a 45% decline in international tourism in 2020. This could rise to 70% if recovery is delayed until September. Domestic tourism is also heavily affected by containment measures; however, a quicker recovery is expected with an important role to play during the recovery phase.

Tourism is a significant part of many national economies – directly contributing, on average, 4.4% of GDP and 6.9% of employment in OECD countries. The immediate and immense shock to the tourism sector resulting from the coronavirus pandemic is affecting the wider economy. This will translate into significant macroeconomic effects, particularly in countries, cities and regions where the sector supports many jobs and businesses. Tourism businesses in all branches of the sector are at the forefront of the crisis and governments are introducing policy measures to mitigate the economic impact and support recovery of the tourism economy. In particular, governments are taking action to ensure that tourism businesses and workers can benefit from economy-wide stimulus packages (e.g. liquidity injections and fiscal relief). Many governments are also introducing tourism specific measures to address the immediate impacts on the sector and facilitate recovery, but more needs to be done at the sectoral level, and in a more co-ordinated way, to support tourism businesses and workers, restore traveller confidence and be ready to restart business operations and stimulate demand once containment measures are lifted.

In April 2020, a preliminary overview of country policy responses to the COVID-19 pandemic highlights three major response categories and types of responses:

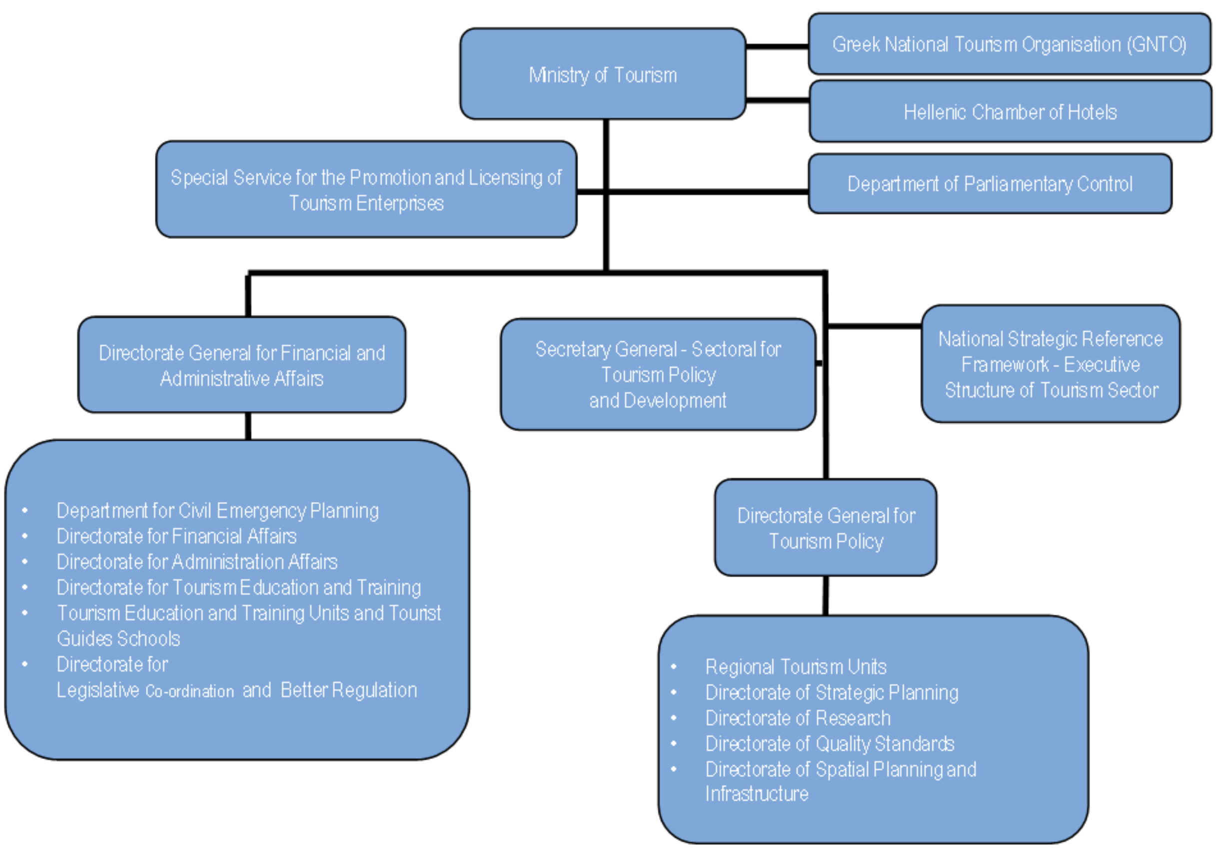
- *People: Protecting visitors and tourism workers.*
    - Tourists outside their normal environment often suffer from an information deficit and countries are taking steps to provide assistance and information in multiple languages and formats.
    - The tourism sector benefits also from cross-sectoral measures introduced by governments to provide flexibility and relief for companies and workers in the reduction of working hours, temporary lay-offs and sick leave. Some countries have introduced measures specifically aimed at the self-employed.
- *Firms: Ensuring travel and tourism business survival*.
    - Countries for which the impact of the pandemic on tourism is most drastically felt have focused on providing financial relief to tourism SMEs, such as postponed VAT payment. Liquidity injections have been introduced to ensure business survival in the immediate term. Other assistance efforts include information on helping to prevent the spread of the virus, support to provide flexibility and relief for companies and workers in the reduction of working hours, temporary lay-offs and sick leave, financial instruments to reduce the impact (e.g. tax relief, guarantees, grants), measures regarding procurement and late payments, and actions to help SMEs adopt new work processes and find new markets.
- *Sectoral Policy: Fostering co-ordination for targeted responses*.
    - Some countries have put in place co-ordination mechanisms, such as taskforces, to monitor the impact of the pandemic on tourism and respond to a fast-evolving situation. Dialogue with the industry has been made a priority to ensure targeted and efficient responses measures.
    - Some countries are also looking at marketing efforts to encourage demand from alternative markets and change the country image. The crisis is also highlighting shortcomings in the availability of timely and comparable data to support policymaking in quickly evolving situations. Some countries have established tools for sharing updated data with businesses.

Note: The OECD has created a Digital Hub on Tackling the Coronavirus (COVID-19), which includes policy briefs and country-by-country COVID-19 economic measures and it is intended to grow and be continuously updated. Consult www.oecd.org/coronavirus/en.
Source: OECD (2020[89]), *Tourism Policy Responses to the Coronavirus (COVID-19)*, https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronavirus-covid-19-6466aa20/.

Tourism policy, implementation and financing

Acknowledging the importance of tourism as a crucial factor in the Greek economy, a separate Ministry of Tourism was established in November 2016. The ministry formulates the country's tourism policy, introduces legislative reforms, undertakes tourism planning and co-ordinates activities with other ministries in order to boost investment and improve the quality and competitiveness of Greek tourism. The Greek National Tourism Organisation (GNTO) is a public entity under the supervision of the ministry. Its mission is to organise, develop and promote Greek tourism, within the country and worldwide, utilising its 16 overseas offices. The Hellenic Chamber of Hotels is the state's institutional consultant and the competent authority responsible for the official classification of hotels, rooms and apartments for rent. The Ministry of Tourism has 14 Regional Tourism Offices, located in each region, which are responsible for licensing and inspecting tourism businesses, conducting quality control, monitoring official classification and imposing administrative sanctions on tourism businesses. At the local level, regions and municipalities design and implement programmes and activities for tourism development and promotion. Regarding tourism promotion activities, in particular, it is mandatory for all public (national or local) authorities to obtain prior approval from the GNTO, with a view to harmonising tourism promotion campaigns with the overall tourism promotion strategy of the country (OECD, 2019[87]).

Figure 3.6. Organisational chart for tourism bodies



Source: OECD, adapted from the Ministry of Tourism, 2020.

The total budget for the Ministry of Tourism rose by 6.7% from EUR 59.9 million in 2017 to EUR 63.7 million in 2018. From this budget, the GNTO received EUR 20.6 million, with investment in tourism projects and related infrastructure totalling EUR 23.9 million (OECD, 2019[87]).

The Partnership Agreement for the Development Framework 2014-2020[69] (ESPA 2014-2020), guides the development of the tourism industry, providing support to innovation, infrastructure, projects, skills and SMEs for the period. The overall objective of the Partnership Agreement (ESPA 2014-2020) is to turn Greece into a sustainable, innovation-driven and outward-looking economy with sustainable growth and jobs. To this end, five key strategic priorities have been identified: i) strengthening the competitiveness and extroversion of enterprises; ii) capacity building and development of human resources; iii) environmental protection – transition to a climate-friendly economy; iv) modernisation – completing infrastructures for economic and social development; and v) enhancing institutional capacity and the efficiency of public administration and local governance. The different actions and investment priorities proposed focus mainly on dynamic productive sectors of the Greek economy which are the main pillars of the country's development: tourism, the agro-food system, energy, the environment, blue growth and logistics. Greece's National/Regional Research and Innovation Strategies for Smart Specialisation (RIS3), which plays a key role in the 2014-20 programming period, also identify "tourism, culture and creative industries" has a priority area of intervention (together with agro-food; health; information, communications and technologies; energy; the environment and sustainable development; transport; materials and construction). The EC initiative LEADER, within the current RDP 2014-2020, constitutes an additional significant financial tool for Greece in creating infrastructures for the development of tourism in the countryside.

Since 2015, the Ministry of Tourism has been implementing a new tourism policy to promote Greece as a globally attractive destination offering unique and authentic travel experiences, 365 days a year. All initiatives are geared towards increasing international travel share, further enriching the tourism offer and enhancing competitiveness. In response to this strategy, a number of specific actions have been implemented to increase tourism flows and lengthen the season, including in the field of tourism education and training and tourism product innovation (OECD, 2019[87]).[70]

A key challenge for the tourism sector in certain regions is congestion caused by excessive volumes of tourists, especially during the peak summer season. In this respect, the ministry has developed a future-oriented policy of dispersal across time and place. New legislation relating to the development of thematic product creates the legal framework for product differentiation, with the ultimate strategic goal to reduce acute seasonality. Along with major tour operators, the plan aims to highlight emerging destinations and attract potential visitors to experience lesser-known hidden assets during the shoulder months. Embracing digital transformation is a key priority as well and important development will concern the creation of a digital ecosystem for Greek tourism in four strategic pillars: i) digital transformation of services to citizens and enterprises; ii) digital upgrading of tourism education; iii) integrated system of online data collection and processing; and iv) utilisation of new technologies in tourism promotion.

Policy challenges

Main issues for tourism in Greece

Tourism in recent years has served to shore up the Greek economy against the recession and the tourism sector is one of the few areas to draw the interest of investors. As a result of its significance, tourism is a key driver of growth in Greece. To ensure continued and sustainable growth, a number of issues need to be addressed. They include:

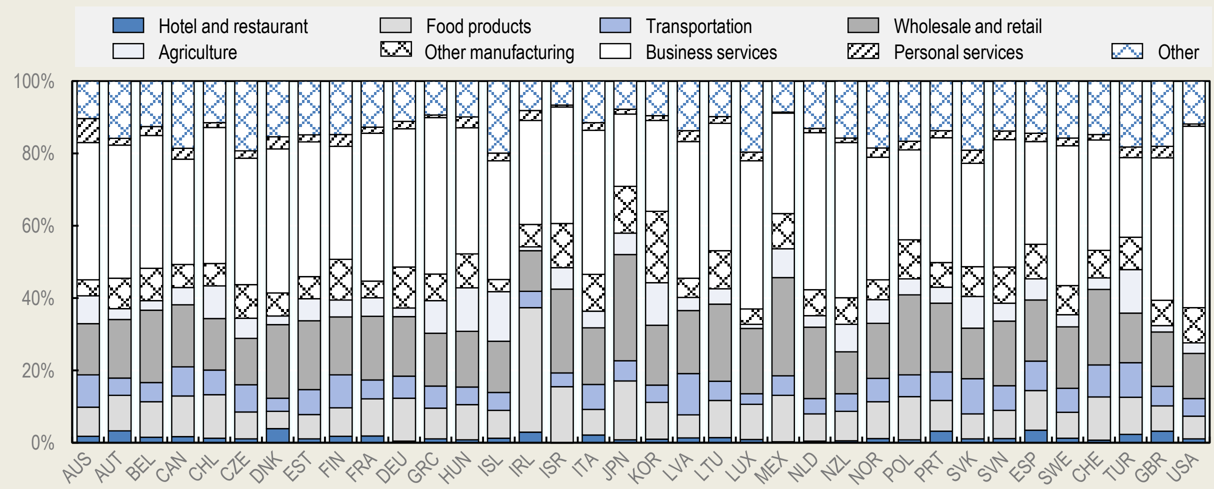
- *Horizontality*. Tourism is an activity determined by the demand it generates for products and services, whereas in manufacturing or the primary sector, activities are associated with production and supply (Box 3.21). Tourism affects many sectors of the economy, such as transport (e.g. travel by airplane and transfer by bus), accommodation (in a hotel or elsewhere), dining (in restaurants or bars inside or outside the accommodation establishment), entertainment (including visits to sites) and consumption in stores (INSETE, 2019[88]). Since tourism affects many and different parts of the social and productive fabric of a country (or a region), an overall tourism-focused cross-sectoral strategy is difficult to design and implement. This is the case also of Greece, where there is no comprehensive tourism national strategy or plan and the sector is sustained through measures and actions within non-tourism-specific national or regional Operational Programmes.

- *Value*. Between 2008 and 2017, Greece saw an increase in the share of tourism employment from 7.5% to 10.0% of total employment. Despite international arrivals nearly doubling over the same time frame, income from tourism remained stagnant as the value of the international receipts rose only by 8%. Although tourism contributed by 6.8% to the GDP in 2017 – an increase from its 5.5% share in 2008 – tourism in Greece still plays a less important role than it does in other OECD or EU countries such as Mexico, Portugal and Spain, even if above the average of 4.5% for OECD countries (in 2017) (Chapter 2).
- *Seasonality.* While tourism has been important in terms of income and employment generation for regions in the post-crisis period, territories relying mostly on the tourism industry in Greece have higher levels of vulnerability because of the combined effect of seasonality and intensity of tourism (Batista e Silva et al., 2018[90]) (Chapter 2), as tourism in Greece remains highly focused on "sea and sun" without taking advantage of the possibilities offered by Greece's natural and cultural attractions. As a result of this, the tourism product is very unidimensional and visitors tend to concentrate in a small time period over summer, in relatively few places and revisit Greece less than other competing destinations.
- *Competition*. Three recent studies of INSETE[71] have shown that, in tourism, Greece is competing mostly against well-developed European destinations in the Mediterranean and not against Turkey or other North African destinations. This implies that, to remain competitive, infrastructure and service have to be at par with those of developed European destinations.
- *Environment*. Integrating environmental concerns within tourism policy remains a challenge, both in terms of conserving nature, water and energy resources, and of more effectively minimising the generation of solid waste, wastewater, congestion and noise. These issues affect almost all the regions in Greece, with island regions being more exposed.
- *Local communities.* For an increasing number of Greek destinations, continued tourism growth is causing pressure on infrastructure, the environment and local communities (including housing). Thus, the need to work more closely with industry and local communities to better manage tourism flows at destinations, encouraging tourism development in alternative areas to spread the benefits and minimise any potential negative impacts are key challenges for Greece (OECD, 2019[91]).

Box 3.21. Upstream effects of tourism expenditure in national economies

The OECD produced Tourism Trade in Value Added (TiVA) estimates that uses "non-resident expenditures by households" as a proxy for tourism. The study shows that in terms of upstream effects of non-resident expenditure, on average, across all countries, 1 euro of non-resident expenditure results in 89 cents in domestic value-added and 11 cents in foreign value-added. For each euro of direct domestic value-added generated by non-resident tourism expenditure, an additional 61 cents of indirect value-added is generated in upstream industries. Figure 3.7 illustrates how this upstream contribution is distributed, pointing to the important role of services as upstream providers to those industries that produce the products purchased by tourists. Looking at the origin of the indirect domestic value-added content of tourism expenditures, these new results highlight the predominant role of services industries, with major contributions especially from the distribution, transport and business sectors.

Figure 3.7. Upstream effects of tourism expenditure in national economies



Source: OECD (2019[92]), "Providing new OECD evidence on tourism trade in value added", https://doi.org/10.1787/d6072d28-en.

Strengthening attractiveness and sustainable tourism in Greece

Sustained development of the tourism sector will depend upon its ability to adapt to emerging economic, social, political, environmental and technological trends. Fulfilling tourism's potential as an engine for sustainable and inclusive growth requires the development of sound policies, integrated strategies, inter-ministerial structures and mechanisms that involve the private sector and other stakeholders in tourism governance. A large majority of countries have developed dedicated tourism policies, strategies and plans for the medium to long term. There is much similarity between countries in their tourism policy priorities, which a focus on improving competitiveness, sustainability and inclusiveness, addressing seasonality of demand and enhancing the quality and appeal of the tourism offer.

The last two years have seen a growing recognition of the importance of the development, management and promotion of local destinations, supported by regional or local structures and funding, and the preparation and execution of destination management plans (OECD, 2019[87]). Many government and institutional actors and stakeholders interviewed during the project expressed the position that tourism should feature as a distinct activity in both sectoral and regional OPs with the aim to expand its activity both in terms of new destinations and reduce seasonality. Measures should support destination management as an overall objective.[72]

There is an enduring policy commitment by many OECD governments to use tourism as a catalyst for regional development. Tourism can be a powerful agent for positive change in communities which may have few other economic options. Such a policy can help spread the benefits of tourism away from capitals, historic destinations and coastal areas to lesser-developed, often rural communities where the opportunities for the development of other industries may be limited. Regional development policy is also being used to create new tourism clusters that can help diversify a tourism industry that may be over-reliant on seasonal demand and/or based on coastal assets (OECD, forthcoming[93]).

A significant dimension of many national tourism policies is the increasing emphasis on regional and local destinations as the location for planned and integrated action. A number of EU and OECD countries (e.g. Iceland, New Zealand, Portugal and the United Kingdom) have been implementing programmes based on selected local destinations, identified on account of their tourism potential or economic need.

This is seen as an effective way of focusing resources and harnessing stakeholder engagement. Destinations, in turn, require their own policies and plans in order to achieve successful, well-supported and integrated tourism development. Frameworks and guidelines for this can be provided by the central government (OECD, 2019[87]). Developing regional development initiatives is a key priority for Greece for tourism to spread its economic benefits further afield and potentially reduce the load on existing high-volume destinations. To address this challenge, Spain, for example, via the Smart Tourist Destination Programme, aims to improve destination planning, development and governance.

Targeted policy intervention should support actions for:

- *Implementing selective infrastructure investments in islands and regions with major touristic potential*, related to: i) transportation – e.g. port facilities/marinas in most places, improvement of safety and signage on island roads, motorways in Crete etc.; ii) energy – e.g. to avoid power shortages, particularly taking into account anticipated trends; iii) water – e.g. to ensure adequate water supplies, particularly taking into account anticipated trends; iv) solid waste and wastewater recycling and treatment facilities. For instance, in Norway, as part of the new Action Plan for Green Shipping, ports are investing in new infrastructure to be able to offer on-shore power supply to visiting cruise vessels, enabling them to turn off their diesel engines and so reduce emissions.
- *Implementing selective investments in key cultural sites* (archaeological sites and museums) to encourage access and facilitate visitation so that they are incorporated in the tourism product, rather than just being precious cultural resources. In Portugal, as a joint initiative between the Ministries of Economy, Culture and Finance, the government is opening up state heritage properties to investment from the private sector on the basis of allowing concessions for developing tourism businesses. This aims to streamline the redevelopment of vacant public property for tourism-oriented uses to support regional development and lengthen the season.
- *Fostering integrated approaches to tourism thematic product development and marketing by all stakeholders*. Product development should take into account the close linkages of tourism with gastronomy and culture, particularly as those two aspects are of high importance to older travellers, a demographic segment whose importance is growing both in terms of market size as well as spending power. In Croatia, for example, the Istria County Tourism Board (ICTB), developed Gourmet Tourism Product since 1995 with the establishment of the first Wine Road of Istria, which today has an estimated 150 000 visitors a year. Following the example of wine roads, Olive Oil Roads were created in 2002. Today, Istria has a total of 8 roads, 137 listed olive growers and about 60 000 visitors a year. Within this product, ICTB successfully organises the Istria Gourmet Festival with the aim of educating main stakeholders on the development of Istrian gastronomy (restaurants, taverns, producers of local products, etc.).
- *Better connecting tourism to local value chains*, promoting vertical production processes to enhance the delivery of high added-value certified food products, and strengthening the agricultural production base of tourist areas in order to address the shortage (e.g. in islands and certain territories) of resources required by tourist and residents. In Peru, for example, the programme *Al Turista, Lo Nuestro* promotes the direct incorporation of local products (agricultural, livestock, fishery, handicrafts, etc.) in the provision of tourism services.
- *Developing all-year-round supply chain networks*, in co-operation with local suppliers and regional logistics centres. Supply-side policies to improve competitiveness may also include investment promotion and the simplification of business regulations. Canada, to address challenges associated with seasonal tourism, developed the Canadian Experiences Fund, which commits CAD 58.5 million toward developing quality and unique products and experiences. The fund will invest in winter and shoulder-season tourism by funding projects such as onsite experience development, tours, excursions, special events and tourism facilities.

- *Developing a comprehensive agro-tourism policy*. Agro-tourism in Greece was initiated in the 1980s supported by the EU agricultural policy. However, technical and functional specifications for agro-tourism activities were set only in 2014 (Law 4276/2014), while operating standards for agro-tourism enterprises were defined in 2018 (Greek Government Gazette 3089/30.7.2018). A structured agro-tourism policy is still missing in Greece. This type of tourism has been based heavily on private initiatives and has been facing several difficulties due to the lack of experience and entrepreneurial skills, as well as correct infrastructure. Greece is starting to use quality labels to create synergies with the local agro-food sector and encourage tourists to visit rural areas, including The Greek Breakfast initiative, which was launched by the Hellenic Chamber of Hotels in 2010, to enrich breakfasts offered by Greek hotels with local products and dishes from all Greek regions. Another example of a co-ordinated approach to agro-tourism is in Austria, where the Culinary Network was established as an initiative by the Federal Ministry for Sustainability and Tourism and the Austrian Market Organisation for Agriculture (AMA) with the aim of bundling all culinary and regional initiatives in Austria and developing them in a common direction.
- *Addressing labour and skills shortages in the tourism sector*. This may require action to improve the awareness and attractiveness of careers in tourism and the availability of relevant training programmes leading to certification and closely linked to the needs of the sector. Keystones of such programmes, for example, may be improved quality and integration of tourism activities other than the sun and beach – particularly related to culture and gastronomy – into Greece's tourism offer. The need for enhancing digital skills is also a key priority. To respond to the challenge of skills shortages in the sector, Finland launched the Matkailudiili programme to improve the workforce's employment and recruitment prospects. The projects included training programmes for job seekers, marketing campaigns aimed at those aged 16-26, initiatives to employ workers from other sectors (e.g. forestry) in tourism businesses during winter season lay-offs, and digital platforms and training to alert people to tourism industry vacancies.
- *Clarifying and simplifying spatial planning processes* and facilitating the alignment of spatial planning with national and regional tourism development policies. As an example of initiatives to clarify processes for land use, Switzerland conducted a study to identify challenges in tourism projects resulting from spatial planning regulations and which create an important barrier for tourism businesses. The work should help to reduce regulation costs and therefore reduce the administrative strain on companies within the tourism industry.
- *Incorporating environmental and sustainability criteria into tourism public financing and investment supports* and encouraging the uptake of green financing instruments for tourism projects, notably by leveraging private investment. This will call for improved co-ordination across different levels of government and policy areas, including tourism, the environment and innovation (OECD, 2019[87]). In France, for example, the national railway company SNCF issued green bonds in 2017 to finance rail investment. An annual audited report will enable green investors to monitor the use of funds and their environmental impact, including the reduction of CO_2 emissions.
- *Implementing a tax reform* in relation to the tourism sector to foster its competitiveness. According to the WEF Travel and Tourism Competitiveness Index, Greece ranks 133rd out of 136 countries regarding the "effect of taxation on incentives to work" and 134th out of 136 countries regarding the "effect of taxation on incentives to invest". Among the taxes most damaging for the competitiveness of the Greek tourism product are the high rate of VAT (13% vs. 10% or less in competitor countries) and the tax levied on occupied rooms. Some countries have recently implemented tax reliefs to stimulate growth – for example, in 2018, Austria and the Slovak Republic reduced VAT on tourism to 10% while Norway prioritised tax reliefs and simplified reporting to aid business competitiveness.

Fostering digitalisation

Particular attention should be paid to digitalisation since the digital revolution has had a profound and ongoing impact on tourism. It presents both opportunities and challenges for destinations and individual tourism businesses, which need to fully embrace new technology to remain competitive.

There are three main areas in which digitalisation is having a profound impact on actions to develop, manage and market tourism (OECD, 2019[87]):

- The first is in the process of communicating with tourists: e.g. web-based marketing messages and information; use of social media and commercial channels to influence choice and share experiences; customer rating of tourist facilities; online travel agents; mobile technology in delivering instant information to visitors during their stay. A further aspect of digitalisation is the opportunity it presents for new and creative ways of enhancing the visitor experience (e.g. virtual reality), not only for attractions but also for branding and marketing.
- The second major impact of digitalisation is in the opportunities it presents for handling transactions and in the capturing and processing of information and data on tourism supply and demand. Work in this area in the tourism sector is still in its infancy. A number of countries are embarking on new projects for the systematic handling of digital information, such as the Data Tourism project in France.
- The third major impact is on the future of work in the tourism sector. The sector is highly dependent on quality human resources to develop and deliver a competitive tourism offer. Technology is reshaping the content and tasks of many occupations, changing the nature of many tourism jobs and generating new business models, opening up new opportunities for entrepreneurship and employment, and transforming the skills needed in tourism-related sectors.

While all countries are taking action, a number of countries have prepared specific strategies on digitalisation in the tourism sector. This is the case, for example, of Austria (Box 3.22).

Box 3.22. A digitalisation strategy for Austrian tourism

Digitalisation is transforming the tourism sector at a rapid pace, with strong implications on both demand and supply. In view of an active role in this process, the Ministry of Science, Research and Economy together with the Austrian National Tourist Office (ANTO) and the Federal Economic Chamber launched a digitalisation strategy for Austrian tourism in September 2017. The strategy has been developed in an open innovation process with the involvement of many stakeholders (national and regional, industry experts from tourism, technology and the creative economy, universities and research, etc.) and pursues three strategic objectives: i) to shape digital change; ii) to strengthen the innovation capacity of enterprises; and iii) to create skills and processes for digital transformation. The strategy defined 22 measures to meet these objectives including nationwide coverage of broadband technology, good information and co-operation structures for data management, support for digital innovation in SMEs, as well as for the development of digital skills for the sector.

Source: Ministry of Science, Research and Economy; OECD (2018[59]), "Greece", https://doi.org/10.1787/tour-2018-19-en.

Fostering quality employment and social inclusion

The labour market, education and skills development

Expanding employment is among the top priorities in Greece and is cardinal for fostering inclusive growth and redressing poverty

After the deep losses over the crisis, employment is now recovering. The unemployment rate increased to 27.5% at its peak in 2013 and subsequently fell to 23.9% in 2016 and further to 19.3% in 2018. Participation in the labour force has continued to expand, particularly among women. More workers are obtaining employee positions, rather than being self-employed. Wages have stabilised. However, full recovery remains distant. Employment at the end of 2017 was still 14% below its 2008 peak. Many of the new jobs are part-time or temporary and pay the minimum wage; the share of the working poor is rising. While unemployment is decreasing, the share of the long-term unemployed has increased, especially among those with less education and skills (Chapter 2) (OECD, 2018[8]).

At the territorial level, the economic crisis and long recovery impacted negatively the labour market of all Greece's regions and worsened their position relative to other OECD regions. Because of widespread unemployment increases, by 2016, all Greek regions moved down to the bottom 20% OECD regions in terms of unemployment rates. Western Macedonia had the highest unemployed rates across OECD regions in 2016, at 31.3%. Continental Greece, Thessaly and Western Greece are in the top 10% regions with the highest unemployment rate in OECD countries in 2016, together with the Mayotte region in France, four Spanish regions and the Mardin region in Turkey (Chapter 2).

All regions in Greece except South Aegean employ fewer people today than before the crisis, however effects are uneven. All regions in Greece, except South Aegean, employ 10% to 20% fewer people than before the crisis. In absolute terms, the largest decreases in employment between 2007 and 2016 occurred in Attica (a loss of 270 000 jobs, mostly in Athens), followed by Central Macedonia (144 000 jobs, mostly in Thessaloniki) and Western Greece (54 000 jobs). The only region where employment increased during the period was South Aegean, albeit only by 1 400 jobs (Chapter 2).

Regional differences in employment are growing across the OECD and in Greece. Generally speaking, regional disparities are largest in Greece, Italy, Spain and Turkey, where unemployment rates between the best- and worst-performing regions vary by approximately 20% (OECD, 2018[94]). In fact, in OECD countries, jobs are increasingly concentrated in a smaller number of regions: over 2006-16, in 15 out of the 27 countries considered, more than 30% of net employment was generated in the capital region (for example, in Denmark, Finland, Ireland and Japan, more than 80% of job creation occurred in the capital region). In Greece, 43% of employment was created in Attica (the capital region), 16% in Central Macedonia, and from 2 to 6% in all the other 11 regions.

Table 3.10. Employment outcomes in Greek regions, 2006-16

	Employment rate (%)		Unemployment rate (%)		Long-term unemployment share (%)	
	2006	2016	2006	2016	2006	2016
Attica	61.7	54.1	8.6	23.2	54.3	72.6
North Aegean	56.4	52.5	9.7	18.7	55.3	66.8
South Aegean	56.7	57.2	9.1	17.8	29.4	43.6
Crete	65	52.7	7.5	23	36.4	55.7
Eastern Macedonia	59.9	51.4	11.3	23.2	60.5	68.7
Central Macedonia	59.6	50.8	9.6	24.8	55	75.3
Western Macedonia	55.2	46.6	14.4	31.6	68.6	65.8

	Employment rate (%)		Unemployment rate (%)		Long-term unemployment share (%)	
	2006	2016	2006	2016	2006	2016
Epirus	59.6	50.7	10	24.9	66.2	76.7
Thessaly	60.9	50.2	8.5	26.1	49.6	72.2
Ionian	59.6	56.7	11.5	16.4	24.3	50.5
Western Greece	56.6	47.4	9.9	30.3	55.6	75.3
Continental Greece	60.7	50.3	9.4	25.4	58.7	77.2
Peloponnese	60.6	52.7	7.8	19.8	63.9	73.8
Greece	**60.4**	**52.2**	**9.2**	**23.9**	**54.1**	**73.1***

Note: (*) Data from 2015. The rates are for the working-age population 15 to 64 years old. The long-term unemployment share is the ratio of the long-term unemployed to all unemployed.
Source: OECD (2019[95]), *OECD.Stat, (database)*, (accessed on 14 February 2019); (Chapter 2).

Box 3.23. The impact of COVID-19 on local employment and economic development

In less than three months as of the first quarter of 2020, the COVID-19 crisis developed into a global pandemic. Half of the world's population is experiencing a lockdown with strong containment measures. Estimates undertaken in April 2020 predict that the share of jobs potentially at risk in the short term as a result of confinement measures ranges from less than 15% to more than 35% across 314 regions in 30 OECD and 4 non-OECD European countries. Within a country, differences in the share of regional employment potentially at risk vary by more than 20 percentage points. The economic consequences of COVID-19 are likely to affect regions very differently, with tourist destinations and large cities suffering the most in the short term. Regions have different sectoral specialisations, exposure to global value chains, focus on tradeable vs. non-tradeable sectors, and shares of non-standard employment. Sectors most at risk include: manufacturing; construction; wholesale and retail trade; air transport, accommodation and food services; real estate services; professional service activities; and arts, entertainment and recreation.

Regional and local governments are an essential part of tackling the emergency and recovery, implementing national schemes and complementing them with locally tailored responses. Local action is particularly important for helping disadvantaged groups who will bear the brunt of the crisis. Some populations will be more vulnerable to short-term job losses and long-term re-integration challenges. Local employment services will be called upon to help these groups, and to connect with other local social services that address multiple disadvantages.

The COVID-19 crisis may accelerate change for job creation, location and access to services. Relevant identified factors include:

The rise in teleworking. The short-term rise in teleworking could spark broader acceptance of this form of work over the long term. This could contribute to some decentralisation of jobs away from major metropolitan areas, as workers are freer to locate where the cost of living is lower or quality of life is higher. It therefore opens up opportunities for more rural communities or smaller metropolitan areas.

Online delivery of local education and training, and other public services. Likewise, as education and training providers have had to adapt rapidly to online delivery, such methods may become more common over the long term. This could help overcome challenges related to economies of scale in delivering services (including public employment services) to a greater number of people and less dense places.

The shift from bricks-and-mortar to online commerce. It could accelerate purchasing from online commerce, given that containment measures are hitting small stores but less so online sales. Local development actors will likely face renewed challenges to maintain a vibrant local SME fabric and prevent the hollowing out of downtowns and other community centres, with implications for the quantity and quality of local jobs and their location.

Increased pressure on digital infrastructure. This increased reliance on digital tools has put additional pressure on digital infrastructure and makes public investment and regulatory barriers even more salient to addresses the upgrade of infrastructure in rural and other places with insufficient access.

Note: The OECD has created a Digital Hub on Tackling the Coronavirus (COVID-19), which includes policy briefs and country-by-country COVID-19 economic measures and it is intended to grow and be continuously updated. Consult www.oecd.org/coronavirus/en.
Source: OECD (2020[96]), *From Pandemic to Recovery: Local Employment and Economic Development*, http://www.oecd.org/coronavirus/policy-responses/from-pandemic-to-recovery-local-employment-and-economic-development-879d2913/.

Policy implementation and financing

The Ministry of Labour and Social Affairs is the responsible and principal actor for employment and labour policies (at the national, regional and local levels) in Greece. It determines objectives and strategies, guides the decision-making process and governs policy implementation. The Ministry of Education and Religious Affairs and the Ministry of Development and Investments, which manage the NSRF-ESIF system, have also significant competencies in a number of fields related to job creation and inclusion (e.g. in relation to education, skills, etc.).

Crucial is the role of Manpower Employment Organisation (OAED), a legal entity of public law supervised by the Ministry of Labour, which supports the implementation of the government's active and passive labour market policies and vocational education and training (VET) in Greece. The OAED's structure includes a Central Administration, 7 Regional Directorates,[73] a network of 121 local public employment services (PES) – called Employment Promotion Centres (KPA2) –, and its educational units (namely 51 vocational schools [EPAS], 31 institutes of vocational training [IEK], and vocational training centres [KEK]). The OAED's IEKs are supervised by the Institute of Adult Continuing Education (IDEKE). Finally, there are also six Employment Offices for Special Social Groups (in Athens, Heraklion-Crete, Larissa, Patras, Thessalonica and Volos) whose aim is to integrate into the labour market the population groups that are faced with the risk of social exclusion. KPA2 (local PES) are operating as one-stop-shops and were formed by a merging of employment services and social insurance services formerly operated by the OAED at the local level. Services provided by KPA2 include: i) personalised counselling and job placement (matching of employment supply and demand); and ii) the payment of benefits and other social security allowances. Education provided by the vocational schools (EPAS) around the country is based on the apprenticeship system, which combines in-class activities with remunerated on-the-job training (traineeship) in businesses.

Other important actors include workers' unions, which co-operate with the Ministry of Employment (e.g. for the formulation of policies) and a number of local actors and institutions which participate directly or indirectly in the implementation of policies.

Employment policies in Greece are designed at the national level taking into account the guidelines of the European Employment Strategy and are mainly (but not solely) developed within the partnership agreement (ESPA) 2014-2020, which defines funds and objectives (notably i) to promote sustainable and quality employment, social inclusion and the fight against poverty; and ii) to address structural problems in the labour market by improving the education and training system and the transition to the labour market and active inclusion).

Funding comes from national financing and mostly from the European Social Fund (ESF) and the Youth Employment Initiative (YEI),[74] mainly deployed within the context of the national OP for Human Resources Development, Education and Lifelong Learning and, to some extent, within the national OP for Competitiveness, Entrepreneurship and Innovation and the 13 ROPs.

In more detail, the OP for Human Resources Development, Education and Lifelong Learning targets: 53% of its total funding to promote employment and support labour mobility; 43% of funds to invest in education, skills and lifelong learning; and a marginal 3% to promote social inclusion and combatting poverty since such actions are covered by the 13 ROPs; while technical assistance counts for 1.7% of the OP budget. Beneficiaries of OP actions include youth not in education, employment and training (NEETs), the long-term unemployed, the unemployed with low qualifications, the unemployed 30-44 years of age, women, students, teachers and researchers. The OP for Human Resources Development, Education and Lifelong Learning also finances (through ESF) the KPA2/PES whose creation as one-stop-shops was promoted by the EC in ESPA 2014-2020. The OP for Competitiveness, Entrepreneurship and Innovation[75] uses ESF funding for action targeted at the "adaptability of employees, enterprises and entrepreneurial environment to the new development requirements".

Policy challenges

Unemployment is declining from very high levels but is becoming increasingly long-term, while a large share of youth inactive. Job-skill mismatch is high. Greece has undertaken a number of reforms to strengthen education, skills and training and to try to better connect them to labour market needs. For example, Greece has undertaken decisive steps towards the development of an efficient system that will design, implement and evaluate active labour market policies (ALMPs). It is important to continue expanding successful and cost-effective active labour market programmes, as part of the new ALMP framework, reallocating resources from programmes that are less effective.

Tackling youth unemployment and underemployment is an important aspect for economic growth, social cohesion and well-being

Regional youth unemployment rates in Greece are among the highest in Europe and can be twice as high as the general unemployment rate. The youth unemployment rate across regions in Greece ranges from 29% to 58% in 2017. Regions in Greece, together with regions in French overseas territories, the south of Italy and Spain, have the highest levels of youth unemployment in Europe. Eastern Macedonia, Epirus and North Aegean had 55% to 58% of youth unemployed. On the other side of the spectrum, Crete and South Aegean had around one-third of youth unemployed. Increasing youth unemployment is consistent with increasing inactivity rates of young people. Average regional inactivity rates of young people increased from 19% in 2007 to 29% in 2014. Attica and Central Macedonia have the most active youth, yet almost 25% of them are not employed nor follow any training or education; Continental Greece and Peloponnese have 43% and 40% of their youth inactive (Chapter 2).

Policy intervention should support actions for:

- *Developing a comprehensive strategy targeting youth*. The OECD has developed an Action Plan for Youth. To achieve the desired effects, a mix of instruments should be utilised. Fostering youth employability requires a comprehensive and forward-looking skill strategy to achieve a better match between the skills youth acquire at school and those needed in the labour market. This is not sufficient alone. Specific programmes should be put in place to help youth start businesses (e.g. policy should target resources at young people with the best chance of success, providing integrated packages of complementary support rather than one-shot instruments). Further, financial literacy is a core life skill for participating in modern society. OECD national surveys show that young adults have amongst the lowest levels of financial literacy. Even from an early age, children need to develop the skills to help choose between different career and education options and manage any discretionary funds they may have. Other measures may be directed at: i) providing adequate income support to unemployed youth but subject to strict mutual obligations; ii) tackling demand-side barriers to the employment of low-skilled youth; and iii) strengthening VET and encouraging employers to expand quality apprenticeship and internship programmes.[76]

Tackling education and skills mismatch with the labour market

Although Greek society places a strong value on education, the country ranks in the bottom 20% of countries in regards to the alignment of skills with the labour market, which is reflective of a complex skills environment (OECD, 2019[9]).

On the one hand, Greece lags behind in terms of skill levels by international comparison and one-fifth of positions are filled with underqualified employees (OECD, 2018[8]). Although rates of early school leaving in Greece are under the EU average, rates are higher in rural than in urban areas (OECD, 2018[97]). Students in isolated areas or with an immigrant background are especially at risk of falling behind. In particular, integrating the high number of refugee students into the formal education system has been challenging, despite extended measures taken by the government and funding through EU grants. There are also indications that drop-out rates are higher in VET than in other types of secondary education. Those differences seem particularly relevant in view of concerns about the shortage of technical skills and the efficiency of the labour market outside of agglomerations. Fifteen-year-olds in Greece tested by the OECD Programme for International Student Assessment (PISA) scored lower than the OECD average in reading, mathematics and science in 2018 and every other year in which it participated (OECD, 2019[98]). The average science performance in Greece has declined steadily since 2006, while performance in mathematics and reading peaked in 2009 again with lower results in recent years. Results from the OECD Survey of Adult Skills suggest that Greece ranks in the bottom 20% with regard to the skills of tertiary-educated adults, adults' foundational skills and adults' possession of a broad set of skills (OECD, 2019[9]). Adults were found to lack opportunities to re-skill via on-the-job training or professional courses in Greece.

On the other hand, there is evidence that already now almost a quarter of employees are overqualified and the high prevalence of underuse of skills on the job is an important concern. Greece performs in the bottom 20% of countries on the intensity of skills use in workplaces and on the adoption of high-performance workplace practices, which are found to stimulate skills use in the workplace (OECD, 2019[9]). Employment outcomes for the high number of tertiary graduates in Greece are poor, especially for young people. The employment rate of tertiary-educated 25-34 year-olds is below the OECD average and the unemployment rate of tertiary-educated 25-34 year-olds is more than 4 times as high as the OECD average (OECD, 2019[9]). Returns to education (in terms of employment probabilities) are low, with the exception of Athens and Thessaloniki, suggesting labour market inefficiencies at least outside of those agglomerations (Monastiriotis and Martelli, 2013[99]). Greece's university graduation rate is above the OECD average among younger demographics and near average for the overall workforce. Tertiary education encompasses both universities and technical institutes (which were absorbed by universities in 2018 legislation). As in many countries, students' perception of technical institutes is poorer and enrolment rates are lower than for universities and fell during the crisis. Tertiary education has focused more on theoretical than professional skills, which is consistent with the prevalent skills mismatch in the labour market. Greece's top graduates are able to achieve international success; for example, Greece's diaspora ranked tenth globally for the number of patents registered relative to the population (Bulman and Pisu, 2018[100]). Back home, the mismatch seems to take at least two forms: i) highly educated candidates take up jobs that underutilise their skills to avoid unemployment; and ii) employers in industries with high skills requirements hire candidates under the desired level in absence of sufficient supply(OECD, 2018[97]).

Policy intervention should support actions for:

- *Further aligning education provision with local labour markets*. Greece has achieved high participation and attainment rates in education but the country needs to address the simultaneous issues of over- and underqualification.
  - Greece should continue its efforts to reduce early school leaving, especially in rural areas and in the area of VET (OECD, 2018[97]). This also involves exploring more targeted measures to help students at risk of falling behind ahead of time, for instance by fostering student engagement, reviewing the effectiveness of education priority zones and ensuring that at least the most disadvantaged students have access to all-day schools providing additional support.
  - For older students, strengthening skills and competencies through a better tuned and more competitive tertiary education is essential for improving employability, income and well-being in Greece. In view of the brain drain of top graduates and employers' challenges to find qualified candidates for high-skilled jobs, better co-ordination between business, academia and the large international community of Greeks could help guide efforts of stakeholders and the government. At the regional level, universities seek to offer training programmes that match the needs of regional employers for specialised skills.
  - The delivery of education in schools and universities needs to be improved so that students indeed acquire the knowledge and skills needed to fuel economic and social development (OECD, 2018[97]). Some actions for improvement have already been taken across the education system. All-day primary schools have been introduced and the school curriculum has been modernised (OECD, 2018[97]). Two laws, one to extend compulsory early childhood education and care to 4-year-olds and another to evaluate teacher and (self-evaluate) schools were approved in 2018. Other recent laws merge all technological institutes into existing universities (except in Attica and Crete, where a new university was established in the place of the former Technological Educational Institute of Athens), reducing drastically the number of academic institutions and also reducing to some lesser extent the number of academic departments. VET and apprenticeship programmes are also being upgraded (OECD, 2019[101]). One additional lever for improvement could be a review of the governance of the tertiary education system as a whole and its institutions to ensure greater alignment between funding and strategic goals for higher education set by the government, i.e. balancing greater autonomy with greater accountability for delivering the desired outcomes (OECD, 2018[97]).
  - Across the education system, it is fundamental to continue to introduce assessment frameworks and professional development schemes; develop regular and broad assessments of students' learning; better connect vocational education with local labour markets needs and certify the quality of courses (OECD, 2019[101]).
  - To succeed in achieving Greece's objectives in education policy, an overarching strategy incorporating the various existing initiatives and identifying long-term and medium-term priorities could help ensure the coherence of the government's efforts (OECD, 2018[97]).

Shortening unemployment duration

The crisis had a considerable and long-lasting effect on average unemployment duration across Greece's regions. Long-term unemployment is problematic as the integration of the unemployed persons into the labour market is harder after a longer unemployment spell. A large share of the workforce being long-term unemployed underlines the structural weakness of the economy as well as the mismatch of the supply and demand of skills on the labour market. Re-employment probabilities of the long-term unemployed require active labour market policies (ALMPs), retraining and skill improvement. Finally, the prevalence of informal hiring has increased, although it is difficult to measure precisely to what extent. In 2017, 73% of the unemployed in Greece had not had a job for at least 1 year, compared to 31% in OECD countries. Already prior to the crisis, Greece had a higher share, about one-half, of long-term unemployed workers than the OECD average but, clearly, the crisis exacerbated the problem. Across regions, long-term unemployment rates increased in all regions except for Western Macedonia between 2006 and 2016, and in 2016 were highest in Continental Greece (77.2%) and lowest in South Aegean (43.6%) (Chapter 2).

Policy intervention should support actions for:

- *Strengthening mechanisms and actions to better match job seekers and employers.* Better matching job seekers with employers can reduce unemployment and support labour productivity and firm growth. Improving vacancy registration and access via online databases and social media, coupled with better engaging with the unemployed through employment offices, were effective elements of Portugal's public employment service reforms (Bulman and Pisu, 2018[100]). The Greek public employment service (OAED) engaged with about one-quarter of unemployed and 4% of newly employed found a job via the employment service (Bulman and Pisu, 2018[100]). Greece's large number of SMEs would particularly benefit from greater recruitment support from the OAED, given that most lack internal human resource departments. Strengthening and supporting the role of the OAED and similar job matching agencies can enhance the capacity to match the skills with available vacancies (Chapter 2). It is important to continue recent strengthening in the capacity of the public employment service to match jobseekers with positions through enhanced profiling tools and well-trained counsellors (OECD, 2019[101]). The OAED is also expected to integrate into the new network of community service centres. These efforts are welcome and should be furthered and finalised (Bulman and Pisu, 2018[100]).

Anticipating local labour market dynamics and reducing the risk of job automation

The concentration of certain types of jobs at high or low risk of automation in different places can contribute to regional divides (Box 3.24). A higher risk of automation may be associated with several regional characteristics, such as lower education levels, a more rural economy and a larger tradeable sector. Further, places with a larger share of less-educated workers can be more affected by increasing automation. With some exceptions, the risk of automation decreases as the educational attainment required for the job increases (OECD, 2018[94]). Thus, a number of jobs are at risk of automation in Greece's economy. Over 2011-16, only the region of North Aegean (category A, see Box 3.24) created jobs in occupations at low risk of automation (e.g. health professionals and business and administration associate professionals), while the other 11 regions (category C, see Box 3.24) experienced a reduction of employment, even though mainly in occupations at high risk of automation (e.g. cleaners and helpers, building and related trades workers, and sales workers). The reduction of employment in the Ionian Islands was in occupations at low risk of automation (e.g. business and administration associate professional and teaching professionals) (OECD, 2018[94]). Besides the number of jobs created or lost, it is their "quality" that matters for development and inclusion.

Policy intervention should support actions for:

- Developing a deeper understanding of regional labour market dynamics, and generally more robust actions to gather regional data and information (e.g. for the identification of skills available and business's needs in a region or locality). This can be used to inform more targeted and effective policy. For example, the poor link between education and employment outcomes in regions such as Crete and the Peloponnese can "direct policy towards actions that selectively attempt to diversify the skills of the better-educated in those regions or to increase their mobility (while pursuing in the longer-run a strategy to increase the demand for skills in these labour markets)" (Monastiriotis and Martelli, 2013[99]). In contrast, in the regions of Thessaloniki and Western Macedonia, where education does lead to employment premiums, policies may focus on increasing the educational qualifications and labour market skills of the local workforce and/or attracting educated workers into these regions (Monastiriotis and Martelli, 2013[99]). Given the relatively centralised Greek employment policy design system, a larger use of Local Development Pacts[77] may help to address the dynamic sectors of the economy while conducting targeted spatial interventions in areas that exhibit high unemployment and low job creation.[78]

Box 3.24. Trends in jobs at risk of automation, Greece

According to a new OECD regional typology for employment creation in the face of technological disruption, regions can be classified into four categories depending on whether they gain or lose jobs and whether the gains or losses occur in sectors with high or low risk of automation. They are:

A. Creating jobs, predominantly in less risky occupations (e.g. North Aegean region).

B. Creating jobs, predominantly in riskier occupations (e.g. all the regions).

C. Losing jobs, predominantly in riskier occupations (e.g. Attica, Central Macedonia, Continental Greece, Crete, East Macedonia, Epirus, Peloponnese, South Aegean, Thessaly, Thrace, West Macedonia, Western Greece regions).

D. Losing jobs, predominantly in less risky occupations (e.g. Ionian Islands region)

Type A and Type C regions experienced an increase in the share of jobs at low risk of automation with respect to occupations at high risk of automation. Type B and Type D regions experienced an increase in the share of jobs at high risk of automation. In both Type A and B regions, aggregate employment grew, while in type C and D regions employment declined.

Regions that create jobs in occupations with a low risk of automation (Type A) improve their job situation in the short term and also reduce their long-term risk of unemployment from automation. In contrast, regions that create jobs in occupations at high risk of automation (Type B) improve their short-term job situation but do so at the expense of moving towards a riskier job profile in the future. Regions that are losing jobs primarily in areas that are at high risk of automation (Type C) have the typical profile of regions in the process of undergoing a structural change caused by automation. While jobs are being lost to automation today, the risk of further job losses due to automation decreases. Lastly, regions that are losing jobs predominantly in occupations that are at low risk of automation (Type D) face the greatest challenge. They suffer current job losses combined with an increasing risk of further job losses in the future due to automation.

Source: OECD (2018[94]), *Job Creation and Local Economic Development 2018: Preparing for the Future of Work*, https://doi.org/10.1787/9789264305342-en.

Preserving and fostering job quality

Data from the Greek Statistical Authority (ELSTAT) shows that 253 000 new jobs were created in the period 2013-17 but that the vast majority of these jobs were in seasonal, low-skilled and low-paid sectors (excluding Industry, 111 000 in hotels and catering, 45 000 in commerce, 44 000 in business activities and 33 000 in processing).[79] The growth of non-standard work (defined as temporary, part-time and self-employment) offers job opportunities for many individuals thanks to the greater flexibility. However, these forms of employment often come with reduced access to social protection and health benefits. They do not give an incentive to invest in skills upgrading in the same way as for a standard employee. Temporary and part-time work has expanded across OECD countries but with some differences. In Belgium, France, Greece, Hungary, Italy and Spain, the gap between the regions with the highest and lowest share of non-standard work exceeds 10%. By contrast, regions with a larger tradeable sector tend to employ fewer workers in temporary contracts. While the rise in temporary work pre-dates the crisis, since 2011, the share of temporary contracts is increasing in regions that are also underperforming in terms of labour productivity (OECD, 2018[94]).

Policy intervention should support actions for:

- *Developing dedicated regulatory frameworks for non-standard work and job quality.* The rise of non-standard contracts creates a trade-off between job creation and job quality. Countries can address this challenge by improving their regulatory framework in order to include these new forms of jobs (e.g. clarifying the working status of "false" self-employment). Yet, the presence of large regional differences in the share of non-standard work requires local approaches to complement national ones. For example, to improve the quality of temporary and part-time work, local policies should develop the skill set of workers in underperforming regions, where the high share of temporary work is more likely the result of workers' low bargaining power than a choice of the worker (OECD, 2018[94]).

Smoothening the effects of the (relative) rigidity of the labour market and limited labour mobility

Greece's labour market is less flexible than in other OECD countries as measured by part-time employment, total working hours and average tenure. By 2017, unemployment remains high and employment rates low, more than half of all part-time employees are in search of a full-time position and the share of unemployed that have not had a job for more than a year is over 40 percentage points higher in Greece compared to other OECD countries (Chapter 2). Further, labour mobility in Greece is limited compared to other European countries. This may be due to a generalised lack of opportunities, to the characteristics of the labour market in Greece and also to the exceptionally high rate of owner-occupied housing (80%) and social and cultural factors in which immediate and wider family connections play an important role and constitute an informal but exceptionally strong network of social protection (EURES, 2019[102]).

Targeted policy intervention should support actions for:

- *Facilitating self-employment*. Self-employment covers a wide range of working arrangements, which have in common the autonomous nature of the work. While many self-employed workers pursue market opportunities as entrepreneurs, others see self-employment as a job opportunity of last resort (many also hide irregular or seasonal or part-time work). The proportion of workers who are self-employed varies across countries and regions. Variations among regions in the same country can attain 25 percentage points, such as in Greece, or about 10 percentage points, such as in France and Spain. Policy support should include entrepreneurship and business management training, coaching and mentoring, and business counselling, as well as improve access to start-up financing and entrepreneurship networks. Policy initiatives should be designed and delivered in an integrated manner and according to the specific needs of local communities, guiding the entrepreneur from the start-up to post start-up phases (OECD, 2018[94]).

Retaining youth and talents

Greece lost half a million people nationwide to outmigration between 2000 and 2017. This had a much larger negative impact on the share of working-age population in urban regions including Attica (10% decrease) compared to intermediate and rural regions (2% and 3.5% decrease respectively).[80]

Policy intervention should support actions for:

- *Developing regional strategies specifically targeted at retaining young people and talents* and bringing back those who have emigrated in search of opportunities (e.g. enhancing collaboration between business and academia and facilitating business creation and investments through incentives and via the large Greek international community for example). Although demand for talent and the brain drain are both driven by job markets, ad hoc policies or measures implemented locally or regionally to retain, attract or regain a highly educated workforce can be also effective.

Regions and cities could: i) better identify the need for talent, for example by establishing a dialogue with young people; ii) improve co-ordination with relevant players benefitting from the presence of talent in the territory; iii) identify and support key driving sectors for retaining/attracting talent; iv) stimulate the recruitment of outside talent; v) mitigate/remove structural impediments/barriers to attracting international talents; vi) co-operate with other authorities facing the same challenges with regards to highly skilled workers; and vii) improve broadband connectivity in rural and remote areas to improve opportunities for youth (European Committee of the Regions, 2018[103]).

Box 3.25. How can regions and cities tackle brain drain?

A study presented at the SEDEC Commission of the European Committee of the Regions in November 2018 has offered insights into how regions could boost their attractiveness to retain or get back young, skilled people.

Brain drain is a problem affecting not only Greece but many regions across Europe. There is a high correlation between the socio-economic conditions of a territory and its brain drain/gain dynamic. Structural migration inflows, especially of young highly skilled individuals, usually occur in regions that have a comparative advantage and play a dynamic role in competing for international talents.

Ad hoc policies or measures implemented locally or regionally to retain, attract or regain a highly educated workforce can be effective.

- A first recommendation is that local and regional authorities (LRAs) in sending regions should become aware of the brain drain problem. LRAs should also identify the talent they want/need to retain, attract or regain. Establishing a dialogue with the talent in question appears to be essential. This is especially true for young talent.
- A second recommendation relates to the need for the co-ordination of players and the synergy of resources to focus on talent-based growth strategies. These circumstances both occur, for example, when a Smart Specialisation Strategy exists. Examples of other valid instruments are physical spaces, virtual spaces or quadruple/triple helix–based approaches/mechanisms. Co-ordination among relevant players is also intended to improve the local/regional matching of the demand and supply of talent. Similarly, it is intended to strengthen the talent-producing capacity of a region by nurturing its gifted youth.
- A third recommendation relates to the opportunity to identify key driving sectors for retaining/attracting talent.
- A fourth recommendation is to stimulate the absorption of talent from outside. This could be achieved by attracting international talent and/or regaining such talent that had previously moved away. It may involve the setting up of specific projects or medium-term strategies as well as branding initiatives or initiatives aimed at rewarding talent.
- A fifth recommendation is for LRAs to work on the removal of structural impediments/barriers which may, for example, be related to infrastructure (e.g. physical and/or technological), services and facilities, the reputation of the locality/region and culture (e.g. gender-biased mentality).
- Finally, as brain gain automatically leads to competition for the same resource (i.e. talent), it is suggested that public authorities facing the same challenges should seek co-operative and/or shared solutions.

Source: (European Committee of the Regions, 2018[103])

Social exclusion

Poverty rates have increased in almost all regions from pre-crisis levels

Poverty and social exclusion occur when people are prevented from participating fully in economic, social and civil life and/or when their access to income and other resources (personal, family, social and cultural) is so inadequate as to exclude them from enjoying a standard of living and quality of life that is regarded as acceptable by the society in which they live.

According to Eurostat, the crisis hit many people very hard and in 2015 every third person in the country was at risk of poverty or social exclusion.[81] ELSTAT (Hellenic Statistical Authority) data suggest that 50.3% of the poor population was facing food deprivation in 2018 which amounts to more than 450 000 households in the Hellenic Republic.[82] The Ministry of Labour commissioned a study to estimate the level of homelessness in the country and how variables such as Airbnb renting and sub-prime mortgage might influence this trend. As noted in Chapter 2, household incomes decreased in all regions and regional poverty rates increased across more regions in Greece than in any other OECD country in the past decade. All regions in Greece, with the exception of the Ionian Islands and South Aegean regions, experienced a drop in their pre-crisis household income and poverty rates increased. The largest increases in the percentage of people at risk of poverty or social exclusion occurred in the Aegean Islands and Crete. The regions with the highest risk of poverty in Greece before and after the crisis are located along the northern border as well as in regions within the Peloponnese; the regions with medium or medium-to-high rates of risk of poverty are close to metropolitan areas (OECD, 2018[104]).

Social exclusion is experienced by those living in poverty and the unemployed as well as other disadvantaged and marginalised groups such as migrants and the Roma population. These populations have some territorial dynamics. The Roma population in Greece, according to the mapping from the Special Secretariat of Roma Inclusion (Ministry of Labour and Social Affairs), is estimated to be around 104 000 individuals residing in 354 settlements and neighbourhoods, often suburban areas. In 2015-16, Greece has been at the forefront of the European Refugee Emergency with over one million people arriving in total, the vast majority from war-afflicted countries like Afghanistan and Syria (OECD, 2018[105]). After the closure of the so-called “Balkans route” and the implementation of the Joint EU-Turkey Agreement of 18 March 2016, arrivals to Greek islands decreased significantly yet the length of stay in national facilities increased. After the agreement, 98% of arrivals applied for asylum in Greece. In 2019,[83] migrants’ long waits in overcrowded island camps were still making the headlines. Uncomfortable conditions and risks of violence are reported by rights groups and United Nations (UN) agencies.[84] The Greek government plans to speed up its process for asylum application and appeals. The UN Refugee Agency UNHCR estimates that there are around 45 000 refugees remaining in Greece. Up to 15 000 are on the islands and some 30 000 on the mainland, including 22 000 in UNHCR-sponsored accommodation (UNHCR, 2019[106]). The EC has awarded over EUR 816.4 million in emergency assistance since the beginning of 2015. This emergency funding was *inter alia* allocated to Greece for migrant reception centres and improving conditions, in part directly to Greek authorities and in part allocated to international organisations and EU agencies.[85] Beyond measures for reception of migrants and refugees, the Ministry of Citizen’s Protection (established 2016, formerly the Ministry of Migration) is now focusing on the national strategy for integration which is to be implemented across different levels of government.

Policies and actors addressing poverty and social exclusion in Greece

Numerous policy measures address poverty and social exclusion such as minimum income[86] policies, public pension systems and a broad range of social assistance programmes and support. The economic crisis and ensuing austerity in Greece changed the landscape of social provisions, with a shift from comprehensive policies to targeted ones focusing on the most in need. At the same time, welfare benefits were cut. For example, prior to the crisis, social provisions for the elderly comprised almost half of all social allowances; these amounts declined substantially in the intervening years as the pension system was reformed (Karl, 2016[107]). Currently, food and basic material assistance are given to all extremely poor people (around 400 000 in 2018) including those who are homeless.[87]

Several ministries are involved in measures for social inclusion and solidarity: the Ministry of Education, the Ministry of Finance, the Ministry of Culture, the Ministry of Citizen Protection, the Ministry of Health and the Ministry of Labour, Social Insurance and Welfare. The Hellenic Manpower Employment Agency (OAED) under the Ministry of Labour has the mandate for unemployment service and benefits. While local authorities have no competency in designing and financing of social policy, they have, since the Kallikratis reform (2010), gained competencies in responding to social emergencies. Regional social programmes are formulated by the regions as a result of the regionalisation of the National Strategy and ROPs. Some cities, such as the city of Athens, also develop their municipal social programme for 2015-19.

The Greek government adopted in December 2014 a National Strategy for Social Inclusion (NSSI). This framework of principles, priorities and targets was designed by the Ministry of Labour, Social Insurance and Welfare and aimed at the co-ordination, monitoring and evaluation of all policies on the national, regional and local levels to combat poverty and social exclusion (Gabriel and Fotini, 2015[108]).[88] The strategy is territorialised: targets and priorities have been adjusted to local needs. Regional action plans have been designed by local authorities (regions and municipalities). Many of the regional social inclusion strategies are financed through the technical assistance grant from the managing authorities of EU funds and through ROPs. The strategy focuses on three axes. The first is combatting extreme poverty, in particular child poverty, through access to basic goods i.e. health, housing, electricity, justice, recreational activities, access to adequate resources in the form of a Guaranteed Minimum Income Scheme, and covering fuels needs through cash benefits. The second is promoting inclusion through services and allowances for the unemployed and most vulnerable groups. The third axis focused on the governance of inclusion policies and provides for strengthening co-ordination through a national mechanism for co-ordination, a Regional Social Inclusion Observatory and an observatory for social care organisations. The strategy aims at strengthening human resources, social pluralism and innovation to ensure a more efficient implementation of inclusion policies.

For instance, the Attica Regional Social Inclusion Observatory was the first one to be established and produced a report on social cohesion policies in collaboration with 66 municipalities, the statistical authority, manpower agency and civil society.

Regions have the mandate for designing and implementing the Regional Strategies for Social Inclusion (PESKE) once the Ministry of Labour certifies that they are aligned with the National Strategy for Social Inclusion (ESKE). They also design projects related to Thematic Objective 9 as part of the ROP, of which the majority of the interventions have been defined by the relevant line Ministries of Labour and Health in line with the existing national strategies. This is not the case for other policy sectors such as labour market inclusion and vocational training, which remain mostly the responsibility of national authorities. However regional authorities claim that interventions across these sectors could be better linked. In particular, data on social vulnerabilities should be linked to information on labour markets and entrepreneurship to design projects that are more coherent with actual needs. More so, some regional actors would like greater involvement when designing the national strategy and question the fact that their regional plans have to align with nationally set priorities, when they have better knowledge of needs on the ground.

In terms of consultation with non-state actors, the existence of a well-established strategy ensures regular consultation with associations.[89] For instance, the Greek Federation for Persons with Disabilities is regularly consulted just as it is consulted when the OPs for EU funding are formulated. However, non-institutional stakeholders claim they are not regularly involved in the monitoring and evaluation of the strategy's implementation. Overall, several associations claim that disabled groups are not systematically taken into account when formulating government actions and investment in public infrastructures.

National, regional and local strategies for Roma integration exist across Greece. For example, it is worth mentioning the specification, by the Ministry of Labour, of the National Roma Strategy into an operational plan, which contains dedicated measures for each axis. In addition, approximately 47 municipalities have developed local Roma inclusion strategies.

One of the measures implemented since 2017 is the national Guaranteed Minimum Income scheme, known as Social Solidarity Income. As of May 2018, around 286 000 households, corresponding to about 600 000 individuals, were enrolled in the scheme. For the first time in the country, it provides income support (EUR 220/month). Municipalities are in charge of registering and distributing these benefits to the beneficiaries. The municipality of Athens and all of the other municipalities in the country in which community centres were created (through the ESF) are planning on linking the beneficiaries of Social Solidarity Income to the social and welfare system of the municipality itself to afford more integrated support to those in need. A three-pillar approach is followed in all municipalities: i) benefits; ii) quality services; and iii) promotion to employment. Migrants can access this support if they hold a five-year work or student resident permit. The threshold for support eligibility was set to EUR 3 000 per person per year – that is approximately half of where the national poverty line stands at the moment – and in Athens alone 20 000 people registered (Athens-EP-F). However, it should be noted that the Social Solidarity Income is targeting extreme poverty (and not poverty in general). The scheme connects beneficiaries to social services and provides labour market activation measures. The scheme has been prepared by the Greek government, with the help of technical support provided by the World Bank, co-ordinated by the Structural Reform Support Services and supported by the Fund for European Aid to the Most Deprived (FEAD, established in 2014) (EC, 2018[109]). The Social Solidarity Income scheme, besides FEAD, has been also supported by national measures such as “social groceries” and “social pharmacies”, implemented through the ESF.

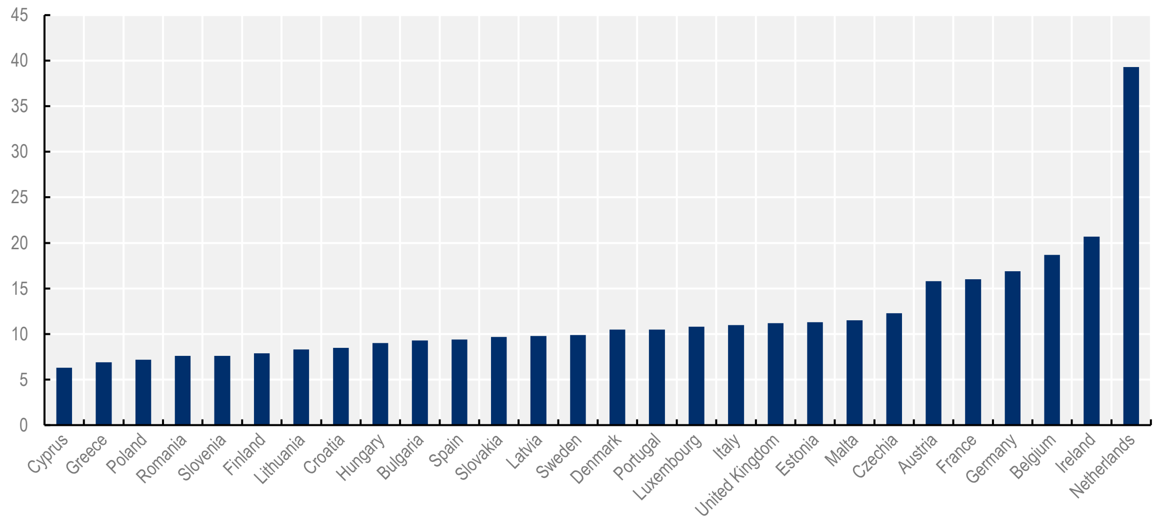
A large number of additional actions targeting social inclusion are also operated across the country, such as Structures for Supported Living for the disabled (SYD), Day Care Centres for People with Disabilities (KDIF), Day Care Centres for the Elderly (KIFI), mental health projects, combatting addiction programmes, etc.

EU funding for social inclusion

The growing demand for social services at the same time as budget constraints and limited human resources has led to an incredibly challenging operating environment. EU programmes have been a stop-gap measure to provide desperately needed services. Social inclusion measures are funded principally through Thematic Objective 9 “Promoting social inclusion, combatting poverty and any discrimination” of the ROPs, although, also relevant for combatting exclusion are Thematic Objectives 8 “Promoting sustainable and quality employment and supporting labour mobility” and 10 “Investing in education, training and lifelong learning”. Three-fourths of the social-inclusion-related objectives are funded by the European Social Fund (ESF) and the remaining fourth is funded through the European Regional Development Fund (ERDF) (Gabriel and Fotini, 2015[108]). Outside the NSRF, the Fund for European Aid to the Most Deprived (FEAD)[90] also contributes to financing social inclusion objectives. For the period 2014-20, 6.9% of total ESIF has been allocated to Thematic Objective 9 which makes Greece the second last among EU countries in terms of relative ESIF spending on this objective (Figure 3.8). However, in absolute terms, Greece ranks 18th out of 28 EU countries in terms of ESIF spending on Thematic Objective 9 (EUR 1 002 billion).

Figure 3.8. Thematic Objective 9: Social inclusion by country for 2014-20

Financial allocation for Thematic Objective 9 as percentage of total ESIF



Source: Author elaboration based on ESIF database, https://cohesiondata.ec.europa.eu/2014-2020/Thematic-Objective-9-Social-inclusion-by-Country-f/2xqi-a87n.

Almost 2 000 projects are being implemented in Greece under Thematic Objective 9 through ESF or ERDF according to the ESIF database.[91] Over 100 projects target the elderly: people over 54 years of age who are unemployed or not, including the long-term unemployed or inactive not in education. Some projects target participants with disabilities. Over 100 projects target migrant participants with a foreign background and minorities (including marginalised communities such as the Roma). Several regions have formulated projects that target people from rural areas, i.e. Central Macedonia, Crete, Epirus, North Aegean, Peloponnese, South Aegean, Thessaly, Western Greece and Western Macedonia.[92] The formula applied to distribute funds for Thematic Objective 9 across regions is based on the size of the population. The region that has invested most in social objectives in the programming period 2014-20 is Attica, with a EUR 306 million budget for 150 approved projects, while the second is Central Macedonia with EUR 266 million.[93]

Community Centres and Local Health Units bring social services closer to people across Greece

The Public Employment Service and social services are supported by the European Social Fund. For example the latter supported the establishment of a new network of ‘Community Centres’ (3+3 years with a budget of EUR 130M) — these are one-stop-shops at municipal level (for cities of over 10 000 inhabitants). The Community Centres operate as information centres and entry points for various social services: social welfare, social inclusion and employment programmes. These centres facilitate the connection between different service providers active in the area, including with the Public Employment Service (i.e. OAED). They are operated by the staff of municipal social services and are co-ordinated and monitored by the central administration. Some Community Centres have also operating branches for Roma and immigrants and they implement specific measures targeted at these groups. The Ministry of Citizen Protection has expressed the will to fund cultural operators in these centres in order to facilitate equal access to services for the migrant population. The Community Centres provide information and referrals regarding a range of national, regional and local programmes and services (e.g. Social Solidarity Income; FEAD, ESF-supported social structures), support citizens who would like to benefit from these programmes (e.g. support for the application procedure for SSI). The Centres may also offer psychosocial support, legal support, advisory services for labour market integration and educational support for vulnerable groups.

There are currently 239 Community Centres in operation (January 2019) in various municipalities across Greece and there have been over 200 000 beneficiaries to date. All operating community centres are connected to the IT system designed by IDIKA (National Social Security Service) with three digitalised registers (beneficiaries, agencies, programmes). They are a pilot action financed by the ESF until 2023. Social issues are complex and – as a one-stop-shop – community centres help navigate the complexity of needs. However, the centres are understaffed at present and find it difficult to fulfil their functions effectively. For example, some employ as few a 1-3 people and have approximately 1 300 clients per annum.

Prior to the creation of Community Centres, municipal social services were mostly provided on an ad hoc basis to address specific problems. Under the last two to three EU Cohesion policy programming periods, some new services were established at the local level – e.g. daily care for the elderly, assistance to the Roma population, wherein there have been overlapping competencies. Presently Community Centres act more as a registration point for the centralized Greek welfare system; however, they could be used to provide client-centred services currently dispersed across multiple departments which reduces their accessibility. For example, at present, four separate approvals are needed from different entities in order to receive a wheelchair through state support. Community centres have access to data which can be used to identify needs. This raises the question of what kinds of services are ideally provided locally and which ones are better managed at the national level.

Such a comprehensive service would need alternative sources of funding beyond EU funds. A concern emerging from OECD interviews with Greek public authorities[94] regarded the sustainability of the Community Centres without EU support.

Since 2017, 127 (out of 239 planned) TOMY – local health units providing primary care – have been operated by the government. Some municipalities, such as Athens, are trying to get their own health facilities (six integrated health clinics in the case of Athens) recognised as TOMY to make sure users are better connected to the national health system while maintaining the operation under municipal auspices (OECD, 2018[105]).

Box 3.26. Social services in Athens – The role of NGOs as a stop-gap measure to provide services over the crisis period

The downward pressure on the spending power of Athens, deriving both from real cuts in central government grants and real falls in tax revenues, has resulted in a reduction of the municipal budget by over 20% in the 2010-16 period; funding for social policy and personnel-related costs declined by approximately 30% (Chorianopoulos and Tselepi, 2019[110]). The municipality of Athens's workforce declined from 12 000 employees to 7 000 and, partly as a consequence of the hiring freeze, the municipality responded by turning to civil society to fill the gaps through such initiatives as the Solidarity Hub, the Athens Partnership and the Reception and Solidarity Centre (Chorianopoulos and Tselepi, 2019[110]).

- The Athens Partnership (AP, established in 2015) is an example of successful co-ordination between the municipality of Athens and philanthropic initiatives. The AP was launched with support from the Stavros Niarchos Foundation to facilitate innovative public programmes in Athens. The AP gathers the municipality, private sector and philanthropic partners to finance and support programmes addressing the general needs of the Athenian population. One of the initiatives that the AP runs since 2017 with the municipal department responsible for the support and social integration of migrants and refugees is the Athens Coordination Centre for Migrant and Refugee Issues (ACCMR). This co-ordination platform brings together 75 members including national and international NGOs, international organisations, public services, etc. which jointly set the priorities and organise services delivery for migrants and refugees. The platform is run by a municipal team who has been recruited thanks to AP support.

- The Athens Solidarity Centre[95] (established in 2013) is located close to Athens' central station and offers to most vulnerable groups residing in the city – including Greek, migrants and refugee populations – food, a clothing bank, basic social and medical services, psychological support, assistance in applying for jobs, legal aid and day care for children.[96] The centre operates as a central hub for civil society organisations in Greece to implement their individual projects, while at the same time providing a space for these organisations to collaborate, co-design programmes and jointly execute actions that help address poverty alleviation and social integration for marginalised and vulnerable populations Assistance is means-tested and the respective municipal database currently includes approximately 6 000 families (Athens-EP-F). Expanded to include a voucher scheme for 8 000 citizens and complemented by social work, the Solidarity Centre has been created by Solidarity Now and is run by the municipality of Athens and the Open Society Foundation together with civil society groups and organisations. The centre is supported by international organisations (UNICEF, UNHCR), foundations, as well as Iceland, Liechtenstein and Norway who contributed through a EUR 63.4 million European Economic Area (EEA) Grant.
- The Athens Development and Destination Management Agency (ADDMA, or EATA in Greek) is part of the municipality and has implemented several projects aiming at increasing the employability of most socially vulnerable groups including migrants. Projects were funded by the region of Attica and by the OAED.
- The Reception and Solidarity Centre (KYADA, established in 1999) is a municipal – yet autonomously run – structure that focuses on the needs of the city's growing number of homeless or at risk of homelessness people. The structure is funded by the municipality (EUR 2.5 million per year adjusted to needs) and raises additional funding from private entities. It operates as one-stop-shop for social emergencies: it offers basic services (shelter, cloth, food, etc.) to all vulnerable groups including irregular migrants and a referral system to its network of partners and public services. Overall, the centre supports 9 000 beneficiaries (an estimated 25 000 people including family). The same municipal department has also set up the Social Grocery Store on its premises. This foodbank-type of initiative covers the basic needs of approximately 200 families (500 people) for a 6-month period and is sponsored by a major supermarket chain. Moreover, KYADA launched the Family Solidarity programme, supporting in kind (food and clothing) and offering mental health counselling to an additional 149 families. The programme is sponsored by two major companies and a corporate NGO, sharing the respective costs.

Collaboration with NGOs has grown as a vehicle for austerity management, a pragmatic and easily available way to ameliorate social deprivation; but the ability of the municipality to develop a social policy strategy that reflects local interests is constrained. The promotion of municipal goals is conditioned upon the degree to which they coincide with the priorities of the funding bodies. By means of example, municipal social policy objectives appear in the city's blueprint for the 2015–19 period, underscored by the annotation "subject to funding availability" annotation, their materialisation being reliant upon funding opportunities secured by the partners. The views of civil society groups collaborating with the city on these issues also paint an unsettled picture.

The fragmentation of social intervention measures into a number of distinct projects, centring on provisions in kind, is seen as incapable of alleviating the multiplicity of exclusions noted in the city. The limited presence of preventative social policy measures and the short time span of actions endorsed further support this conclusion, shaping what has been elsewhere described as "… an emergency model of social crisis management" (Arapoglou and Gounis, 2015[111]). In addition to that, public oversight is missing from these policies.

The newly founded municipal schemes are marked by the thorough absence of citizens' groups in their governance structures, despite the growing grassroots mobilisation noted recently in the city (Chorianopoulos and Tselepi, 2019[110]).

Source: Adapted from Chorianopoulos, I. and N. Tselepi (2019[110]), "Austerity urbanism: Rescaling and collaborative governance policies in Athens", http://dx.doi.org/10.1177/0969776417733309; OECD (2018), *Working Together for Local Integration of Migrants and Refugees in Athens*, https://dx.doi.org/10.1787/9789264304116-en.

Strengthening social inclusion through the social economy

EU-financed programmes have been instrumental in raising the importance of measures to address poverty and social exclusion e.g. the Community Centres, TOMY and funding for NGO poverty alleviation measures that have helped to raise public awareness on minority issues such as for the Roma population and refugees and asylum seekers (Liargovas, Petropoulos and Huliaras, 2016[112]).

Inclusion is a multidimensional concept, which depends on various aspects of people's lives, from income and access to education to health and social networks. The challenges of social inclusion cannot be met by a single actor – governments, whether at national, regional or local level – must work with others, including the private sector (OECD, 2019[113]). However, an actor which is frequently overlooked is the "social economy" – a label given to a wide range of organisations which inhabit the space between the state and the market, including associations, co-operatives, foundations and social enterprises. Rooted in local communities, social economy organisations (SEOs) are in an excellent position to identify the needs of their localities and to respond quickly to social and economic changes at the local level. At the same time, they are also often in a position to be able to reach those groups that are "hard to reach", further increasing their effectiveness in addressing social exclusion. The local embeddedness of SEOs, and their ability to harness resources (such as volunteers) from their local communities, is critical to their contribution to fostering social inclusion.[97]

SEOs, including traditional types and newer forms such as social enterprises, all share a common approach that puts people at the core (Box 3.27). Such entities are well known for their capacity to identify and implement innovative approaches to integrating disadvantaged groups in the labour market. SEOs are estimated to account for 6.3% of jobs in the EU28. In addition, their strong local roots enhance their capacity to address the special considerations of disadvantaged populations in a particular place. To better capitalise on the potential of SEOs, policies can provide a more appropriate regulatory environment for their development as well as encourage activities in labour market integration. The contribution of SEOs is of course not limited to employment and work integration of disadvantaged groups. These entities also produce goods and services that create a social, economic and/or environmental impact in different sectors of activity. For instance, they create innovative health services for the elderly or new and sustainable forms of tourism, transportation and delivery of renewable energy. The different social innovations that support inclusion are further potential benefits to developing this social economy (OECD, 2018[94]).

Specific legal frameworks to support the social economy have been introduced in Greece. A first law (Law 4019/2011) was introduced in 2011 to regulate social economy and social entrepreneurship. However, the law was too restricted to the inclusion of vulnerable groups and social care, which led to its replacement in 2016 by a new law on social and solidarity economy (Law 4430/2016). This law has created different legal forms, one of which focuses on the inclusion of vulnerable or special social groups: the Integration Social Cooperative Enterprise (KoinSEp Entaxis). The law being relatively new, the number of these

Integration Social Cooperative Enterprises remains low (24 Social Cooperative Enterprises in 2019) but the data show rapid growth in the number of social enterprises. The percentage of employees from vulnerable social groups in these social enterprises is another interesting statistic to consider as it confirms the relevance of these legal forms as a tool to foster social inclusion. In 2016, 37.71% of the workforce were people from vulnerable groups.[98]

Policy actions to increase the impact of social economy organisations (SEOs) and social enterprises

In Greece, there is untapped potential within SEOs and social enterprises that requires policy action to unlock. These entities can help build a more inclusive and sustainable society in each of Greece's regions (Box 3.28). Much of the policy needs concern the development of enabling ecosystems. Building a conducive ecosystem for social economy development includes (OECD, 2018[94]):

- *Raising awareness and visibility of SEOs, including social enterprises.* This can be done through dedicated and enhanced framework laws or national strategies that define the nature, mission and activities of SEOs and therefore help policymakers to target their support more effectively. To this end, existing Law 4430/2016 could be strengthened. This can also be done through lighter policy options such as setting up communication campaigns or providing specific support to networks that connect social entrepreneurs to investors and public sector representatives.
- *Providing business support to social enterprises throughout their developmental phase*. Specific public support for structures such as hubs, accelerators or incubators can facilitate the development of social enterprises across territories and activity sectors.
- *Supporting a diversification of financial sources*. While public support (predominantly through grants and subsidies) is a major financial source for a number of social enterprises, an increasing number now seek to access financing provided by mainstream or new funders (e.g. commercial banks or impact investors). Still, mainstream funders or impact investors perceive social enterprises – especially in the early stages – as high-risk clients and are therefore reluctant to invest in them. Policymakers need to raise awareness through capacity building, along with efforts to share the risks with mainstream funders, impact investors and commercial banks, through guarantee schemes for example.
- *Fostering social entrepreneurship skills in the education system*. In the long run, education and skills that breed entrepreneurial behaviours need to be developed. For example, educational programmes on social entrepreneurship can provide students with opportunities to develop new solutions to unresolved social challenges and learn about business creation processes and planning at the secondary and higher education levels.
- *Ensuring institutional continuity and political support for social enterprise development*. Political impetus can act as a catalyst for both nascent and/or well-established ecosystems, fostering and accelerating favourable conditions for the growth of social enterprises. However, challenges may emerge when political support for developing the sector of social enterprises fluctuates owing to government changes. Sustained policy support is essential to establish an enabling ecosystem allowing social enterprises to thrive over time. Concerning policy actions that are specifically designed to support the employment creation role of SEOs, policymakers could promote:
    - *Funding stability*. Ensure that public financial support goes beyond short-term contract funding so that longer-term employment plans can be developed.
    - *Public procurement*. An important tool to sustain social enterprises is public procurement, for example including "social clauses", using "reserved contracts" or applying "best quality/price ratios" so that social enterprises can compete in getting public contracts.
    - *Employment subsidies*. An ecosystem favourable for the social economy can be also facilitated through the use of employment subsidies for social enterprises working with disadvantaged

individuals to offset the costs stemming from the loss of productivity associated with hiring individuals whose job performance is less than normal.

Box 3.27. Defining the social economy and social enterprises

Social economy organisations (SEOs) traditionally refer to the set of associations, co-operatives, mutual organisations and foundations whose activity is driven by values of solidarity, the primacy of people over capital, and democratic and participative governance. Among SEOs, social enterprises, which emerged more recently, distinguish themselves by a more pronounced entrepreneurial approach – their source of income coming primarily from commercial activities rather than grants and donations. Social enterprises may emerge from the social economy or be outside of the social economy.

Social enterprises are identified by the OECD as "any private activity conducted in the public interest, organised with an entrepreneurial strategy, whose main purpose is not the maximisation of profit but the attainment of certain economic and social goals, and which has the capacity for bringing innovative solutions to the problems of social exclusion and unemployment".

More recently, the EC has defined a social enterprise as being "an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. It is managed openly and responsibly and, in particular, involves employees, consumers and stakeholders affected by its commercial activities".

Source: OECD (2018[94]), *Job Creation and Local Economic Development 2018: Preparing for the Future of Work*, https://doi.org/10.1787/9789264305342-en.

Box 3.28. Improving social inclusion at the local level through the social economy

Participative and collaborative in its essence, the social economy can produce inclusive economic development. However, the social economy and its value-added are often not well understood and its drivers are not well focused and coherently supported. Reform, development and co-ordination of existing structures as well as capacity building and leadership are required.

Key issues and policy requirements

Opportunity

- New interest and political will could reinvigorate the social economy.
- Potential to deliver public services more efficiently in light of budget constraints.

Suggestions

General

- Draft specific legislation and ensure legal and fiscal frameworks that are not burdensome.
- Ensure the institutional framework provides access to markets, particularly public procurement.
- Implement a set of entrepreneurial policies consistent with distinctive features of social enterprise.

- Develop a strategy to support the social economy sector in similar ways to the SME sector.
- Allow the social economy to create its own representative structure.
- Develop a system of partnerships and co-governance to support the design and delivery of policies.

Co-operatives

- Deliver modernisation measures to build capacity, assist in independence and strengthen trust.
- Develop a programme to promote new work integration co-operatives and user-based welfare services.
- Improve information about and access to tenders and support structures.

Not-for-profit organisations

- Address lack of seed capital and cash flow support.
- Develop a programme to support NGOs to become social enterprises and encourage NGO and non-profit mergers.
- Develop programmes for strengthening volunteer involvement and facilitate this as a transitional arrangement for work integration, ensuring that such activities are compatible with the benefits system.

Social enterprises

- Improve sustainability within the tender regime.
- Use EU funding to develop a social enterprise strategy.
- Develop a supportive environment through seed money, incubators, loan funds and new networks.

Source: Presentation of the OECD report "Improving social inclusion at the local level through the social economy", 17 February 2011, Ljubljana, Slovenia.

Enhancing connectivity and sustainable development

Transport infrastructure and connectivity

Greece has often been criticised in past programming periods for actions that have focused too much on delivering basic infrastructure investments and not enough on competitiveness and social cohesion actions (Bartzokas, 2007[7]). In fact, infrastructure investments have been the dominant type of investment in Greece across each EU Cohesion Policy's programming period. While these investments have been very important for the country, they have not fully delivered on the goals of increasing competitiveness, creating jobs and raising well-being, especially in rural areas and in small islands.

Infrastructure investments were negatively impacted by the economic recession. National investment in infrastructure declined over this period and EU funds (Cohesion Fund and ERDF) were the main financing mechanisms for the vast majority of infrastructure projects. There were also demand-side effects. For example, in the 2 major metropolitan areas, Athens and Thessaloniki, the freight volumes decreased by 42% between 2008 and 2014 (Moschovou and Tyrinopoulos, 2018[114]). Still, in 2018, the rate of infrastructure investment was around 1.4% of GDP, falling short of the historical pre-crisis average of 3.0% and the European average of 2.1% of GDP. PricewaterhouseCoopers (PwC) estimates that the current infrastructure's project portfolio is much more geared towards energy and transport (91% of the pipeline of all projects) and short on tourism (5%) and environment (4% for waste management and water supply) (PwC, 2018[115]).

The economic benefits of accessibility

Accessibility to towns and cities matters for a number of reasons.[99] Larger agglomerations have more dynamic and diversified economies and a greater range of public and private services available, including specialist services that are unlikely to exist in smaller communities (e.g. healthcare specialists and post-secondary education institutions). Agglomeration benefits given by proximity to urban areas or cities is an important driver of growth and productivity "catching-up" of the lagging regions. Rural regions could take advantage by "borrowing" agglomeration benefits from nearby cities if they are well-connected. This includes but is not limited to physical transport connections since digital and ICT are also crucial for example (OECD, 2018[2]). In contrast, regions with more limited accessibility – such as Greece's many islands – face higher transportation costs and seasonal transport variability, problems of water supply and waste disposal, are poorly connected to core energy infrastructure and often obtain their electricity primarily from inefficient, expensive and polluting diesel generators (Roinioti and Koroneos, 2019[116]) (Chapter 2).

Yet, while theory suggests that accessibility will, *on aggregate*, be positive for the economic performance of an area, there are some caveats to this view. First, the scale of economic impact will vary in different contexts. Second, the benefits are uneven: some firms and sectors will benefit more than others, while the benefits will be skewed to particular cities or regions. Also, some important questions remain. In particular, it is hard to assess whether new transport infrastructure results in a net economic gain for the country or simply reallocates economic activity from areas with lower accessibility to those with higher accessibility. Second, the benefits are often realised because of a change in the composition of workers and firms, rather than benefits to existing workers and firms. Improving accessibility may lead to aggregate benefits at the regional or county level, but the benefits do not apply to all in the local area. Lastly, another issue is to consider the economic benefits of accessibility in relation to the cost of transport schemes or potential alternatives (Lee and Lembcke, 2019[117]).

Policy implementation and financing

Greece's recent National Growth Strategy outlines amidst priorities the need to further develop and upgrade Greece's road and rail networks, improve the efficiency of maritime transport and invest in a comprehensive national digital/ICT strategy (Hellenic Republic, 2018[1]). In June 2019, Greece has adopted a new National Strategic Transport Plan, co-ordinated by the Ministry of Transport and Infrastructure, which contains "high-level objectives" and "investments pillars" and sets the direction for strategic and co-ordinated investments. They are:

- High-level objectives
  - Promote economic growth and efficiency.
  - Increase regional and international connectivity.
  - Ensure environmental sustainability.
  - Increase personal accessibility and social inclusion.
  - Ensure safety and security.
- Investments pillars
  - Enhancing safety, sustainability, efficiency and competitiveness of transport.
  - Building stronger international land connectivity.
  - Supporting the tourism sector.
  - Enhancing connectivity to the Greek islands.
  - Improving the efficiency of the logistics sector.

- Developing an efficient urban and suburban public transport system to support national transport system.
- Fostering regional mobility and growth.
- Exploring further opportunities (concerns investments that will be reviewed in the future).

The plan spans 20 years and determines the actions that may receive financial support from international financing institutions and donors, especially the EU and the EIB (Hellenic Republic, 2018[1]).

Further, the National Action Plan for Logistics supports the country’s goal (outlined in the growth strategy) to become a leading logistics hub by increasing transit and developing value-added services. The National Ports Strategy outlines initiatives to enhance shipping efficiency, maritime operations and to upgrade port technologies. Since maritime transport is vital for Greece’s territorial cohesion, it also supports upgrading commuting and communication between the islands and the mainland, which is another priority outlined in the National Growth Strategy. The National Digital Strategy (NDS) is the road map and framework supporting the country’s digital development so that Greece may join the European digital map by 2021 (Hellenic Republic, 2018[1]).

In the EU, infrastructure development has been one of the most prominent priorities under cohesion policy and the largest category of structural/ESI fund spending over the past five programming periods since 1989. To help EU countries develop the Trans-European Transport Network (TEN-T Network), the EU adopted a regulation in 2013 providing union guidelines for transport investment. The regulation establishes a legally binding obligation for EU countries to develop the so-called "core" and "comprehensive" TEN-T Networks. In addition, the regulation identified projects of common interest and specified the requirements to be complied with in the implementation of such projects. The Connecting Europe Facility (CEF) regulation, adopted in 2013, allocated a seven-year budget (2014-20) for the transport sector. Recently, the EC has taken several initiatives to further foster the development of the Single European Transport Area. Progress towards this goal has been made, e.g. with the 4th Railway Package, the Blue Belt initiatives for maritime transport, the proposed Single European Sky II, the EU Aviation Strategy, and the NAIADES Programme for inland waterways. The focus post-2020 remains on developing the Trans-European Network, with a particular priority on cross-border sections and missing links of the TEN-T Core Network, which is planned to be completed by 2030 (EC, 2019[118]).

In this framework, EU cohesion policy funding has been crucial to finance all the major infrastructure investments in Greece so far. Many important infrastructure projects were completed (e.g. Attiki Odos, the Metro in Athens, Egnatia Odos, the PATHE north-south road axis, etc.), allowing for new transportation networks that have dramatically reduced distances and have reshaped the regional map of Greece. However, despite these many investments, Greece continues to have many competing priorities for (and with) infrastructure investments. While national funding for infrastructure projects has been limited, the major source of investment remains the EU Partnership Agreement (ESPA 2014-2020), of which one of the 5 objectives refers to “Modernisation – Completing infrastructures for economic and social development”. To this end, the PA allocates about EUR 3 billion for “Promoting sustainable transport and removing bottlenecks in key network infrastructures”, within the OP for Transport Infrastructure, Environment and Sustainable Development.

Policy challenges

Efficient transport and connectivity infrastructure and services are important for exploiting the economic strengths of a country and its regions, supporting the internal market and growth and enabling economic and social cohesion. They also influence trade competitiveness, pricing and have strong implications on production processes and the choice of trading partners. With such a central role, transport and connectivity are by definition also inter-related with various policy areas, such as environmental and social policies (EC, 2019[118]).

Greece stands at the crossroad of three continents and has long been a strategic node for transportation. It is in the challenging position of needing to link mountainous and island territories. Its unique geography, maritime connections and position at the periphery of the EU makes connectivity a top priority for public investment. Greece is ranked 24th among EU countries in terms of quality of its infrastructure and Greek firms report more often than companies in other EU countries inadequate transport infrastructure as a significant obstacle to investment (EIB, 2017[119]). Moreover, poor intermodal connections – especially between ports and railways – raise the costs of doing trade and in addition to cumbersome customs procedures lower the quality of logistics in Greece.[100]

To ensure continued and sustainable growth and well-being in Greece's regions, a number of challenges regarding transport and connectivity need to be addressed. They include the following points.

Advancing in the National Digital Strategy (NDS) and strengthening digital infrastructure across regions

Digital infrastructure is underdeveloped, especially in rural and remote areas. The performance of Greece in the digital infrastructure is uneven, with relatively low mobile broadband penetration. In terms of connectivity, SMEs lag in their high-speed broadband connections compared to large firms. In 2018, Greece had the poorest penetration rates in the OECD; less than 10% of all firms with more than 10 employees were connected to fixed high-speed broadband. Some actions to fill the ICT gap are ongoing but should be accelerated (e.g. the Next Generation Access Programme will deploy fast and super-fast broadband in rural areas and islands with support from EU funds) (OECD, 2019[54]).

Policy intervention should support actions for:

- *Developing ICT and digital infrastructure.* Fully investing in a comprehensive NDS is crucial for Greece's economic transformation and can lead to productivity gains, greatly improve the quality of life of citizens and the quality of public services. Priorities include ensuring inclusive access to digital infrastructure (especially to rural areas and islands), accelerating the transition to high-speed Internet, providing an adequate legal framework, building a modern e-government and helping economic sectors and SMEs take advantage of productivity-enhancing digital tools (Hellenic Republic, 2018[1]).

Strengthening the transport primary and secondary networks for people and goods

Greece has made investments in highways and major roads but the secondary road networks for which regions are responsible are underdeveloped. Some projects are underway but generally advance slowly. The density of the rail network per surface and population is one of the lowest in the EU. The low capacity of the railway lines places a limit on the number of (high-speed) trains that can use the existing network. The limited coverage of the rail network and its low capacity put severe limitations on mainly cargo but also passenger traffic flows. The share of rail freight in the modal split remains low also due to the non-developed market and missing links with the main seaports. The modal share of rail passenger inland transport is one of the lowest in the EU. Further, the extensive network of non-TEN-T ports is facing difficulties in obtaining the necessary funding to cover maintenance and re-investment costs (EC, 2019[118]).

Policy intervention should support actions for:

- *Enhancing regional road networks.* Greece has made important investments in highways and major national roads but the basic regional road networks should be completed and better linked to motorways, ports and airports to shorten travel and export/import lead times fostering regional productivity, competitiveness and citizens' well-being.
- *Strengthening railway and maritime transport*. Railway and maritime transportation need to overcome bottlenecks and better integrate amongst themselves and with the road systems. The

lack of high-quality infrastructure or low-performing rail and port services can result in significant extra costs for shippers, transport operators and consumers. For EU companies, port and terminal costs can represent up to 25% of the total door-to-door logistic cost. Some action has been taken (e.g. the Ports Regulation of 2017-18 introduces rules on transparent public funding to improve market access and make port investments and operations more efficient) (EC, 2019[118]). However, it is necessary to further act on administrative simplification, port capacity and efficiency, connection to the hinterland and access to financing especially for the network of non-TEN-T ports.

Fostering practices and capacities for project planning, design and implementation.

The main factors contributing to a systematic shortfall of infrastructure investment in Greece are poor planning, slow process of political consensus and delays that curtail infrastructure positive economic impact. Infrastructure projects in Greece suffer from systematic slippage both in preparation and execution, with an average 23 months of slippage in preparation/design and 28 months of slippage in execution/construction (PwC, 2018[115]). An additional important aspect to consider is the fact that regions have taken on greater responsibility for aspects of transportation and other types of infrastructure in recent years but many of them lack adequate resources and capacities.

Policy intervention should support actions for:

- *Improving project planning, design and implementation*. Project planning and implementation need to be accelerated and better linked to strategic plans for public investment and spatial planning. Speeding up the preparation and execution of projects would require enhanced co-ordination across the whole process and full use of concessionary and private funding. To do so, there could be a single state organisation mandated with the planning, design and management of all major infrastructure projects to reduce delays and maximise private funding (PwC, 2018[115]).
- *Enhancing regions' and municipalities' capacity to plan, co-ordinate and deliver local infrastructure investments*. Greece's decentralisation reforms ushered in new responsibilities for regions and municipalities for certain aspects of transportation, communications, energy and waste infrastructure. The national government remains responsible for large infrastructure such as main roads and is responsible for approvals of infrastructure projects. Regions and municipalities often lack resources, staff and capacities to accomplish their increasing tasks. New and extended forms of technical assistance and more flexible ad hoc support for subnational authorities to plan, co-ordinate and deliver local infrastructure investments should be envisaged for the next programming period.
- *Fostering stakeholder consultation and partnerships*. Transparent and early engagement with all stakeholders is key to building political ownership of long-term public investment strategies. Inclusive consultation allows any regulated party or member of the public to contribute or comment on proposals, ensuring that all concerned interests are heard (OECD, 2018[8]).

Prioritise investments and diversify financing for infrastructure

The growing need for infrastructure spending, combined with the limited capacity of state funding and the balance sheet constraints of the Greek banks call for new sources of funding. Traditional funding sources, such as loan facilities and the PIP are limited. The financing involvement of the private sector is also limited (PwC, 2018[115]; EC, 2019[118]).

Policy intervention should support actions for:

- *Fully exploiting all the available financing options*. Given the scarcity of national financing, EU funds have been crucial for infrastructure projects in Greece. However, there are many competing pressures for infrastructure and there needs to be a more robust system to prioritise and finance investments across local, regional and national scales. Existing financing instruments should be better exploited; these include: i) private investment in infrastructure in partnership with the public sector (PPP); ii) use of project bonds, which could provide a significantly higher private sector participation in infrastructure funding adding a low-risk element in institutional investors' portfolios; iii) tax increment financing earmarks incremental property tax revenues to service debt incurred to develop new transit infrastructure; iv) municipal asset management to generate additional value that can be invested in infrastructure; and v) value capture leverages (e.g. the value of property made viable by new infrastructure such as a subway line extension) to finance that new infrastructure, etc. (PwC, 2018[115]).

- *Developing better local data.* New and more efficient indicators and data are needed to conduct population forecasts, prioritise investments and monitor change. A dedicated unit within the Ministry of Transport might take the task to harmonise existing data and developing new survey which should help to address these issues in the future.

Tackling territorial difficulties for accessibility and service provision

Greece's rather unique geography characterised by a mountainous land and almost 6 000 islands. This shapes the distribution and access of people and resources across the territory. Around a third (32%) of Greece's population lives in rural and remote areas. Across the OECD, this is comparable with the most sparsely populated countries, like Norway or Sweden. As a result, a quarter of the population cannot reach a town with at least 50 000 inhabitants within an hour travel time (by any transportation mode). This matters because larger agglomerations have more dynamic and diversified economies and a greater range of services available.

Policy intervention should support actions for:

- *Developing dedicated strategies for special areas such as islands and remote rural areas*. The heterogeneity of the Greek territory and the islands' landscape, in particular, pose some unique infrastructure challenges because of the size and fragmentation of territories and scarce connectivity and accessibility. This reflects in weak services (e.g. business, health, administration) and lack of adequate transport infrastructure for citizen and tourism, high costs of transportation for citizen and goods and high pressure on the local environment (e.g. energy use, water and waste management). All this calls for a strong place-based approach and dedicated solutions/incentives when planning future use of the ESIF under the cohesion and regional policy.

Sustainable development

Greece's rich natural environment is among the country's major economic assets. A vast part of the territory is not exploited or only lightly so. This is especially the case in mountain areas and remote islands. However economic development driven by tourism and infrastructure building has often increased the pressure on the environment. The majority of the population, infrastructure and economic activities are concentrated in the coastal plains. Uncontrolled construction has led to the degradation of nature and landscapes in some areas. Tourism is highly seasonal: the population rises two to tenfold on islands and coastal areas during summers, often overloading water and waste services. Much of the agricultural produce is intensively grown with excessive use of irrigation, fertilisers and pesticides, impacting on climate change and natural resources. Industry generates increasing environmental pressures, particularly for disposal of solid and liquid waste. Greece has made important steps to control these pressures. Nonetheless, further efforts are needed to achieve environmental convergence within the EU and the OECD.[101]

Policy implementation and financing

The Ministry of the Environment and Energy (MoEE) holds most environmental policy and regulatory powers at the central level, together with the Ministry of Rural Development and Food. Decentralised administrations of the national government have significant environmental management responsibilities, particularly with respect to spatial planning. Regions regulate activities with low environmental impact, municipalities deliver water and waste-related environmental services. In 2018, Greece renewed its commitment to sustainable development in a voluntary national review on implementation of the 2030 Agenda (Government of Greece, 2018[120]). Among its priorities are strengthening the protection and sustainable management of natural capital as a basis for social prosperity and transition to a low-carbon economy. The 2019 National Strategy for Sustainable and Fair Growth 2030 (NSSFG) guides Sustainable Development Goal implementation until an action plan is developed (Government of Greece, 2019[85]).

The Greek environmental policy is largely based on EU environmental regulations and directives. Current environmental policy in Greece focuses on encouraging the use of renewable energies and applying energy efficiency and waste management measures that promote eco-innovation.

As depicted in Chapter 2, EU Structural and Investment Funds (ESIF) represent an important share in Greek public investments (which fell since the crisis as Greece targeted debt reduction through consolidation programmes). Environmental policy and sustainable development have been important priorities for each of the last three EU Cohesion Policy programming periods (Tzifakis, Liargovas and Huliaras, 2015[121]).

Protection of the environment and transition to a more environmentally friendly economy is one of the main strategic priorities of the Partnership Agreement (ESPA) for Greece 2014-2020. It refers to ESIF thematic priorities: 4 – "Support the transition to a low-carbon economy in all sectors"; 5 – "Promotion of the adaptation to climate change, risk prevention and management"; and 6 – "Preservation and protection of the environment and promotion of efficient use of resources" (Table 3.11).

To this end, specific measures are contained in the national OP for Transport Infrastructure, Environment and Sustainable Development and in each of the 13 ROPs (Table 3.12). The Rural Development[102] and the Fishery and Maritime Programmes 2014-2020 also include nature conservation policies (Tables 3.13 and 3.14). The partnership agreement (ESPA) 2014-2020 allocates the largest share of ESIF (21% out of total funding),[103] to promote innovative technologies and practices for environmental protection, waste and water management, soil contamination and air pollution. ESIF support also includes related businesses, research and development activities, data acquisition and monitoring.

Table 3.11. Total (EU and national) contribution for ESIF Thematic Objectives 4, 5 and 6

Thematic Objective	Commitments (EUR)	Budget of calls and tenders (EUR)	Contracted (EUR)	Payments (EUR)
Objective 4. Supporting the shift towards a low-carbon economy in all sectors	2 390 385 946	4 024 026 176	2 619 800 403	1 216 346 532
Objective 5. Promoting climate change adaptation, risk prevention and management	421 809 483	330 857 938	184 648 420	81 178 803
Objective 6. Preserving and protecting the environment and promoting resource efficiency	3 890 347 020	4 274 805 821	1 765 463 273	927 139 086

Note: They are: support the transition to a low-carbon economy in all sectors (obj. 4), promotion of the adaptation to climate change, risk prevention and management, preservation (obj. 5) and protection of the environment and promotion of resource efficiency (obj. 6).
Source: ANAPTYXI (n.d.[122]), *Homepage*, www.anaptyxi.gov.gr (accessed on 15 April 2020).

Table 3.12. Total (EU and national) contribution of Regional Operational Programmes (2014-2020) for Thematic Objectives 4, 5 and 6

Region	Commitments (EUR)	Budget of calls and tenders (EUR)	Contracted (EUR)	Payments (EUR)
Attiki	331 434 053	318 025 112	253 321 835	110 026 836
Voreio Aigaio	127 112 042	120 254 367	48 775 044	27 257 239
Notio Aigaio	50 652 414	66 678 404	26 474 761	13 033 644
Kriti	189 437 310	162 588 897	71 957 625	39 353 682
Anatoliki Makedonia-Thraki	190 973 793	180 027 453	57 035 819	28 635 852
Kentriki Makedonia	214 316 607	265 299 538	66 607 570	25 580 564
Dytiki Makedonia	125 836 652	117 059 334	42 914 015	23 461 335
Ipeiros	132 221 552	144 172 267	70 175 038	42 051 189
Thessalia	116 700 000	129 014 331	23 682 756	11 634 782
Ionia Nisia	89 920 977	89 052 598	34 826 562	19 508 349
Dytiki Ellada	160 238 844	171 290 087	70 322 874	47 341 917
Sterea Ellada	45 507 756	32 718 947	17 372 443	12 016 524
Peloponnisos	60 618 839	66 552 132	20 533 151	11 607 517

Note: The Thematic Objectives are: 4 – “Support the transition to a low-carbon economy in all sectors”; 5 – “Promotion of the adaptation to climate change, risk prevention and management”; and 6 – “Preservation and protection of the environment and promotion of efficient use of resources”.
Source: ANAPTYXI (n.d.[122]), *Homepage*, www.anaptyxi.gov.gr (accessed on 15 April 2020).

Table 3.13. Financing of measures of the Rural Development Programme 2014-2020 that are related to natural rural amenities

Measures	Amount (EUR)
07 - Basic services and village renewal in rural areas – biodiversity	84 401 320
08 - Investments in forest area development and improvement of the viability of forests	251 265 500
12 - Natura 2000 and Water Framework Directive payments	7 500 000

Source: EAD (n.d.[123]), *Rural Development Programme of Greece 2014-2020*, https://ead.gr/home-en/grdp-en/.

Table 3.14. Budget for the areas of the network NATURA 2000 for 2014-20 in Greece

Investment priority	Total (KEUR)
Completion of the National System of Protected Areas and management structures of Natura 2000 areas	227 200
Supervision, monitoring and planning of the management of Natura 2000 areas	56 300
Organisation and functioning of the environment explanation system – Actions of information and sensitisation for the biodiversity of Natura 2000 areas	40 350
Habitat management plans/species and management implementation for the measured improvement of the conservation situation	91 800
Actions to upgrade the operation and organisation of the management of Special Protection Areas	21 600
Management measures for the reduction of influences from the invading species	13 000
Advancement of specifications, compilation of plans for sustainable development of forests by incorporating measures to promote biodiversity in forest management plans	4 800

Investment priority	Total (KEUR)
Completion of the Maritime Network of Natura 2000	36 500
Organisation and promotion of ecotourism in national and regional parks	24 190
Continuous training of staff and personnel of the system of natural environment	4 500
Reinforcement and promotion actions of ecosystems and protected areas	146 930
Total	**667 190**
Personnel/Administration operation costs	18 046
New total	**685 236**

Source: (EC, 2014[124])

Greece's commitment to green growth through a circular economy

The transition to a low-carbon, resource-efficient and circular economy is of key importance for Greece to ensure environmental protection but also to boost green growth, create new jobs, fight unemployment and support innovation in production, consumption, value chain of materials, sharing use methods and reduction, reuse and recycling of waste, in order to extend the life circle of products and optimise the resources, water and energy. In 2018, Greece's Governmental Economic Policy Council endorsed a National Strategy and an Action Plan on Circular Economy to set the country on a path towards the long-term adoption of circular economy principles. The long-term (2030) goals of the Strategy on Circular Economy can be summarised as follows:[104]

- Moving up the waste hierarchy by focusing on preventing waste and improving recycling.
- Supporting circular entrepreneurship by promoting "industrial symbiosis" and business clusters.
- Supporting circular consumption patterns of re-using, restoring and repairing rather than buying new products, especially for electrical and electronic devices.
- Enhancing multi-stakeholder partnerships across industry, academia and civil society.
- Monitoring progress towards a circular economic model through SMART (specific, measurable, achievable, relevant and time-bound) indicators.

Policy challenges

One enabling factor for future regional growth is Greece's environmental capital. An almost untouched natural environment and a unique and rich cultural heritage characterise wide areas of Greece. Over the last years, important progress was made in the implementation of national and EU environmental legislation. However, the renewed economic growth has led to increased pressures on the environment, which already included unplanned construction, degradation of some coastal zones and some islands, increasing air emissions from electricity generation and problematic use of irrigation water. Although much is undergoing, overall, further efforts are needed to achieve environmental convergence within the EU and the OECD. To meet these challenges, Greece needs to thoroughly develop and implement its environmental and land use policies, which should be better integrated into sectoral policies. Also, law enforcement remains a major issue and should be strengthened to foster the effectiveness of regulations and permitting.[105]

To ensure continued and inclusive growth and well-being in Greece's regions, a number of challenges regarding the environment and sustainable development need to be addressed. They include the following points. (For additional complementary analysis and recommendations, please also consult the "OECD Environmental Performance Review Greece 2020", OECD 2020).

Implementing the circular economy in all Greek regions

Greece adopted a National Circular Economy Strategy and Action Plan in 2018 and the 2017 Law on Recycling aligned existing legislation with circular economy principles. A circular economy can strengthen entrepreneurship and development, along with high-level environmental conservation. Investing in a circular economy, energy efficiency and facing climate change may become a lever for changing the Greek productive model, thus reversing the prevalent trends of de-investment, while also promoting new investment and creating new jobs throughout the supply chain of industrial products.

Policy intervention should support actions for:

- *Fully implementing the Circular Economy Strategy enforcing its action plan*. The Greek government has set implementation of circular economy objectives through a Circular Transition Business Plan of Greece, as one of its key cross-sectoral priorities. Action should be enforced and accelerated at three levels: i) setting criteria for green and circular public procurement including through incentives for enhancing secondary raw material markets and industry; ii) promoting industrial clustering of businesses for supporting circular entrepreneurship, environmental industry, digital transformation; and iii) stimulating employment through measures to strengthen the collaborative economy and small-scale entrepreneurship.

Improving waste management

There are structural problems with waste management in Greece and the country has been far behind EU standards for waste management (e.g. in 2014, it was fined by the European Court of Justice for uncontrolled waste disposal sites and landfill use, in contravention of the EC Waste Directive). Greece disposes of the majority of its municipal waste in landfills (80%, vs. EU average of 24%), with only 19% being recycled (EU average 46%) (EC, 2019[125]). The 2012 pay-as-you-throw (PAYT) scheme to reduce waste in landfills and encourage people to separate their waste for separate collection is not yet being applied. A landfill tax was created in 2014 but it was suspended in 2017. This fee remained low and did not apply to residues of waste treatment processes. In 2017, the EC called Greece to "Properly enforce and gradually increase landfill taxes to phase-out landfilling of recyclable and recoverable waste".[106]

Low fees and illegal landfills do not encourage recycling over disposing of waste. Municipalities are responsible for the collection of waste and develop waste plans together with regional waste management agencies, which are national government deconcentrated agencies. According to OECD interviews, inefficiency and bureaucracy are a major block to improve waste management and co-ordination (e.g. across ministries involved and also at subnational levels) is often lacking or not effective. For instance, in continental Greece, only a few municipalities are reported to manage waste efficiently. Greece's many islands have a delicate ecology and a face a lot of environmental pressures due to geographic specificities, lack of adequate infrastructure and services and tourism pressure.

Policy intervention should support actions to:

- *Continue upgrading waste management infrastructure in more in-need regions/municipalities.* Policy innovations are being recently introduced and should be further developed. For instance, there is a plan to co-finance waste management units by the private sector and for this purpose, the government is creating a pricing plan for municipalities to be debited by the regional agencies. The construction of appropriate waste treatment units should be accelerated and the preparation of a new set of PPPs urged. More investments in waste management targeted at specific needs of different regions and localities are also needed to meet European standards; this will also ultimately help to create jobs.

Fostering decarbonisation and the use of renewable energies

Greece ranks among the ten most carbon-intensive economies in the OECD due to its strong reliance on fossil fuels (OECD, forthcoming[23]). Although the country is slowly shifting from oil and coal to natural gas and renewable resources, there is much room to foster the use of renewable energies, which can stimulate eco-innovation and help to move towards a more circular economy. The establishment of energy audits (2016) and an energy efficiency obligation (EEO) programme (2017) are important steps in the right direction. In 2019, a National Renewable Energy Action Plan was created to foster energy saving and renewables, in accordance with the EU Renewable Energy Directive.[107] The plan includes updates in the legal framework and risk assessment. Natural gas is subsidised by the government and there are facilitations for integrating natural gas in households, which compete with renewables.[108] Improvements in energy efficiency are however affected by lack of public funding, low public awareness and limited data and monitoring of implemented measures.[109]

Policy intervention should support actions for:

- *Making decarbonisation and improvements in energy efficiency a major priority for (national and) subnational governments*. The establishment of energy audits (2016) and an energy efficiency obligation (EEO) programme (2017) are important steps in the right direction (OECD, forthcoming[23]). The necessary completion of the National Energy and Climate Plans (NECPs) for 2021-30 within the EU "Clean Energy for all Europeans" strategy[110] will be an important step forward. Greece's NECP, submitted to the EC in December 2019, sets ambitious energy and climate targets, including a detailed plan for phasing out 14 lignite power plants amounting 3.9 GW (about one-third of conventional installed capacity in Greece) by 2023. To this respect, Greece needs to further detail a broader national decarbonisation plan and design a focused sustainable development and regeneration strategy for the carbon-dependent areas. Decarbonisation will have an enormous effect on the energy sector, the environment as well as the future prospects of the region of West Macedonia and the area of Megalopolis in Peloponnese. In order to pursue an energy efficiency goal, it will be necessary to strengthen investments in biomass, geothermal, wind and solar-thermal energy (OECD, forthcoming[23]). Investments should consider specificities and needs of territories. Local authorities should be supported through know-how and financially by the central government to implement local practical plans to have renewable resources, energy savings, demand-side management and production of clean electricity. Public awareness should be raised through ad hoc actions and monitoring of the impact of implemented measures should be dramatically strengthened.

Increasing environmental investments and ensuring stable financial resources to fully implement all aspects of environmental policy

Further to the above discussions, additional challenges that the national and subnational governments need to consider high in their policy actions refer to:

- *Climate change.* Both urban and rural areas across Greece are feeling the impacts of climate change – from major floods to forest fires – and there has been major damage to property and infrastructure in recent years, as well as loss of life.[111] Environmental challenges linked to urban planning are also anticipated. Urban settlements are expected to scale up by 2030 and there is a need to improve planning, infrastructure and anti-flooding measures. Greece adopted the EU Adaptation Strategy on climate change in 2016. The Greek National Adaptation Strategy (NAS) is an overarching policy document, which defines goals, principles and priorities to make the climate more resilient. The NAS includes adaptation measures and actions for socio-economic sectors that are likely to be affected by climate change.[112] The NAS provides guidance, insight and priorities, which should be further detailed at the regional level and translated into Regional Adaptation Action Plans. These plans should take into account strategic environmental assessments and sectoral strategies for renewables, water and flood risk management. The law also calls for the establishment of a National Climate Change Adaptation Committee to advise the Ministry of the Environment and Energy (MoEE) and co-ordinate policy design and implementation. However, the work to fulfil NAS requirements and define the related implementation system is moving slowly and should be accelerated and better integrated with other policies (EC, 2019[125]).

- *Water management.* Greece is endowed with freshwater resources but spatial and seasonal distribution and use vary widely. The Greek National Action Plan against Desertification[113] considers that about 30% of the land is in several stages of desertification. The regions of the Aegean islands, Central Macedonia, East Macedonia-Thrace and Thessaly are at high risk of water deficit due to climate change (EC, 2014[124]). Greece has one of the OECD's highest rates of water abstraction per capita due to irrigation (which is subsidised through water pricing and tax-exempt electricity use) and to leakages in the distribution system, which contributes to inefficiency and potentially creates health hazards (OECD, forthcoming[23]; EC, 2018[126]; National Bank of Greece, 2015[127]).
- *Air pollution.* Despite recent improvements, Greek cities and metropolitan areas (first of all Athens and Thessaloniki) are amongst the most polluted in Europe (Chapter 2). Car emissions and residential heating are two major sources of ambient PM pollution that determine air quality of cities. Air pollution is not exclusive to metropolitan areas in Greece. Crete and South Aegean have had the highest pollution levels across regions over time. Other Greek regions experience smaller exposure to pollution, with Continental Greece, the Ionian Islands and Thessaly being the least air-polluted regions in Greece. Yet, in 2017, all Greek regions have higher air pollution levels than an average OECD region. Almost all emissions in Peloponnese and Western Macedonia come from the energy sector, as they are specialised in mining and energy production. In Attica, Central Macedonia, Crete, Epirus, Ionian Islands, North Aegean Islands and Western Greece, between 30% and 51% of emissions come from the transport sector, with the energy sector counting for 17% (Chapter 2).

Cities and regions have the brunt of the significant economic and human costs of climate change, both in terms of rebuilding and recovery efforts that follow climate-related disasters, as well as the investments that can support climate mitigation and adaptation efforts. Climate-related events, such as storms, droughts and heatwaves, put residents, the local economy and social cohesion at risk; they also have the potential of entrenching existing inequalities, as disadvantaged populations suffer disproportionately from climate change damages.

ESIF rules oblige EU countries to promote the environment and climate in their funding strategies and programmes for economic, social and territorial cohesion, rural development and maritime policy. Use of ESIF is essential if Greece has to achieve its environmental goals and integrate these into other policy areas. However, achieving sustainability involves also mobilising national public and private financing sources. Greece spent EUR 2 752 billion on environmental protection in 2016, an increase of 8% from 2015, 48% for reducing pollution, 41% for waste management, and 0.1% for protecting biodiversity and the landscape (EC, 2019[125]).

Policy intervention should support actions for:

- *Harnessing the potential of subnational governments to deliver sustainable development.* This includes: i) strengthening data collection, statistical systems and methodological approaches to track policy implementation; ii) mobilising funding to help subnational governments address environmental priorities; iii) making greater use of land value capture tools to support climate and inclusive growth objectives; iv) exploring the potential for green bonds to achieve both climate and inclusion goals; v) fostering effective horizontal co-operation, in particular in metropolitan areas – for instance, some financing instruments (e.g. congestion charges, ecotaxes) should be applied at the regional/metropolitan scale, not only in city centres; and vi) developing a green fiscal strategy and action plan, and integrating green priorities in budgeting (OECD, 2019[128]).

Reinforcing administrative structures and procedures

In recent years, Greece has made major efforts to streamline administrative structures, processes and legislation to reduce delays and bottlenecks affecting the country's competitiveness and growth. This included environmental and spatial planning. However, ensuring compliance with environmental laws and regulations is still a challenge for Greece, which faces a highly fragmented regulatory environment – with co-competencies and overlapping competencies, a complex public procurement framework, extensive use of red tape and rigid controls set at different administrative levels. This scenario is further complicated by persisting lack of financial resources and competencies, mainly at subnational levels.[114]

Policy intervention should support actions for:

- *Fostering administrative capacity and quality*. Central, regional and local administrations must have the ability to carry out their own tasks and work effectively with each other within a system of multilevel governance (see Chapter 4). The MoEE is responsible for producing a global environmental policy, preparing plans and programmes and monitoring them. The ministry is also in charge of transposing EU environmental directives into national law. At the decentralised level, the regional and municipal authorities have certain environmental competencies for their geographical areas. Regional and municipal authorities assure the practical application of various environmental measures such as water quality, waste management and impact assessments. Difficulties in meeting deadlines and requirements of the EU environmental legislation may be explained by relatively few (and decreasing in recent years) human resources to deal with the complex body of environmental legislation, combined with the bottlenecks created by lengthy and complicated administrative procedures, which often involve too many actors from various levels of public administration (EC, 2019[125]). Although a number of measures and mechanisms are already in place (e.g. for water and waste management), there is room to improve formal and informal vertical co-ordination, streamline environmental legislation and procedures, simplify the public procurement framework, reduce the use of red tape and increase skills and capacity of regional and local actors.[115]
- *Fostering legislative systematisation and mapping*. The systematisation of environmental legislation has been initiated with support from the EC and should be speeded up and promptly completed. This action complements the ongoing systematisation of the cadastre and spatial planning and aims at better enabling citizens and investors to access and understand environmental legislation (EC, 2019[26]). Further, the Greek government is (slowly) advancing in the preparation of the so-called "forest maps". As of May 2019, 55% of the territory has been mapped. In order to accelerate the ratification of the maps, some areas with building settlements within forest land were temporarily excluded from the maps. The rationale was to cover the vast majority of the country with permanent and definitive maps, while the state would decide on how to proceed with the more controversial areas, where whole settlements were built within forest land at a later stage (EC, 2019[26]). This very important mapping exercise should be speeded up and finalised, including all the designed areas without further delays.

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Notes

[1] Non-profit sector, third sector or social economy (e.g. NGOs, non-profit organisations, community groups, co-operatives, etc.) are distinct but interconnected concepts that partially overlap and are sometimes used as synonyms (OECD, 2003[134]; Salamon and Sokolowski, 2014[135]).

[2] The legal basis of Cohesion Policy can be found in Art. 174 of the Treaty of the Functioning of the European Union (TFEU). As is fixed there, cohesion policy focuses on reducing regional disparities: "In particular, the Union shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions" (Auslandsbüro Griechenland, 2015[131]).

[3] The main policy goals of the Europe 2020 strategy is to deliver more and better jobs and a socially inclusive society. This is achieved through three broad socio-economic goals based on: i) sustainable growth; ii) smart growth; and iii) inclusive growth.

[4] European Commission – Regional development and cohesion – legal texts and factsheets.

[5] National Strategy for Sustainable and Fair Growth 2030, https://www.nationalgrowthstrategy.gr/en/.

[6] The European Structural and Investment Funds (ESIF) are: the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund (CF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF). The ERDF and ESF together form the so-called European Structural Funds (EU-SF).

[7] The principles and priorities of cohesion policy for the seven-year period are distilled through a process of consultation between the EC and EU countries (and in certain cases between the countries and their regions). They are outlined in "partnership agreements" stipulated by each state with the EC. Each partnership agreement examines the economic and institutional context in order to outline a strategic framework for the optimal use of the ESIF. It sets out the strategy for investments under the cohesion policy, rural development as well as the fisheries and maritime policy (in line with the targets of Europe 2020).

[8] The EU Structural Funds (EU-SF) are composed of the European Regional Development Fund (ERDF) focused on innovation and research, digital agenda, support for SMEs and a low-carbon economy, and the European Social Fund (ESF) focused on employment, education, training, social inclusion and institutional capacity.

[9] Less developed regions are those regions with GDP per capita of less than 75% of the EU-27 average; transition regions are those with GDP per capita of greater than 75% but less than 90% of the EU-27 average and finally, more developed regions at those with GDP per capita of greater than or equal to 90% of the EU-27 average.

[10] EU contribution from: https://ec.europa.eu/regional_policy/el/atlas/; https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/rural-development/country/greece_en; https://ec.europa.eu/fisheries/cfp/emff/country-files.

[11] The European Territorial Cooperation (ETC), also known as "Interreg", is one of the goals of Cohesion policy which provides the framework for the implementation of joint actions and policy exchanges among national, regional and local actors from different partner states. The overarching objective of ETC is to promote a harmonious economic, social and territorial development of the union as a whole.

[12] As a consequence of the change in government after the July 2019 elections, the Ministry of Economy and Development has been renamed the Ministry of Development and Investments.

[13] Non-profit sector, third sector or social economy (e.g. NGOs, non-profit organisations, community groups, co-operatives, etc.) are distinct but interconnected concepts that partially overlap and are

sometimes used as synonyms (OECD, 2003[134]; Salamon and Sokolowski, 2014[135]).

[14] Source: Ministry of Development and Investment.

[15] For example, financing the Special Purpose Developing Programs in the regions of North and South Aegean.

[16] Source: Ministry of Development and Investment.

[17] Source: Ministry of Development and Investment.

[18] The main goals are to: stimulate "extroversion" and innovation; create new jobs; utilise the country's human resources with emphasis on the employment of skilled human capital to reverse the migration of young Greek scientists; encourage the production of high added-value products and services; improve the technological level and competitiveness of enterprises; achieve smart specialisation; develop networks, synergies, co-operative initiatives and generally support the social economy; encourage mergers; strengthen through reform and intervention healthy and specialised entrepreneurship with an emphasis on SMEs; re-industrialise the country; reduce the ecological footprint.

[19] The Development Council is composed of a Scientific Committee and the Social Partners and Public Administration Committee. The scientific committee is composed of experts and has the task of preparing proposals and provide expertise on the country's National Growth Strategy and on the design of national and European development programmes. The Social Partners and Public Administration Committee (SPPAC) is composed of public administration officers from local and regional authorities and social partners.

[20] Relevant aspects concern: i) simplification of licensing for the strategic investments and introduction of fast-track provisions and incentives for urban-planning; ii) fast-track audit and certifications procedures for investment projects; iii) consolidated digital map/integration of land-related data in one system; iv) facilitation in the Athens-Attica Regulatory Plan for certain aspects of urban planning for the re-industrialisation of Attica (e.g. related to "Green Investments"); v) modernisation and simplification of business parks provisions; vi) simplification of the licensing process for industrial activities; vii) establishment of a one-stop shop for business related licenses; viii) facilitation of certain aspects of environmental licensing; ix) reform of collective and individual labour relations and measures to tackle undeclared work; x) digitalisation of administrative legal procedures; xi) speeding up of public procurement procedures; xii) simplification and digitalisation of procedures for the Hellenic Commercial Registry.

[21] Source: Ministry of Development and Investment; "Law4635/2019: an overview", KLC Law Firm, 5 December 2019. www.klclawfirm.com.

[22] Over the 2014-20 programming period, self-governed regions elaborated and managed Regional Operational Programmes (ROPs) for the first time. In 2007-13, ROPs were also planned by the regions but managed by the Ministry of Development and Investments through a system of delegations back to the regions.

[23] Greece has a National Spatial Strategy which sets out principles and objectives for the country's spatial development. Regional Frameworks of Spatial Planning and Development are also the responsibility of the central government. Sub-regional governments, including regions and municipalities, have approval and oversight roles in planning document development.

[24] In Greece, there is 1 national and 13 regional RIS3s. The identification of key development priorities through Research and Innovation Strategies for Smart Specialisation (RIS3) at the regional and/or national level is an *ex ante* conditionality of the European Structural and Investment Funds (ESIF) implementation procedure. The choice as to whether the smart specialisation strategies should be prepared at a regional level or a national level rests with the EU member states. All of Greece's national and regional ESIF

Operational Programmes try to incorporate the RIS3 process according to the content of their priority axis and the nature of interventions.

[25] Smart specialisation strategies involve three distinct areas: i) the underlying role of scientific, technological and economic specialisation in the development of comparative advantage and more broadly in driving economic growth; ii) policy intelligence for identifying domains of present or future comparative advantage; and iii) governance arrangements that give a pivotal role to regions, private stakeholders and entrepreneurs in the process of translating specialisation strategies into economic and social outcomes.

[26] Notably the Ministry of Economy, Infrastructure, Marine and Tourism, the Ministry of Education-Research and Religious Affairs, the Ministry of the Environment and Energy, and the Ministry of Labour, Social Insurance and Social Solidarity.

[27] In fact Thessaly has also a significant industrial base in the cities of Larissa and Volos.

[28] Typology of Greek regions informed by Komninos et al. (2014[133]).

[29] The hiring of permanent staff by ministries, independent agencies, decentralised and local government and the public bodies supervised by them is subject to a hiring ratio of 1:4 (previously 1:5) attrition rule laid out in the memorandum of understanding (MoU), meaning one new hire is permitted for every 4 (previously 5) departures.

[30] Between 2004 and 2018, the share of population distrusting the EU increased by 48 percentage points, the highest share among EU member states (Dijkstra, Poelman and Rodríguez-Pose, 2018[129]).

[31] See also: Rodríguez-Pose, Psycharis and Tselios (2016[137]); Rodríguez-Pose, Psycharis and Tselios (2016[138]).

[32] www.anaptyxi.gov.gr/el-gr.

[33] Some regions – e.g. in Argolis and Arcadia (Peloponnese), Continental Greece, Drama (Eastern Macedonia), Epirus and Western Greece – have fewer than 30 people for square kilometre. Meanwhile, Continental Greece and Epirus are entirely composed of predominantly rural regions, and North Aegean, Peloponnese and Western Macedonia regions have all above 73% of population living in rural remote areas.

[34] OECD Principles on Urban Policy (2019), https://www.oecd.org/cfe/urban-principles.htm.

[35] Also referred to as the Second Bailout package or the Second Memorandum.

[36] Also referred to as the Third Bailout package or the Third Memorandum.

[37] This has implied the reduction of the planning levels from six to three, excluding master plans at the metropolitan level and unifying the plans at the lower levels (e.g. city plans), renaming them Urban Implementation Plans.

[38] See also OECD (n.d.[136]).

[39] See also the Urban Agenda of the EU.

[40] Although this is not the case of Greece, many EU states (e.g. Italy) have gone beyond the minimum of 5% and have implemented Integrated Territorial Investments, committing additional non-urban funding to territorial development.

[41] See: https://urbact.eu/what-are-integrated-territorial-investments.

[42] The New Master Plan of Athens-Attica applies to the region of Attica and gives strategic directions for the whole region and specific directions for each spatial unit.

[43] Carried out accordingly to the EC Commission Delegated Regulation EU 1698/2005.

[44] This increase may reflect that individuals sold off their homes over this period – often to foreign buyers (though there are no national figures on the extent of this).

[45] The largest share of GVA for both predominantly urban regions and predominantly rural regions close to cities is in the trade, transport, accommodation, food sector (at 23% and 22% respectively in 2015).

[46] This ministry which co-operates with others for other relevant thematic fields such as the Ministry of the Environment and Energy (for the protection of the environment), the Ministry of the Interior, the Ministry of Finance (for financing, e.g. support of Special Protection Areas), the Ministry of Development and Investments (for issues of infrastructure, e.g. forestry roads), the Ministry of Labour, Social Security and Social Solidarity (for training issues), the Ministry of Health, the Ministry of Culture and Sports, and the Ministry of Tourism.

[47] https://www.europarl.europa.eu/factsheets/en/section/196/the-common-agricultural-policy-cap-.

[48] The programmes are based on a combination of measures selected from a “menu” of European measures detailed in the Rural Development Regulation (Regulation (EU) No 1305/2013) and co-financed by the EAFRD.

[49] The Special Management Service for the Rural Development Programme (managing authority) is responsible for co-ordinating all stakeholders, ensuring the development of their monitoring capabilities, guiding and facilitating co-operation between the stakeholders. Evaluation plans based on ensuring that sufficient and appropriate evaluation activities are undertaken, in particular to provide information needed for programme steering, for the annual implementation reports and the *ex post* evaluation, and to ensure that data needed for RDP evaluation are available.

[50] The financial support from the European Agricultural Fund for Rural Development is structured on NUTSII level of regions which are classified according to the Rural Development Programme of Greece in four categories: i) the less developed regions and the small islands of Aegean Sea; ii) the transition regions; iii) the transition regions that are not included in the second category; and iv) the developed regions.

[51] These measures are for all Aegean islands including Gavdos (South Crete), except Crete and Evoia (Hellenic Ministry of Rural Development and Food, 2019[132]).

[52] This measure will reduce the share of direct payments received above EUR 60 000 per farm and limit payments at EUR 100 000 per farm, with a view to ensure a fairer distribution of payments.

[53] Employment in agriculture constituted more than 10% of total employment in Romania (25.8%), Bulgaria (18.2%), Greece (11.0%) and Poland (11.0%) in 2016 (EC, 2019[50]).

[54] For example, the provision of free broadband network to the residents as well as to the employees of the public sector in the remote islands of the country was facilitated by the state (Greek Government Gazette 3532/B’ 9/10/2017) in order to strengthen insularity and to provide equal opportunities and access to communication and information systems to the employees of remote islands. The Next Generation Access (NGA) programme aims to deploy fast and super-fast broadband technologies in rural areas with support from EU funds (OECD, 2019[54]).

[55] Formal agricultural education which is traditionally provided by vocational schools, technological educational institutes and universities.

[56] The CLLD outside of rural areas takes the form of urban-rural linkages and RURBAN, DG Regio; Implementing CLLD in cities, URBACT and co-operation between LEADER LAGs and Fisheries LAGs, FARNET.

[57] Some positive examples include: i) the newly established Hellenic Institute for Research and Innovation (ΕΛΙΔΕΚ) has been using funds loaned by EIB to support basic academic research and scholarships; and

ii) EPANEK has funded the programme ΕΡΕΥΝΩ-ΚΑΙΝΟΤΟΜΩ-ΔΗΜΙΟΥΡΓΩ (Research-Innovate-Create) which has been very popular and successful in bringing together business and research institutes.

58 https://ec.europa.eu/maritimeaffairs/policy/blue_growth.

59 https://www.ugs.gr/en.

60 https://www.ugs.gr/en/greek-shipping-and-economy/greek-shipping-and-economy-2019/.

61 Greek Shipping and Economy 2019: The Strategic and Economic Role of Greek Shipping in Hellenic Shipping News 07/08/2019, https://www.hellenicshippingnews.com/greek-shipping-and-economy-2019-the-strategic-and-economic-role-of-greek-shipping/.

62 The research institute of the Greek Tourism Confederation (SETE), http://www.insete.gr/en-gb.

63 Foundation for Economic & Industrial Research, http://iobe.gr/default_en.asp.

64 Every euro created by tourism activity generated additional indirect and induced economic activity of EUR 1.2 and therefore a total of EUR 2.2 in GDP.

65 Centre of Planning and Economic Research, https://www.kepe.gr/index.php/en/.

66 Which means that for every euro from tourism activity, an additional EUR 1.65 is generated from indirect and induced economic activity, and therefore the GDP increases by EUR 2.65 in total.

67 It is based on regional distribution of incoming tourism revenue as reflected by the Border Survey of the Bank of Greece. These data are compared with the GDP estimation of each region, taking into account both the GDP of 2017 and the last available regional GDP distribution (2016). Due to the approximate nature of the table data, the picture that emerges is largely indicative. INSETE “The contribution of Tourism to the Greek economy in 2018”, May 2019.

68 Interview with INSETE.

69 The Partnership Agreement (ESPA) 2014-20 is implemented through 7 sectoral national Operational Programmes (OPs) (they are: competitiveness, entrepreneurship and innovation; transport infrastructure, environment and sustainable development; human resources development, education and lifelong learning; public sector reform; technical assistance; rural development programme; fisheries and maritime); 13 regional OPs, one for each of the 13 administrative regions of the country; 11 territorial co-operation programmes, 5 of which in co-operation with the countries bordering Greece.

70 The strategic pillars of the New Tourism Policy are: i) extending the tourism season by innovative product development in close co-operation with all 13 regions; ii) promoting new thematic tourism products and special interest tourism with an emphasis on cultural tourism, pilgrimage tourism, cruises, yachting, diving parks, wellness and spas, medical tourism, luxury tourism, city breaks, and Greek gastronomy; iii) targeting new dynamic source markets (China, India, South Korea, Middle East) while enhancing Greece’s presence in traditional markets in Europe, Russia and the United States; iv) increasing air connectivity/direct flights from central and regional foreign airports to existing and new destinations in Greece; v) attracting investments of high quality and added-value to upgrade the overall tourism product and accommodate the expected increase in demand in the coming years; vi) creating and promoting synergies with other economic sectors (e.g. agro-food, manufacturing).

71 Study “Benchmarking experience of tourist in Greece vs competition”; Study “Showing loyalty of travelers to Greek vs competitive destinations”; Study: “Comparing spend of tourists in Greece and Spain”.

72 Interview with INSETE and other regional stakeholders.

73 In Attica, Central Macedonia, Crete, Eastern Macedonia, Epirus, Peloponnesus, Thessaly, Western Macedonia. Each regional directorate supervises the operation of the services within its field of

competency.

74 Which accounts for a total of EUR 5 039 444 058 in 2014-20 (EUR 3 899 892 473 from the EU and EUR 1 139 551 585 from national co-financing).

75 Which aims to contribute to the proposed shift in the growth model of the Greek economy from non-tradeable into tradeable sectors, and cluster development of innovative and out-turned sectors with a sustainable competitive advantage.

76 See OECD work on Youth (https://www.oecd.org/youth.htm) and also The OECD Action Plan for Youth - Giving Youth a Better Start; The OECD Skills Strategy; OECD-Financial education in schools.

77 Local Development Pacts are the result of the diagnosis of specific local needs as well as of specific development capabilities, and their design and implementation is realised with the participation of the local actors and stakeholders.

78 Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews.

79 “Recent Employment Developments and the Productive Model of the Greek Economy”, Institute of Labour – Greek General Confederation of Labour’s - INE- GSEE, July 2018.

80 See Chapter 2.

81 https://eeagrants.org/news/helping-people-in-need-in-greece.

82 https://ec.europa.eu/social/main.jsp?catId=1239&langId=en&intPageId=3614.

83 https://www.infomigrants.net/en/post/19064/minor-killed-at-moira-migrant-camp-on-lesbosv.

84 https://www.bbc.com/news/world-europe-45372942.

85 https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/201902_managing-migration-eu-financial-support-to-greece_en.pdf.

86 Currently national unemployment benefits (EUR 400/month for 15 months) continue to be distributed to people registered in the national unemployed system who have worked a certain amount of days for 2 consecutive years.

87 https://ec.europa.eu/social/main.jsp?catId=1239&langId=en&intPageId=3614.

88 http://www.housingeurope.eu/blog-419/the-greek-national-strategy-for-social-inclusion.

89 OECD conducted several field missions to Greece, some of the findings for this section were collected during the 1st (12-16 November 2018) and 2nd mission (16-18 January 2019).

90 The FEAD is managed nationally by the National Institute of Labour and Human Resources, under the Ministry of Labour and Human Resources. The FEAD OP in Greece aims to provide food and basic material assistance to the most deprived households, https://ec.europa.eu/social/main.jsp?catId=1239&langId=en&intPageId=3614.

91 https://cohesiondata.ec.europa.eu/2014-2020/ESIF-2014-2020-Achievement-Details/aesb-873i/data.

92 Author analysis from https://cohesiondata.ec.europa.eu/2014-2020/ESIF-2014-2020-Achievement-Details/aesb-873i/ (accessed on 27 August 2019).

93 http://anaptyxi.gov.gr/en-us/AT-A-GLANCE/Thematic-Objectives.

94 OECD conducted several field missions to Greece, some of the findings for this section were collected during the 1st (12-16 November 2018) and 2nd mission (16-18 January 2019).

95 https://www.solidaritynow.org/en/κεντρα-αλληλεγγυησ/.

[96] https://eeagrants.org/news/helping-people-in-need-in-greece.

[97] www.oecd.org/cfe/leed/improvingsocialinclusionatthelocallevelthroughthesocialeconomy.htm.

[98] European Commission (2019), Social enterprises and their ecosystems in Europe. Updated country report: Greece. Authors: Angelos Varvarousis and Georgios Tsitsirigkos. Luxembourg: Publications Office of the European Union, https://europa.eu/!Qq64ny.

[99] Economic theory suggests a number of potential benefits from accessibility. Two main sets of theories are particularly relevant. One set relates to trade. Increased accessibility reduces the cost of trade, allows territories to specialise in areas of production and increases competition. A second set of theories relates to agglomeration. Research on the economics of agglomeration suggest that greater density (or accessibility) of economic activity will aid economic activity in three ways: i) through improved sharing of inputs into the production process, including infrastructure; ii) by better matching demand and supply in markets, primarily the labour market; or iii) through learning, since economic actors in relatively close proximity are better able to benefit from knowledge transfers from each other (Lee and Lembcke, 2019[117]).

[100] In Greece, the export lead time (the time between the placing of an order and the receipt of the goods) is 3 days for port and airport transportation and 6 days for rail and road transportation, against 2 days on average in high income OECD countries. A similar gap exists for import lead times (OECD, 2018[8]).

[101] OECD Environmental performance reviews 2010; OECD Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews.

[102] The Rural Development Programme 2014-2020 enhances the competitiveness of the agro-food sector, promotes the multifunctional role of rural areas and protects the environment, thus including actions that aim to enhance natural rural amenities. The RDP is supported by the EAFRD, https://ead.gr/home-en/grdp-en/.

[103] EU (ERDF, Cohesion Fund, European Agricultural Fund for Rural Development, and the European Maritime and Fisheries Fund) and national.

[104] European Circular Economy Stakeholder Platform, https://circulareconomy.europa.eu.

[105] OECD Environmental performance reviews 2010 and forthcoming (2020); OECD Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews.

[106] http://www.cewep.eu/wp-content/uploads/2017/12/Landfill-taxes-and-bans-overview.pdf.

[107] In December 2018, the revised renewable energy directive 2018/2001/EU entered into force, as part of the Clean Energy for all Europeans package, aimed at keeping the EU a global leader in renewables and, more broadly, helping the EU to meet its emissions reduction commitments under the Paris Agreement. The new directive establishes a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023.

[108] In 2018, a major project (2018-22) to expand the Greek natural gas network will reach 43 cities, including some of its main islands, making gas cheaper for over 32 000 new consumers. This will be 50% financed by the Partnership Agreement for the Development Framework (ESPA), 40% by loans and the rest by the Public Natural Gas Distribution Networks Corporation's own funds. The region with the greatest expansion will be Continental Greece, whereas the commodity is already available in Attica, Thessaloniki and Thessaly, http://www.ekathimerini.com/230936/article/ekathimerini/business/natural-gas-set-to-expand-to-all-regions-of-greece-by-2022.

[109] OECD Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews; OECD Environmental performance reviews 2020 – Greece (forthcoming).

[110] Under the Clean Energy for all Europeans package, EU countries are required to draft 10-year National

Energy & Climate Plans (NECPs) for 2021-30, outlining how they will meet the new 2030 targets for renewable energy and for energy efficiency. Member states needed to submit a draft NECP by 31 December 2018 and should have been ready to submit the final plans to the European Commission by 31 December 2019. Most of the other new elements in the new directive need to be transposed into national law by member states by 30 June 2021.

[111] OECD Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews.

[112] These sectors are: biodiversity and ecosystems, agriculture and food security, forestry, fisheries, aquaculture, water resources, coastal areas, tourism, energy, human health, the built environment, transport, cultural heritage, industry, mining, and the insurance.

[113] Ratified by the joint ministerial decision 99605/3719/2001 (Greek Government Gazette 974/B').

[114] OECD Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews; OECD Environmental performance reviews 2020 – Greece (forthcoming).

[115] OECD Territorial Reviews of Greece 2019 – Answers to questionnaires and from interviews; OECD Environmental performance reviews 2020 – Greece (forthcoming).

4 Multi-level governance for regional development

Previous chapters underline how Greece could benefit more from place-based development strategies. Delivering a place-based regional policy requires a sound multi-level governance system that ensures co-ordinated policy measures, the involvement of a broad range of stakeholders and adaptation to the specific conditions of regions and localities. This chapter provides a comprehensive assessment of the multi-level governance system in Greece. First, it assesses how the territorial and decentralisation reforms undertaken in the last years can further contribute to support regional development. Second, it provides ways forward for Greece to pursue progresses made during the 2014-20 programming period for the strategic governance of EU funds and analyses how EU funds may be further used as a lever to strengthen the overall multi-level governance system for regional development and public investment.

Introduction

As discussed in Chapter 3, Greece would benefit from place-based development strategies where territorial and sectoral policies meet and interact in each place, generating multiplier effects. Place-based policies might also help Greece exploit the growth potential of each region and ensuring that growth benefits reach different population groups and places – from continental, mountainous and island localities. A place-based approach to regional development and investment – compared to spatially blind policies require an adjustment of the objectives, the intervention scale, the tools and actors involved in the policymaking process, and how they interact during the whole policymaking process.

Moving towards a stronger place-based approach to regional policy in Greece as recommended in Chapter 3 requires finetuning the overall multi-level governance (MLG) system of the country. This is the approach taken by Greece since the early 2010s, with deep changes in the Greek institutional and fiscal MLG system. Since 2010, Greece has established a new architecture of the MLG system to deliver regional and local development policies. A number of improvements have been made and the shift towards a greater place-based approach to regional development policy is taking place, through the following changes: i) a decentralisation agenda, in particular regionalisation; ii) a more strategic approach to European Union (EU) funds management and a greater regional approach in the 2014-20 programming period compared to the previous one.

Adopting a systemic approach to multi-level governance is crucial to enhance the effectiveness of public investment and EU funds management more specifically. Indeed, institutional quality and governance processes affect the expected returns to public investment and have a positive influence on the capacity of public investment to leverage private investment, rather than to crowd it out (OECD, 2018[1]). Evidence shows that government quality matters for regional growth and that, in particular, government quality improvements are essential for low-growth regions (Rodríguez-Pose and Ketterer, 2019[2]). Thus, delivering a place-based regional policy requires a sound multi-level governance system that ensures co-ordinated policy measures, the involvement of a broad range of stakeholders and the adaptation to the specific conditions of regions and localities (OECD, 2019[3]).

Fine-tuning the multi-level governance system is all the more important in the current COVID-19 crisis. The COVID-19 global crisis has a strong territorial dimension impacting differently regions and cities within countries, some of them being harder hit than others. The combination of national and subnational measures and an ability to work together is fundamental for an effective response to this crisis. Regional and local authorities are responsible for delivering critical short-term containment measures and more long-term recovery activity – from health and social care to economic development and public investment. A co-ordinated response by all levels of government can minimise crisis-management failures. Effective crisis response so far highlights that robust vertical and horizontal co-ordination mechanisms are more important than ever. Furthermore, national and subnational governments will be leading the economic recovery effort, including through regional and local recovery plans that are likely to include business support and stimulus packages targeting public investment (OECD, 2020[4]).

Regional policy in Greece is largely driven by the European Cohesion Policy. Investments funded through European Structural and Investment Fund (ESIF) account for 80% of public investment in the country (OECD, 2018[5]). Structural funds have permitted Greece to invest in new infrastructure and modernise small- and medium-sized enterprises (SMEs), among others. Cohesion Policy in Greece has also been a key contributor to reducing territorial inequalities, in particular between island and continent regions and municipalities.

To make the most of regional development policies in Greece it is important to focus on improving the whole multi-level governance system of the country. This means: i) putting a strong focus on improving the governance of EU funds within the country as they represent the largest part of regional policy in Greece; and ii) using these improvements as leverage to improve the whole multi-level governance system.

To assess the current multi-level governance system of regional development policies in Greece and provide actionable recommendations in this matter, it is necessary to look at two interrelated dimensions:

1. **Decentralisation and regionalisation reforms**: Greece has established, in a short amount of time, a new architecture to deliver regional polices. Decentralisation reforms undertaken during the last 30 years have resulted in the creation of a new tier with directly elected regional governments responsible for the implementation of regional development policies. With decentralisation reforms Greek regions and municipalities can also have greater ownership over development policies, playing a more active role in the definition of priorities.
2. **The multi-level governance of regional policies**: Regional policy in Greece is mainly delivered through investments financed by European funds. For the current programming period 2014-20, Greece has introduced a number of adjustments to the management and control system (MCS) that govern the use of European funds in the country, including the creation of new institutions as well as tools to ensure the appropriate co-ordination among them and more strategic use of funds. Finetuning the multi-level governance framework for the implementation of EU funds in the country is a lever to improve the multi-level governance system as a whole, encompassing also policies and investments funded through the national investment programme.

Considering these two interrelated dimensions, this chapter provides a comprehensive assessment of the multi-level governance system as a whole in Greece. It is informed by research interviews conducted with key actors from across Greece's 13 regions in order to understand how the multi-level governance framework and instruments meet the needs of diverse regional contexts and by questionnaires answered by Greek experts, data analysis, academic and grey literature.

The chapter first focuses on the territorial and decentralisation reforms that have taken place during the last years in the country and assesses how these reforms can further contribute to support the regional development policy agenda. The second part of the chapter focuses on the need to pursue the progress made in the 2014-20 programming period for the strategic governance of EU funds. It then analyses how EU funds may be further used as a lever to strengthen the overall multi-level governance system for regional development and public investment.

New architecture to deliver regional policies: Consolidating the implementation of the decentralisation and regionalisation reforms

Introduction

Greece has established, in a short amount of time, a new architecture to deliver regional polices. Decentralisation reforms undertaken during the last 30 years have resulted in the creation of a new tier with directly elected regional governments responsible for the implementation of regional development policies. By granting regions and municipalities more responsibilities, the decentralisation and regionalisation reforms have allowed Greek subnational governments to play a more active role in the definition of their own development.

As decentralisation in Greece is relatively new, responsibilities are continuously evolving, including responsibilities for elaborating and delivering regional policy, which sometimes overlap or are unclear. In its current efforts to assess, clarify and potentially reassign responsibilities to the regional level, it is crucial for Greece to clearly define the roles of and interactions between the different actors involved in the design and execution of policies and ensure co-ordination.

In the transition towards a more locally-led policymaking to deliver place-based policies, the degree to which Greek regions and municipalities are policymakers, as opposed to policy "takers", is still limited. Greek regions and municipalities have low autonomy compared to other OECD countries as they are highly reliant on central government and EU funds to carry out their activities. This in part results from the post-recession context, which has put strong pressure on regional and local governments. Limits on hiring of new employees and significant budget shortfalls limit the capacity of regions and municipalities to deliver on their new roles. Further strengthening the capacity of regional and local actors to identify their strengths and opportunities and to build on them is fundamental to the success of modern regional policies. As regional governments build capacity and increase own-source revenues, their role as policy "takers" will change and they will be better places to adopt tailored solutions to local needs.

Recent decentralisation reforms represent important steps towards a more locally-led policymaking

The Kapodistrias and Kallikratis reforms: A new landscape of subnational governments

Greece forms part of a large group of countries, within and beyond the OECD, that are increasingly providing subnational governments, and especially regions, with more responsibilities and autonomy. Since the 1960s, European countries are increasingly decentralising responsibilities from the national level to the second tier of government to take advantage of economies of scale in public service provision, improve co-ordination between municipalities and intermediate levels of government, and increase competitiveness, among others (Box 4.1). Regions have a key strategic role, relative to local and national governments, to implement a more integrated territorial development planning. This is why strengthening the Greek second-tier needs to be seen as a strategic decision to enhance productivity and ultimately inclusive development across the country.

The first major change took place in 1997 when the Greek government adopted the Kapodistrias reform (Law No. 2539/1997). This reform reorganised the country's administrative divisions reducing the number of local authorities (communities and municipalities) and providing municipalities with more competencies. This reform also aimed at modernising the economic and administrative management of municipalities. It was part of a general effort to increase transparency and reduce the levels of corruption, especially at the local level. The *Politeia* Programme of 2000, for example, contemplated the development of new technologies and adoption of modern techniques of administrative control, the adoption of more efficient financial management measures for public services, the reduction of administrative procedures and the facilitation of citizen participation, amongst others (OECD, 2001[6]).

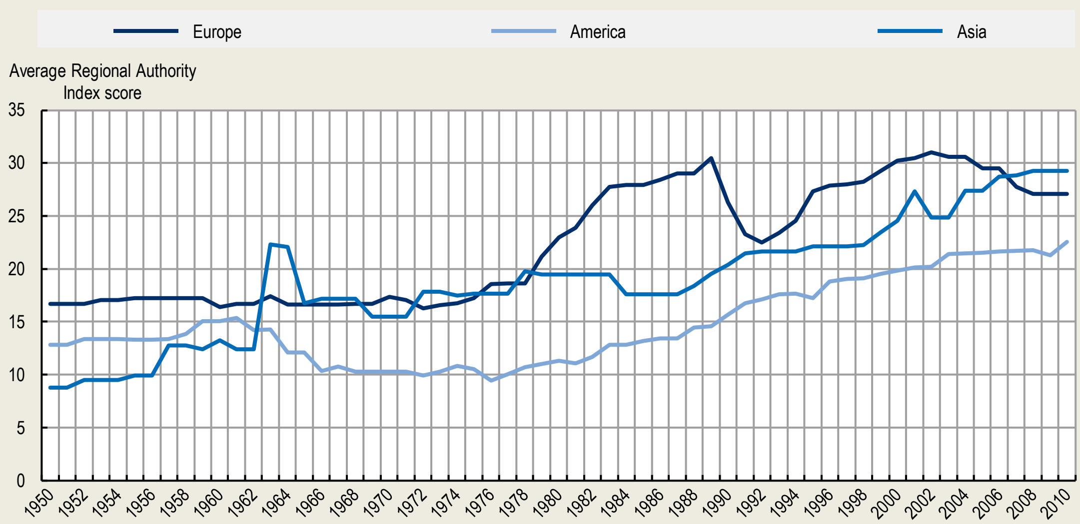
In 2010, the Kallikratis reform (Law No. 3852/2010) rearranged the distribution of power in favour of subnational governments. Through institutional and territorial restructuring, the Kallikratis plan sought to rationalise resources and local spending by creating economies of scale and improving service delivery to citizens and enterprises at the local level. The reform put special emphasis on state efficiency and the improvement of the management of human and financial resources.

To this end, the 13 administrative regions were transformed into self-governed regions with directly elected regional councils. These 13 administrative regions were first introduced in 1986 (Law No. 1622/1986) with the unique purpose of co-ordinating regional development policies and managing EU Structural Funds (Kalimeri, 2018[7]). The Kallikratis reform transformed these administrative entities into new self-governed regions with a regional council composed of members elected by direct universal suffrage for a period of five years. This deliberative assembly is the regional authority's decision-making body (Figure 4.2). The regional council is composed of a number of committees, including the financial and the regional committees for consultation. On the executive side, the Executive Committee is mainly responsible for co-ordination of policies, while the Economic Committee is responsible mainly for economic affairs, budgeting, public procurements and tendering procedures. Regions can also create a regional "development enterprise" (private law entity) in order to promote development projects, as well as, in some cases, non-profit companies (Hlepas, 2015[8]).

Box 4.1. Trends in decentralisation and regionalisation

Since the 1970s, countries are increasingly decentralising responsibilities from the national level to the regional level (second tier). Indicators that measure the authority of administrative regions, such as the Regional Authority Index, show that decentralisation to the regional level is pervasive in all parts of the world with available data (Figure 4.1). In western (mostly European) countries, the trend started in the 1960s and 1970s, with countries in Asia and the Pacific region following suit since the 1980s. To a lesser extent, regionalisation has also taken place in Latin America since the 1980s. Of the 81 countries covered by the Regional Authority Index, 52 experienced a net increase in the degree of regional authority and only 9 experienced a net decline.

Figure 4.1. Regionalisation in America, Asia and Europe



Note: Shown are average Regional Authority Index scores for 29 American, 11 Asian and 41 European countries.
America: Argentina, the Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, the United States, Uruguay and Venezuela.
Asia: Australia, Brunei, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand and Timor Leste.
Europe: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, the Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, Serbia and Montenegro (until 2006), Serbia, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.
Source: Schakel, A. et al. (2018[9]), *Final Report on Updating the Regional Authority Index (RAI) for Forty-Five Countries (2010-2016)*, https://publications.europa.eu/en/publication-detail/-/publication/5562196f-3d3a-11e8-b5fe-01aa75ed71a1.

Through regionalisation, countries aim to take advantage of economies of scale in public service provision, better responding to widening functional labour markets, improving co-ordination between municipalities and intermediary levels of government, and increasing competitiveness, among others. Relative to local governments, regions have more resources to implement effective regional development strategies and the ability to foster intraregional co-ordination and implement more integrated territorial planning. They may better target regional comparative advantages through access to local knowledge, compared to the national government or fragmented local governments.

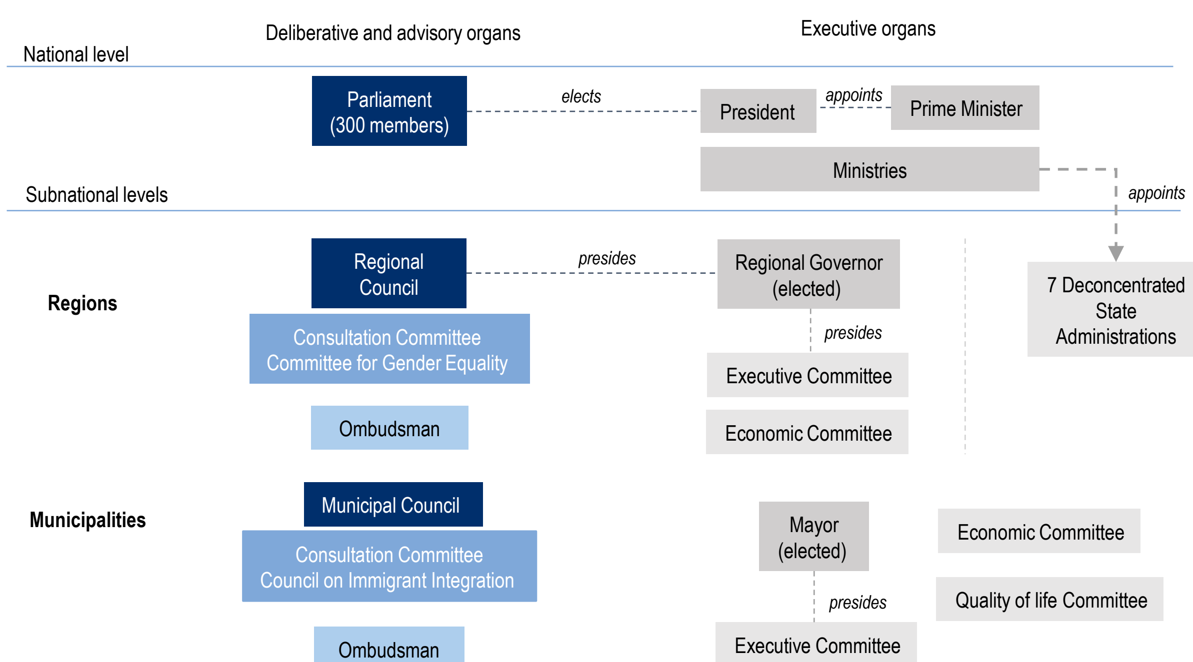
Source: OECD (2019[3]), *OECD Regional Outlook 2019: Leveraging Megatrends for Cities and Rural Areas*, https://dx.doi.org/10.1787/9789264312838-en.

A number of competencies were transferred to regions, notably in the areas of regional planning, transport, employment and education, amongst others. The transfer of competencies followed, in general, the homogeneous principle by which all regions were transferred the same competencies and functions at the same time. The Executive Committee, composed of the head of the region and the deputy head, is responsible for monitoring the implementation of regional policy.

The Kallikratis reform introduced a degree of differentiation in the transfer of competencies for urban areas (see section "Making the most of Greece's metropolitan areas). The reform provided the Metropolitan Region of Attica and the Metropolitan Unit of Thessaloniki with more responsibilities in four strategic sectors: transport and networks, environment and the quality of life, civil protection and security, spatial planning and urban regeneration. The metropolitan status of these regions aimed mainly at promoting environmental protection, improving quality of life and urban and land planning in these areas. Some of their main tasks include implementing European development policies and promoting regional development projects (Kalimeri, 2018[7]).

Together with the 13 regions, the reform created seven deconcentrated[1] authorities headed by a general secretary appointed by the Ministry of the Interior (Figure 4.2). These deconcentrated administrations are since then responsible for overseeing regional governments and municipalities to ensure the legality and transparency of their actions and decisions. They also have responsibilities in regional and urban planning and environmental protection, as well as in migration, citizenship and energy policies. As in other OECD countries, such as France, Italy, Poland or Sweden, having such state representatives at the territorial level means that the central level continues to play a key role in implementing national policies at the local level (OECD, 2017[10]).

Figure 4.2. Greek multi-level governance system



Note: The 325 new municipalities are divided into 6 102 communities (deconcentrated entities), providing "some intra-municipal decentralisation". The Kleisthenis reform (Law 455/2018) abolished the distinctions between municipal communities and local communities. In communities of more than 300 inhabitants, the governing bodies are the President of the Council of the Community and the Council of the Community, the President of the Community in communities with fewer than 300 inhabitants.
In municipalities with more than 10 000 citizens, a deliberation committee is the authority that represents local social groups.
Source: Author's elaboration based on CEMR/CCRE (n.d.[11]), *CCRE: Greece*, https://www.ccre.org/pays/view/44 (accessed on 14 February 2020).

At the same time, the number of municipalities was reduced from 1 033 to 325 through a top-down process of mandatory mergers. This important reduction of municipalities is generally considered a major achievement (Council of Europe, 2017[12]). The reform established a one-island one-municipality principle, with the exception of those with Polynesian character ("archipelagos") and Crete which comprises 21 municipalities (Council of Europe, 2017[13]). With this restructuring, the average size of municipalities increased significantly; municipalities now average 33 200 inhabitants, which is well above of the OECD average of 9 700 inhabitants and the EU28 average of 5 900 (OECD, 2019[14]). A reduced number of municipalities facilitates more efficient policymaking by taking advantage of greater economies of scale in service delivery and infrastructure investments.

The 325 municipalities have a municipal council, composed of members elected by direct universal suffrage for a 5-year term. This Deliberative Assembly is the decision-making body of the municipality. The municipal council is composed of a number of committees including the Financial Committee, the Quality of Life Committee and the Board of Immigrant Integration (Figure 4.2). The Executive Committee is composed of the mayor and deputy mayors and monitors the implementation of municipal policy, as adopted by the municipal council.

The Kallikratis reform has conferred more responsibilities to municipalities. They have competencies over urban planning and environment being responsible for the design and implementation of local land use and statutory plan. They also issue building permits and monitor their implementation. The construction and management of waste disposal facilities is also under municipal responsibility. In terms of employment policies, they take over employment support policies and citizens services centres. For education, they care of adult day care centres, they set up and manage pre-school education centres, and construct and maintain schools and sports venues. For transport, they have responsibilities regarding road network and traffic management.

While the Kallikratis reform follows a homogeneous principle for the assignment of competencies, functions, and internal structures of municipal authorities (as it is the case for the regional level), the law also considers a certain degree of differentiation for island and mountainous municipalities. The law grants the possibility to island municipalities to be conferred more competencies in four sectors, namely: i) agriculture and fisheries; ii) natural resources, energy and industry; iii) transport and communication; and iv) planning and environment. The law also considers that, in such cases, island municipalities would receive additional personnel and technical infrastructure. However, the decree to apply this provision considered by the law has not yet been adopted and, in practice, these competencies are now in the hands of the regions (Council of Europe, 2017[13]).

Contextual challenges that impact the implementation of decentralisation reforms

The compliance with austerity measures explains the reform's hastily enactment (CEMR, 2013[15]). The implementation of the Kallikratis reform needs to be understood and assessed in the context of the Greek government-debt crisis and the memoranda of understanding (MoUs) signed by Greece, with the European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF) in 2010, 2012 and 2015. These financial aid packages, and in particular the first and the second, had specific provisions concerning local government's role in ensuring austerity (Kalimeri, 2018[7]). The second MoU set specifically rigid targets for the reduction of personnel and put a restriction on hiring (Dimitropoulos, 2012[16]). The amalgamation and reduction of the number of municipalities and public employees responded to the general effort in creating a smaller state and cutting public spending.

The economic and fiscal crisis affected the success of the decentralisation reform's implementation. Perceived as imposed, local actors did not engage properly during the design and implementations processes. Actors from regions and municipalities could not entail in any negotiation process and had to accept memorandum provisions, undermining the commitment of local actors to a more collective implementation of the reform (Hazakis and Ioannidis, 2014[17]; Ioannidis, 2016[18]; Ioannidis, 2015[19]). Not only decentralisation reforms but many policies have been imposed on the Greek state through bailout conditions and this has impacted public trust in politicians and European institutions alike. Indeed, while the proportion of citizens who have a positive image of the EU in Greece has increased by 8 percentage points in the last 2019 Eurobarometer survey, still 62% of the population tend not to trust in the EU, the higher ratio among EU countries (EC, 2019[20]; Dijkstra, Poelman and Rodríguez-Pose, 2018[21]). This context of mistrust might affect the degree to which subnational actors own the reform and the degree to which they perceive it as a promising way to enhance the productivity and development of regions and municipalities.

Box 4.2. The first and second memoranda of understanding and their impact on local governments

The first and second MoUs signed by Greece and the EC, the ECB and the IMF make explicit references to measures that need to be taken at the subnational level, including all agencies and institutions attached to regions or municipalities.

The cut on public spending has direct impacts on subnational governments. Memorandum II, in particular, specifies very tight fiscal policy and supervision procedures for the municipalities and regions. One of the provisions of this memorandum is the reduction of wages of all political officials by 10% with effect on 1 January 2012. The agreement also considers reduction in the number of deputy mayors and associated staff in 2013 with the aim of saving at least EUR 9 million in 2012 and EUR 28 million in 2013 and onwards. Moreover, the document specifies the requirement of reducing the number of fixed-term contracts. Overall, operational expenditure by the subnational government needed to be reduced with the target of saving at least EUR 50 million.

Source: Dimitropoulos, G. (2012[16]), "The 'Kallikratis program:' The influence of international and European policies on the reforms of Greek local government", https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2518450 (accessed on 7 July 2019).

While Greek regional and local actors are eager to handle more responsibilities, there is a widespread feeling that the reform is incomplete. In particular, actors have expressed that the reform needs some adjustments to reflect regional disparities in terms of resources, capacities and geographic characteristics. The weak ownership and the difficulties to communicate the advantages and challenges of the reform have been also affected by the rooted centralised organisational culture of the Greek public sector.

The fast implementation of decentralisation and regionalisation reforms in Greece, especially the Kallikratis plan, has also posed important challenges to the regions and municipalities, which often do not have the adequate institutional, administrative and financial capacities to deal with the new responsibilities. Building capacities at the subnational level requires time and is often a learning-by-doing process. Therefore, it needs a long-term commitment from central and subnational government levels (OECD, 2019[22]).

In a context that imposes enormous challenges, regional governments and municipalities have done important work in dealing with the new tasks they have been assigned. At the local level, administrations actively responded to unprecedented demands for social services, which have been aggravated by the current refugee and migration crisis affecting local communities (Council of Europe, 2017[12]).

Success with decentralisation reform depends on a number of preconditions (OECD, 2019[22]). Among these, clarifying the responsibilities and functions assigned to each government levels is fundamental. Other preconditions include allowing for territorially specific policies and the possibility for asymmetric decentralisation, with differentiated sets of responsibilities given to different types of regions/cities, in particular the metropolitan areas. Such mechanisms are critical to providing institutional and fiscal arrangements that best respond to local needs. Greece needs to address these preconditions in order to ensure that decentralisation reform is an enabling tool to foster productivity and social inclusion across the country. The OECD has identified ten guidelines to make decentralisation work (Box 4.3) which are key elements that need to in place to enable effective outcomes from decentralisation policies. Some of these key elements will be addressed in detail in the following sections.

Box 4.3. Making decentralisation work: 10 OECD guidelines

Decentralisation is not an end in and of itself but rather a means to deliver greater accountability, better public services and more vigorous growth for regions and cities. This means more than just a zero-sum transfer of resources or functions from one level of public power to another.

The way decentralisation is designed and implemented has a major impact on its associated outcomes. The benefits depend on the system as a whole, including the adequate capacity of subnational governments, accountability of local public decision-making and sound framework conditions.

When it is properly designed and implemented, there is evidence that decentralisation policies have a number of benefits, from improved subnational public service delivery and greater citizen engagement to reduced corruption and a positive impact on growth.

This is why the OECD has developed ten guidelines that help make decentralisation work as follows:

1. Clarify the responsibilities assigned to different government levels.
2. Ensure that all responsibilities are sufficiently funded.
3. Strengthen subnational fiscal autonomy to enhance accountability.
4. Support subnational capacity building, including through appropriate staffing and training strategies.
5. Build adequate co-ordination mechanisms across levels of government.
6. Support cross-jurisdictional co-operation.
7. Strengthen innovative and experimental governance, and promote citizens' engagement.
8. Allow and make the most of asymmetric decentralisation arrangements.
9. Consistently improve transparency, enhance data collection and strengthen performance monitoring.
10. Strengthen national regional development policies and equalisation systems, and reduce territorial disparities.

Source: OECD (2019[22]), *Making Decentralisation Work: A Handbook for Policy-Makers*, https://dx.doi.org/10.1787/g2g9faa7-en.

Administrative decentralisation contrasts with limited fiscal decentralisation

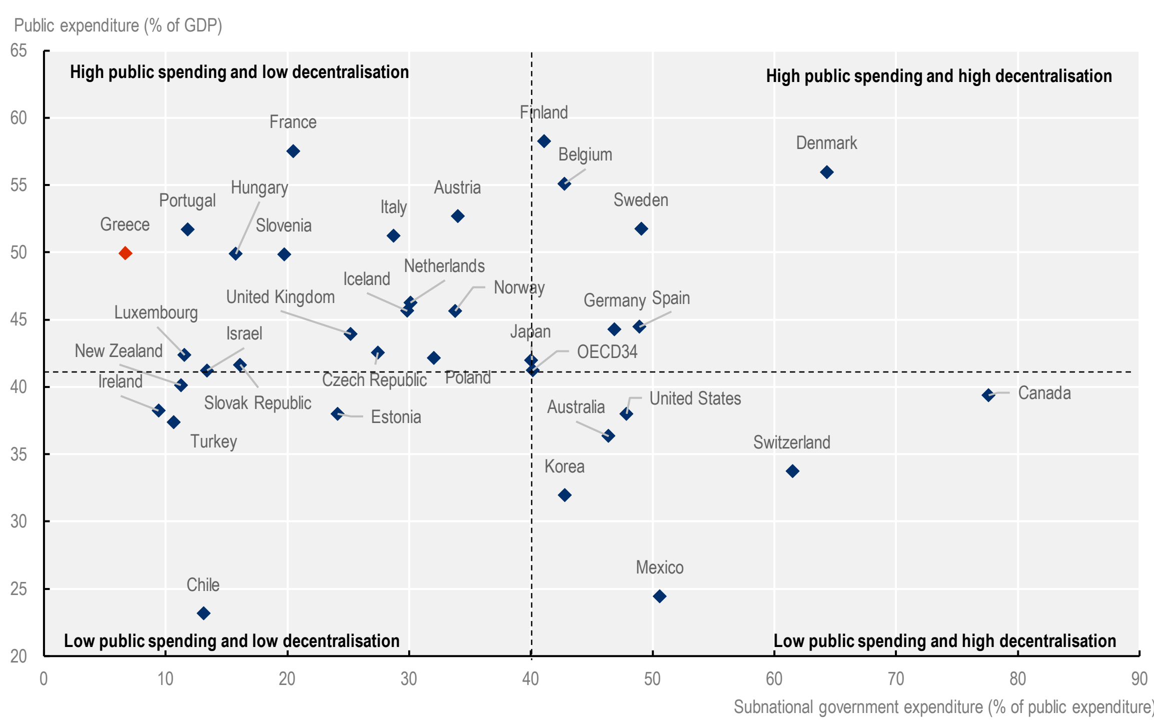
The shares of subnational public expenditure and investment are modest

Despite the transfer of responsibilities foreseen by the Kallikratis reform, Greece remains among the most centralised countries of the OECD in terms of subnational spending together with Chile, Ireland, New Zealand and Turkey. Subnational expenditures in Greece accounted for 3.5% of gross domestic product (GDP) and 7.1% of total public expenditure in 2016, the lowest level in the OECD (EC, 2018[23]). While public expenditure in Greece is relatively high when compared to the OECD average, subnational public expenditure is considerably lower than the OECD average, even when considering only unitary countries (Figure 4.3). Overall, the share of subnational expenditure (as of GDP and total public spending) has not increased compared to 1995 (OECD/UCLG, 2019[24]). The share of staff spending at the regional and municipal levels (10.6%) is also among the lowest in the OECD and well below the OECD average for unitary countries (43%) (EC, 2018[23]).

The reduced share of public expenditures of subnational governments results, in part, from the fiscal consolidation measures taken by Greece, as well as the compliance with the MoUs. Fiscal consolidation measures resulted in several budget cuts, including the downsizing of the subnational government public sector through staff reduction, limitations in hiring new and qualified staff and pay cuts. Between 2010 and 2013, the Greek civil service was downsized by around 19% at the subnational level and subnational spending decreased by 2.8% per year in real terms between 2007 and 2017 (OECD/UCLG, 2019[24]).

The modest share of subnational expenditures also reflects the fact that some of the most important public service delivery systems, such as public education, public health services and social protection, are subject to direct control by the central government (OECD/UCLG, 2019[24]). Moreover, regional expenditure is subject to special restrictions controlled by the State Treasury and the Court of Audit (Article 98 of the Constitution), which also controls public contracting (Hlepas, 2015[8]).

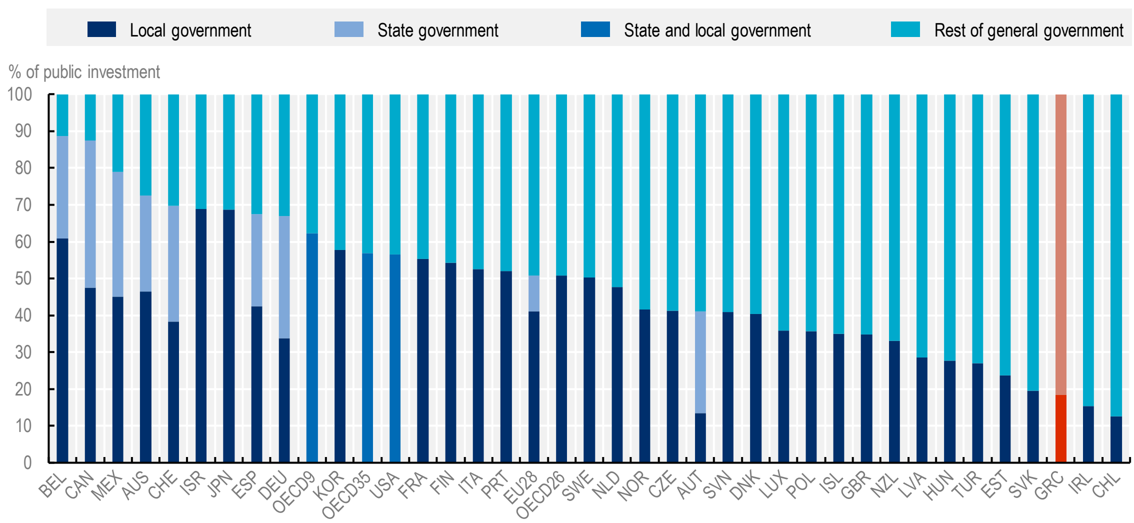
Figure 4.3. National and subnational public expenditure, 2016



Note: 2013 for Chile, Mexico and New Zealand, 2012 for Australia and 2011 for Turkey. Data stated in local currency were converted in USD using purchasing power parity (PPP). OECD average is weighted.
Source: OECD (2020[25]), "Subnational government structure and finance", https://doi.org/10.1787/05fb4b56-en.

Greece also belongs to the group of countries with limited subnational investment. In Greece, regions and municipalities are only responsible for 18.5% of total public investment – the third-lowest rate in the OECD after Chile and Ireland, a rate that is much lower of the average of OECD unitary countries of almost 51% (Figure 4.4). The low level of public investment at the subnational level is a result, at least partially, of the crisis: between 2008 and 2017, public investment at the subnational level decreased on average 10% per year in real terms. This number is also relatively low as an investment at the local level is primarily funded by the state and through EU Structural Funds, and the corresponding resources do not always appear in local budgets (Torres Pereira and Mosler-Törnström, 2015[26]).

Figure 4.4. Public investment across levels of government, 2016



Note: OECD9 and OECD26 refer to the average for OECD federal countries for OECD unitary countries respectively.
Source: OECD (2018[27]), "Subnational governments in OECD countries: Key data (brochure)", https://www.oecd.org/regional/regional-policy/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf.

However, investment remains one of the most important tasks of subnational governments in Greece as it represented 19.3% of their total expenditure in 2016, above the OECD average for unitary countries of 13.8% (EC, 2018[23]). The majority of local investment (64%) goes to economic affairs and transports (road networks, urbanisation projects and land acquisition, etc.) while housing and community amenities (street lighting, water supply networks, etc.), environmental protection (sewage systems, green areas) and general public services (administrative infrastructure, buildings and equipment) accounted for the same share (around 9%-10%).

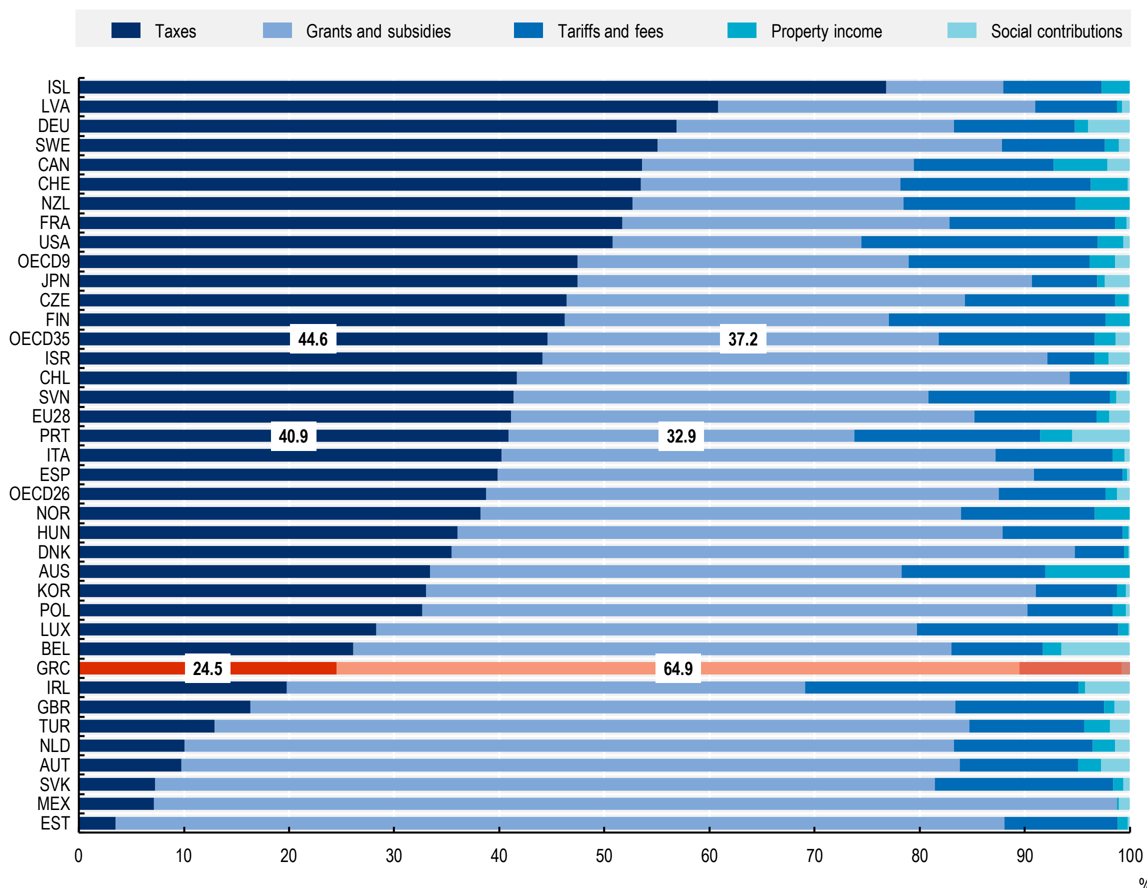
Subnational governments rely on central government transfers

The crisis had a significant impact on subnational government revenues, which decreased, on average, 2% per year between 2007 and 2017 in real terms (OECD/UCLG, 2019[24]). This decrease came particularly from cuts in grants by the central government, which were reduced on average by 3.5% per year in real terms during those 10 years.

Greek subnational governments rely heavily on central government transfers, especially the regional level. In 2016, central transfers accounted for more than 65% of subnational government's revenue, well above the OECD average for unitary countries that reaches 48.8% (Figure 4.5) (EC, 2018[23]). Revenues of regions depend almost exclusively on state grants, which represent 95% of regional revenues. Regions still do not collect taxes or raise any revenue to fund specific projects. Taxes, fees, charges and rates set by law are a negligible part of regional revenues and ordinary resources essentially come from the special grants and the so-called central autonomous funds (CAF) (Torres Pereira and Mosler-Törnström, 2015[26]). Still, subnational governments have had to raise own-revenue sources (tax revenues, user fees) due to recent fiscal adjustment measures combined with successive waves of responsibility transfers from the central to local levels. As a result, the share of tax revenues and user fees in local revenues has risen while the share of grants has fallen, reflecting a small decline in local government financial dependence on state funding (Greek Government, 2019[28]). Municipalities have greater discretion than regions over their revenues. Almost one-third of municipal revenue comes from municipal fees, taxes and charges (Torres Pereira and Mosler-Törnström, 2015[26]).

At the municipal level, the amount of the grants coming from the central level are defined by fixed percentages of state revenues on property tax, income tax and value added tax (VAT). The allocation of the central grants depends mainly on two variables: the number of permanent population registered in municipalities – which is the most determinant one – and a variable that estimates the minimum operational cost of every municipality (Council of Europe, 2017[12]; Council of Europe, 2017[13]).

Figure 4.5. Structure of subnational government revenue, 2016



Note: Tax revenues do not include social contributions here.

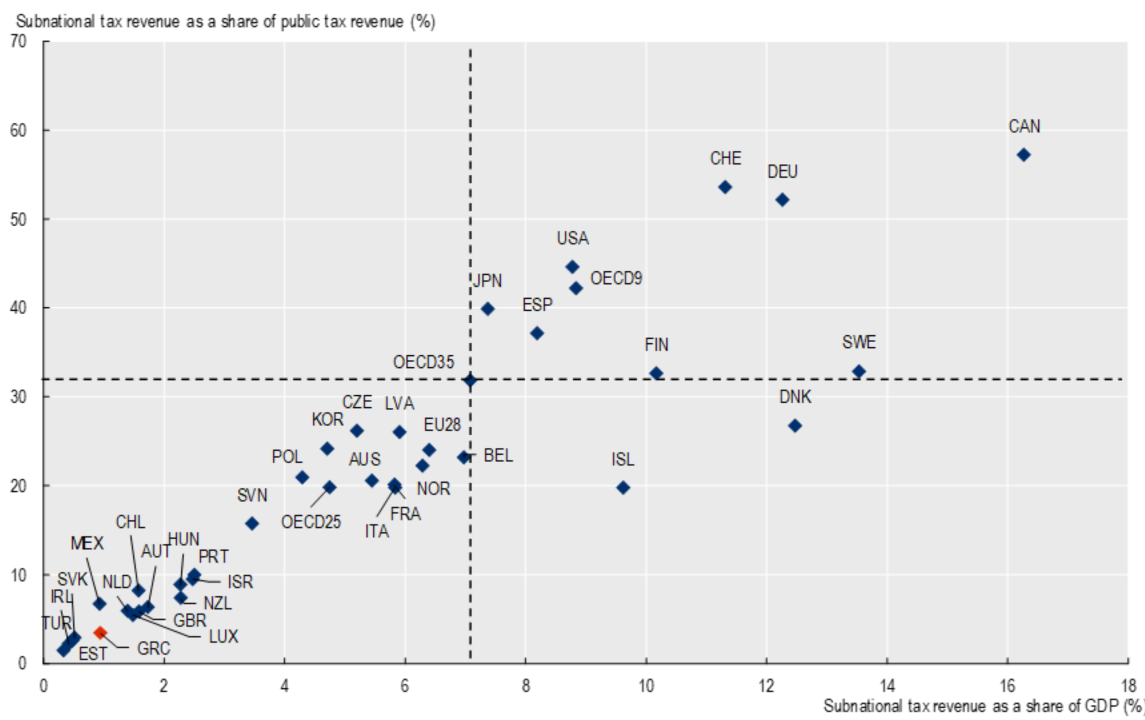
Source: OECD (2018[27]), "Subnational governments in OECD countries: Key data (brochure)", https://www.oecd.org/regional/regional-policy/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf.

Fiscal decentralisation in Greece has not been pursued to the same degree as political and administrative decentralisation. This is partially explained by the debt-crisis context where subnational governments were called to pursue austerity measures. The initial plan of fiscal decentralisation called the ELLADA programme, that would have allowed subnational governments to develop their fiscal capacity by collecting their own resources, was finally abandoned (Greek Government, 2019[28]).

While the Kallikratis reform had an important impact on fiscal consolidation – in particular for small municipalities (Council of Europe, 2017[12]), there is consensus on the need for subnational governments to further develop their fiscal capacity. Indeed, the share of tax of 24.5% is below the OECD average for unitary countries of 38.7%. Tax revenues are entirely own-source, benefitting municipalities almost exclusively (regional tax revenues are negligible) and concentrated on the property tax which accounts for 92% of municipal tax revenue (EC, 2018[23]). Other minor taxes include street cleaning and lighting tax, beer tax, advertising tax and the tourist tax, particularly important in several coastal areas. Tariffs and fees coming from waste management, water and sewage services provided by local public companies, use of public/communal space for professional activity, operation of cemeteries and the use of municipal water resources by bottling and refreshment companies, and car licensing are also low by international comparison (OECD/UCLG, 2019[24]).

However, the ability to set rates over these taxes is restricted (Table 4.1) (OECD/UCLG, 2019[24]). For example, the property tax takes into account the location and the age of the building, both of which are determined centrally by the Ministry of Finance, and municipalities can set rates within legally binding limits (Torres Pereira and Mosler-Törnström, 2015[26]). It is also the central level that collects this tax for local authorities through the electricity bills which ensures a very high level of collection (Torres Pereira and Mosler-Törnström, 2015[26]). While in the past municipalities had greater space to set up the variables defining the property tax, this levy was restricted through an act in 2000 which reduced their manoeuvre considerably (Torres Pereira and Mosler-Törnström, 2015[26]).

Figure 4.6. Subnational government tax revenue as a percentage of public tax revenue and as a percentage of GDP, 2016



Note: Tax revenues do not include social contributions here.
Source: OECD (2018[27]), "Subnational governments in OECD countries: Key data (brochure)", https://www.oecd.org/regional/regional-policy/Subnational-governments-in-OECD-Countries-Key-Data-2018.pdf.

Table 4.1. Municipal own-source taxes

	Tax base	Scope to set tax rates or tax base: total, restricted, no leeway	Weight in Subnational governments' total tax revenue (%)	Weight in Subnational governments' total revenues (%)	Administration in charge of tax collection
Street Cleaning and Lighting Tax	Land and buildings	Restricted. The revenue from street cleaning and lighting tax cannot exceed the cost of the delivered service. As well as, the range between higher and lower rate cannot exceed 10:1.	72	19	Collected by electricity providers (primarily by Public Electricity Company (PEC)) and municipalities for premises that are not electrified
Immovable Property Tax (ΤΑΠ)	Land and buildings	Restricted. Municipalities can set rates within legally binding limits.	9	2	Collected by electricity providers (primarily by PEC) and municipalities for premises that are not electrified
Electrically Powered Spaces Tax	Buildings and uncovered surfaces	Restricted leeway. Municipalities can set rates within legally binding limits.	7	2	Collected by electricity providers (primarily by PEC)
Business Gross Income Tax	Business gross income	Restricted. Municipalities cannot alter the tax rate but have the authority to extend the tax base (the types of businesses subjected to the tax).	3	1	Municipalities
Advertisement Tax	Advertising expenses	Restricted leeway. Municipalities can set rates within legally binding limits.	1	0.5	Municipalities
Accommodation Tax	Daily accommodation charges	No leeway at all.	1	0.3	Municipalities

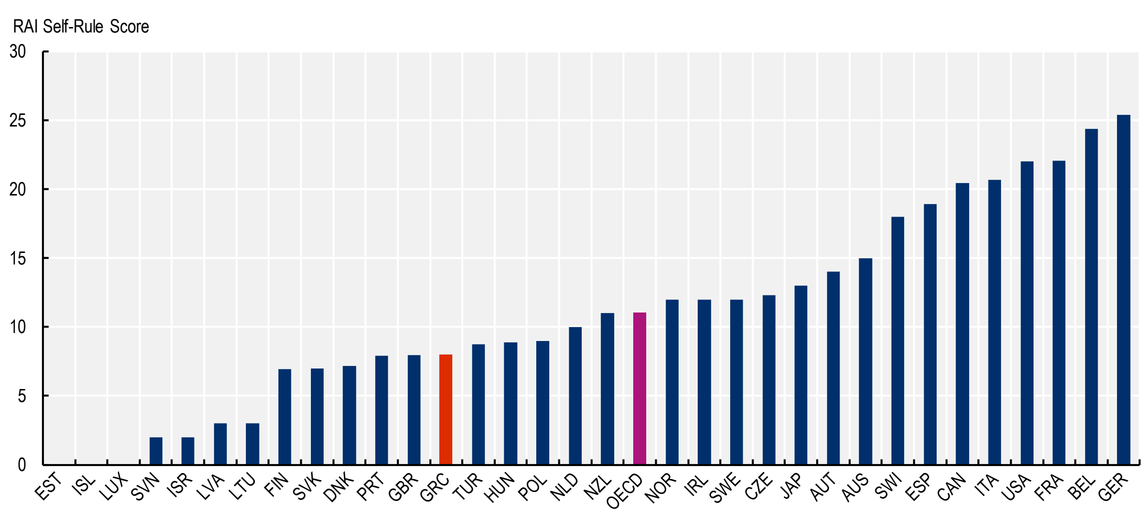
Note: SNGs refer to Subnational Governments
Source: Greek Government (2019[28]), "Questionnaire B for the Territorial Review - Governance - Regional Policy in Greece Post 2020", Unpublished.

The crisis, together with the introduction of strict rules to manage debt at the local level, have resulted in low levels of indebtedness of regions and municipalities. Greek subnational governments can engage in medium- and long-term borrowing in the credit and capital markets (loans and bonds). Borrowing is authorised to finance investment projects following the "golden rule" and to refinance existing debt under better conditions. In 2013, Greece introduced stricter rules for subnational governments' access to borrowing. Through Law 4111/2013, subnational governments have to comply with additional fiscal rules limiting debt and need to receive the approval of the Minister of Finance to access any kind of loans. Additionally, the law introduced a debt-brake for the few municipalities facing over-indebtedness problems, which have to join a Special Economic Recovery Programme. Overall, the level of local debt remains low as a percentage of GDP and total public debt, especially compared to the OECD average for unitary countries (14.5% of GDP and 11.8% of public debt). In 2016, it was made up of financial debt (68%) and other accounts payable (32%). Financial debt is exclusively composed of loans (OECD/UCLG, 2019[24]). Borrowing autonomy, as shown by the Local Authority Index (Box 4.4) also shows a decrease in Greece, which is most probably due to the financial crisis.

Regional and local authority are among the lowest in the OECD

The Regional Authority Index (RAI) presents a useful way to explore the authority or power of regions in a large number of countries. This index is a comprehensive attempt to measure the real degree of power of intermediate governments, going beyond fiscal indicators. The RAI specifically focuses on regional government, which is defined as an intermediate tier of government between the lowest, local tier and national government, with at least 150 000 inhabitants per regional unit on average control (OECD, 2019[22]). This indicator traces regional authorities across 10 dimensions in 81 countries between 1950 and 2010 (Hooghe et al., 2016[29]; Hooghe, Marks and Schakel, 2010[30]) (Box 4.4). When comparing the Regional Authority Index (RAI) of Greek regions with OECD countries and beyond, Greece is part of the group of countries with the lower index values.

Figure 4.7. Regional Authority Index in OECD and EU28, 2016



Note: The data includes only 33 OECD countries (all except Chile, South Korea and Mexico).
Source: Marks, G. (2019[31]), *Regional Authority*, http://garymarks.web.unc.edu/data/regional-authority/ (accessed on 15 May 2019); Schakel, A. (2019[32]), *Regional Authority Index (RAI)*, https://www.arjanschakel.nl/index.php/regional-authority-index (accessed on 15 May 2019).

Greek municipalities have also a limited degree of autonomy. The Local Autonomy Index (LAI) is an attempt to measure decentralisation beyond recording the share of funds managed by local authorities and should capture to what extent local authorities have a say in how these funds are spent (Ladner, Keuffer and Baldersheim, 2015[33]) (Box 4.4). As per the LAI, Greek municipalities pertain to the group of medium-low degree of autonomy together with Albania, Hungary, Slovenia, Ukraine and the United Kingdom.

Box 4.4. The Regional Authority Index (RAI) and the Local Autonomy Index (LAI)

The RAI tracks regional authority on an annual basis from 1950 to 2010 in 81 countries. The sample consists of all European Union member states, all OECD member states, all Latin American countries, 10 countries in Europe beyond the EU and 11 in the Pacific and South-East Asia. The unit of analysis is the individual region/regional tier. The dataset encompasses subnational government levels with an average population of 150 000 or more. Regions with a special autonomous statute or asymmetrical arrangements are also coded separately.

Regional authority is measured along ten dimensions: institutional depth, policy scope, fiscal autonomy, borrowing autonomy, representation, law-making, executive control, fiscal control, borrowing control and constitutional reform.

Primary sources (constitutions, legislation) are triangulated with secondary literature and consultation of country experts to achieve reliable and valid estimates. A regional data set contains annual scores for regional governments or tiers and a country data set aggregates these scores to the country level.

The RAI has proven to have solid convergent content validity and has been used as a regionalisation or a multi-dimensional decentralisation measurement.

The LAI aims to analyse and report changes in the scope of decentralisation of countries in the EU. It attempts to measure decentralisation beyond recording the share of funds managed by local authorities and should capture to what extent local authorities have a say in how these funds are spent. The LAI was developed for 39 European countries and it reports changes between 1990 and 2014.

The conceptualisation of the LAI follows the methodology of the RAI. For the LAI, some adaptations had to be made to capture the specific characteristics of local government. For example, it is not appropriate to speak about non-deconcentrated local government or the endowment of an independent legislature because these aspects are parts of local self-government by definition. . Furthermore, more dimensions have been taken into account and some revisions of variables have been made.

The LAI contains 11 variables: institutional depth, policy scope, effective political discretion, fiscal autonomy, financial transfer system, financial self-reliance, borrowing autonomy, organisational autonomy, legal protection, administrative supervision, central or regional access. The first eight variables measure the degree of “self-rule” of a local government, while the last three measure “interactive rule”, i.e. the way the vertical relation is organised. These variables are combined with seven theoretically and empirically meaningful dimensions of local autonomy: that is, legal autonomy, political discretion, policy scope, financial autonomy, organisational autonomy, access and non-interference. The overall index aggregates the seven weighted dimensions, giving greater weight to political discretion, financial autonomy and legal autonomy in particular.

Source: OECD (2019[22]), *Making Decentralisation Work: A Handbook for Policy-Makers*, https://dx.doi.org/10.1787/g2g9faa7-en; Ladner, A., N. Keuffer and H. Baldersheim (2015[33]), *Self-rule Index for Local Authorities (Release 1.0);* Ladner, A. and N. Keuffer (2018[34]), “Creating an index of local autonomy – Theoretical, conceptual, and empirical issues”, http://dx.doi.org/10.1080/13597566.2018.1464443.

Strengthening subnational finances for an efficient implementation of decentralisation reforms

Improvements to the fiscal management framework

Greece has moved to ensure the fiscal consolidation of subnational governments and to increase the effectiveness of management, accounting and financial control. For example, in 2012, Greece introduced an internal stability pact for local government (based on a balanced budget constraint) in order to strengthen tax and budget management. In addition, according to the Medium-Term Fiscal Strategy Framework (MTFS) for 2015-18, approved by Law 4263/2014, subnational governments are required to contribute to the overall fiscal effort. In 2014, the country put in place the Observatory for the Financial Autonomy of Local Government (set up by Law 4111/2013 and further implemented by Laws 4270/2014 and 4555/2018) to monitor, on a monthly basis, the management and implementation of subnational governments budgets (OECD/UCLG, 2019[24]).

Reducing the fiscal gap

The fiscal dimension has been the missing link in Greek decentralisation reforms. This has been the case in a number of OECD countries as well. One of the most frequent challenges, particularly in countries at an early stage of decentralisation, is the misalignment between responsibilities allocated to subnational governments and the resources available to them. Unfunded or under-funded mandates – where subnational governments are responsible for providing services or managing policies but without the requisite resources – are common (OECD, 2019[22]).

The implementation of political and administrative reforms in Greece has created a mismatch between the responsibilities of subnational governments and their financial capacities. The transfer of responsibilities was not accompanied by a corresponding transfer of resources but rather by an attempt to reduce them (George and Nikos, 2015[35]). This is not an exclusive feature of the Greek decentralisation process, as in most OECD countries the alignment of responsibilities and revenues is an important concern (OECD, 2019[22]).

In Greece, subnational funding is based mostly on transfers from the central level. The population criteria by which municipalities receive grants based on the number of permanent (registered) citizens does not consider the differences in geographical conditions and economic strength of the Greek municipalities (Council of Europe, 2017[12]). This criterion does not have specific provisions or complementary indicators for insular and mountainous municipalities or localities that receive the most important influx of tourist in a certain period of the year. This puts strong pressure on certain municipalities, in particular small touristic islands, which need to ensure services for an important floating population without the corresponding necessary funding. The effectiveness of the population criteria to determine grants is also put at stake by the fact that official statistics and indicators are not necessarily updated regularly (Council of Europe, 2017[12]; Council of Europe, 2017[13]).

Beyond the challenges linked to the assignment of funds through the population criteria, different institutions and scholars have highlighted some other key challenges of the municipalities' financing system. The Council of Europe, for example, has highlighted that some critical aspects of the system are linked to: i) the lack of an up-to-date and reliable data source, in particular the municipality resident's registry; ii) small amount of transfers which often do not even cover municipality's operating costs leaving a small proportion for local authorities to dedicate to investments or other policies; iii) lack of transparency of the transfer system resulting in some municipalities receiving less than was stipulated in the state budget (Council of Europe, 2017[12]).

The mismatch between responsibilities and revenues makes regions and municipalities very dependent on European funding, in particular for public investment. The dependence on external funding entails some important risks. First, as EU funding levels can change from one seven-year programming period to the next, European funds are not necessarily sustainable in the long term, an extreme (or almost exclusive) reliance on these funds can be risky in the long term and may prevent long-term planning (George and Nikos, 2015[35]). The high dependence on European co-financing may also benefit more those regions and municipalities that are more prepared in terms of administrative and institutional capacities to prepare mature projects able to be funded by European funds.

A better balance between revenue-generating means with expenditure needs might help Greece in creating better accountability and responsiveness to local preferences (OECD, 2019[22]). In Greece, a series of laws and policy measures have drastically restricted space of discretion and initiative given to local authorities during the previous years concerning financial resources management (Hlepas, 2015[8]). However, evidence shows that subnational governments work best when local residents self-finance local services through local taxes and charges. This enhances the efficiency and accountability of local service provision by encouraging local residents to evaluate the costs and benefits of local service provision. It is also a way of facilitating yardstick competition, which encourages local politicians to maximise the welfare of local residents instead of promoting their own self-interested goals (OECD, 2019[22]). This might be particularly relevant for the geographical and contextual specificities of Greek subnational governments – especially islands – which might need particular financing policies to address higher costs of service delivery and investments.

Better balancing revenue-generating means with expenditure needs is also crucial but more challenging in the current COVID-19 crisis. This COVID-19 global crisis is putting strong pressure on subnational finance in Greece as well as in all OECD countries. Subnational governments in most countries may experience a large drop in revenue, including tax revenue, user charges and tariffs and asset income. A strong decrease in tax revenues is expected, both from shared and own-source taxes. A strong decrease in revenues combined with a continuous increase in expenditure (due to social spending and investment) could result in a scissor effect and therefore in subnational government deficit, as was the case in 2007-08. It is thus likely that central governments will design recovery strategies and counter-cyclical measures to mitigate the impact of the crisis on subnational government budgets, prevent them from carrying out pro-cyclical actions and ensure coherence in the overall government response to the crisis (OECD, 2020[4])

Towards a clearer assignment of responsibilities

> *A clearer assignment of responsibilities may enhance the effectiveness of regional development policies*

During the last years, regions and municipalities have been increasingly responsible for key policy areas resulting from the transfer of competencies started in 2011. At the regional level, the new regions are mainly responsible for regional planning and development, including the management of EU operational programmes. At the municipal level, the law has defined eight specific areas of responsibilities, which remain broad. The Kallikratis programme transferred additional responsibilities related to local development, child protection, elderly care, social assistance to the unemployed/poor and preventative healthcare.

The national and subnational levels in Greece share a number of responsibilities in different sectors, as is the case in all OECD countries. Some of the competencies shared among the three levels of government are linked to key policy sectors such as education (pre-school, primary and secondary education), health, urban and regional planning, environment, and transport (urban roads), among others. In most countries, due to the complexity of interactions in shared rule, there are many ambiguities in the assignment of responsibilities (OECD, 2019[22]).

Like in most OECD countries, responsibilities of national and subnational governments in Greece are often overlapping, ambiguous or unclear. Regions and municipalities have almost no exclusive competencies and the dividing lines between central and subnational governments for shared competencies are not well established. Although the competencies of the central, regional and local governments are defined legislatively, the practical division of responsibilities is not always clear, leading to implementation gaps or overlaps (Koutalakis and Allio, 2016[36]). Overlapping and unclear assignment of competencies and responsibilities between the deconcentrated authorities, regions and municipalities is particularly challenging in key sectors like infrastructure and transport. For example, all three levels of government are responsible for some aspects of road maintenance (Council of Europe, 2017[13]) and floodwater management. Another example lies in the management of traffic lights, which is a responsibility that was partially transferred to subnational levels. This makes it difficult to identify, for example, who is responsible for changing a sign in a route. This lack of clarity for concurrent or shared responsibilities might contribute to government failures or inefficiency and inequity in public service provision and negatively impacts accountability (OECD, 2019[22]). In turn, this lack of clarity and accountability may affect transparency and citizen's trust in the public sector.

Regarding regional development responsibilities, the overlap of competencies is particularly acute between the regions and the deconcentrated authorities. The role of the seven state administrations is especially unclear as they become progressively weaker, as a consequence of the empowerment of regions (Torres Pereira and Mosler-Törnström, 2015[26]). The seven deconcentrated administrative authorities exercise devolved powers, in town and urban planning, environmental policy, forest policy, migration policy, citizenship and energy policy (Council of Europe, 2012[37]). These deconcentrated structures are also tasked with supervising regions and municipalities. Regional governments are the main party responsible for the implementation of regional development policies through the management and implementation of a considerable part of the EU Structural Funds. However, this role is partially hampered by the overlap of competencies with the deconcentrated state authorities. This might contribute to policy delays, in particular for critical infrastructure projects. The lack of any legal basis to establish co-ordination mechanisms between these institutions impedes overcoming those overlaps for a more efficient policy planning and implementation (Council of Europe, 2017[12]).

A clear and transparent division of powers is crucial for Greek subnational governments at all levels to deliver on their mandates and be held accountable by citizens. National and subnational actors are strongly aware of the need to review municipal and regional competencies in order to reduce the space of conflicts in its allocation. Better clarity in the division of power is also critical for Greece to build subnational government capacities as well as instituting mechanisms for intergovernmental partnership and co-ordination (OECD, 2019[22]).

The Kleisthenis reform: Clarifying and re-defining the assignment of responsibilities

Greece is making important efforts to better define the roles of and interactions between the different actors involved in the design and execution of policies. In June 2018, Greece approved Law 4555/2018 known as the Kleisthenis reform. This reform touches upon various issues concerning subnational governments such as the electoral system in local and regional elections, establishes a new system of representation in local and regional councils and reorganises the supervision authorities (see Box 4.5).

One of the key issues addressed by the Kleisthenis reform is the introduction of new tools to monitor and assess past and scheduled transfers of responsibilities to municipalities and regions. It also contemplates reconsidering the current allocation of subnational government responsibilities. The law establishes new Inter-ministerial Committees for the Redefinition of Competences and Procedures (Δ.Ε.ΑΝ.Α.Δ.) for each sector or policy field with the task of recording the competencies and procedures of the central administration, the deconcentrated administrations and regional and local government levels. These committees should assess if the conditions to properly exercise competencies are in place and identify which are the main challenges and dysfunctions in its exercise. It also creates a permanent committee within the Ministry of the Interior to evaluate every new bill that involves the transfer of responsibilities. All of this follows the principles of proximity, subsidiarity and effectiveness.

Box 4.5. The Kleisthenis reform in Greece

Law 4555/2018 known as the Kleisthenis reform introduced some changes to the multi-level governance system in Greece in various topics. First, it reforms the institutional framework of subnational governments by introducing changes to the election system and its procedures at the regional and local levels. It considers some minor adjustments to the community governance system (regional, municipal and community councils, economic committees, ombudsman, etc.). It also introduces some changes to strengthen the participation and improving the economic and developmental function of local authorities.

One of the main objectives of the Kleisthenis reform is to address the overlap and unclear assignment of responsibilities. For this, the law contemplates the creation of different Inter-ministerial Committees for the Redefinition of Competencies and Procedures by sector or policy field. These committees seek to assess whether the conditions for exercising competencies by different governments are in place, and which are the main bottlenecks for the exercise of those competencies at different levels.

These inter-ministerial committees are composed of: representatives from the Ministry of the Interior and the competent line ministry; one representative of the Central Union of Municipalities of Greece (KEDE); and one representative of the Association of Regions of Greece (ENPE). Experts and specialists may also be invited, depending on the competencies and procedures, as appropriate.

The purpose of these committees is to identify cases of fragmentation or duplication of responsibilities and procedures between the central administration, the deconcentrated administrations and the two levels of local government. The committee studies the possibility of simplifying the conditions for the exercise of the competencies and procedures by consolidating them by public policy area or by sub-theme and their assignment to the appropriate level of administration.

Each committee, within four months after its constitution, submits to the Minister of the Interior, to the competent minister responsible and the Standing Committee on the Control of Local Authorities a report with its conclusions and proposals and a draft of the proposed legislation. The finding of each committee is communicated to KEDE, ENPE and the co-ordinators of the deconcentrated administrations to submit their comments to the Minister of the Interior and the competent minister responsible.

Source: Greek Government (2018[38]), *Law 4555/2018 - Lawspot*, https://www.lawspot.gr/nomikes-plirofories/nomothesia/nomos-4555-2018 (accessed on 10 July 2019).

In the complex task of assessing the allocation of competencies among levels of government, the inter-ministerial committees should ensure a balance in the way different responsibilities and functions are decentralised. Balanced decentralisation means that the various responsibilities are decentralised to a similar extent. In this respect, OECD work has shown that balanced decentralisation is important for local economic development and growth (OECD, 2016[39]). It is also important to ensure balance in the way various policy functions are decentralised to allow for complementarities across decentralised policies and integrated policy packages (OECD, 2019[22]). Indeed, if decentralisation only takes place in two or three policy areas (such as housing or education) in an unbalanced way *vis-à-vis* other policy areas, this prevents subnational governments from designing integrated regional and local development strategies (OECD, 2019[22]). Inter-Ministerial Committees could also explore the possibility of increasing the number of exclusive competencies for regions and/or municipalities and reducing the number of shared ones.

While there is no unique model for assigning responsibilities among levels of government, Greece can consider some key elements for breaking down responsibilities (Box 4.6). The optimal assignment of responsibilities within each public service area depends largely on the type of service. In many OECD countries, the municipal level tends to manage community services (e.g. streetlights, local schools and child day care). For municipal responsibilities, regulations often refer to the general clause of competency or "subsidiarity principle". This principle gives local authorities explicit freedom to act in the best interests at the local level. In this case, laws rarely limit or specify local responsibilities but enumerate broad functions instead, except if a particular responsibility is devolved by law to another government level. However, the economies of scale in service production should also be taken into account here. For example, in some cases, a higher-level government may be able to invest in technology that enables more efficient service provision (OECD, 2019[40]).

In two-tier systems of subnational government, it is often the regional level that provides the services of regional interest which benefit from economies of scale, generate spill-overs, involve redistribution and are required to meet the same standards across the jurisdiction (Kitchen and Slack, 2006[41]; OECD, 2017[42]). Public services with important redistributive features (e.g. specialised healthcare, secondary and higher education) are often best suited for regional or national governments, mainly because redistribution at the local level would be inefficient. Public services with considerable positive externalities or spill-overs, such as major roads or main water pipelines, are also usually better provided by higher levels of government (OECD, 2019[40]). The regional tier is also often called to facilitate co-operation and strategic planning (OECD, 2017[42]).

Box 4.6. Breakdown of responsibilities and functions across subnational government levels

For each area, it is necessary to distinguish between different key functions: regulating, operating, financing and reporting. Regarding the financing function, another distinction can be made between current expenditure and investment. In the OECD, health, education and social protection or law enforcement weigh heavily on subnational expenditure when subnational governments are in charge of paying medical staff, teachers, social workers or police officers or providing social benefits on behalf of the central government. Often, while subnational governments may simply act as "paying agents" to carry out these delegated functions with little or no decision-making power or room for manoeuvre, these spending responsibilities are a great burden on their budget.

Table 4.2. Breakdown of responsibilities across subnational levels: A general scheme

Municipal level	Intermediary level	Regional level
A wide range of responsibilities: ● General clause of competency ● Eventually, additional allocations by the law Community services: ● Education (nursery schools, pre-elementary and primary education) ● Urban planning and management ● Local utility networks (water, sewerage, waste, hygiene, etc.) ● Local roads and city public transport ● Social affairs (support for families and children, elderly, disabled, poverty,	Specialised and more limited responsibilities of supra-municipal interest An important role of assistance towards small municipalities May exercise responsibilities delegated by the regions and central government Responsibilities determined by the functional level and the geographic area:	Heterogeneous and more or less extensive responsibilities depending on countries (in particular, federal vs. unitary) Services of regional interest: ● Secondary/higher education and professional training ● Spatial planning ● Regional economic development and innovation ● Health (secondary care and hospitals) ● Social affairs (e.g. employment

social benefits, etc.) ● Primary and preventative healthcare ● Recreation (sport) and culture ● Public order and safety (municipal police, fire brigades) ● Local economic development, tourism, trade fairs ● Environment (green areas) ● Social housing ● Administrative and permit services	● Secondary education or specialised education ● Supra-municipal social and youth welfare ● Secondary hospitals ● Waste collection and treatment ● Secondary roads and public transport ● Environment	services, training, inclusion, support to special groups, etc.) ● Regional roads and public transport ● Culture, heritage and tourism ● Environmental protection ● Social housing ● Public order and safety (e.g. regional police, civil protection) ● Local government supervision (in federal countries)

Source: OECD (2016[43]), *OECD Regions at a Glance 2016*, https://dx.doi.org/10.1787/reg_glance-2016-en; OECD (2017[42]), *Making Decentralisation Work in Chile: Towards Stronger Municipalities*, https://doi.org/10.1787/9789264279049-en.

Different responsibilities for different types of subnational governments: Considering their geography and capacities

Greek subnational governments are strongly diverse

The 325 Greek municipalities and 13 regions are very diverse in different dimensions (Chapter 2):

- **Geography and resources**: Greece has important geographical fragmentation with around 6 000 islands[2] that represent about 20% of the national territory, out of which only 227 are inhabited, and sometimes with very low population levels. Most of the Greek territory is at the same mountainous.
- **Size, density and population**: Regions range from 206 000 inhabitants in the Ionian Islands to 3.765 million in the region of Attica. Greek predominantly urban regions contain 45% of the total population, a share that is slightly lower than the OECD average of 48%. Predominantly rural regions (3.4 million people) contain a larger percentage of people and a smaller percentage of land; 3 million live in rural remote regions, making Greece the country with the third-largest share of the rural population in remote regions across OECD countries.
- **Socio-economic characteristics**: In 2016, GDP per capita in the top 20% of regions was 2.5 higher than in the bottom 20% of regions. Attica is the best-performing region concentrating almost half (48%) of the country's GDP which is twice as high as in East Macedonia, the region with the lowest GDP per capita in the country (OECD/UCLG, 2019[24]). There are also important disparities in terms of the capacity to administer, deliver services and manage their territory. Often, more isolated island or mountainous municipalities have weaker administrative and financing capacities.

Deepening differentiated assignment of responsibilities to better respond to territorial specificities

The heterogeneity of Greek territories calls for a differentiated multi-level governance system. According to their location and level of development, Greek subnational governments face challenges that could be addressed individually and differently. Countries confronted with disparities in local capacities and/or various territorial, political or international cultural contexts are increasingly developing differentiated or asymmetric decentralisation structures (Box 4.7).

Box 4.7. Defining differentiated competencies for different municipalities: The case of Colombia, the Czech Republic and Denmark

Colombia

To address differences in capacities between subnational governments, the Colombian government uses a certification system to identify subnational governments that are best capable of providing important public services. The certifications are mostly operated by line ministries and they are sector-specific (education, health, water and sewage) so that certification in one sector does not automatically lead to certification in another sector. The certified municipalities have more autonomy to allocate the central transfers and to organise service provision. The certified subnational governments are also in an advanced position to apply for special central government funding for projects.

Czech Republic

In the Czech Republic and in the process of decentralisation, the responsibilities of the 76 abolished state "districts" were largely passed on to 205 "municipalities with extended powers" (ORP) in 2003. These municipalities perform central government delegated functions, such as child protection and issuing passports, on behalf of smaller surrounding municipalities. These functions are associated with additional funding. Smaller municipalities can also delegate to the ORP additional functions that they do not want to provide or cannot provide because of their lack of capacities. They use contract agreements to do this. In 2012, they concluded 5 784 contracts. Transferred responsibilities include administration as well as services such as healthcare and education. While this is very flexible and has increased efficiency, it also adds to the complexity and has proved difficult to monitor. The Ministry of the Interior in 2012, therefore, proposed to move all delegated functions to the 205 ORP in order to streamline the system and increase efficiency.

Denmark

Between 2012 and 2015, nine local municipalities in Denmark were granted exemptions from government rules and documentation requirements in order to test new ways of carrying out their tasks, in a policy experiment known as the "Free Municipality" initiative. The main focus has been on simplification, innovation, quality and a more inclusive approach to the individual citizen, with many of the experiments focusing on employment. The Free Municipality experiment is currently being evaluated, in order to form the basis for potential future legislation on de-bureaucratisation for all municipalities. The concept of Free Municipalities was extended to more municipalities in 2019

Source: OECD (2019[40]), *Asymmetric Decentralisation: Policy Implications in Colombia*, http://www.oecd.org/countries/colombia/Asymmetric_decentralisation_Colombia.pdf (accessed on 11 July 2019).; OECD (2017[42]), *Making Decentralisation Work in Chile: Towards Stronger Municipalities*, https://dx.doi.org/10.1787/9789264279049-en.

While most of the Greek legal framework is based on the principle of uniformity, the law considers some differentiation in the assignment of responsibilities reflecting upon the municipalities' diversity of geographic conditions. To better serve the populations of insular municipalities, island municipalities have a wider set of competencies in the areas of: agriculture; natural resources, energy and industry; employment, trade and tourism; transport and communications; and public works, urban and spatial planning and the environment. In the same logic, mountain municipalities have also a wider set of powers in the areas of energy, water, forestry, agriculture and support to the local community and economy. Still, despite their diversity, almost all Greek municipalities have the same political organisation, functions and funding arrangements.

At the regional level, Greek law also considers a slight differentiation in the assignment of responsibilities. Insular regions, in addition to their regional responsibilities, exercise powers related to the planning, approval and monitoring of intraregional transport plans (Council of Europe, 2012[37]). The metropolitan regions of Attika and Thessaloniki have also some additional responsibilities in the areas of: the environment and quality of life; spatial planning and urban regeneration; transport and communication; and civil protection and security, beyond the municipal administrative boundaries (see below).

However, Greece still has some scope to introduce more differentiation in the allocation of competencies to reflect not only the geographic conditions but also different local governments' capacities. In particular, it is important for Greece to move forward with the decree allowing for territorially specific policies and the possibility for asymmetric decentralisation foreseen by the Kallikratis Law, with differentiated sets of responsibilities given to different types of regions/cities, in particular to island municipalities, in the domains of agriculture, natural resources, transport and planning, and the environment.

There are different ways to implement differentiated decentralisation according to the capacity and performance of municipalities: devolving additional competencies to the most capable municipalities; allocating additional fiscal powers to municipalities with greater financial and technical capacities (e.g. access to borrowing, tax power, ability to define user fees and tariffs, etc.); simplifying reporting mechanisms of weaker municipalities to alleviate the administrative burden.

To differentiate responsibilities according to capacities, Greece could follow an approach similar to the one implemented by Colombia, for example. Colombia has developed a certification system to identify subnational governments that are best capable of providing important public services (Box 4.7). In any case, the criteria used to differentiate the powers of municipalities and/or regions needs to be transparent and agreed upon with all interested stakeholders.

Differentiated governance approaches also entail some risks linked with institutional complexity and inequalities. By definition, differentiated arrangements do not directly promote equal treatment of subnational governments and citizens. These arrangements might also be perceived as a way to support the wealthiest regions or subnational governments. To minimise those risks, it is crucial to ensure that positive spill-over effects result from the differentiated arrangements between subnational governments, for instance, conditions set to encourage subnational governments to assist their weaker neighbours, the creation of co-operation frameworks between subnational governments and the promotion of good practice dissemination (OECD, 2019[40]). This risk can also be attenuated if the differentiated assignment is made on a voluntary basis while the central government ensures service provision for those regions or municipalities that do not volunteer to take on more responsibilities.

Countries are increasingly adopting pilot experiences in the devolution of responsibilities to subnational governments. In Sweden for example, two successful pilot experiences on asymmetric decentralisation were established at the end of the 1990s (regions of Skåne and Västra Götaland) to transfer the responsibility of regional growth from regional state agencies (County Administrative Boards) to regional political bodies (elected regional councils). Since then, the responsibility has been gradually transferred from regional state agencies to regional political bodies in other counties as well (to county councils and county co-operation bodies). This policy might be rolled out to the entire country based on the pros – that outweigh the cons – of its implementation (OECD, 2018[1]). These approaches might allow a better match between policies and local needs without going through radical administrative or constitutional reforms. Indeed, pilot experiences allow policymakers to experiment and learn while avoiding subnational governments with low capacities becoming overwhelmed by new responsibilities (OECD, 2018[1]).

Making the most of Greece's metropolitan areas

While some progress has been made, the governance of Greek metropolises is still fragmented

Greek urban areas are the main engines of the economy and, as such, face particular challenges. The regions of Attica and Central Macedonia concentrate the majority of the population and are responsible for almost two-thirds of the national GDP. Attica alone concentrates almost half of the country's GDP (Greek urban areas were also the most affected by the economic crisis, compared to intermediate or rural regions in the country [Chapter 2]).

With the Kallikratis reform, Greece advanced in the management of its two major metropolitan areas. The reform provided, for the first time, a metropolitan status to the metropolitan areas of Attika and Thessaloniki (the Metropolitan Region of Attica, which comprises 66 municipalities, and the Metropolitan Unit of Thessaloniki, which comprises 14 municipalities). This special status confers to these two areas additional functions and responsibilities beyond the municipal administrative boundaries in the areas of the environment and quality of life, spatial planning and urban regeneration, transport and networks, and civil protection and security. In this framework, Athens does not have a special status as a capital city but is included in the metropolitan region of Attica. This new status meant a significant change for Athens: since the reform, the metropolitan regional authority is represented in the European Committee of the Regions and the 66 municipalities now participate in European Groupings of Territorial Cooperation with other EU subnational governments to promote common economic interests (Chorianopoulos and Pagonis, 2015[44]).

Together with the transfer of competencies, the law creates metropolitan committees to address metropolitan issues that have, however, limited space for action. The metropolitan governance structure includes four metropolitan committees in the region of Attica (spatial planning and urban reform, transport and communications, civil protection, and the environment and quality of life) and one metropolitan committee of Thessaloniki in the region of Central Macedonia. These committees, headed by a deputy head of the region, are supposed to deal with relevant local government issues and submit suggestions to the regional council. However, these committees have not taken full responsibility, they meet on an ad hoc basis for deliberative purposes and do not hold any decision-making power. In addition, municipalities are not systematically represented in the committees, although they are occasionally requested to provide data on relevant topics under discussion (Council of Europe, 2018[45]; OECD, 2015[46]).

Despite the transfer of additional competencies, the management and governance of metropolitan areas are still fragmented. Regarding metropolitan competencies, the three levels of government have fragmented responsibilities over key issues such as the management of floods and natural disasters. The fragmented administration has also had an impact, for example, in refuse collection and the location of landfills (Council of Europe, 2018[45]). At the same time, even if there are some metropolitan-wide co-ordination institutions to deal with urban policies such as transport or the environment, the lack of a single metropolitan administration structure limits their impact (Council of Europe, 2018[45]). This is what happens in Athens, for example, where different organisations are in charge of co-ordinating and implementing environmental, waste management and transport policies at the metropolitan scale:

- The Athens Urban Transport Organisation (OASA S.A.) is a public company responsible for the planning, co-ordination and control of all public transport modes within the region of Attica. It operates under the supervision of the Ministry of Infrastructure, Transport and Networks and its managing director is appointed by the Minister of Finance and the Minister of Infrastructure. Co-ordination between the OASA and municipalities on transport planning is undertaken on an ad hoc basis, with no systematic procedure in place. The same happens with the co-ordination between transport planning and overall metropolitan planning (OECD, 2015[46]).
- The Organisation for Planning and Environmental Protection of Athens (ORSA) was created in 1985 as a special agency of the Ministry of the Environment, Energy and Climate Change, which

serves as an advisory council to municipalities. One of its main responsibilities is the implementation and revisions of the Regulatory Master Plan of Athens (1985) and its subsequent update (Law 4277/2014). Despite its unique metropolitan-wide mandate, the ORSA has been struggling with limited formal competencies, insufficient implementation powers and the structural deficiencies of the Greek planning system (OECD, 2015[46]).

Besides the fragmentation, the central level plays a decisive role in metropolitan issues with little involvement of the regional or municipal levels. The main responsibilities for spatial planning for example, such as the approval of comprehensive urban plans as well as the implementation of the Regulatory Plan and the Urbanisation Control Zones (ZOE), remain under the jurisdiction of the central government (Chorianopoulos and Pagonis, 2015[44]). The lack of a metropolitan authority, as well as the financial crisis context, has also meant an increasing role for private foundations in urban planning, interventions and projects of metropolitan significance (e.g. Rethink Athens, Hellinikon S.A., among others). Most of these institutions are controlled by the central government (Chorianopoulos and Pagonis, 2015[44]).

Towards a more effective metropolitan governance

Most OECD countries have trouble producing policies at the appropriate level, including in critical areas such as transport and housing. Still, evidence shows that for a given population size, a metropolitan area with twice the number of municipalities is associated with around 6% lower productivity, an effect that is mitigated by almost half when a governance body at the metropolitan level exists (Ahrend et al., 2014[47]). This is why an increasing number of countries are implementing differentiated governance structures for metropolitan areas to make the most out of urbanisation and agglomeration economies. Currently, around two-thirds of the metropolitan areas in the OECD have a metropolitan governance body.

The metropolitan governance models implemented by countries are not unique and must respond to particular circumstances and institutional contexts. Regardless of the model, basic features, such as political representation through direct election, clear assignment of expenditure responsibilities and revenue sources, geographic boundaries that match boundaries of the economic region (functional area), fiscal autonomy, adequate capacity and revenues that match expenditures, are essential elements for any successful metropolitan area governance (Allain-Dupré, Chatry and Moisio, forthcoming[48]). The United Kingdom has an interesting model where urban areas are governed through arrangements between the national and subnational governments by allowing a degree of “tailored” devolution of responsibility to English cities (Box 4.8). This model can be interesting for Greece, as it would only mean an enlargement of the implementation of the current regulation on contracts across levels of government. A recent example of metropolitan governance includes the 2013 French Law on Metropolitan Areas which contemplated differentiated governance for Aix-Marseille, Lyon and Paris to include governance structures with own-taxing powers and the shift of competencies from regions and departments (Box 4.8).

In Greece, the need to establish a metropolitan governance structure is widely acknowledged. Programmatic contracts and inter-municipal co-operation have been available as tools in Greece since Law 1622/1986 (updated by the Kallikratis reform) but they could be further used. Some useful tools exist in spatial law and are hardly used today. There is a broad consensus on the necessity of reforming governance in the metropolitan area, in particular for Athens. In the path towards a more integrated metropolitan governance, a first step for Athens would be to integrate the multiple bodies dealing with metropolitan issues (such as the OASA or ORSA) into the region of Attica’s metropolitan committees in order to consolidate both inter-municipal and cross-sectoral co-ordination. This could also serve to strengthen their role as an interface with the national and EU levels. The structure of the Urban Authority for the Sustainable Urban Development Plan in Thessaloniki could be also expanded or specialised.

Box 4.8. Different models for metropolitan governance: The cases of France and the UK

The 2013 French Law on Metropolitan Areas

The 2013 French Law on Metropolitan Areas contemplated differentiated governance for Aix-Marseille, Lyon and Paris to include governance structures with own-taxing powers and the shift of competencies from regions and departments. In France, efforts were made by the central government already during the 2000s to encourage co-operation at an urban level.. However, apart from the creation of urban communities in 1966, they had little success. The 2010 Law on the Creation of Metropolitan Areas has led to the creation of only one metropolis (Nice Côte d'Azur), confirming once again that regulation is not sufficient to induce reform. A new step was achieved in 2013 with the first discussions on the new law on metropolitan areas. The government adopted a new approach, based on governance solutions tailored to territorial specificities and local needs. The 2014 MAPTAM law on the modernisation of public territorial action and metropolises introduced a degree of diversification across French territories. Fourteen metropolises (more than 400 000 inhabitants) will be granted greater responsibilities than "standard" municipalities or inter-municipalities, justified by their larger size and urban nature. Among them, the three largest metropolitan areas (Aix-Marseille-Provence, Lyon and Paris, which already have a specific status since the 1982 PLM law) received ad hoc different governance structures – i.e. different organisation, responsibilities and resources.

The Métropole du Grand Lyon, operational since January 2015, has (unlike Aix-Marseille-Provence and Paris) a particular metropolitan status: it merged responsibilities of the existing inter-municipal co-operation entity Grand Lyon and those of the *département* du Rhône, covering about 1.3 million people – the only one of its kind in France. Political representatives for the metropolis will be elected through direct suffrage from 2020 onwards. This innovative "asymmetrical" approach based on "recognising the diversity of territories within the unity of the Republic" is relatively new in France, where past policies were uniform across territories (except for overseas territories). It aims to adapt organisational structures and policies to the distinctive characteristics of territories at an appropriate scale. Another innovation is the setting up of two transitory inter-ministerial "prefiguration" task forces for Aix-Marseille-Provence and Grand Paris. These task forces, headed by the prefect and composed of national and local civil servants and experts, prepared the reforms and then helped in the transition process. They also work to gain support from citizens, local authorities, the private sector and civil society.

Finally, the French metropolitan reform is a good illustration (at least in the cases of Aix-Marseille and Grand Paris) of resistance from local mayors and possibly from the regional level. The implementation process is as crucial as the nature of the reform itself: adopting a law is not sufficient as it may not, or only partly, be implemented in practice.

City Deals in the United Kingdom

Since 2010, the United Kingdom has developed a comprehensive policy on devolution and local economic growth which is characterised by:

- Agreeing on place-based approaches to driving economic growth, regeneration and housing development – including pan-region models.
- Devolving and decentralising powers and functions to local areas, e.g. through City Deals, Growth Deals and Devolution Deals.
- Empowering strong and accountable local decision-making and giving a voice to the private sector, e.g. Local Enterprise Partnerships, mayors, combined authorities.
- Creating the conditions for local growth through a competitive, deal-making approach which offers incentives, e.g. Local Growth Fund, Enterprise Zones.

In particular, City Deals are agreements between the government and a city that give cities control to: i) take responsibility for decisions that affect their area; ii) design their own strategies to help businesses grow; iii) create economic growth; and iv) decide how public money should be spent. The City Deals are focused on institutional alignments and re-centring local governments as key agents of urban planning. The deals are built following a bottom-up approach to agree on priorities and proposals with local authorities.

Currently, the responsibilities of metropolitan areas comprise transport, spatial planning, regional development, waste disposal, water provision and sanitation.

Source: OECD (2019[49]), "Greece", https://doi.org/10.1787/tour-2018-19-en; Thorpe, K. (2019[50]), "Devolution and local economic growth policy in the United Kingdom", Presentation for a policy seminar in Kazakhstan, Unpublished; Allain-Dupré, D., I. Chatry and A. Moisio (forthcoming[48]), (OECD, 2013[51]).

The existence of a wide-metropolitan governance structure may help Athens and Thessaloniki to deliver integrated urban and spatial strategies and enhance metropolitan productivity. In Greece, space and economy are still planned separately from each other, with little alignment between regional and municipal objectives and few implementation tools (OECD, 2015[46]). Comprehensive urban and spatial planning for metropolitan areas is necessary to connect spatial planning considerations with broader economic, social and environmental goals and objectives. Such a strategy may help to align strategic investments in a wide range of policy areas – health, education, transport and energy investments and infrastructure – with land use considerations. They can also help co-ordinate the actions of functionally connected municipalities around common policy objectives (Chapter 3). Together with this, a metropolitan governance structure may help Greek urban areas to become more resilient to an economic crisis and better manage the negative aspects of agglomeration such as growing congestion and sprawl.

In order to be successful, metropolitan institutional structures must enjoy a degree of decision-making authority over resources and own revenues. Evidence shows that metropolitan authorities that can generate own-source revenue and have control over their finance tend to flourish, while those that are held in check by their funders face greater difficulties (OECD, 2013[51]). In general, when unitary countries undertake metropolitan reforms, the central government plays a key role in financing the new metropolitan body. If Greece wants to make progress in the area of metropolitan area governance, the central government needs to provide municipal areas with adequate funding to ensure responsibilities have adequate funding. Otherwise, any proposed institution with a metropolitan ambition would simply inherit an unfunded mandate, which is likely to generate frustrations and eventually perpetuate costly inertia (OECD, 2015[46]). For example, to start, specific tax regimes for inter-municipal groupings or metropolitan areas could be promoted without taking resources away from the municipalities.

Strengthening the Greek multi-level governance framework for regional development: Progress, challenges and ways forward

Introduction

While the decentralisation process that Greece is pursuing is a key step to deliver on place-based approaches, this does not occur spontaneously with decentralisation. The impact of decentralisation reforms on regional development policy depends, to a significant extent, on how governments ensure the conditions to make it work. It is necessary to put in place multi-level governance arrangements that facilitate co-ordination and integration of sectoral policies, as well as co-ordination arrangements that allow delivering regional policies and investments at the relevant scale and bring together relevant public, private and civil society actors. Regions and municipalities also need to have sufficient capacities – administrative, financial and professional – to deliver and be able to produce genuine place-based regional policies.

In addition, the central government needs to strengthen its place-based approach to regional development policy and public investment. Greece's regional policy is largely driven by the European Cohesion Policy. In the absence of a specific regional development strategy, regional development is implicitly served through the regional allocations and programmes of the European Structural and Investments Funds (ESIF) and to some extent, Greece's own Public Investment Programme (PIP). To improve the multi-level governance for regional development in Greece, it is thus crucial to focus on the governance of EU funds in the country. Indeed, the influence of European funding has played an important role in helping Greece upgrade its institutions and governance models for regional development. Improving how Greece manages EU-funded investments serves as a lever to improve the overall multi-level governance of regional policy across the country.

While Greece has put new structures in place, an important challenge remains on how to further implement and consolidate the new structure and, particularly, the role of the regions, given their recent institutional change to local government organisations with elected leaders (governors), in regional development and investment policies. Several studies have pointed out Greece's weak institutional framework and capabilities as a key explanation for the low efficiency of regional development policies and, in particular, for investments financed by EU Structural Funds. Low planning capacity, cumbersome bureaucratic procedures and lack of experienced staff are cited amongst the factors delaying decisions and forestalling outcomes) (Huliaras and Petropoulos, 2016[52]). A more strategic and reinforced partnership between the central, regional and municipal level is not only important for the management of EU funds but the public investment system as a whole. This would also enhance the capability of regions to produce genuine regional development strategies.

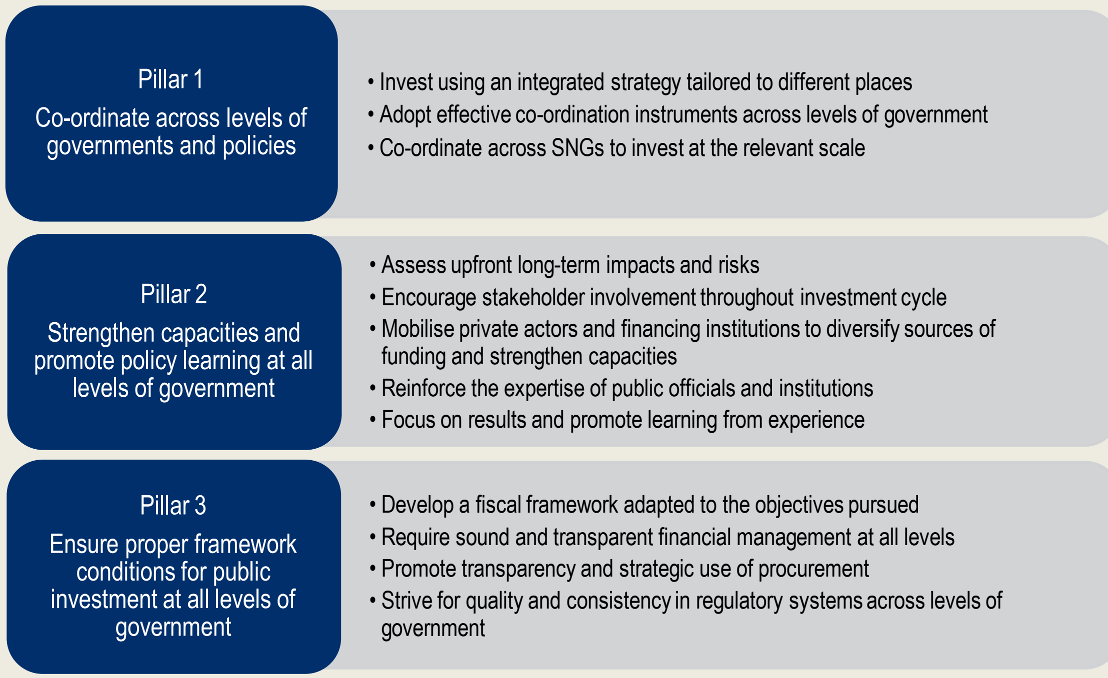
The OECD *Recommendation on Effective Public Investment across Levels of Government* (OECD, 2019[53]) provides a generic analytical framework as well as guidance on how countries can take out the most of investments opportunities.

Box 4.9. The OECD *Recommendation on Effective Public Investment across Levels of Government*

When done well, public investment can be a powerful tool to boost growth and provide a solid infrastructure for economic and social development as well as to leverage private investment. In contrast, poor investment choices or poor management of investments is a waste of resources. It erodes public trust and may hamper growth opportunities.

OECD member countries have acknowledged the importance of better governance for public investment by adopting the *Recommendation of Effective Public Investment Across Levels of Government* in March 2014. The recommendation groups 12 principles into three pillars which represent three systematic challenges for efficiently managing public investment: co-ordination challenges, subnational capacity challenges and challenges in framework conditions.

Figure 4.8. The 12 principles of the OECD *Recommendation on Effective Public Investment across Levels of Government*



Source: OECD (2019[53]), *Effective Public Investment across Levels of Government: Implementing the OECD Principles*, https://www.oecd.org/effective-public-investment-toolkit/ (accessed on 16 August 2019).

The recommendation's implementation toolkit, which provides basic guidance and helps policymakers at all levels of government implement this principle in practice, provides concrete examples and best practices for countries at any stage of decentralisation.

After five years of its adoption, the OECD has conducted a monitoring exercise to assess the implementation of the recommendation by Member and non-Member countries that have adhered to the recommendation. The monitoring exercise shows that the practices of many adherents align with the recommendation, in particular by developing integrated investment strategies and implemented mechanisms to co-ordinate public investments across levels of governments. However, there remains room for improvement in key areas of public investment, notably in the implementation of mechanisms to assess the long-term impact of public investment and in the mobilisation of private actors to finance investments at the subnational level.

Source: OECD (2014[54]), *Recommendation of the Council on Effective Public Investment across Levels of Government*, https://www.oecd.org/regional/regional-policy/Principles-Public-Investment.pdf; OECD (forthcoming[55]), *Environmental Performance Review: Greece 2020*, OECD Publishing, Paris.

Multi-level governance of the 2014-2020 Greek Partnership Agreement: Roles and interactions of its main actors

In Greece, between 2010 and 2018, public investment co-financed by the EU accounted for about 80% of total public investment (OECD, 2018[5]). The large share of EU funds protected investment from more severe cuts during the crisis. As a result, the share of public investment in total expenditure ranged between 11%-12%, remaining broadly stable between 2013 and 2017 (OECD, 2018[5]). Structural funds have permitted Greece to invest in new infrastructure, modernise SMEs, among others. Cohesion policy in Greece is also a key contributor to reducing territorial inequalities, in particular between island and continent regions and municipalities.

Overview of the Greek 2014-2020 Partnership Agreement

The Partnership Agreement (PA) for the Development Framework 2014-2020 (Box 4.10), together with the recently adopted National Growth Strategy (2018), constitute the two strategic documents that guide Greece's national development (Chapter 3). They benefit from the contribution of significant resources originating from the European Structural and Investment Funds (ESIF) of the EU.

The PA specifies among its strategic goals the improvement of the public administration, enhancement of competitiveness, tackling high unemployment, in particular of young people, reducing social exclusion and poverty, upgrading infrastructure to promote growth and jobs, and efficient use of natural resources/climate change and mitigation the impacts.

Box 4.10. Partnership Agreements on the European Structural and Investment Funds (ESIF)

For the programming period 2014-20, each EU member state signed a PA in co-operation with the EC. This is a reference document for programming interventions from the ESIF and links them to the aims of the Europe 2020 growth strategy. PAs are designed to achieve the 11 EU Thematic Objectives (TOs) for 2014-20 via a series of national and regional Operational Programmes (OPs). The PA defines the strategy and investment priorities chosen by the relevant member state operationalised through the OP, as well as an indicative annual financial allocation for each OP. PAs lead to a series of investment programmes channelling the funding to the different sectors, regions and projects in the policy areas concerned. Across the EU, responsibility for managing and implementing OPs is assigned to institutions designated as managing authorities (MAs).

Source: EC (n.d.[56]), *Glossary*, https://ec.europa.eu/regional_policy/en/policy/what/glossary.

For the 2014-20 programming period, Greece was allocated EUR 21.4 billion from ESIF, with the national government being responsible for EUR 4.8 billion in national co-financing. Within the context of EU funding, 40% (EUR 8.6 billion) is from the European Regional Development Fund (ERDF), 22% (EUR 4.7 billion) from the European Agricultural Fund for Rural Development (EAFRD), 18% (EUR 3.9 billion) from the European Social Fund (ESF) and 15% (EUR 3.3 billion) from the Cohesion Fund (CF). The rest comes from the European Maritime and Fisheries Fund (EMFF) and the Youth Employment Initiative (YEI).

Resources allocated to Greece and its regions from the EU Cohesion Policy envelope of the European budget have been attributed to 5 national OPs and 13 Regional Operational Programmes (ROPs) (Table 4.3). The total OP envelope is formed by adding the corresponding national co-financing, typically of the order of 25%. These allocations concern the ERDF, ESF and CF and include supplementary resources allocated to Greece following the midterm review. This is also true for OPs financed through the ERDF under the European Territorial Co-operation (ETC).

At the beginning of the negotiation process for the Partnership Agreement (PA) for the National Strategic Reference Framework (NSRF) 2014-2020, Greece, under the leadership of the Ministry of Development and Investments, submitted the PA to the EC. This PA included Operational and Regional Programmes and a summary report of NSRF 2014-20 providing key information including objectives and performance by OP. The final PA was approved by the EC in May 2014.

Table 4.3. Resources allocated to Greece and its regions from the EU Cohesion Policy, programming period 2014-2020

Distribution of funds in 5 national (sectoral) OPs and 13 ROPs

Operational programme	ERDF	ESF (+YEI)	CF	EARDF/ EMMF	Total union contribution
Competitiveness, Entrepreneurship and Innovation	3.104	582	0	0	3.686
Transport Infrastructure and Environment	1.395	0	3.204	0	4.599
Human Resources Development, Education and Lifelong Learning	0	2.572	0	0	2.572
Public Sector Reform	239	223	0	0	462
Region of Eastern Macedonia and Thrace	355	63	0	0	418
Region of Central Macedonia	646	162	0	0	808
Region of Thessaly	266	73	0	0	339
Region of Epirus	228	42	0	0	270
Region of Western Greece	328	78	0	0	406
Region of Western Macedonia	247	25	0	0	272
Region of Continental Greece	76	32	0	0	108
Region of Peloponnese	163	65	0	0	228
Region of Ionian Islands	156	29	0	0	185
Region of North Aegean	215	33	0	0	248
Region of Crete	292	68	0	0	360
Region of Attica	680	260	0	0	940
Region of South Aegean	62	24	0	0	86
Technical Assistance	157	70	62	0	289
Rural Development (EARDF)	0	0	0	4.718	4.718
Fisheries and Maritime (EMFF)	0	0	0	389	389
Total	**8.609**	**4.401**	**3.266**	**5.107**	**21.382**

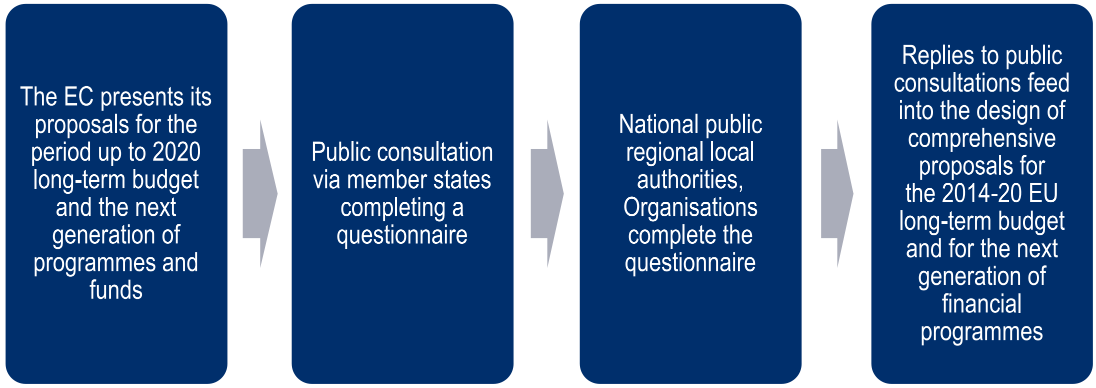
Source: (Psycharis, 2019[57]).

Table 4.4. Bilateral European Territorial Cooperation Programmes

Operational programme	ERDF EU contribution (EUR)	National contribution (EUR)	Public expenditure (EUR)
Greece-Bulgaria	110.241.234	19.454.338	129.695.572
Greece-Italy	104.700.362	18.476.537	123.176.899
Greece-Cyprus	47.004.240	8.294.868	55.299.108
Greece-Republic of North Macedonia	38.649.552	6.820.507	45.470.059
Greece-Albania	35.965.222	6.346.807	42.312.029
Balkan-Mediterranean	33.456.246	6.271.408	39.727.654
TOTAL	370.016.856	65.664.465	435.681.321

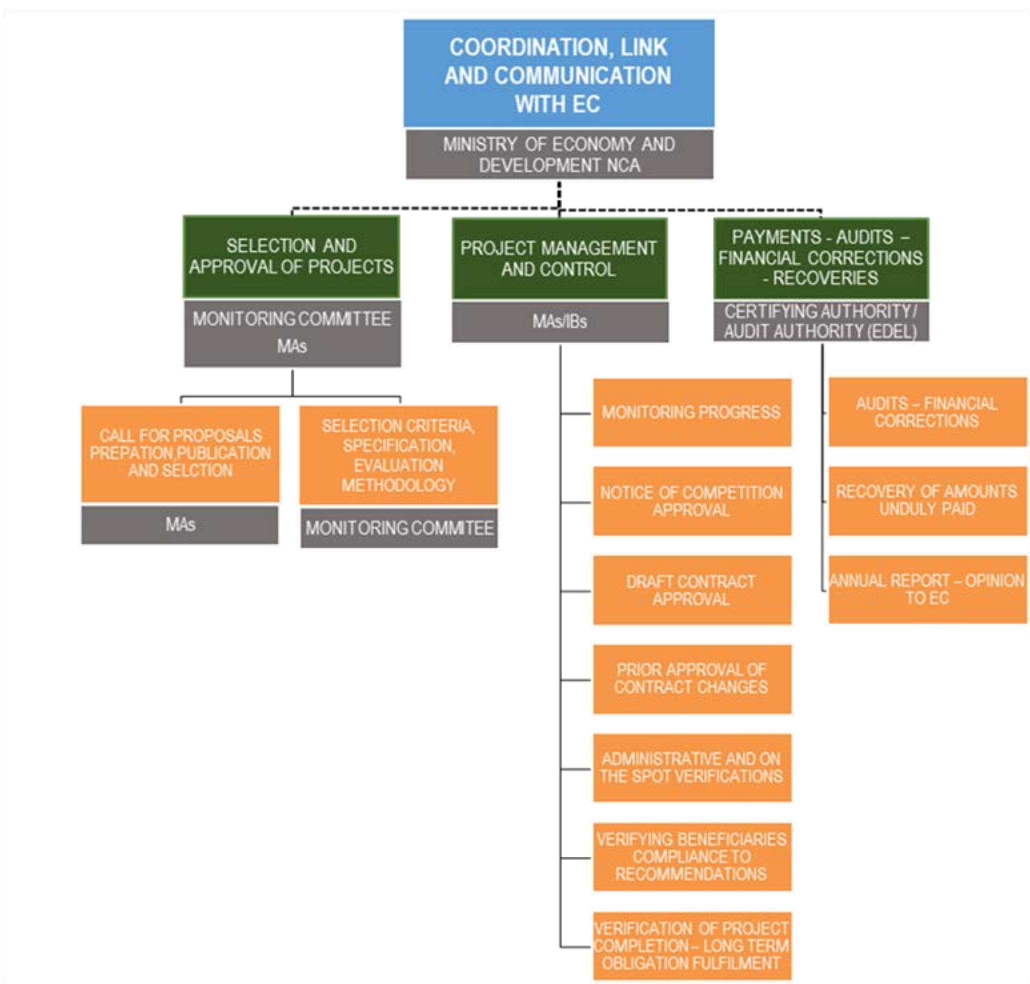
Note: For the OPs financed under the ETC, the allocations are depicted on a different table due to the contribution of other member states in the respective OPs.
Source: (Psycharis, 2019[57])

Figure 4.9. Partnership agreement (PA) process preparation



Note: The questionnaire refers to the questionnaire(s) sent by the Ministry of Development to all involved bodies, included mainly to the 1st Circular (April 2012) and the 2nd (March 2013) for the preparation and submission of the PA agreement.
Source: Psycharis, Y. (2019[57]), "The multi-level governance framework for ESPA: Presentation, assessment, and recommendations", Background paper for the OECD Review, Unpublished.

Figure 4.10. The implementation process of the PA 2014-20



Source: Psycharis, Y. (2019[57]), "The multi-level governance framework for ESPA: Presentation, assessment, and recommendations", Background paper for the OECD Review, Unpublished.

While Greece had no official document to inform the negotiation of the 2014-20 PA, the National Growth Strategy developed in 2018 set the basis for the upcoming 2020-27 programming period. The strategy offers a prescient assessment of the central challenges facing Greek society and its economy and proposes a range of measures to address them. Greece's next agreement with the EU for Cohesion Policy post-2020 shall be informed by these development objectives and the strategy needs to be used to harmonise national and EC goals and national policy directions.

All funding programmes follow the same implementation and monitoring procedures which are defined by the EC and Greece. The creation of a call for tender, as well as the project selection, is done by the relevant MA. The monitoring committee is approves the selection criteria, the programme specification and the evaluation methodology.

The 2014-20 architecture for the management of EU funds in Greece

For the 2014-20 programming period, Greece introduced a new architecture for the management of EU funds in order to address some of the key challenges confronted during the 2007-13 period. One of the main objectives of the new architecture is to strengthen the capacity of regional and local authorities to implement a full range of actions according to the PA priorities. This is why the architecture of the 2014-20 PA includes:

- Seven National Operational Programmes (including programmes for rural development and fisheries) covering one or more sectors and whose geographic scope and implementation applies across the country.
- Thirteen Regional Operational Programmes (ROPs), one for each of the 13 administrative regions of the country, including regional-scale activities.

Each programme includes strategic priorities and indicative actions that shape its contribution to the achievement of the PA objectives and therefore the implementation of the EU strategy for smart, sustainable and inclusive growth. Each and every one of the Greek regions is the subject of a regional programme that includes projects and regional-scale actions and is funded by the ERDF and the ESF.

For this programming period, National Operational Programmes represent 71.5% of the total OP budget. However, a significant part of these resources is invested in ROP projects: more than 90% of the total budget of sectoral OPs are committed to regional projects.

For the ROPs, each region designs an OP for the ESI funds allocated by the Ministry of Development and Investments and uses the funds to cover some of the region's needs. Each region distributes the allocated budget across its chosen target areas while maintaining compliance with European regulations and covering local needs in the most appropriate way. In essence, however, in the planning and implementation of the funds, a share of the budget dedicated to ROPs is planned and implemented by regional authorities, while another share is planned and implemented by the central government. In most programming periods, the share of EU Structural Funds allocated to regional authorities has been small and on average, it does not exceed 30% of the funds over the period. The remaining 70% is managed at the central government level, which in some cases is justified by the size of certain projects.

The Greek Management and Control System for Operations

When the EC entrusts a member state with implementing programmes at the national level, the country is responsible for setting up a Management and Control System (MCS) which complies with the requirements of EU regulations. The EC plays a supervisory role by ensuring that the arrangements governing the MCS are compliant.

A country's MCS is the "machinery" used to deliver effectively on the country's development policies (Box 4.11). The EU has issued extensive guidance on ESIF, including on the setup of MCS (EC, 2014[58]).

The MCS sets the institutional and legal framework for ESIF investment and OP implementation, as well as the common rules, procedures and monitoring mechanism in a country. At the same time, EU-level regulations govern the allocation and use of ESIF (including control, verification, monitoring and audit processes). The MCS includes all the *ex ante* financial controls (i.e. before the EU claims), while the audit bodies carry out *ex post* controls (i.e. after EU claims). This "shared management" (by the EU and the member state) model – the main principle for implementing cohesion policy agreed at EU political level – creates a complex system of multiple checks where EU-, national- and programme-level bodies participate in a range of internal and external management and control activities.

Countries have discretion on how MCS and MAs are organised. The OECD does not support a single "best practice" in terms of organisational set-up of public administrations (nor of MAs) respecting the different missions, activities and contexts of governments and cohesion strategies. At a minimum, administrations should be organised in ways that avoid duplication and fragmentation of tasks; respect integrity (i.e. with sufficient accountability mechanisms and "arms-length" institutions to provide objective, independent oversight); and with adequate horizontal and vertical mechanisms for information sharing and communication (OECD, 2019[59]).

Box 4.11. The Management and Control System in Greece

The Management and Control System 2014-2020 is common for all Greek OPs in the PA 2014-2020, that are financed by the ERDF, ESF and Cohesion Fund, in the framework of the Investment for Growth and Jobs goal. The MCS includes, determines and documents the following aspects:

- Designation of the authorities/bodies, which undertake competencies for management, certification, control and co-ordination, in accordance with Regulation (EC) 1303/2013.
- The organisational structure and individual competencies of the said authorities/bodies.
- The operational correlation of authorities/bodies and compliance with respect to the separation of functions.
- Written procedures to be implemented.
- Regulatory acts required for the designation of authorities/bodies and the implementation of the OPs.

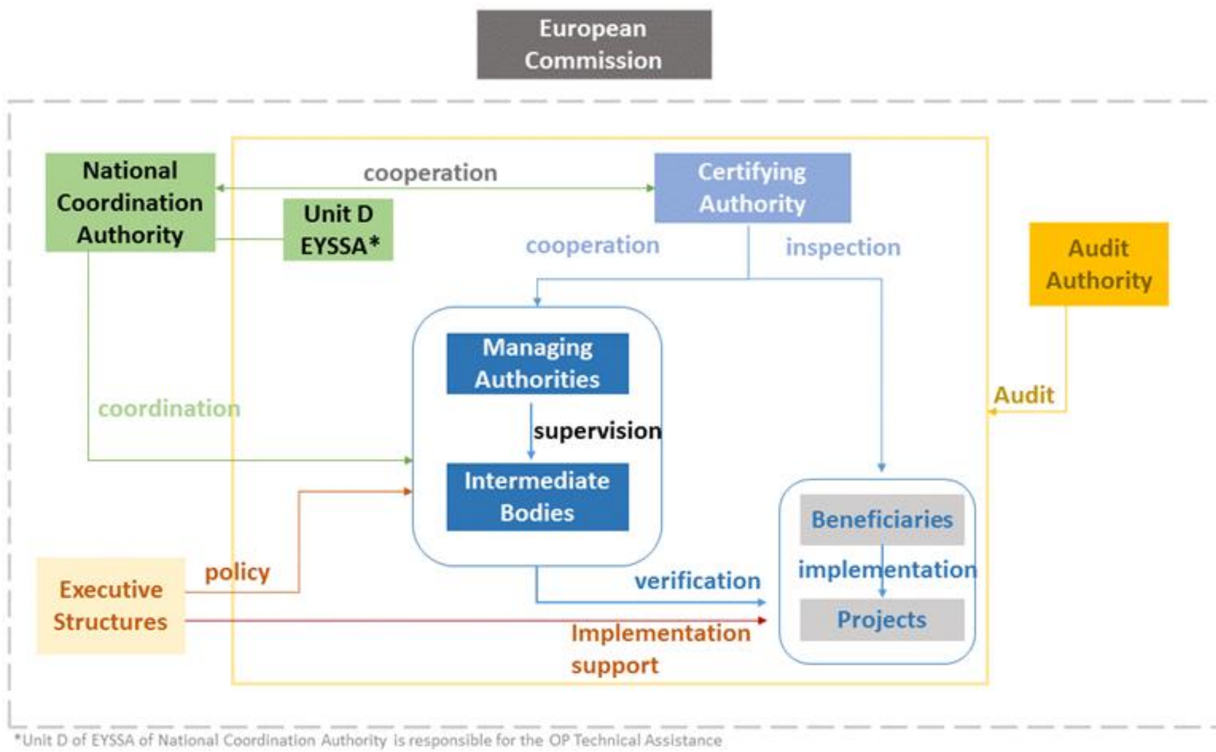
The main principles that govern the Greek Management and Control System 2014-2020 focus on the following:

- Existence of common rules in the management and monitoring of the OPs in accordance with the principle of sound financial management and with the aim of better controlling potential divergences in their application and the timely adoption and application of corrective measures.
- Mandatory electronic exchange of data between management authorities and the beneficiaries of the operations, through the monitoring information system (MIS), with the aim of reducing the administrative burden of the involved authorities and bodies.
- Strengthening the electronic communication between the MIS and the information systems of the beneficiaries and intermediate bodies, as well as other general government bodies with the aim of reducing red tape and the more efficient operation of the authorities and bodies involved.
- Timely financing of the operations through the PA Central Account in combination with the electronic interconnection between the MIS, the Programme for Public Investments and the Bank of Greece.

Key actors in the PA implementation: Roles and interactions

The main actors involved in the implementation of the Partnership Agreement 2014-20 are the MAs, the Audit Authority and the Certifying Authority. Their role and respective functions are provided in European Regulation 1303/13. Other key actors and institutions involved are the National Co-ordination Authority and the Executive Units (Figure 4.11).

Figure 4.11. Key actors of the Greek Management and Control system



Source: Description of the MCS 2014-2020/ Annex 1: Structure of MCS.

The National Co-ordination Authority

The National Co-ordination Authority (NCA) is housed in the Ministry of Development and Investments. Its main objective is ensuring co-ordination and the effective management of co-financed assistance. It is the main point of contact with the EC and operates under the Secretary-General for Public Investments and Partnership Agreement. Through its six special services the NCA provides framework conditions, tools and guidance to the MAs (see below) on issues concerning all aspects of OP implementation, ranging from strategic planning to the single MIS.

The NCA is at the centre of the EU funds strategic planning process and comments and consults all OPs. It has overall responsibility for co-ordinating the different levels of programme design. During the preparation phase, three circulars were issued by the NCA, setting out the procedures to be followed in the design of the 2014-20 Partnership Agreement, its OPs and the bodies authorised to undertake these procedures. The NCA has a strategic role in programme implementation. All OP revisions over the 2014-20 period are directed by the NCA and carried out by the competent MAs, in line with the guidelines of the NCA.

Specifically, the NCA through six special services is responsible for the strategic monitoring, programme evaluation, institutional support, internal co-ordination among MAs as well as the co-ordination of state aid.

The Special Service for the Implementation (EYSE) is responsible for the strategic monitoring of the 2014-20 PA OPs. For this purpose, the MAs are in continuous and close collaboration with the EYSE which is responsible for co-ordinating and overseeing the management and implementation of OPs supported by ESI funds. The EYSE performs monitoring of compliance with the N+3 rule, monitoring of the thematic concentration and the allocation of resources by category of region. It also ensures and monitors the proper funding from the Public Investments Programme. The EYSE has developed: analytical forecasting techniques to identify and respond to emerging N+3 issues; a special alarm procedure when specific absorption problems are forecast; and close-monitoring and follow-up measures on the basis of particular operations. In order to improve the financial progress of all of the OPs, it draws up action plans whose implementation is monitored on a quarterly basis in constant co-operation with the MAs.

The Special Service for Strategy, Planning and Evaluation (EYSSA) holds the key responsibility for programme evaluation. During the OP's design, the circular on the implementation of the *ex ante* evaluation and strategic environmental assessment of the OPs for the period 2014-20 set out the main guidelines for organising and carrying out the *ex ante* evaluations for OPs, which were completed and submitted to the EC together with the OPs. In the implementation phase, the EYSSA provided guidelines to the MAs in order to draw up and submit an evaluation plan; another circular provided guidelines for organising and carrying out the ongoing evaluations of the OPs. Finally, the NCA provided guidance to the Mas in issues of quantitative targets and indicators contained therein, contributing thus to the development of a single system of indicators for the PA 2014-20.

The Special Service for Institutional Support (EYTHY) is responsible for the drafting and monitoring of the MCS. It provides legal support to all special services and staff structures of the NSRF 2014-2020 to ensure the compatibility of the interventions with EU and national law. It plays a key role in defining MCS architecture as it is responsible for formulating and presenting proposals for the continued simplification of the system for the implementation of co-financed operations. This service is also in charge of developing the strategy for the prevention and fight against fraud in structural actions and ensures the establishment and operation of an effective complaints' mechanism.

The Special Service for the Co-ordination and Monitoring of ESF Actions (EYSEKT) co-ordinates the design and evaluation of ESF interventions implemented in the NSRF and OPs.

The Special Service for State Aid (EYKE) is the central administrator of the State Aid Information System (PSC), the use of which is mandatory for all entrepreneurship support actions funded by the NSRF 2014-2020, as well as for the other actions of the Ministry of Development and Competitiveness. It also supports all MAs on state aid rules.

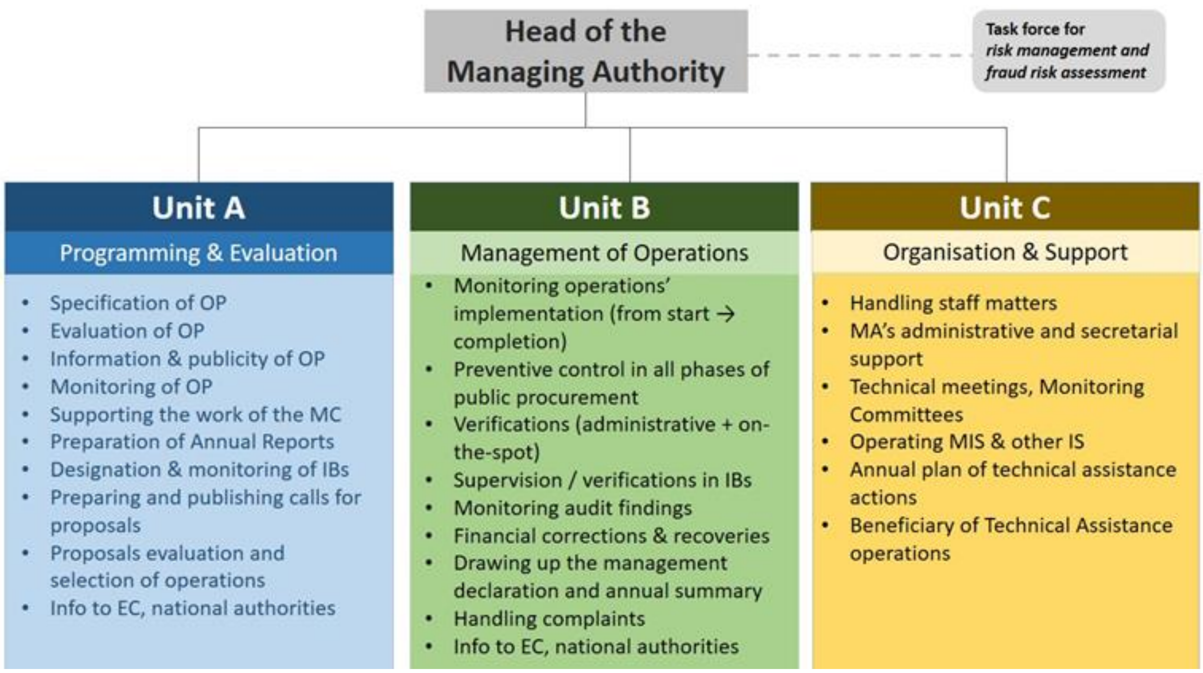
The Special Service for the Monitoring Information System (MIS) plans, develops and adapts the integrated information system (IIS) to the implementation requirements of NSRF 2014-2020 and other development programmes. It provides training and supports users in the operation of the MIS and parallel auxiliary information systems. The service is also in charge of processing and exploiting the data entered in the MIS in order to satisfy system user requirements and provide statistical data for assessing the performance and adoption of measures or establishing the need for new ones.

Managing authorities

Greek MAs – responsible for the efficient management and implementation of an OP – have common rules for their organisation, staffing and functioning. All MAs have the same competencies as specified in the regulatory provisions. They are responsible for a range of activities, including programming and evaluation, monitoring, technical assistance, which require technical knowledge and a broad array of professional competencies. As is the case across the EU, Greek MAs operate in a tightly controlled legislative and regulatory environment where processes and procedures are clearly delineated in order to minimise the potential for error or fraud.

The MAs organisational structure is uniform across the Greek system and reflects the distribution of competencies set by the regulations. Countries have discretion over the internal organisation of MAs. All Greek MAs have three types of units (Figure 4.12) but the number of each type of units can differ by MA. This configuration ensures the separation between the functions of: i) issuing calls for proposals and project selection; and ii) monitoring projects and verifications needed. Public procurement and payment processes related to project implementation do not fall under the responsibility of MAs unless the MA itself is a beneficiary of the OP. Each MA has an annual action plan with specific targets, as well as a website for publishing calls for proposals and approval decisions of operations.

Figure 4.12. Organisation structure of Greek managing authorities



Source: Description of the MCS 2014-2020/ Annex 2.

For the 2014-20 programming period, MAs responsible for national OPs moved out of the relevant line ministries into the Ministry of Development and Investments, under the responsibility of two special secretariats (which after July 2019 have been merged to only one special secretariat) established for this purpose. This choice of centralising the management of OPs within the Ministry of Development and Investments reflects an attempt to separate: (i) the managerial responsibility which lies with the political leadership supervising the MA; from (ii) policy planning responsibility which lies with the political leadership of the line ministries, by supervising beneficiaries implementing the sectoral policies. With this demarcation, the strategic policy planning role falls within each line ministry.

In addition, Greece has also limited the number of MAs managing a fewer number of national OPs. In the 2014-20 period, Greece has only five national OPs, in contrast with nine in the previous programming period. To manage these five national OPs, some MAs merged (e.g. the MA for Infrastructure with the MA for the Environment, the MA for Education with the MA for Employment, etc.) The MA for the OP for Transport Infrastructure, the Environment and Sustainable Development, for example, results from the merger of three MAs, each responsible for their own OPs in the 2000-06 and 2007-13 programming periods and situated within the relevant line ministries. At the regional level, there are 13 MAs as each of the 13 regions is responsible for its own regional OP. This is also an important change as in the previous programming period, Greece had a complex scheme of three regions merged into one single OP that was managed directly by the NCA; in this scheme, regions were acting as intermediary MAs. For the 2014-20 programming period, the head of each regional MA is the relevant regional governor, who has the same responsibilities as the administrative head (the Special Secretary at the Ministry of Development and Investment) of the national OPs. The regional MA's services belong to the regional administration special organisational units designated as MAs. They are not, however, included in the chart of the respective institutional structure as is the case for all special services linked to PA 2014-20. The regional governor is the political supervisor of a regional MA and, thus, the regional MA's staff reports to the regional governor, and all MA documents and decisions are signed by the regional governor, whereas the decisions of the national OP MAs are signed by the special secretary. Administratively speaking, the heads of both types of OPs (national and regional) have exactly the same responsibilities.

Executive Units

Executive Units were created through Law 4314/2014 for the 2014-20 programming period within different line ministries. These units were introduced to help line ministries in policy planning and delivery, mainly by enhancing ministries' capacity to transform sector policies into a solid and coherent set of specific projects/actions able to deliver the policies with funding by the relevant OPs of PA 2014-20 or other financing instruments. In this regard, the mandate of these executive units is twofold: i) to ensure effective policy design as well as funding for sector policies mainly through ESIF co-financed programmes; and ii) to support and strengthen the administrative capacity of line ministries or other government entities in the sector to develop and implement their co-financed activities. They are also actively involved in the OP's specialisation process and in monitoring the overall progress of the operations falling within the relevant sector of the ministry, in co-operation with the MA, for the adoption of troubleshooting measures.

They are responsible for designing policies of the relevant ministry, and planning, preparing and implementing projects or actions that are funded by ESIF. They are entitled to translate sector strategy stemming from all ministry services and bodies into concrete operational plans with corresponding resources, as well as to collaborate with relevant MAs in drafting calls for proposals once they have agreed upon a budget. Being officially part of the corresponding line ministry, the Executive Units have a broker role between the line ministry and the MA. This requires co-operation at three levels: i) with the line ministry services and entities to form a consolidated operational plan, comprising funding priorities for each sectoral policy; ii) with the MA to further detail the actions to be included in the call for proposals; and iii) with ministry services/entities to support project implementation.

In addition, they monitor the overall programming and implementation progress for their sector. They also support ministries/entities in developing (up until they are sufficiently "mature" to be financed) and implementing their co-financed actions and, in certain cases, they can act as beneficiaries for the ministry. Before issuing a call, both the Executive Unit and the MA have to co-ordinate and decide on the call, the resources, the content, the beneficiaries, the indicators and the targets, as well as the criteria of evaluation.

The creation of these units separates the strategic planning process and the management and implementation of OPs. This demarcation maintains line ministries' responsibility for sectoral planning and avoids conflict of interest in the management and implementation of OPs as they are in charge of monitoring and supporting beneficiaries but not of selecting their projects. It is important to note that the services established as the new Executive Units for the 2014-20 programming period had a different role previously, either as MAs of sectoral OPs, as intermediary bodies (IBs) or main beneficiaries for actions in the respective policy sector. However, as the official creation of these units is somewhat recent – and their responsibilities have been broadened – they have encountered significant challenges in clearly identifying and realising their role and responsibilities in the new programme architecture.

Other key actors of the Greek Management and Control System are the intermediate bodies to which an MA has entrusted part or all of its competencies, the beneficiaries which are the ones that execute the different projects and the Certifying and Auditing Authority (Box 4.12).

Box 4.12. Other actors in the PA implementation

Intermediate bodies

Intermediate bodies (IBs) are entities to which an MA has entrusted part or all of its competencies under its own final responsibility towards the EC. MAs can delegate some of their activities to IBs while still remaining responsible for overall governance. The content of this delegation is included in a ministerial decision detailing mutual obligations. Considering the 2014-20 programming period, 74 bodies have to date been designated as IBs, 40 of which are municipalities or other urban authorities.

Beneficiaries

Beneficiaries are the legal entities, usually businesses, government authorities (e.g. line ministries, agencies, city and municipal governments, etc.), non-governmental organisations (NGOs) and universities that apply for ESIF financing for a project designed to align with one or more thematic objectives referred to in the PA.

The Certifying Authority

The Certifying Authority (CA) is responsible for drawing up and submitting payment applications to the EC, certifying the fulfilment of all reliability regulatory requirements. Other functions include monitoring of the procedure for the transfer of appropriations to the beneficiaries as well as inspection of MAs, IBs and beneficiaries. The CA is under the responsibility of the General Secretariat for NSRF (not part of the NCA) in the Ministry of Development and Investments.

The Audit Authority

The Audit Authority (AA) has overall responsibility for the audit of the functioning of the MCS for OPs co-financed by the ERDF, ESF, CF and EMFF as provided for in the ESIF regulations. It is under the responsibility of the Ministry of Finance and, as of its neutral role, is external to the NSRF system.

The Management Organisation Unit of Development Programmes

The Management Organisation Unit of Development Programmes (MOU), founded in 1996 following a joint decision of the Greek government and the EC, is a non-profit institution reporting to the Ministry of Economy and Development. it was created to safeguard community interventions in terms of sound management, quality assurance and project monitoring, against a background of an underperforming Greek public administration. Its mission is to support and strengthen the Greek public administration in the effective management and implementation of EU co-funded OPs, covering needs in specialised human resources, management systems, tools, procedures and expertise.

One of the main responsibilities of the MOU is the staffing of the special services (MAs, Executive Units, IBs) for all OPs. For this, the MOU hired expert staff with experience in the managing and monitoring of EU programmes and public works. The MOU also supports the daily operation of special services, addressing their operating needs (payroll and personnel administration, housing, provision of necessary infrastructure and office equipment), ensuring high operating standards and quality work conditions. To accomplish this task, the MOU conducts training (e-learning) and implements practices for knowledge transfer. They are also key in capacity building for beneficiaries by establishing expert teams, which provide advisory, managerial and technical support to the weakest beneficiaries. The MOU is also engaged in other projects related to the management and implementation of ESIF, e.g. production of guidelines for beneficiaries regarding project maturity, operational reviews of various services, development of tools, etc.

In accordance with the provisions of the PA 2014-20 for Greece, a major restructuring and streamlining of all management structures, including the MOU, took place in 2014, taking into consideration the new OPs' architecture. A uniform system of HR management (under MOU responsibility) was established for all ESIF structures, governed by eight principles, including: independence, transparent and merit-based recruitment system, strict operating rules and clear definition of job profiles and responsibilities, staff mobility, performance appraisal, continuous training, modern and efficient operating environment, and accountability.

The establishment of the MOU was an experiment aiming to support and reinforce the Greek public administration and facilitate its closer co-operation with the private sector. Today, the MOU is an innovative unit within the Greek administration playing an important role in the effective management and implementation of EU co-funded programmes.

Enhancing the strength and efficiency of EU funds management

Focus on improving the efficiency of the current management system

For the 2014-20 programming period, Greece made significant changes in its management system in order to better manage EU funds, including changes and adjustments to the OP Management and Control System (MCS).

The main adjustment introduced by Greece to its MCS was the delimitation and separation of the strategic planning functions from the management and implementation of the OPs. Several reasons explain this change, which, all together, make this separation – the Executive Units on one side and the MA on the other – an efficient way of managing and implementing the PA. Among these reasons are: i) the reduction of national sectoral OPs from nine to five, involving the merger of different sectors into a unique OP; ii) moving all MAs from the line ministries to the Ministry of Development and Investments. This contributes to the alignment between strategic documents that support the MA and its OP and national and sector strategies.

At the regional level, while all regions have their own OP for this programming period, this separation between planning (Executive Units) and management and implementation (MAs) is not in place.[3] Some MAs have the view that the Directorates of Development Planning of the regions could undertake this role, as, according to the Kallikratis reform, the regions are mainly responsible for regional planning and development, including the management of EU OPs. However, there is also a common understanding that with the staff shortcomings faced by regions, this division between MAs and Executive Units is difficult to implement in regions. However, some MAs consider that if those directorates had the appropriate human resources in terms of quantity and expertise, they could be more actively involved in the regional planning and set the regional priorities related to the environment, transport and other sectors. For example, they could identify and prepare the regional transport projects that should be included under the Strategic Transport Investment Framework 2014-2025, or the sewage treatment projects, among others. They could also work in close collaboration with the Executive Units of the line ministries in the fields of tourism, culture, poverty and social inclusion, employment, etc. in order to identify and prioritise relevant regional interventions and ensure synergies and complementarities between the sectoral and regional OPs; this task is now executed by the MAs.

The co-existence of the Executive Units and the MAs at the national level may allow the system to work more efficiently. On the one hand, the line ministries are the "policy owners" and remain the main strategic planners while the MAs can focus on the implementation, management, monitoring and evaluation of the OPs – which require particular expertise. On the other, it reduces conflict of interest as the Executive Units are now the ones responsible for supporting and building capacities of beneficiaries; i.e. beneficiaries receive support from a different entity than the one that finally assigns the projects and evaluates. At the same time, having all MAs under the same ministry may facilitate economies of scale as well as co-ordination among them. If well managed, it also may facilitate peer learning across the different MAs.

In general, the collaboration between MAs and the Executive Units seems to be positive. Some Executive Units, such as those linked to health, culture or energy, or the Executive Units of the Ministry of Labour, undertook a co-ordination role in programme implementation during the programming period. For those Executive Units that did not to play such a co-ordination role, the experience with collaboration is also generally positive. The positive collaboration between MAs and the Executive Units will persist and might be reinforced if the Executive Units accomplish their role as described by the legislation (policy design, preparation of projects, specialisation process), avoiding entering other stages of implementation, which comes under the responsibilities of the MAs. For example, MAs are responsible for consultations with the beneficiaries, as well as the day-to-day activities regarding project implementation. The involvement of the Executive Units in monitoring and management stages could result in overlapping, which would multiply the burden and is a crucial factor of implementation, especially under the light of staff shortages reported by the MAs and the Executive Units.

The reduction of the number of MAs at the national level (as a result of the reduction of the number of national OPs) as well as the regrouping of all MAs under the Ministry of Development and Investments also allows for some more flexibility in management and implementation. First, the more priorities and resources are set under the same programme, the more they support programme management, as internal transfers within the programme are easier whenever required, or imposed by the need to avoid loss of funding due to the N+3 rule. Second, the NCA can directly ask MAs (instead of a great number of different ministers) to make the relevant modifications or amendments to programme documents and financial resource transfers.

At the same time, the changes introduced in the 2014-20 programming period were burdensome and costly for a majority of actors and parties within the MCS. Any organisational change, whether in the private or public sector, puts pressure on the parties involved and may generate, at least at the beginning, some resistance. In the public sector, organisational change is an exercise of negotiation and compromise and not simply an exercise in convincing the various stakeholders to get on side (Cunningham and Kempling, 2009[60]). In the new structure, public employees and policymakers needed to re-learn how to navigate within the MCS. With the merger of the Environment and Transport MAs, for example, officials worked to create a single MA entity, trying to harmonise different sectors (transport and the environment), blend differences in working cultures and manage programme and project portfolios that vary in size and scope (OECD, n.d.[61]).

For the next programming period, Greece may focus on strengthening the existing scheme instead of introducing new changes, which would bring further administrative costs and uncertainty. To effectively implement organisational changes in the public sector, it is important to implement a programme of continuous improvement, focusing on the actions, initiatives and measures that are in place (Cunningham and Kempling, 2009[60]). To make the most out of changes, all actors need to incorporate the new policies and structures into their daily routines; this is a learning-by-doing process (Fernandez and Rainey, 2006[62]). For this, it may now be necessary to make the system mature, investing in its optimisation, without subjecting it to the stress of structural and profound changes.

Indeed, while the overall architecture has been set, the framework condition and tools to make it function well are not always there and the capacity needed is often underdeveloped. Law 4314/2014 that regulates the management, control and implementation of the interventions for the 2014-20 programming period, that introduces mandatory measures such as the specialisation process or the creation of the Executive Units, has not yet been fully implemented. This is the case, for example, of the selection of managers through a new process or of the anti-fraud measures regarding personnel rotation. Similarly, the Regional Development Planning Committees foreseen by this law are not yet operational (see below). For the next programming period, it will be necessary to ensure the full operationalisation of the management, control and implementation law by, for example, introducing concrete mechanisms to monitor the whole process and the respect of the relevant deadlines throughout the programming period.

There are four key conditions and areas that need to be strengthened in order to make the system function better. These are; i) better delineating the responsibilities of the different actors at the national and subnational levels; ii) strengthening and deepening co-ordination mechanisms, especially between the national and subnational levels; (iii) reinforcing the administrative capacities of the different parties with a special focus on beneficiaries; and (iv) continuing efforts in streamlining the rules and procedures to navigate within the MCS and to increase efficiency and accountability. All of this whilst ensuring that tools to make the MCS more efficient need to better suit regional and local realities and capacities.

Finetuning the responsibilities of key actors

A majority of national stakeholders see the distinction between management (MAs) and planning (Executive Units) as a positive experience. The Executive Units, for example, have helped in the maturity of projects, by supporting beneficiaries and filtering the projects submitted to the final calls by the different agencies of the ministries.

However, the role and effectiveness of the Executive Units vary, depending on the circumstances and conditions in different line ministries. In some cases, Executive Units lack the capacity to act as brokers between the line ministry and the MAs. While all Executive Units should be able to translate strategic priorities of line ministries into concrete programming, not all of them are able to deliver on this task. For example, the Executive Unit of the health sector played an important role in the implementation of all regional programmes, as all of them included specific priorities regarding the sector. In practice, this executive unit played a much wider co-ordinating role in the OP implementation than other units within the system. This Executive Unit not only decided the policy but also prepared the relevant projects, monitored their implementation as well as the indicators and co-ordinated the OPs' revision whenever required. In other words, the Executive Unit divided the national policy into specific projects per region, to be financed by the regional programmes, after a consultation process with the regions. This was also the case for other Executive Units such as the Executive Unit of Energy, the Executive Unit of Culture or Executive Units of the Ministry of Labour (LKN Analysis, 2020[63])

With the move of all MAs to the Ministry of Development and Investments, and the creation of Executive Units in line ministries, the officials previously responsible for planning within the MCS moved to the Ministry of Development and Investments together with the whole MA structure. Therefore, for this programming period, some Executive Units lack sufficient planning expertise. For the next programming period, Executive Units will benefit from the learning-by-doing process and should be able to better accomplish their tasks.

Moreover, this has meant that, while officially MAs are no longer responsible for strategic planning, in practice, some MAs still have a hand in planning processes. This is why some stakeholders also point out the need to further clarify, in practice, the responsibilities of the MAs and the Executive Units. This is particularly true when the Executive Unit lacks sufficient capacity to undertake its role.

To further reinforce the alignment between OPs and national and sectoral strategic priorities in the 2021-27 programme, the broker role of the Executive Units needs to be strengthened. To do so, it is necessary to better clarify and communicate the role and responsibilities of the Executive Units and MAs to all the parties involved in the planning and management of EU funds as well as to those that are not part of the MCS. A system works better when all the parties involved have clarity on the roles they accomplish and their main objectives and targets. It would also help to improve accountability frameworks and co-ordination (instead of competition) between actors. For the Executive Units to accomplish their role effectively, it is important to ensure that they all have adequate personnel and internal capacities to fulfil their responsibilities. For the 2014-20 programming period, some executive units had less than 10 employees while others had more than 40.

Strengthening co-ordination across sectors and levels of government

To increase the efficiency in the use of EU funds for investments, ensuring sufficient co-ordination in the OP design and implementation processes is key. This includes actively establishing partnerships among actors at different levels of government, which could help reduce information asymmetries and ensuring the alignment of strategic priorities for the OP.

Moreover, as analysed in Chapter 3, a key challenge for Greece for the next programming period is embedding its regional policies and investments – which are now de facto the different OPs – in a territorial perspective. Moving towards a place-based regional policy in Greece that frames the Partnership Agreement for the next period requires strengthening co-ordination at the national level across sectors and key actors of the MCS, as well as with subnational stakeholders. Horizontal co-ordination across sectors and vertically with regions and municipalities is necessary to avoid overlaps in the different OPs and ensure that the regional OPs include targeted actions for each region.

Greece has made important progress to enhance cross-sectoral co-ordination but further steps need to be taken

Greece has made progress in encouraging and facilitating co-ordination between actors within the MCS, including with beneficiaries. In order to facilitate OP project management and streamline efforts and approaches, the NCA has set up a number of "thematic networks", including the participation of regional MAs, to discuss specific issues such as public procurement, evaluation, integrated territorial investments, anti-fraud policies, risk management, among others. These networks meet two to three times per year and act as information exchange fora. They are entitled to formulate specific proposals for the effective implementation of their policy field. These networks have proven to be useful for different Geek stakeholders to be up to date on the main issues and requirements on specific topics. They are also a tool to exchange experiences and seek advice from peers. Some MAs have the view that the thematic networks that have been set up by the National Co-ordination Authority have an added value and provide opportunities for information and exchange of experience but, although they are entitled to formulate specific proposals for the effective implementation of their policy field, this is not happening in practice.

To complement the work done by the thematic networks, Greece has also set up a number of technical inter-ministerial bodies to accelerate the implementation of co-financed projects. The Major Projects Inter-ministerial Committee, for example, is in charge of simplifying the legal framework that directly affects the implementation of major investment projects. Other inter-ministerial committees set up at the technical level and co-ordinated by the NCA are responsible, for example, for the improvement of roads and ports construction legislation, the review of the legislative framework for expropriations and the simplification of the procedures related to archaeological works. Some specific proposals of the above bodies have already been incorporated in the respective legal framework.

Still, systematic co-ordination of policy priorities and collaboration on policy design and implementation among the different actors of the MCS can further improve the effectiveness and impact of EU-funded investments in Greece. Co-ordination among MAs/IBs, both national and regional, on the content of the OPs, the call for projects, their management and evaluation occur mostly on an ad hoc basis. This is why in some cases it is possible, for example, to find similar and overlapping calls for projects stemming from different MAs. The lack of co-ordination among sectoral and territorial approaches, policies and programmes is a longstanding problem in many countries and affects ESIF management across the EU.

A more systematic approach to the design of tenders, and *a posteriori* a co-ordinated approach to the management and evaluation of projects would result in more efficient public investments. For example, Greece would benefit from a co-ordinated approach for the call processes by defining a clear centralised plan agreed by all relevant parties (e.g. different MAs/IBs, including the Monitoring Committee) and developing a centralised calendar for the calls. To complement this work, Greece would also benefit from integrated outcome indicators for the projects' monitoring defined by all parties, beyond the sectoral output and impact indicators. Such co-ordination could also reinforce MA/IB collaboration on identifying and discussing programming and technical project problems and finding realistic solutions.

To address this challenge, Portugal, for example, has set up a network of MAs, which articulates the content and timing of the calls and elaborates a yearly plan for all calls. Beneficiaries then apply in the same portal to a common call. The network also agrees on the evaluation criteria. The Balcão 2020 is the portal where all potential beneficiaries of the EU Cohesion Policy funds must apply, whether they are companies, public institutions or other private entities. For Portugal, this has created operational articulation on calls, procedures and deadlines coming from the thematic networks of MAs and has allowed having coherent monitoring and evaluation results for all OPs at the national, regional and local levels.

In Spain, the Economic and Regional Policy Forum brings together national and regional MA and IB authorities to discuss ESIF management. As an expert network, it provides space for knowledge sharing on challenges, issues and new requirements or regulations, while also offering participants an opportunity to seek advice and exchange experiences (OECD, forthcoming[64]).

Box 4.13. Articulation of MCS actors in Portugal

Portugal has deployed a series of networks to articulate the interventions of the various range of key MCS stakeholders , from the entities most directly involved in the management and monitoring of the OPs (National Co-ordination Entity, MAs, IBs, etc.) to the beneficiaries. The main purpose of these networks is defining and harmonising procedures. They integrate entities in charge of managing the ESIF and public administration actors (both central and regional/local levels), which are the main bodies responsible for policies. They might also include other organisations or experts according to the issue. The members met periodically without prejudice to the use of other informal means of communication (e.g. electronic information sharing, parallel meetings, etc.). In addition to their contribution to the definition and harmonisation of procedures, they provide a privileged forum for discussion and training of stakeholders in the management of ESI funds and the sharing of experiences and good practices. Among the most important networks in Portugal are:

- **Communication network:** Ensures articulated, efficient and effective communication between all OPs, through a common communication strategy that actively contributes to the success of Portugal 2020 objectives. It also helps in spreading knowledge of funding opportunities by potential beneficiaries and other stakeholders. The network communicates the role played by the funds and the EU and disseminates the results achieved and the projects funded. The main outputs of this network are: Common Communication Strategy Portugal 2020; Information and communication guide for Portugal 2020 beneficiaries; Portugal 2020 information and communication campaign with written, audio and video media and covering the media (paper, radio and television); amongst others.
- **Monitoring and evaluation network**: This network promotes the development of monitoring and evaluation activities to ensure excellence in the Monitoring and Evaluation System of Portugal 2020. It also promotes the exchange of experiences and good practices among network members in order to strengthen public policy monitoring and evaluation capacity in Portugal. The network has discussed issues such as the Global Evaluation Plan, including the definition of common guidelines for design and follow up of the evaluations, new methodologies and evaluation approaches, operation of the monitoring system, including indicators and performance framework, and strategic environmental monitoring, amongst others.
- **Regional dynamics network:** It promotes multi-level articulation, capacity building and deeper knowledge of the territories and their dynamics, as well as the development

of territorial monitoring tools. This structured forum tracks, monitors, evaluates and reflects on the progress and development processes in the regions and territories in their different settings and contexts. Examples of thematic meetings include: Resilience and Innovation of the Territory and Regions; Post 2020; RIS3; Regional Economic Convergence and Divergence; Territorial Monitoring; Multi-level Governance; and European Territorial Co-operation.

- **Thematic networks**: Networks of managing authorities (national and regional), intermediate bodies and co-ordination entity for the following Portugal 2020 themes: incentive schemes to firms; research, development and innovation support; education and qualification; employability and social economy; and environmental network. These networks are crucial for a coherent and co-ordinated implementation of ESIF funds in each thematic domain.

Besides these formal networks, Portugal has in place several working groups co-ordinated by the National Co-ordination Entity with the active participation of all MAs in other specific topics, such as information systems and simplified cost options.

All the networks are privileged fora, together with other devoted actions for institutional capacity building (e.g. seminars, conferences and workshops, including with beneficiaries, and guidance documents for MAs and beneficiaries) and contribute to the effectiveness of Portugal 2020.

Source: Agência para o Desenvolvimento e Coesão (2016[65]), *Relatório Anual Dos Fundos Da União Europeia*; Agência para o Desenvolvimento e Coesão (2017[66]), *Relatório Intercalar Do Acordo De Parceria*.

Better co-ordination between the MAs implementing state aid actions and the State Aid Special Service is also necessary. This co-ordination could be improved by setting up a platform and/or a state aid database with direct access by the MAs. At the same time, it could be of help developing standard templates for state aid calls for proposals with reference to the institutional framework and, consequently, continuous updating in a database/platform in order to save time on the controls implemented by the State Aid Special Service to the calls issued by the MAs. The State Aid Information System (PSKE) could also create standard templates as regards the different levels of reporting produced by the system (the kind of data that each involved stakeholder [applicant, MA] can access). In parallel, to improve co-ordinated measures, it is necessary to provide continuous training/seminars for MA staff on state aid issues.

Beyond fine-tuning co-ordination and collaboration within the MCS, Greece needs to develop a stronger cross-sectoral and whole-of-government perspective for regional development policies and investments to step out from a project-by-project design logic. Greece would benefit from an active co-ordination platform to define its regional and territorial development policy priorities. Setting up a cross-ministerial committee, including subnational actors, on regional development policies and investments would guide and complement the work done at the technical level by the numerous thematic networks and committees. This is, indeed, at the core of the EU Cohesion Policy which aims at promoting more balanced and sustainable territorial development.

To this end, several EU countries have set up inter-ministerial committees for regional policies. The Polish permanent inter-ministerial Co-ordinating Committee for Development Policy (CCDP), for example, carries out analysis and drafts documents to facilitate the implementation of the country’s Strategy for Responsible Development with a strong territorial dimension. Portugal has also set the Council for Territorial Dialogue, which is a political body that promotes consultation and concertation between the government and the different political institutions, at regional and local levels.

Enhancing the role of the NCA

The role of the National Co-ordination Authority (NCA) is vital for the efficient functioning of the MCS. The NCA (see above) provides directions, regulations and guidelines, and assists the different parties when necessary. They lead and ensure the co-ordination between the different actors involved in public investments. For this purpose, they have set the thematic networks and the inter-ministerial committees that have proven to be successful in co-ordinating specific key issues for a better-functioning MCS.

The NCA is the actor better placed within the MCS to ensure a better alignment between state aid and EU-funded projects, as well as projects financed through national and regional OPs. The NCA could further ensure that co-financed and nationally funded public investment are co-ordinated, by promoting complementarities and avoiding overlapping.

The NCA could further expand their guidance to deal with specific issues regarding the programmes' design and implementation. For the current programming period, the fulfilment of the *ex ante* conditionalities, for example, at the beginning of the programming period was a factor delaying programme activation in most cases. The need for the formulation of regional smart specialisation strategies, the implementation of projects in the fields of innovation, social inclusion, the new legislation on public procurement, the development of national policies in main sectors and the frequent changes of legislation are some other reasons causing delays. The MAs (especially the regional ones) frequently express the need for more guidance on those issues and the provision of specific solutions, a task that could be undertaken by the NCA. The elaboration of specific issues by the NCA – in collaboration with the Executive Unit in charge – and its dissemination to the MAs would be a helpful tool for them, solving problems and accelerating the implementation.

In parallel, the knowledge-sharing networks and task forces could also be expanded, in particular, bringing together the NCA services, the MAs and the Executive Units. For the current 2014-20 programming period, the regional MAs had to deal with a variety of issues as specific policy priorities were implemented horizontally in the ROPs for the first time (smart specialisation strategies, innovation and entrepreneurship, poverty and social inclusion, sustainable urban development, integrated territorial investments, etc.). Task forces or thematic networks dealing with this horizontal issue could be effective, in particular if they consider the participation of thematic experts to provide solutions. For this, it is important that these networks, beyond being a forum for information and experience exchange, are able to formulate specific proposals for the effective implementation of their policy field, which has not been the case so far with the existing networks (MOU, 2020[67]).

Improving the role and impact of the Monitoring Committee

For all countries receiving ESIF, the EC requires the creation of a Monitoring Committee (MC) in charge of checking the implementation of all of the country's OPs. The MC is in charge of: assessing the effectiveness and quality of OPs; approving criteria for financing under each OP; making periodical reviews of OPs and their progress towards specific targets; examining the results of implementation to assess whether those targets have been met; and, where necessary, proposing revisions to OPs, including changes related to their financial management. As such, the MC complements the programme-level monitoring by overseeing the quality, efficiency and effectiveness of OP implementation. In practice, the MC is required to meet at least once a year and be comprised of various stakeholders from public, private and non-profit institutions (Batory and Cartwright, 2011[68]).

The regulation also considers the creation of OP Monitoring Committees, supposed to be the steering body providing guidance to the MA for the effective implementation of the OP's strategy. In order to ensure the participation of a wide range of stakeholders, the MCs comprise a large number of participants, exceeding 80 members in the case of large sectoral OPs. Normally, the MCs gather socio-economic partners, representatives of the line ministries (via the Executive Units) of sectors related to the OP strategy, as well as representatives from the NCA. In the case of regional OPs, there are also representatives of municipalities. The EC also has a seat, without voting rights.

In Greece, the MC overseeing the whole PA implementation, as well as the OP MCs could better support efficient implementation of the different OPs. In Greece, as is the case in a majority of EU countries, the

MCs are in place mostly to accomplish a formal requirement and their strategic role remains limited (Bachtler, Mendez and Oraže, 2013[69]; OECD, forthcoming[64]). Different Greek stakeholders pointed out that the MCs do not fulfil a role as a steering committee and members lack ownership of policy results. This is partly the result of heavy information and burdensome procedures. Documents to inform OP MC members are of a significant volume and include an important amount of information using ESIF jargon, which is not necessarily easily accessible to "outsiders" of the system. In some cases, this limits the possibility of real engagement of the different stakeholders, limiting the discussions of MCs as well as the impact of their work. The MC, thus, ends up being a formal rather than a participatory process aimed at monitoring the OP.

To improve the functioning of the MCs and transform them into effective steering groups that ensure better use of funds, a key step would be to improve the communication among members as well as clearer communication of what is expected from this body. To facilitate engagement beyond formalities, the information shared with MC members could be reduced and synthesised, avoiding the use of EU jargon as much as possible. Indeed, presenting information in a simple way helps all sides engage in fruitful dialogue and keeping instructions as clear, succinct, and convenient as possible might help to improve participation and reduce errors (OECD, 2018[1]). Making the MCs more accessible could also facilitate its role in improving programme monitoring, including by discussing evaluation results at their meetings and providing feedback to the MA. Given the composition of MCs (including socio-economic partners, NGOs and regional and local authorities), they could also play a role in influencing resource allocation (OECD, forthcoming[64]). If MCs are able to conduct strategic discussions and decisions, they can effectively help the MAs in better informing investment needs and priorities as well as the impact of programmes and projects. To facilitate their task, a smaller but potentially more targeted MC in terms of representation could be more functionally operational and efficient. Therefore, the possibility of reducing the number of members while keeping the representation of all relevant stakeholders should be examined.

Better exploiting the synergies and complementarities within the Managing Authorities

The reduction of the number of MAs is a way of facilitating co-ordination and coherence between the different sectoral policies. Indeed, it is a way of moving from planning based on sectors towards planning based on objectives. If well implemented, this can be the first step towards place-based regional development planning.

The merger of different MAs into a single one has facilitated the adoption of good practices by sharing the experiences of officials that were previously located in different line ministries. For example, in the MA for Transport and the Environment, a single system for the administration and management of document workflow has been established, and although it is early days, there is scope for greater professionalisation of key business operations such as performance evaluation, outreach and recruitment, and mobility (OECD, n.d.[61]).

While progress has been made towards an effective merging of functions and expertise, there is still space to improve the synergies that these mergers can create. The consolidation of OPs in fewer and bigger budget programmes created important difficulties in managing them. The mergers lack sufficient planning and preparation and the MAs merged were not involved in the process from the beginning. Therefore, the parties have dedicated important resources and time to overcome administrative, technical and cultural issues arising from these mergers. For the MA on Transport and the Environment, for example, officials have proven difficulties in creating a single MA entity due to differences in working culture and differences in the management of projects of different size and scope, among others. This lack of organisational harmonisation might risk duplication of efforts, miscommunication and, in some cases, frustration as different teams allegedly approach key reporting requirements with differing degrees of urgency and method. As a result, there is room for the MA to further harness the synergies and strategic complementarities between an OP's two thematic sectors (OECD, n.d.[61]). It is thus important that the merged MA capitalise on the synergies and complementarities that can exist between the different sectors in order to move effectively from sector-based planning towards objective-based planning.

Building stronger partnerships with subnational governments within the MCs

Greece has benefitted from the EU Cohesion Policy partnership principle by improving the degree to which the national and subnational governments collaborate. The dialogue and collaboration with subnational governments are at the core of EU Cohesion Policy and, for this, it has developed its own, unique system of multi-level governance. Through programming, it aims at reconciling and integrating the perspectives of different development partners, ranging from the EC, national governments, and regional and local institutions to private companies and civil society. In this context, Greece has implemented some vertical co-ordination tools mostly in the framework of EU policies and access to EU funding (Hlepas, 2015[8]). For example, in each region, the Regional Development Planning Committee should have an advisory character for the compilation of ROPs and may elaborate some recommendations to the MAs of the sectoral OPs on the priority axes or specific objectives or categories of action they have as beneficiaries of municipalities. There were also several rounds of consultation with relevant stakeholders in the development of the PA and OPs.

Greece has made efforts to improve co-ordination and collaboration among the national, regional and local levels. Greek law foresees a range of contracting and networking possibilities to co-ordinate policies between the two tiers of subnational governments. The various co-ordination networks within Greece's overall system of OP management – the network for smart specialisation, the thematic networks to promote exchange on public procurement, evaluation, integrated territorial investments (ITI), anti-fraud, risk management and publicity; the inter-ministerial bodies focused on accelerating project implementation; and the networks formed by the MA and its IBs – all contribute to the knowledge base for more effective ERDF and Cohesion Fund investment.

For the 2014-20 programming period, Greece has also promoted co-ordination with regional actors and among the different parties of the MCS. Within the system, co-ordination between the different levels of government occurs mostly in three concrete instances with formal channels in which the NCA, the MAs (national and regional) and sometimes the beneficiaries sit together:

- **Preparation and planning of the PA**: The architecture of OP budget allocation among ROPs and policy sectors was decided at the political level, following consultation with regional governments (conferences, workshops, among others) and line ministries, on the basis of a proposal from the Ministry of Development and Investments. The priorities and budget allocation were proposed by the NCA to the Ministry of Development and Investments taking into account relevant EC documents, such as the position paper, as well as stakeholders' proposals, during a gradual strategic planning process. The proportion of budget allocated to ROPs is one of the key decisions taken during this process and represents a source of tension between the Ministry of Development and Investments and the regional governors. It is crucial that, in this process, all parties agree on the demarcation of actions to be implemented through the two categories (national and regional) of OPs, in a way to avoid overlaps and exploit synergies. For the 2021-27 period, line ministries should set up "strategic planning teams", under the responsibility of the respective Executive Unit and the participation of the current MAs.
- **Preparation and planning of OPs**: For the 2014-20 period, further consultation among stakeholders and line ministries took place, with the active participation of the MAs under the co-ordination of Ministry of Development and Investments. During this process, all the parties agree on priorities, policy objectives and specific objectives for each OP. Line ministries and regions set up "strategic planning teams" in charge of the OP design and drafting. As regards the regional strategic planning teams they comprised representatives of the relevant MA, of the Directorate for Development Planning and other directorates within the region. The strategic planning teams were

supported in their work by external consultants. In some regions, thematic working groups were also set up to provide expertise in specific issues.

- **Prioritisation of projects within the OP**: For the first time in the 2014-20 programming period, the specialisation process (Box 4.14) details budget allocations and specifies the different actions, investment priorities, potential beneficiaries, expected results and time schedule. The specialisation process is completed by the call for proposals, defining the project selection criteria, led by the MAs (in consultation with the Executive Unit for the national OPs). The specialisation process involves the NCA, OP MAs, Executive Units of the line ministries or, in the absence of such, the relevant departments of the ministries, the OP Monitoring Committees and the governors (for regional OPs) or the Special Secretary of the Ministry of Development and Investments (for the sectoral OPs).

Box 4.14. The specialisation process in Greece

The OPs are strategic documents which do not specify the necessary information required for their proper management and monitoring (e.g. linking actions to output indicators, areas of intervention (i.e. the budget) with actions and investment priorities, clear timetable of activation due to unfulfilled thematic *ex ante* conditionalities or self-commitments, etc.). The specialisation is thus a complementary process conceived as a management tool that can ensure the smooth implementation of the approved strategies in the context of multi-fund, multi-sectoral and multi-thematic OPs.

The specialisation process is a strategic tool for planning purposes. It is considered a supportive management tool for issuing calls for proposals, and also for the monitoring, activation and implementation of the OP. It includes a mapping of the actions to be funded and clear timetable of the necessary steps to be followed. It identifies the bodies that will manage the OP actions and contributes to identifying, at the implementation stage, the constraints and conditions that (may) exist and hamper the activation of the actions.

The OP specialisation documents are mandatory national documents and are not subject to approval or consultation with the EC.

Specialisation is a dynamic process, the degree of which is determined according to the implementation data that the MA has at its disposal. The specialisation of each OP is gradually made, taking into account the maturity of each call for project selection in the priority axes and the implementation needs of each OP. Consequently, each MA should specify at the initial stages of the OP activation those actions for which it has the necessary analysis in order to issue calls for proposals.

The main features of the specialisation process are that the analysis is broken down by priority axis and action and includes, *inter alia*: indicative beneficiaries, method of implementation, action planning, output indicators and indicative budget. Furthermore, the specialisation includes a more specific reference to the actions to be undertaken for projects that have started prior to the adoption of the OP, major projects and phasing projects, part of which were funded by the NSRF OP 2007-13 and another part foreseen to be implemented under the 2014-20 OP. It also includes a reference to the actions to be taken to achieve the intermediate objectives set for the allocation of the performance reserve at the priority axis level.

Greece has also had good experiences with setting working groups to discuss and address specific issues. In 2018, for wastewater treatment projects for example, the MA on Transport and the Environment set up a working group across levels of government to foster co-operation among the Ministry of the Environment and Energy, the municipalities, the municipal water supply and sewage companies and the project owners (Psycharis, 2019[57]). Another example is the Special Management Service for the Rural Development

Program (MA) which is responsible for co-ordinating all stakeholders, ensuring the development of their monitoring capabilities, guiding and facilitating co-operation between the stakeholders.

However, as it is the case for the planning of regional development policies (see Chapter 3), some of the co-ordination channels established in the context of the PA respond to formalities and their concrete impact remains limited. Law 4314/2014 for the management, control and implementation of development interventions for the 2014-20 programming period, for example, foresees the creation of a Regional Development Planning Committee in each region as an advisory body. These committees may elaborate some recommendations to OP MAs on priority axes or specific objectives or categories of action they have as beneficiaries of municipalities. However, despite their provision by law, none of these committees are operational. The lack of targeted measures in ROPs reflects a limited involvement of regional actors when defining the objectives and priorities that the OPs should meet. Policy priorities and guidelines do not always match local priorities, needs and capacity.

The OECD has also observed that subnational actors have difficulties in grasping the consequences and seeing the impacts of co-ordination and collaboration. Subnational stakeholders from across the country point the lack of co-ordination and bottom-up approach to policymaking, in particular when it comes to funding allocation. The existence of formal co-ordination tools does not in themselves ensure proper co-ordination. The parties involved must perceive an impact and be able to see a concrete output, otherwise, the benefits are limited and future participation of subnational actors is at risk. Indeed, trust in the process and among the parties is essential for any co-ordination tool to work properly. Trust is both a condition for an effective dialogue and a long-term outcome of collaboration (OECD, 2018[1]).

Another example of the limited participation of local actors in policy planning and implementation is the impact of ROP MCs. While municipalities should directly participate in these bodies, their participation has been reported as fragmented (Council of Europe, 2017[12]). There is scope for improving the co-ordination between regions and municipalities, for instance by strengthening the institutions that facilitate consultation as well as the role of regional associations of municipalities in formulating common positions and issuing eligible programmes to be considered for incorporation into the ROPs (Council of Europe, 2017[12]).

Greece needs to take a more systematic approach to co-ordination and collaboration, especially with regards to beneficiaries. Collaboration among the different levels of government, including with civil society and citizens, is crucial to embed national and regional OPs with a territorial approach (Chapter 3). Effective exchanges between national government, MAs, regional MAs and beneficiary local authorities, help to ensure that national OPs make room for regional MAs to tailor regional-level interventions and investments. At the same time, it is a way of avoiding overlaps and creating synergies between national and regional OPs as well as ensuring that regional OPs are tailored to the different regional and local realities. They also help to ensure the alignment of objectives and expectations of all parties, as well as flagging where subnational governments may lack capacities to design or implement projects. This is also a way of building ownership over OP projects among regional and local authorities. Ownership over sectoral OP projects is particularly important as many Greek regions act not only in the interest of their own OP but also as intermediary bodies (IBs) for sectoral national OPs. For effective implementation, regions must “own” the objectives of the national OP and agree with the implementation process.

At the same time, regular opportunities for two-way communication between MAs, IBs and beneficiaries regarding changes in regulations, processes or programmes might be helpful and contribute to reducing project delays. Regular co-ordination and communication among these parties are also helpful to gain insight into how to better support its beneficiaries throughout the project cycle. This could help an MA better tap into “on the ground” knowledge of beneficiaries, thereby supporting more effective OP design, monitoring and implementation, while also building subnational capacity. Indeed, ESIF investment relies on effective information flows and knowledge sharing among multiple stakeholders at all levels of government, and beyond. Without good and timely communication among those responsible for OP implementation, large biases and information asymmetries may arise.

To ensure the alignment of priorities and co-ordination among levels of government, OECD countries have developed different strategies. In Poland, for example, local authority investment projects may be financed using EU funds on the condition that they contribute to the implementation of a multi-annual development strategy. A recent OECD study shows that this approach has a positive impact on regional programme effectiveness and the sustainability of project financing when there is room for subnational governments to negotiate and influence conditions set by the national level. This experience suggests that conditions around which the two levels agree may work better than those imposed by one side or the other (OECD, 2013[70]). To deliver EU Cohesion Policy in a co-ordinated way, Portugal has used contracts among levels of governments known as Pacts for Territorial Development Cohesion (see Box 4.15).

Box 4.15. Using contracts to enhance co-ordination across levels of government in Portugal

Portugal has been using contracts to deliver EU Cohesion Policy since 1989, but the scope and scale of these contracts have greatly expanded in the subsequent years. As indicated above, for the current programming period, a total of 22 Pacts for Territorial Development and Cohesion have been signed, covering all of the mainland regions of Portugal (except the Algarve) and involving EUR 1.15 billion. Cohesion policy has played an important role in consolidating a third level of management in mainland Portugal, including consolidating the financial and strategic capacities of inter-municipal entities. After multiple cycles of contracting, there has been particular progress in relation to:

- Extension of strategic planning to the regional, sub-regional and local levels.
- Strengthening a sub-regional level of inter-municipal co-operation.
- Enhanced capacity at the sub-regional level.
- Evolution in the type of interventions, such as the increasing relevance of interventions beyond physical infrastructure.
- Indications of a transition from intra- or inter-municipal (e.g. municipal networks of collective services) to supra-municipal projects (e.g. anchor projects or e-governance at NUTS 3 level) (OECD, 2018[1]).

Source: OECD (2019[49]), "Greece", https://doi.org/10.1787/tour-2018-19-en.

Reinforcing the capacities of all actors and institutions

Administrative capacity is recognised as one of the key factors contributing to the success of EU Cohesion Policy (Boijmans, 2013[71]; Rodriguez-Pose and Garcilazo, 2013[72]). Successfully managing and administering ESIF rests on the effective governance of the investment process, on the administrative capacity of MAs, and on the capacities of a diverse range of stakeholders – from multiple levels of government to private firms and not-for-profit entities that intervene in the process.

Capacity building is a priority for the EU

The EC has made administrative capacity building central to EU Cohesion Policy and the Europe 2020 strategy. Since the beginning of the current programme period, the EC and specifically DG REGIO, offers EU member state administrations diverse mechanisms to strengthen their institutional capacity and professionalise those managing ESIF. These include institutional capacity building and reforms under Thematic Objective (TO) 11, technical assistance (TA) for authorities that administer and use ESIF as well as specific programmes, such as the S3 Platform, the Urban Development Network, guidance for practitioners on how to avoid public procurement errors; training seminars; and the EU Competency

Framework for managing and implementing the ERDF/CF together with its self-assessment tool, which identifies and addresses competency gaps (OECD, forthcoming[64]).

A key challenge for the next programming period is linked to the financing of technical assistance. While TA will still exist, there will no longer be a separate thematic objective (currently TO 11) dedicated to capacity building. In practice, this means that countries will no longer receive a lump sum for administrative capacity. In its place, as stipulated by Article 25 of the Regulation of the European Parliament and the Council, additional technical assistance financing will be secured by developing roadmaps for specific administrative capacity building actions (EC, 2019[73]). To support European member states and their MAs adapting to this shift, DG REGIO launched a pilot project, with the support of the OECD, to give an initial shape and test an approach to designing MA roadmaps that could eventually be used for obtaining technical assistance in the post-2020 ESIF system.

Box 4.16. OECD-EC project: *Strengthening the Governance of EU Funds under Cohesion Policy: Roadmaps for Administrative Capacity Building*

In anticipation of the 2021-27 programming period, the EC launched a pilot project to support MAs in the development of roadmaps aimed at strengthening their administrative capacities to effectively oversee, administer and evaluate the use of ESIF. Five MAs, including the MA for the Transport Infrastructure, the Environment and Sustainable Development Operational Programme in Greece, participated in the pilot project. Throughout the pilot, the OECD provided technical support to MAs and relevant stakeholders to develop their respective roadmaps. The design of the roadmap is based on the analytical framework developed by the OECD, which captures various dimensions that MAs must work with – people and organisational management, strategic planning and co-ordination, as well as framework conditions. Throughout the project, the OECD gathered information and documentation from the MAs and a wide range of stakeholders through a questionnaire, interviews, as well as interactive workshops. The challenges, potential solutions and prioritised actions were developed and validated by the MAs and relevant stakeholders, with assistance from the OECD.

In addition to the tailored roadmaps, a synthesis report is prepared by the OECD, which captures the main findings of this project and offers recommendations to MAs, national authorities and the EC regarding the management and implementation of EU funds under Cohesion Policy. The second phase of this pilot project is planned to start in 2020, to help the MAs implement selected actions of their roadmaps.

This pilot project also tests the new approach proposed by the EC for the 2021-27 programming period, which would allow EU member states to develop roadmaps for administrative capacity building measures. The experiences will be disseminated to other MAs, feeding into preparatory work for the upcoming programming period.

Source: OECD (forthcoming[74]), *Strengthening the Governance of EU Funds under Cohesion Policy: Roadmaps for Administrative Capacity Building*, OECD Publishing, Paris; EC (2019[75]), "Frontloading administrative capacity building for post-2020", https://ec.europa.eu/regional_policy/en/policy/how/improving-investment/frontload/.

The capacity of Greek MAs is an asset for the management of EU structural funds

Greek employees within the MCS have a long experience in the structural funds' area, which is an advantage for the efficiency of the system itself. Given the freeze on recruitment introduced in the wake of the economic crisis, the staff have been working together for several years and have built up deep expertise and institutional knowledge in ESIF management. This accumulated experience has helped to respond to different challenges during the implementation in a timely and effective way. Several stakeholders recognised the rich experience of certain national MAs in managing the OPs, especially their knowledge in understanding funding procedures and project implementation. For example, Greek stakeholders, as well as EC authorities, identify the MA for Transport and the Environment as one of the best-performing MAs thanks to the professionalism and knowledge of the MA staff. Both the MOU personnel and the personnel that comes from the public sector are both highly qualified, with very high standards of knowledge and experience. For example, more than 96% of the current staff holds a university degree, while 56% are postgraduates (MOU, 2020[67]).

Greece has to be aware that, while the stability of employees has brought important advantages for the functioning of the system, the lack of new personnel can be also prejudicial as the system does not benefit from new perspectives that new and younger employees might bring. It might also affect motivation as employees have limited opportunities for career progression and there are few tools to recognise and reward performance (OECD, n.d.[61]).

At the regional level, there is also some cumulated experience. While the newly created regions are officially MAs for the first time during the current programming period, in the previous period, the regional level was also managing EU funds, either as an MA or an IB. Still, planning for the current programming period was done, to a large extent, by external consultants. While this may support regions to reinforce planning capacities, it also limits the ability for regions to create capacities internally on this matter. For the next programming period, Greece will have to make a special effort in reinforcing the planning capacities within the regions themselves by gradually internalising tasks that have been so far conducted mainly by external consultants

Addressing staff shortcomings through the optimisation of human resources

The compliance with MoUs[4] signed between the EC, the ECB and the International Monetary Fund (IMF), limited the capacity of regions and municipalities to hire new and qualified professionals. Memorandum II sets rigid goals for personnel reduction and a hiring cap on new personnel. The rule of one recruitment for five exits that applies to national and subnational governments has meant that many posts have gone unfulfilled and that the types of skills that are needed to implement reforms have been filled externally. Moreover, given the hiring freeze, managers are often reluctant to support secondments of high-quality staff to the MA, limiting the possibilities for MAs to fulfil their needs (OECD, n.d.[61]). Special consideration must be given to the fact that high workload, long working hours and insufficient incentives inevitably drive staff away from MAs towards other less-demanding government departments or the private sector. As a result, a disquieting phenomenon of erratic mobility and high staff turnover is increasingly being observed (MOU, 2020[67]).

To illustrate the staff shortages, the Joint Ministerial Decrees foresaw 2 055 jobs in the special services but only 1 471 of these have been filled (MOU, n.d.[76]). Besides the shortage of staff, some MAs struggle to find people with the right qualifications and knowledge, especially at the subnational level. According to mapping exercise conducted by the MOU in December 2017, the special services have urgent specific shortages in law (particularly in the field of public procurement), IT and software engineering, financial instruments, auditing, accounting, construction engineering and regional development (MOU, 2020[67]).

The shortage of staff and lack of capacities also affects the Executive Units. The Executive Units should have expertise in the sector they operate and on the management and implementation processes in order to be able to prepare mature projects for their sector. As they operate within line ministries, the first requirement is covered by definition. The second is in many cases undermined by the availability of appropriate human resources in some Executive Units, as among them, there are units with less than 10 employees and others with more than 40. The specific needs of the Executive Units need to be assessed through an in-depth analysis of the potential gaps in their operation, considering their different degree of involvement in programme implementation, in view of strengthening their role in the next programming period. In this regard, the assessment of the Executive Units that will be prepared by the NCA will be crucial to identify the main capacity gap of these entities. This exercise will indicate the specific actions that should be undertaken at the level of each specific Executive Units considering that their role and responsibilities would remain the same for the next programming period.

At the regional level, the capacity gap also represents an important challenge, especially with regards to planning capacities. In general, the Directorates of Development Planning within each region lack the appropriate human resources in terms of quantity and expertise in order to fulfil effectively their role in regional planning. Of course, there are variations between regions in this field; some perform better than others. It is worth mentioning that representatives of the Directorates of Development Planning participate in the "strategic planning teams" which were set up for the design of the OPs in the current and previous programming periods. They also participate along with the other region directorates in the design of the four-year regional programme,[5] according to the Kleisthenis programme, which includes the strategic plan, accompanied by the operational plan and indicators for monitoring and evaluation. This means that they have acquired on the ground a level of knowledge as regards the ESIF OPs' design. However, a major challenge remains matching and adapting the regional priorities to the specific priorities and guidelines included in the ESIF programming as applies in each programming period.

Human resources planning and recruitment are particularly challenging in Greece as MAs do not hire their personnel directly. All their staff is seconded from different parts of the public sector, or the Management and Organisation Unit (MOU). The ESIF Special Services (46 distinct structures in ministries and regions) constitute, from a human resources point of view, hybrid teams which are staffed with both tenured civil servants and seconded MOU personnel. The MOU seconds to ESIF Special Services more than 70.6% of its workforce and only 13.4% is employed in the MOU headquarters (providing to ESIF services human resources management, training, know-how and tools, information systems, infrastructure and ongoing support to beneficiaries) and 16% is seconded to other public entities (MOU, 2020[67]). Candidates from outside the public administration apply to the MOU to work on EU funds, and, if successful, enter the Partnership Agreement pool. They are immediately seconded to an MA or other body for 5 years, renewable. Candidates from inside the public administration also need to be seconded to the MA, which requires selection procedures (written examination, interview and knowledge) and experience criteria, as well as agreement from their home department.

While MOU staff is known for its high-qualification, the last open call for personnel took place in 2005. This has translated into an ageing staff – the mean average of MOU's staff is currently over 50 years – which cannot cover specific needs, namely in the fields of law, IT, finance or local development. Thanks to the flexibilisation of the attrition rule to 1:1, in 2018, there was an agreement to conduct a new open call to hire 300 new employees through the MOU, specialised in fields such as finance, IT, local development and law. Nevertheless, this agreement has not yet received final approval and the hiring process has not yet started. *Ad portas* of the new programming period, the hiring of the new personnel is a top priority; new staff needs to be involved from the planning stage of the new PA.

The MOU has played a key role in the optimisation of human resources within the ESIF management system. The MOU regularly carries out a mapping of human resources in special services. It has a comprehensive view on the status of the human resources of the entire MCS by recording data such as the number of staff (both civil servants and MOU officials), job positions, qualifications and professional experience, tasks and employee status as well as staffing priorities of the ESIF special services. This data reflects that, despite important staff shortages, there is an overall satisfactory distribution of specialisations within the various MCS areas (e.g. a high number of engineers in services managing ERDF actions) (MOU, n.d.[76]).

Without the possibility of hiring new staff, Greece needs to continue its efforts in building capacities within the MCS, in particular at the regional and local levels. For this purpose, the MOU offers a wide range of capacity building activities. They organise seminars as well as e-learning platforms for MAs and beneficiaries focused primarily on EU technical knowledge issues, managerial competencies and project management (Box 4.17). The Hellenic Agency for Local Development and Local Government (EETAA) is also a key actor for capacity building of local government authorities. They offer, for example, technical support of small and remote municipalities in order to carry out technical projects, and they issue guides and tools to promote local development.

Box 4.17. The MOU's capacity building activities

The MOU has put particular emphasis on the continuous training of staff in the special services. One of the tasks of MOU is to provide systematic training designed on demand according to specific needs (a training needs' analysis takes place at regular intervals). The delivery of training takes place in two forms: i) traditional face-to-face seminars; and ii) distance learning (asynchronous and synchronous e-learning platform). MOU seminars focus primarily on EU technical knowledge issues, managerial competencies and project management.

Since 2007, MOU has organised more than 550 formal training events with the participation of 20 000 trainees from MAs and beneficiaries. Regarding the e-learning system, about 3 000 users (MA staff and beneficiaries) had the opportunity to access more than 200 training courses (web-based training, screencasts, video recordings, etc.). The total number of enrolments since the introduction of MOU's e-learning system is more than 16 000. Furthermore, 140 virtual classrooms gave MOU the possibility to ensure faster delivery, flexibility and efficient deployment of training for more than 1 600 participants, covering different training needs. An MOU platform (e-classroom) has also been deployed for the organisation of 80 multiple teleconferencing events with the EC.

In order to enhance the beneficiaries' administrative capacity in the maturing and preparation of project proposals under the specific OP and regional OPs, the MOU has also developed a series of guides, namely:

- Guide on Procedures for the Preparation of Port and Harbour Projects (June 2014).
- Guide on Procedures for the Preparation of Highway and Road Projects (November 2013).
- Guide on Procedures for the Preparation of Sewage Treatment Plant Projects (November 2013).
- Guide on Procedures for the Preparation of Solid Waste Projects (November 2013).
- Guide on Procedures for Projects Producing Electricity from Renewable Energy Sources (2011).

Source: MOU (n.d.[76]), "Memo: Highlights of the MOU proposals on the management and controls system for the Operational Programs in Greece", Unpublished.

While there has been an increasing offer of capacity building practices, MAs – in particular regional ones – emphasise the need for benefitting from more targeted and dedicated training that effectively address their needs. For this purpose, Greece could develop a more systematic approach to reviewing training needs of operational staff and managers. In parallel, a flexibilisation of the attrition rule for the MOU would allow them to hire new qualified personnel through open competition, in order to cover urgent and longstanding needs in the management and implementation of ESIF OPs. This new staff would need to be distributed in all regions, according to the specific priorities of each special service and the priorities set by the coming programming period.

In most OECD countries, competency frameworks are used to align training and development to organisational and individual development needs, and link training to career progression. The lack of a competency framework in most MAs and Executive Units means training does not address the long-term needs of the organisation, nor of individuals. Instead, training is sometimes seen as a burden rather than as core staff and organisational development activity. To develop such a strategy, an important preliminary step is the need for an evidence-based gap analysis, to understand which skills and competencies are available in the MA, and which ones should be developed in order to properly manage ESIF-financed projects (OECD, forthcoming[64]). The EC's Competency Framework and Self-Assessment Tool is designed to provide this kind of analysis. In this line, the Campania region in Italy carries out a gap analysis on skills for senior management of the regional council of Campania. The results of this analysis are shared with the National School of Administration, which then plans training accordingly.

Box 4.18. EU Competency Framework for the management and implementation of the ERDF and Cohesion Fund

The implementation of the ERDF and Cohesion Fund programmes requires strong administrative capacity. Therefore, the EU developed a tool that addresses the competencies of employees involved in the management of the funds. These include the following practical tools that support human resources development:

- The Competency Framework covering all institutions involved in the management of the funds.
- The Competency Self-Assessment Tool based on the Competency Framework.
- A recommended training blueprint.

The Competency Framework and Self-Assessment Tool is a job-aid to help institutions managing the funds in strengthening their human resources capacity. The tool is flexible and customisable so that it applies to the different organisational structures in the member states. The self-assessment tool allows for a competency assessment on an individual and institutional level. The outcomes of the assessment provide an important base for individual development plans, overarching human resources strategies and training plans. The recommended blueprint for ERDF and Cohesion Fund training provides guidance on the structure of a learning offer, which is functional to strengthening the competencies defined in the Competency Framework.

Source: OECD (forthcoming[64]), *OECD Tourism Trends and Policies 2020*, OECD Publishing, Paris.

In parallel, Greece could focus on finding innovative solutions to recruitment challenges. This is what has been done by Italy for example, in the regions of Calabria, Friuli-Venezia-Giulia and Umbria. These three regions have collaborated to set up a registry of chartered accountants specialised in the management and control of programmes co-financed by ESIF. Its purpose is to facilitate MA access to candidates with sought-after skills but who can prove difficult to attract. The registry will be piloted until the end of 2019 and will be evaluated by independent evaluations occurring as part of the Italian Plans for Administrative Reinforcement (OECD, forthcoming[64]). Partnerships with local universities can also be a way for regional MAs to leverage possible expertise among students and faculty for specific projects that could add value to the MA. This type of partnership needs the direct involvement of MA staff to avoid over-relying on "externals" and build, together with experts, the internal capacity to carry out their different functions.

A special focus on building capacities of beneficiaries

The low level of capacities of beneficiaries is a longstanding problem in Greece that concerns micro and small beneficiaries – which represented over 96% of the beneficiaries in 2017 – as well as larger ones. It has been largely documented that smaller Greek municipalities are especially affected by the lack of qualified personnel. Some Greek municipalities face shortage not only of expert administrators carrying out specific technical duties but also of personnel to perform even basic tasks (Council of Europe, 2017[12]). In the same line, several evaluations have noted that beneficiaries, in particular municipalities, have insufficient expertise and that this has led to delays or even projects being cancelled (Huliaras and Petropoulos, 2016[52]). Indeed, beneficiaries frequently re-submit technical bulletins up to the selection of the project proposal due to the low degree of maturity of the proposals and the failure to complete the standard forms of the MCS 2014-20. This translates at the end in low rates of payment progress that contrast with the budget activation rates. While the activation rates are high (even exceeding the budget allocated) for all types of regions, payments rates are low: in less developed regions, verified payments represent only 25% of their total budget (Psycharis, 2019[57]). Although the discussion frequently focuses on the small beneficiaries (municipalities are the most frequently referred example), the problem also concerns the larger ones. The delays regarding project implementation with a very high share of the budget in the sectors of transport or the environment leads to the conclusion that specific actions must be undertaken regarding all levels of beneficiaries.

In the case of municipalities, a lack of the right technical expertise on staff is well acknowledged and they have been struggling under rules limiting the hiring of permanent public service staff that have been imposed since 2010. The lack of capacities particularly affects smaller and remote (mountainous and islands) municipalities. For example, as per MOU numbers, approximately 35 small island municipalities and 10 mountainous municipalities do not possess in house technical services for tendering their projects and have to seek other public services to assist them. This process is complicated and time-consuming (MOU, n.d.[76]). Most of the small island municipalities are understaffed and do not have an engineering department (islands without such a department constitute 75% of all island municipalities) (LKN Analysis, 2020[63]).

The most frequently identified problems that beneficiaries face during project implementation relate to:

- Failure by the beneficiary to comply with the institutional framework of public procurement, which may lead to non-eligible expenditure.
- Improper project management by the beneficiary, which may lead to non-eligible expenditure.
- Non-compliance with deadlines by the beneficiary and failure to take appropriate measures to resolve the problems that arise, which has a negative impact on the OP's indicators.
- Implementing a project without taking into account the current legal and regulatory framework which leads to unlawful actions.

Weak capacities of beneficiaries are a common issue across many EU states and efforts are made to address it through initiatives under the Technical Assistance Plan. However, while in principle these funds would be used in Greece to upgrade the system's capacity to manage and absorb earmarked funding, in practice, they have been used for hiring consultancy firms to do the job (Huliaras and Petropoulos, 2016[52]). This has limited the creation of internal capacity.

While Greece has made efforts to strengthen the support to beneficiaries, the tools used do not necessarily respond adequately to specific needs. In order to assist beneficiaries that lack technical staff (i.e. engineers) to supervise public works, a provision was included in the NSRF 2014-2020 Law 4314/2014, article 28. The idea was the creation (by MOU or the Technical Chamber of Greece) of a register of freelance engineers willing to undertake project supervision to support weak beneficiaries. A ministerial decree was published to stipulate the details of the register (eligible engineers, their compensation and the criteria for their selection in each project). Unfortunately, the register itself has not been made available yet. For the next programming period, it will be necessary to activate the register. In addition, a ministerial decree (issued in May 2016 by the Deputy Minister of Economy and Development) regulates the support of beneficiaries in the current programming period. The decree aims to provide guidelines on how support weak beneficiaries focusing on strengthening their managerial, operational and financial capacity within the frame of NSRF projects. The advantage of this ministerial decree is that it sets a framework and describes the role of the stakeholders involved. However, in practice, this decree does not necessarily provide the required flexibility needed for support activities. Its main disadvantage is that it introduces heavy and time-consuming bureaucratic procedures which, in practice, are fulfilled after the actual beginning of the support (MOU, n.d.[76]). To further develop the support for weak beneficiaries in the next programming period, it is important to simplify the procedures specified in the decree.

In parallel, the MOU leads the training activities for beneficiaries. For the 2014-20 programming period, the MOU led, for example, the technical assistance model for the wastewater sector. Wastewater has been for several years a very complex and challenging issue for Greece and a significant amount of structural funds have been approved in Greece to equip the country with modern sewerage facilities. In this context, the MOU was responsible for implementing a technical assistance project to draw up 13 regional plans with a new methodology for identifying priorities between small agglomerations, updating the national wastewater database for reporting and monitoring. To date, Greece has achieved important progress resulting for the technical assistance project, most of them linked to the governance of the wastewater management system. Among this progress is the creation of a steering committee and technical secretariat, the development of the 13 master plans with a timetable for their implementation, the creation of a reporting system and methodology to identify projects at risk and how to resolve them, among others. Based on this experience, the MOU can further develop targeted actions to help small municipalities and their institutions to improve their technical, managerial and organisational skills for the implementation of their projects.

Still, several stakeholders agree that training activities are often insufficient to keep them abreast of the latest developments with legislation, regulations, procedures and processes. Indeed, the lack of capacities is strongly related to changing and burdensome rules. There is little engagement with beneficiaries to identify their training needs and this is why some stakeholders perceive that training does not necessarily add significant value to day-to-day work and longer-term career and personal development. As a result, in the context of important workload pressure – municipalities often do not have sufficient staff to deal with daily tasks – training is rarely prioritised or incentivised. This is particularly true when learning is not well aligned to the needs of individuals and their organisations.

Capacity building activities need to be appropriately tailored to local reality to encourage the involvement of beneficiaries. Capacity building can be done at different levels, with different short- and long-term objectives and using different mechanisms. Beneficiaries need, at least in the short term, stronger targeted support to prepare specific studies required to implement a proposal for evaluation and financing. This support can come from the MOU, the NCA, the national or regional MAs, or through inter-municipal structures. The MOU should pursue, for example, the creation of a technical service to carry out all the necessary public tendering procedures up until the signing of the contract phase. To better target the support, the MOU could also expand the geographical coverage of their tasks forces which are currently present in some areas of Greece making it easier to address quickly any local requests. All types of support provided by the different actors must be strongly co-ordinated to avoid overlaps and better target it to the specific needs. This is why the role of the NCA (as co-ordinator) and regional MAs (to help target the needs) is crucial.

In parallel, the NCA should co-ordinate closely the MAs regarding the support and monitoring of the beneficiaries, through binding action plans, with strict timetables and milestones and appointment of specific persons in charge for its implementation (from the tendering process to the contracting phase and the supervision).

Box 4.19. The Sustainable Islands Network

The Sustainable Islands Network – DAFNI – is a non-profit company of island local authorities. It was set up in 2006, to empower the island's local authorities and activate a sustainable model for island development based on sustainable and intelligent management of natural resources and infrastructure, sustainable tourism utilising the natural and cultural resources of the islands, and the functional interface of the primary to the secondary and tertiary domains.

The DAFNI network currently counts 48 members, including 44 island municipalities in the Aegean and Ionian Islands, the North Aegean and South Aegean, as well as the Regional Union of Ionian Islands. Thanks to its systematic and multifaceted action and the range of partnerships it has developed, the network is recognised as a true ally of the islands, both at national and European level. This is because it has scientific and technical training, deep knowledge of the local needs and development dynamics of the islands, as well as dedication, over time, to the implementation of integrated solutions that meet the identified needs of each island individually.

The network implements a range of projects with particular added value for its members as a whole, as well as for individual islands, drawing on different sources of funding. A key project is, for example, the development of a Geospatial Data Portal for all Greek islands except Crete and Evia. The project is essentially about creating an organised database network (platform) with common standards and protocols, which will ensure compatibility and interoperability between data and services.

The network also co-ordinates and actively participates in initiatives to strengthen local government and island society, seeking to develop policies tailored to the particular challenges and development opportunities of the islands. It co-ordinates, for example, the Smart Islands Initiative which is supported by over 200 municipalities and regions, networks and energy bureaus of islands across Europe.

Source: DAFNI (n.d.[77]), *Homepage*, https://dafninetwork.gr/.

Beyond the specific and targeted support for project design, beneficiaries would benefit from regular knowledge-sharing activities. Communication, information and knowledge-sharing practices between the beneficiaries, the MAs and other actors in the OP management system, could help to jointly identify solutions to specific problems. This could also help better tap into "on the ground" knowledge of beneficiaries. Ensuring regular and well-structured exchanges between the MAs and beneficiaries could offer additional insight into regional needs and the true capacity of local beneficiaries, thereby supporting more effective OP design, monitoring and implementation. Periodic "knowledge workshops" could be developed under the leadership of the MAs (or a group of MAs, or NCA, or Thematic Working Group) and target specific topics. Optimally, themes should cover topics that the beneficiaries themselves highlight as important or of interest, but could include regulatory issues, state aid, etc. These workshops could also involve other relevant stakeholders and representatives from other knowledgeable bodies. These instances would help to actively exchange experiences and identify potential solutions to common challenges (OECD, n.d.[61]).

Streamlining the rules and procedures for the management of EU Structural funds

Improving the regulatory environment is a precondition for Greece to use EU funding more efficiently and with that, stimulate economic activity, create jobs and raise productivity among all regions. In addition to economic effects, improving the regulatory environment should also lead to reduced opportunities for corruption and maladministration in public service and therefore increase trust in state institutions and the government (OECD, 2014[78]). Regulatory burdens, combined with administrative capacity weaknesses leads to inefficient use of resources, affecting to a greater extent the less prepared regions and localities.

Greece, as well as all EU countries, needs to deal with administrative and regulatory burden arising from EU legislation as well as the one stemming from its own national legislation. While the EU has made administrative simplification a key priority for the next programming period, these efforts need to be echoed by the Greek national government.

Efforts to simplify the regulatory environment at the EU level

Aware of the burden of the regulatory environment, the EC has made regulatory simplification a top priority. For example, in the 2014-20 period, there is a single set of rules covering the EU's five ESI funds. Countries draft just one document to apply for funding (previously it was one per fund) and can use predefined accounting methods to simplify cost options (OECD, 2018[79]). Still, for the current programming period, the volume of rules for EU Cohesion Policy alone runs to over 600 pages of legislation and 5 000 pages of guidance (EC, 2017[80]). The EC High-Level Expert Group that monitors simplification for ESIF beneficiaries for the next programming period acknowledged that excessive and overlapping guidance at the EU level "has long passed the point of being able to be grasped either by beneficiaries or by the authorities involved" (EC, 2017[80]).

This is why, for the 2021-27 programming period, the EC aims to strike the right balance between accountability, simplification and performance, while still maintaining strict rules for the sound management of EU funds. The EC has proposed a number of changes to the Cohesion Policy framework[6] for the 2021-27 programming period including simplification and fewer policy objectives.

Further simplifying the administrative procedures in Greece

Since the crisis, a priority for Greece has been the improvement of the regulatory environment. OECD indicators, for example, point to the sharpest reduction in the rigidity of product market regulation between the end of 2007 and the end of 2012 among OECD countries (OECD, 2014[78]). Indeed, it has been widely acknowledged that reducing the administrative burden is necessary to make EU Cohesion Policy more effective. Too much legislation and guidance and/or the proliferation of multiple conditions coupled with weak capacities may lead to low or inefficient use of cohesion funds by subnational governments. If the administrative burden exceeds the expected benefits of regional policy outcomes, project beneficiaries might not even bother applying for European grants to fund their initiatives. Administrative burden affects particularly small beneficiaries (e.g. small or weak subnational governments, SMEs, start-ups) and could potentially increase regional disparities instead of sustaining convergence. Moreover, while one of the main objectives of regulatory procedures might be setting controls, checks and balances to avoid corruption, they can, on the contrary, have the opposite effect, potentially incentivising illegal construction and corruptive behaviour (OECD, 2011[81]). It is thus crucial to compare the administrative burden with the expected policy benefits to avoid an excessive amount of guidance and legislation (OECD, 2018[1]).

Despite the progress, stakeholders across the country identify regulatory practices and the associated administrative burden, as one of the top challenges for the efficient use of EU funds. They point to the excessive number of time-consuming procedures delaying or/and blocking decision-making and implementation of programmes and operations (e.g. joint inter-ministerial decisions, issuance of permits, such as archaeological permits, tendering procedures and contracting, etc.). A survey conducted among the Local Action Groups (LAGs) shows that 71% of them consider that the LAG's ability to implement LEADER is constrained by bureaucracy and administrative burden and the same proportion consider that time taken to approve selected projects has a negative effect (ENRD, 2018[82]).

The excessive administrative burden partly stems from the need to align priorities and compliance requirements in an environment with low levels of trust and confidence (Eurocities, 2017[83]). This is particularly challenging when diverse actors from different levels of government need to co-ordinate and collaborate or when regional policies are operating in areas with low governance capacity or risks of corruption. Simplifying administrative procedures requires, among other things, trust among the various actors involved (OECD, 2018[1]).

In addition to aligning with EU requirements for the management and control of European funds, Greece's national regulatory framework has incorporated additional provisions. This results in gold-plating and can create an unjustified administrative burden. The reasoning behind the additional requirements rests on a series of operational factors, including the longstanding weaknesses in the Greek public procurement system, in project selection and monitoring, and in striving for compatibility with guidance notices issued by the EC. While EU regulations do not call for or lead to gold-plating in and of themselves, in its effort to implement the EC's regulatory guidance, the Greek government has adopted a stricter system (often applied to public infrastructure projects and to some degree state-aid projects). In the day-to-day, this results in a significant administrative burden. Contracting authorities are known to require that technical offers include not only the necessary documentation per European directives but also documentation requested in previous national legislative framework(s) (OECD, n.d.[61]). Beneficiaries, in particular, are the ones that face the largest hurdles in accessing and applying regulations.

The frequent changes to regulatory frameworks – in particular the public procurement law – affects the ability of the MAs, IBs and beneficiaries to cope with the procedures required by law. As a result, MAs put important resources in keeping up with the changes, understanding their implications and how to apply them. Communicating the changes to the IBs and the beneficiaries and actively helping ensure compliance is also a very resource-intensive task for MAs. The Thematic Network on Public Procurement is a strong step toward managing some of these procurement-related difficulties.

For example, some of the main institutional and regulatory factors that have led to delays in the implementation of the 2014-20 OPs so far – that deserve further assessment to identify sources of simplification – include:

- The adoption of Law 4412/2016 (Government Gazette A'147) for the award and execution of public works, supplies and service contracts (adoption of Directives 2014/24/EU and 2014/25/EU) and Law 4413/2016 (Government Gazette A'148) for the award and execution of concession projects (adoption of Directive 2014/23/ EU).
- Delays in the update of the Regulation for Buildings' Energy Performance (KENAK) which was finalised by the Joint Ministerial Decision on 12 September 2017 and further specified by the technical instructions of the Technical Chamber of Greece for the Energy Performance of Buildings (Decree 182365/17.11.2017, Government Gazette 4003/17.11.2017 and Government Gazette B'4108/23.11.2017).
- The adoption of the National Climate Change Adaptation Strategy (April 2016), as well as of the regional strategies for adaptation to climate change that contribute to the optimal implementation of the national policy with the further specialisation at the regional level.
- The updates of the National Plan for Waste Management and of the National Strategic Plan for Waste Prevention, ratified by the Joint Ministerial Decision 51373/4684/25-11-2015 of the Ministers of Interior and Administrative Reconstruction and of the Environment, and the update and approval of the Regional Plans for Waste Management (PECA), being a prerequisite for the financing of the related projects.
- The implementation of EU directives and regulations on state aid, in projects with technical specificities in terms of their physical scope, requiring adaptation to ensure the agreement of the EU on a number of projects.

Moreover, there is consensus – in Greece and across EU countries – on the uncertainty generated by differing interpretations of the regulatory framework by the MAs, the Audit Authority (AA), EC services and the European Court of Auditors. Three different authorities audit the MAs (the Certifying Authority [CA], the AA and the relevant services of the EC) and they all might have different interpretations on how to apply the regulations. Thus, audit approaches (and sometimes findings) can differ by auditor or by on-the-spot verification teams. To address this, the NCA needs to ensure a consistent and agreed interpretation of rules by national auditors and evaluators. Moreover, co-operation with audit authorities and the EU services is needed in order to define simpler rules and avoid national gold-plating of EU regulations.

The regulatory changes combined with the lack of clarity of regulatory procedures generate excessive administrative burden, instability and uncertainty in the investment process, which in turn causes delays in implementation and affects absorption capacity. This might be one of the reasons – not the only one – behind the low rates of payments observed, in particular, in the less developed regions. As of May 2019, the proportion of verified payments represented less than 30% of the total cost for all ROPs. This contrasts with the high rates of activation – which includes drawing up and publishing calls, call specialisation, evaluation of Executive Structures requests, approval by the Monitoring Committee and issue of the Inclusion Decision.Beyond the implementation delays, regulatory burden might also generate mistrust in the system and, at an extreme, a disincentive to use ESIF among beneficiaries.

Administrative simplification has remained high on the agenda in most OECD member countries over the last decade. All EU member states have adopted elements of administrative simplification and burden reduction strategies and most of them have a body responsible for the legal quality, administrative simplification/burden reduction, stakeholder engagement and overall legal quality (OECD, 2019[84]). The Danish Inter-Ministerial EU Implementation Committee, for example, oversee the transposition of EU law to avoid additional burdens for businesses through the transposition of EU directives (Box 4.20).

Box 4.20. Oversight of the implementation of EU law in Denmark

In 2015, the Danish government set up a new oversight arrangement with the aim to ensure a systematic and uniform approach towards the implementation of EU legislation across government and to avoid additional burdens for businesses through the transposition of EU directives.

The Inter-Ministerial EU Implementation Committee examines all national legislative proposals deriving from business-oriented EU legislation to ensure that the new legislation follows five principles for implementation. These principles include, *inter alia*, provisions to avoid burdens for businesses stemming from the transposition of EU directives and implementation going beyond the minimum requirements set in EU legislation. The committee is comprised of eight ministers and situated in the Ministry of Employment.

As part of the development of legislation implementing business-oriented EU legislation, all ministries need to submit an implementation schedule to the secretariat of the committee, explaining whether the five principles have been followed. If a draft law is not in compliance with the five principles, the matter is put before the inter-ministerial committee, which can approve or reject measures going beyond what is required as part of implementing EU legislation.

The external EU Implementation Council advises the committee in its efforts to prevent unnecessary costs for business in implementing new EU legislation. The council is comprised of 11 members from business, consumer, employer and employee organisations. It is supported by a secretariat situated in the Danish Agency for Labour Market and Recruitment, which is an agency under the Ministry of Employment. The council exercises three tasks:

1. In the event the council identifies burdensome future EU legislation, it can advise the government through the Inter-Ministerial EU Implementation Committee to lobby proactively right from the development stage of EU legislation.

2. The council advises ministries on the transposition of new EU legislation. As part of this task, all ministries are required to submit an implementation plan to the council within 4 weeks of the adoption of the directive in Brussels, indicating the planned process and method of implementation. The council sends recommendations to the ministries on this basis, which are subsequently discussed in the implementation committee.
3. It can suggest to the Inter-Ministerial EU Implementation Committee to conduct a "neighbour check", i.e. the ministry examines best practices in other member states and checks the existing implementation against methods used in other member states in order to identify simplification opportunities for businesses. As a result of such a "neighbour check", the Danish Maritime Authority decided in 2016 to phase out 33 shipping rules to reduce economic burden to Danish businesses.

Source: OECD (2019[84]), *Better Regulation Practices across the European Union*, https://dx.doi.org/10.1787/9789264311732-en.

EU governments are also increasingly trying to limit the flow of regulatory costs stemming from new regulations and reduce the existing regulatory stock. Countries are increasingly resorting to offsetting new regulations by reducing the existing ones (Trnka and Thuerer, 2019[85]). Still, the use of stock-flow linkage rules, i.e. requirements to remove or rationalise existing regulation when introducing new regulations (e.g. one-in one-out rule), is not yet widespread among EU member states. Currently, only a few member states have formalised stock-flow linkage rules in place, requiring removal of existing regulations when introducing new ones or to reduce "red tape burdens" by certain amounts annually (OECD, 2019[84]). France, for example, has engaged in important simplification efforts. Following waves of simplification measures, the 2017 programme *Action publique 2022* identifies administrative simplification as one of the five priority actions and ministers are tasked to develop simplification plans. France also introduced a "one-in, two-out" regulatory offsetting approach in 2017. When transposing EU legislation, the adoption of requirements going beyond those set by the EU measure is prohibited (OECD, 2019[84]) (Box 4.21).

Box 4.21. Approaches to regulatory offsetting in selected EU member states

While the core idea of regulatory policy as promoted by the OECD has always been based on juxtaposing costs and benefits stemming from regulations in order to reach a conclusion as to the desirability of regulation, many OECD countries have added other regulatory management tools and techniques focusing on measuring and reducing regulatory costs in isolation.

The offsetting approach has its roots in setting net quantitative targets for reducing administrative (or later compliance/regulatory) costs, pioneered in the Netherlands in the 1990s with introducing a method to quantify administrative burdens in monetary terms – the Standard Cost Model – accompanied with a government commitment to reduce administrative burdens by 25% within 5 years.

The **United Kingdom** was the first OECD and EU country introducing "one-in, one-out" as an official government policy in 2011. The programme was deemed so successful that the government decided to go further and double the offsetting by introducing the "one-in, two-out" approach. In 2015, the approach was even strengthened so every pound of newly created regulatory costs must be offset by a reduction of 3 pounds ("one-in, three-out").

France established a regulatory offsetting policy in 2013. The "*gel de la réglementation*" requires departments to both offset the increase in costs to businesses and to remove (or, if not possible, simplify) an existing regulation when a new one is enacted. Costs to local governments and citizens are also considered. The policy was replaced by a two-for-one policy ("*maîtrise du flux des textes* *réglementaires*") in 2017. The offsetting obligation was doubled with the intent to impose greater control of the flow and reduce the stock of regulatory texts.

In **Germany**, the "one-in, one-out" rule was introduced by the government in 2015 as part of its Bureaucracy Reduction and Better Regulation agenda. At the start of the programme in 2006, the German government set a goal "to cut measurably the costs of bureaucracy … and to avoid new information obligations". While the concept of measuring compliance costs was adopted in 2011, the Council of Ministers stated in June 2014 that the government's "aim is to reduce the existing compliance costs".

More recently, **Spain** introduced their version of regulatory offsetting and **Finland** has completed a pilot project, testing a one-in, one-out policy.

While the scope of these approaches differs between all countries, Germany, Spain and the United Kingdom excluded regulations implementing EU legislation from the offsetting obligation.

Source: OECD (2019[84]), *Better Regulation Practices across the European Union*, https://dx.doi.org/10.1787/9789264311732-en; (OECD, 2010).

Introducing flexibility to the Management and Control System

A key element to reduce the administrative burden is introducing some space for flexibility in the regulatory framework. Simplicity comes with the need for greater flexibility that allows adapting programmes to different contexts. Currently, the MCS requires the same amount and type of documentation and licenses, number of approvals and obligations (e.g. to apply to an "open tender") for large and expensive projects as it does for small and less expensive ones (OECD, n.d.[61]). While a one-size-fits-all framework might help to address accountability issues and facilitate higher-level management, control and co-ordination, it can also create unnecessary delays and increased project costs – in particular for small projects with limited expenses. A more flexible regulatory framework might ensure that resources are used in a more efficient way by responding more effectively to different needs, tailoring responses to specific challenges (OECD, 2018[1]).

The issue of flexibility in management and implementation is particularly relevant for MAs that manage projects of different sizes and from different sectors. In the MA for Transport and the Environment, for example, transport projects are large, costly, lengthy to design and implement, and tend to attract large beneficiaries with strong experience. In contrast, environment projects are often small, do not demand high levels of funding, are less time-consuming, and beneficiaries are often smaller and have less capacity or experience with applying for and managing EU funds.

To manage the trade-off between accountability and flexibility, the leading institution (the NCA could lead this process) must work closely with all relevant stakeholders from all levels of government. In preparation for the next programming period, a simpler and flexible MCS should result from a diagnosis of the regulatory issues that cut across levels of government (including the EU level) to identify where simplification and flexibility are needed. As recognised by the OECD *Recommendation on Regulatory Policy and Governance*, governments should co-operate with stakeholders on reviewing existing and developing new regulations by actively engaging all relevant stakeholders during the regulation-making process (OECD, 2012[86]). For this, the NCA needs to activate the MCS network including actors from all levels to serve as a consultative forum as well as a platform to share information and experience on critical matters such as system amendments, legal framework amendments and their impact, etc.

Building a strong and coherent multi-level institutional framework for place-based policies

Fine-tuning the governance framework for the implementation of EU funds in the country is a lever to improve the multi-level governance system as a whole, also encompassing policies and investments funded through the national investment programme. This is even more important considering the implementation of the National Development Programme scheduled to start on 1 January 2021.

Improved co-ordination for effective place-based policies

Co-ordinating across sectors facilitates a place-based approach to regional development

The processes of designing and implementing the Cohesion Policy, the Development Law and the Public Investment Programme – the three main regional development instruments – involve multiple institutional actors:

1. The Ministry of Development and Investments, which is the leading institution.
2. The Ministry of Finance, which controls and regulates public spending.
3. The Ministry of the Interior and Public Administration that provides funding for municipal budgets.
4. The Ministry of the Environment that is responsible for spatial planning at the national, regional and urban levels and controls environmental legislation (including permits for projects).
5. The Ministry of Agriculture, which controls the funds of the EU Common Agricultural Policy (CAP).

However, co-ordination across these institutions occurs mostly on an ad hoc basis with no active institutionalised platform to co-ordinate policies. In general, co-ordination between ministries is seen as problematic and each ministry focuses on its own policy area in order to keep decision power (Greek Government, 2019[28]). Moreover, the budget elaboration process and the policy planning process do not appear to be systematically co-ordinated (Council of Europe, 2017[13]). This fragmentation in the policymaking process is not exclusive to Greece. In most OECD countries, policymakers from different sectors and levels of governments tend to work in silos. It is not surprising that, for example, among the 15 dimensions of institutional quality for efficient public investment management by the IMF, central-local co-ordination is the one where advanced economies tend to fare the worst (IMF, 2015[87]). In the same line, a lack of co-ordination across sectors is identified as a top challenge by three-quarters of subnational governments across the EU (OECD-CoR, 2015[88]).

Collaboration among the different sectors and levels of governments to develop a coherent approach is particularly relevant in the Greek context of fragmented, overlapped and also sometimes fuzzy assignment of responsibilities. For example, most of the competencies over island policy are shared among several ministries (Ministry of Maritime Affairs and Insular Policy, Ministry of the Interior and the Ministry of Development and Investments, among others). While the Ministry of Maritime Affairs and Insular Policy is actively promoting horizontal co-ordination for island policies, there is a great margin for further strengthening structures and practices: if a national Committee for Island Policy is supposed to be in place, it has not yet been activated (Council of Europe, 2017[13]). This committee, which should be led by the office of the prime minister, is supposed to gather the main ministers with competencies over island policy, mayors, head of the island regions and representative of the social partners (Council of Europe, 2017[13]).

A stronger cross-sectoral and whole-of-government perspective for regional development will help Greece in stepping out from a project-by-project design logic, shifting away from an overreliance on EU funds. In the context of austerity, Greece has strongly relied on EU funds for regional policy. However, looking forward, effective cross-sectoral co-ordination needs to be in place in order to contribute to the pursuit of common development goals, limiting the scope of overlapped projects, promoting synergies between policies and investments, and ensuring that projects and local investments are mutually reinforcing.

In order to minimise administrative barriers for collaboration, dialogue across different sectors has been institutionalised in several OECD countries. Out of a sample of 27 OECD countries, 20 have put in place a permanent inter-ministerial committee on territorial development issues. Poland, for example, has established the Co-ordinating Committee for Development Policy (CCDP) as a permanent inter-ministerial committee linked to regional development issues through sub-committees (e.g. sub-committee for rural areas development, sub-committee for territorial dimension). The CCDP carries out analysis and drafts documents to facilitate the implementation of the country's Strategy for Responsible Development with a strong territorial dimension (see Box 4.22). Some countries have also established joint investment funds that pool monies across public agencies/ministries to encourage consideration of a broader set of priorities across different sectors.

Box 4.22. Place-based development strategies and cross-sectoral co-ordination in OECD countries

Italy

Italy's Strategy for Inner Areas is an integrated strategy tailored to different places with the aim of reducing demographic decline and land abandonment in many rural areas, by improving the quality of essential services – education, health and mobility – and promoting the opportunities for economic activity and jobs. The strategy has been pursued by the national government through the following main actions:

- Identifying in each project area an alliance of municipalities willing and capable of working together towards a long-term strategy, also by unifying the management of functions relevant to the common strategy.
- Promoting in each project area a result-oriented strategy concerning both essential services and economic activity, through a participatory approach based on an informed and open debate among citizens and relevant competent actors, and the production of data and indicators.
- Defining a set of integrated projects and their expected outcomes, through enhanced co-ordination across sectoral administrations (inter-ministerial committee with representatives from the Ministry of Education, Health, Agriculture and the Department for Cohesion Policy) and subnational levels of government, so as to align objectives, adapt sectoral policies to territorial specific needs and match different sources of financing.

Portugal

In 2015, Portugal established the Council for Territorial Dialogue chaired by the prime minister, and with the representation of central and local governments, in order to facilitate continuing dialogue on important policy and programme issues. Beyond permanent fora of intergovernmental consultation, ad hoc committees and commissions also serve to facilitate intergovernmental and civil society dialogue on some intractable issues.

Building effective partnerships across levels of government

Legal frameworks to promote co-ordination and collaboration between the three levels of government has been established in the country mostly in the framework of EU policies and access to EU funding (Hlepas, 2015[8]). The Europeanisation of Greece – as some authors have called this process – has come together with the creation of co-ordination networks and institutions. In general, for the definition of ROPs, local actors can have an advisory role in the consultation phase for the formulation and designing of EU-based policies.

Beyond the management of EU funds, Greek law also foresees a range of contracting and networking possibilities to co-ordinate policies between the two tiers of subnational governments. Chapter G of the Kallikratis reform refers to all the different legal statuses that regions and municipalities can establish to cooperate:

- Regions and municipalities may establish contracts of inter-municipal or cross-level co-operation where one part can offer support to the other or/and exercise the responsibility on behalf of one or more of the contracting parties (Art. 99).
- Subnational governments can also enter into programmatic contracts (Art. 100) for the study and execution of specific projects and programmes (e.g. development projects, constructions, etc.). These contracts establish the scope of the study and the workings, their budget, rights and obligations of the parties involved as well as clear timeline and financial commitments. Local authorities as well as other public authorities (such as universities) or public sector entities (public enterprises, etc.) can become parts of these contracts.
- Two or more municipalities or regions with common characteristics may also constitute networks to exercise and support policies that are linked to the specific characteristics of network members (Art. 101).
- The law (Art. 105) also foresees the voluntary establishment of networks between several municipalities and the region to carry out public works, for service provision, for the fulfilment of concrete tasks or the design and development of programmes. These networks – which are legal entities governed by public law – are established by decision of the municipal and regional councils concerned. They also need to be approved by the Secretary-General of the Deconcentrated Administration.

At the regional level, the regional council is the main platform where several actors, such as the chambers of commerce, union of municipalities and trade unions, hold a seat. They are responsible for the design and implementation of designated policies at the regional level. Local governments, though, participate in these councils mostly as observers, limiting the impact of their involvement and their influence on final decisions.

However, co-ordination and collaboration between levels of government seem to be restrained to formalities for the planning and implementation of projects financed by the EU. The different co-ordination tools foreseen by the Kallikratis reforms are not widely used and do not have a comprehensive approach for regional development policies; they are set for specific and narrowed projects or purposes. There are also few active co-ordination instances in which municipalities and regions can participate together. At the same time, dialogue between regional authorities and the state representatives in regions is rather sporadic and depends heavily on personal initiatives and contacts, not least because of insufficient legal bases and lacking organisational and procedural arrangements (Council of Europe, 2017[12]).

While regional development policies are now more decentralised, the role of the central government is increasingly important for providing an overarching framework and guidelines and ensuring proper co-ordination. The central level needs to ensure overseeing co-ordination mechanisms within which regional policy can be formulated and implemented (OECD, 2019[22]). This is particularly crucial if Greece wants to develop place-based regional development policies that go beyond EU policies (Chapter 3).

OECD countries have developed a broad set of mechanisms to promote collaboration and bridge information, capacity, fiscal, administrative or policy gaps across national and subnational governments. These mechanisms can range from “binding” to “soft” instruments. They include, for example, financial incentives to support co-operation among levels of governments, co-financing mechanisms, joint investment strategies, the use of conditionalities when assigning funds, platforms of dialogue, or specific instruments such as contractual arrangements (Box 4.23). Some OECD countries have addressed these concerns early on in their decentralisation processes, improving governance structures between levels of government as well as across sectors. In Denmark, for example, the Regional Growth Forum integrates local, regional, national and EU development activities within a single, programme-based policy structure.

Box 4.23. Different instruments and platforms to build partnerships across levels of governments

Chile

In 2015, Chile created the Inter-ministerial Committee for City, Housing and Territory (COMICIVYT). The COMICIVYT is responsible for formulating policies relating to land use planning and developing integrated investment plans in each of the 15 regions. Five ministries participate in the infrastructure planning dimension: the Ministry of Housing and Urbanisation, the Ministry of Public Works, the Ministry of Transport and Telecommunications, the Ministry of State Properties, and the Sub-secretary for Regional Development of the Ministry of the Interior and Public Security. The COMICIVYT thereby provides a cross-sectoral and multi-level platform for prioritising infrastructure investments within regions based on a long-term vision for the region's development. Regional integrated infrastructure plans developed through the COMICIVYT have a five-year timeframe and inform the annual budget discussions held between spending ministries and the Ministry of Finance budget department. They, therefore, have the potential to greatly improve the overall coherence of infrastructure planning within regions, thus maximising the efficiency and impact of both public and private investment.

Italy

The main institutional mechanisms to promote dialogue across the different levels of government in Italy are the so-called "conferences"; i) the Conference of State-Regions; ii) the Conference of State-Municipalities and other Local Authorities; and iii) the Unified Conference of State-Regions-Municipalities and Local Authorities. The three conferences are held in the prime minister's office and constitute the most important co-operation instrument to co-ordinate between the different levels of government:

- The Conference of State-Regions was instituted in 1988 by Law No. 400. It brings together the prime minister (or the Minister of Regional Affairs) to chair the conference, the presidents of the regions and other ministers whenever matters related to areas of their competency are discussed. The central government consults the conference regarding all legislative initiatives related to areas of regional interest. Regional governments play a key role in this platform and the process of institutional innovation, especially relating to the transfer of functions from the centre to the regions and local authorities.
- The Conference of State-Municipalities and other Local Authorities, which was created by decree of the President of the Council of Ministers in July 1996, sits together with the prime minister, as president of the conference, the Minister of the Interior, the Minister of Regional Affairs, the Minister of Treasury, the Minister of Finance, the Minister of Public Works, the Minister of Health, the President of the Association of Italian Municipalities (ANCI), the President of the Association of the Italian Provinces (UPI) and the President of the Association of Italian Mountain Communities (UNCEM), 14 mayors and 6 presidents of provinces. The conference carries out the following functions: i) co-ordination of the relations between state and local authorities; and ii) study, information and discussion on issues pertaining to local authorities.
- The Unified Conference of State-Regions-Municipalities and Local Authorities, set up in 1997, is the institution where relations among the central government, regions and local authorities occur. It includes all members of the two conferences (state-regions and state-regions-municipalities and other local authorities). It must be consulted on any act related to shared competency. In particular, the Unified Conference is consulted by the central government on

financial law and decrees concerning the allocation of personnel and financial resources to regions and local authorities.

Source: OECD (2017[42]), *Making Decentralisation Work in Chile: Towards Stronger Municipalities*, https://dx.doi.org/10.1787/9789264279049-en.

In the COVID-19 global crisis context, co-ordination across levels of government is crucial as a co-ordinated response by all levels of government can minimise crisis-management failures. The main risk of non-co-ordinated action in a crisis is to "pass the buck" to other levels of government, resulting in a disjointed response. What matters is the effectiveness of the co-ordination mechanisms in place, and the ability of government actors to align priorities, implement joint responses, support one another and foster day-to-day information sharing, including with citizens. Effective crisis response highlights that robust vertical and horizontal co-ordination mechanisms are more important than ever (OECD, 2020[4]).

Greece could establish, for example, a body dedicated to co-ordinating regional development planning which could help to inform the partnerships agreement or other sectoral strategies of the line ministries. For this purpose, Italy has three levels of "conferences" between central and subnational governments (Box 4.23), serving as fora for intergovernmental co-ordination: 1) the Conference of State-Regions; 2) the Conference of State-Municipalities and other Local Authorities; and 3) the Unified Conference of State-Regions-Municipalities and Local Authorities, which includes all members of the two other conferences. Portugal has also recently developed a permanent Council for Territorial Dialogue chaired by the prime minister to favour and institutionalise a continuous dialogue between the central government and subnational governments.

Greece could also strengthen and expand the scope of existing contracts to transform them into broader "territorial contracts" promoting specific territorial goals and regional development priorities. Greece could follow the example of France that has a long tradition of state-region planning contracts (Box 4.24). The design of these type of contracts needs to be as flexible as possible so they can adapt to different circumstances and local characteristics – urban and rural regions, mountainous and islands municipalities, etc. They can also target specific areas (island regions and municipalities, for example) providing a multi-annual strategy. The key point is to specify the regional development priorities supported by contracts, possibly through a careful assessment of needs and opportunities.

Box 4.24. State-region planning contracts in France

State-region planning contracts (*Contrat de plan État-région*, CPER) have been in operation since 1982 and are important tools in regional policy in terms of planning, governance and co-ordination. They are characterised by their broad thematic coverage and cross-sectoral nature, with a territorial approach being applied across diverse policy fields including industrial, environmental and rural issues. The DATAR functions as the main national partner of the regions in developing and implementing such planning documents. The President of the Regional Council and the Prefect, as the representative of the central government's different ministries, draw up the contract. The co-financing of interventions is seen as an important co-ordination mechanism.

- *2007-13 planning contracts*: A new generation of state-region contracts was introduced in 2007 alongside the 2007-13 Structural Funds programmes, in order to increase links between French and EU regional policies. The new contracts have the same timeframe as the EU OPs, are based on a joint territorial analysis and have integrated monitoring systems. Similar to the structural funds, regions can decide that funding be de-committed 18 months after approval for projects if no commitment has been made. Contracts increased their focus on the Gothenburg and Lisbon agendas. They reflect three priority areas: the promotion of territorial competitiveness and attractiveness, the environmental dimension of sustainable development, and social and territorial cohesion. The emphasis on sustainable development has grown, with a consultation process launched in 2007 (*Grenelle de l'environnement*). Priority is given to soft functions (e.g. education, research and development) as well as infrastructures other than roads.

- *2014-20 planning contracts*: A new generation of 2014-20 state-region planning contracts has been launched. Five topics have been selected: higher education, research and innovation; national very high-speed broadband coverage and the development of digital technologies usages; innovation, promising niches and the factory of the future; multimodal mobility; the environmental and energy transition. Employment – a priority for the government – will be treated as a cross-cutting issue in the contracts.

In order to ensure equality between territories within the regions, contracts will mobilise specific resources for priority areas: urban priority neighbourhoods, vulnerable areas undergoing major economic restructuring, areas facing a deficit of public services (rural areas), metropolitan areas and the Seine Valley. Inter-regional contracts for mountainous and fluvial basins will be reconducted. The preparation of this new generation of contracts was conducted in two phases: the first for strategic thinking and joint preparation between the central government and the regions; a second for financial negotiation.

Source: OECD (2019[53]), *Effective Public Investment across Levels of Government: Implementing the OECD Principles*, https://www.oecd.org/effective-public-investment-toolkit/ (accessed on 16 August 2019).

Making collaboration across municipalities more efficient

Strengthening co-operation across Greek regions and municipalities is necessary to invest and deliver services at the relevant scale and enhance synergies among policies of neighbouring (or otherwise linked) subnational governments. This is particularly relevant at the metropolitan scale where less fragmented governance structure can favour growth and productivity.

Inter-municipal co-operation in Greece has proven to be necessary in order for municipalities to cope with the increasing transfer of powers and responsibilities. Co-operation structures are also critical economic and development tools to tackle the cuts in local government resources that have resulted from the challenging economic situation of the country during the past decade.

Inter-municipal Greek structures with single or multiple tasks do exist but many of them are inactive. The Greek legal framework foresees the compulsory or voluntary creation of associations of local government authorities for public investment, service delivery or to exercise competencies belonging to local governments:

- Article 245 of Law 3463/2006 allows for the establishment of municipal associations in the form of legal entities governed by public law and financed through municipal contributions and user charges. Most of these horizontal co-ordination structures are currently inactive (OECD/UCLG, 2019[24]).
- The Kallikratis reform (Art. 95) also provides for a form of obligatory inter-municipal co-operation known as "administrative support" in order to help temporarily smaller municipalities carry out some responsibilities transferred to them under the Kallikratis programme (e.g. town planning, technical and welfare benefits services). Municipalities administratively support other municipalities receive an additional amount from the state for their operating expenses.
- As mentioned in the previous section, the Kallikratis Law also foresees the establishment of contracts or networks for inter-municipal co-operation (see above).

Waste management has been a long-lasting challenge in Greece and its municipalities, through co-operation has found ways to address it successfully. In 2012, Greece launched the New National Waste Management Plan (NWMP) in compliance with Law 4042/2012, which sets out the policy, strategy, principles and targets for the management of waste in Greece. This plan reallocated waste management at the municipal level. Within this framework, for example, the municipalities of Agias Paraskevis, Papagou-Holargos and Zografou launched an inter-municipal local plan for waste transportation and deposit. Through this plan, the three municipalities pool resources to achieve economies of scale for transport and waste differentiation. This specific inter-municipal collaboration enjoyed significant support from both regional and central government authorities (Koutalakis and Allio, 2016[36]).

However, Greek law does not foresee concrete incentives to encourage municipalities to co-operate on a voluntary basis. It has been documented that inter-municipal co-operation has been underexploited because political leaders do not have incentives to intervene in affairs that do not necessarily pertain to their strict administrative or competency boundaries (Council of Europe, 2017[12]; Koutalakis and Allio, 2016[36]). Due to a lack of incentives to enter into a contract or form a network between different municipalities, their formation depends largely on the political will and personal contacts of local authorities. The lack of trust between different local authorities is another factor that is undermining co-operation (Council of Europe, 2017[12]). Thus, the lack of concrete incentives coupled with bureaucratic procedures results in weak co-operation between municipalities, even when the law formally allows it.

Organising co-operation between subnational governments has also been a relatively common method used by OECD countries to solve capacity issues, especially at the municipal level. These arrangements have been popular in particular among the Nordic countries (Denmark, Finland, Norway and Sweden) but they have also been practised for example in France, Italy, Poland and Spain (OECD, 2017[10]; OECD, 2019[40]). In Chile, for example, municipal associations have had a positive impact on investments and capacity building. Municipalities that are part of an association in Chile: present better investment projects in view of obtaining financing; positively affect smaller municipalities' local capacities; and have more bargaining power than municipalities looking to obtain financing from regional and central levels on their own. All this results in more and better investments (OECD, 2017[42]).

The Greek central and regional governments can use specific incentives, whether financial or not, to encourage voluntary co-operation among municipalities. Some OECD countries have opted to encourage collaboration by providing consulting and technical assistance, promoting information sharing or providing specific guidelines on how to manage such collaborations. A way for Greece to encourage municipal co-operations is to take advantage of peer learning. Municipalities with successful stories can share their experience and encourage other municipalities to enter into such arrangements by showing that, through partnerships, municipalities can achieve more efficient and better results. Regions need to take a proactive role in supporting critical projects that require cross-jurisdictional co-operation, in particular regarding weaker and rural municipalities. They are the ones that can organise peer learning, offer technical support and act as a political facilitator.

The central governments can also create financial incentives whereby municipalities can access higher funding amounts for joint projects or shared services. Financial incentives can help to overcome the administrative costs that can be associated with the creation of networks or contracts. The central government can, for example, define specific National Investment Programme budget lines to finance exclusively municipal association projects or joint investments. Many OECD countries have recently passed regulations to encourage inter-municipal co-operation on a voluntary basis (Box 4.25). For instance, France offers special grants and a special tax regime in some cases and other countries like Estonia and Norway provide additional funds for joint public investments. Slovenia introduced a financial incentive in 2005 to encourage inter-municipal co-operation by reimbursing 50% of joint management body staff costs – leading to a notable rise in the number of such entities. In Switzerland, one-third of funds for regional development policy are reserved for projects involving inter-cantonal co-operation (Mizell and Allain-Dupré, 2013[89]).

Alternatively, Greece can promote co-financing arrangements for projects between the national government and municipal networks. This has been done by Portugal, for example, using multi-level contracts for this purpose. Japan, where inter-municipal co-operation was not particularly encouraged (amalgamations being the preferred option to consolidate municipalities and increase their efficiency), is now developing a new type of contract encouraging inter-municipal co-operation (OECD, 2017[10]).

Box 4.25. Incentives for cross-jurisdictional co-operation

Most of the time, inter-municipal co-operation is promoted on a voluntary basis. Incentives are created to enhance inter-municipal dialogue and networking, information sharing and sometimes to help in the creation of these entities. These incentives can be financial or can also have a more practical nature (consulting and technical assistance, production of guidelines, measures promoting information sharing such as in Canada, Norway and the United States). Several countries also implemented new types of contracts and Partnership Agreements to encourage inter-municipal co-operation: Poland (with the introduction of territorial contracts), Portugal (with multi-level contracts), among others.

In **Slovenia**, inter-municipal co-operation has risen in recent years, in particular with projects that require a large number of users. In 2005, amendments to the Financing of Municipalities Act provided financial incentives for joint municipal administration by offering national co-financing arrangements: 50% of the joint management bodies' staff costs are reimbursed by the central government to the municipality during the next fiscal period. The result has been an increase in municipal participation in such entities from 9 joint management bodies in 2005 to 42, rising sharply to 177 municipalities today. The most frequently performed tasks are inspection (waste management, roads, space, etc.), municipal warden service, physical planning and internal audit.

At the sub-regional level in **Italy**, there is a long tradition of horizontal co-operation among municipalities, which takes the form of *Unione di Comuni*, intermediary institutions grouping adjoining municipalities to reach critical mass, reduce expenditure and improve the provision of public services. A recent law from April 2014 established new financial incentives for municipal mergers and unions of municipalities. All of the basic functions of municipalities are to be carried out in co-operation..

The region of Galicia in **Spain** has many small municipalities. Many have limited institutional capacity and are spread out geographically, which increases the cost of providing public services. The regional government has taken steps to encourage economies of scale. First, it has improved the flexibility of and provided financial incentives for voluntary ("soft") inter-municipal co-ordination arrangements. Investment projects that involve several municipalities get priority for regional funds. "Soft" inter-municipal agreements tend to be popular in the water sector. Local co-operation is also being encouraged in the urban mobility plan for public transport, involving the seven largest cities in the region. The regional government also imposed a "hard" co-ordination arrangement. Specifically, it created the Metropolitan Area of Vigo, an association of 14 municipalities. Although the metropolitan area was defined by the regional government, it was based on a history of "light co-operation" among 12 municipalities (out of 14). Voluntary municipal mergers may be encouraged in the future.

Source: OECD (2017[10]), *Multi-level Governance Reforms: Overview of OECD Country Experiences*, https://dx.doi.org/10.1787/9789264272866-en; OECD (2019[53]), *Effective Public Investment across Levels of Government: Implementing the OECD Principles*, https://www.oecd.org/effective-public-investment-toolkit/ (accessed on 16 August 2019).

Building trust among parties

Trust in government is both a driver of government effectiveness and economic development, and an outcome measure for government action (OECD, 2017[90]). Social trust underpins the effectiveness of place-based policies. In Greece, social trust significantly eroded over the crisis period, with declining levels of trust in both political and impartial institutions (Ervasti, Kouvo and Venetoklis, 2019[91]).

Corruption impacts trust in national and subnational authorities

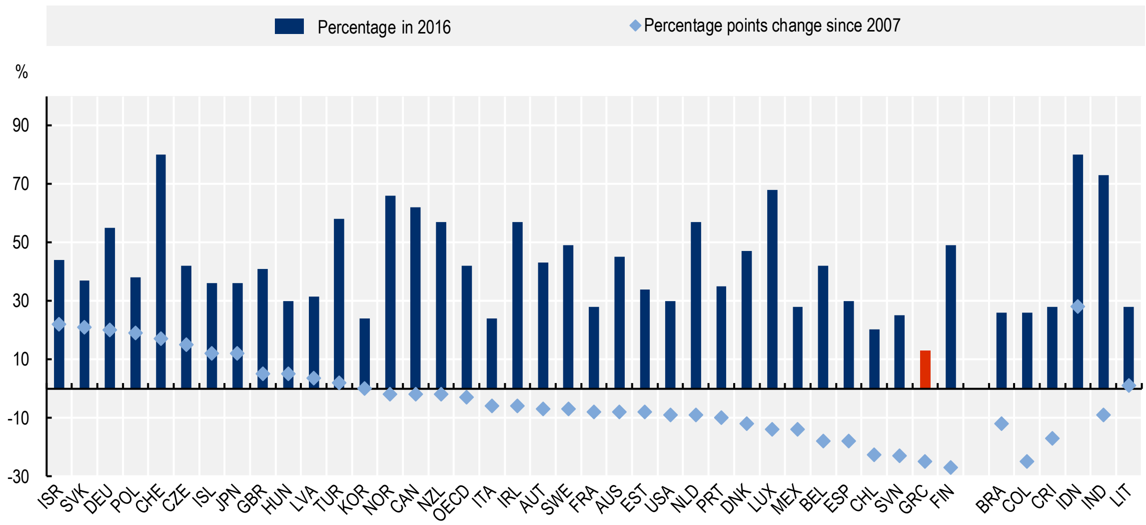
Greek authorities have acknowledged that high levels of political clientelism have impacted the country's development. During the last 30 years, the levels of corruption have been increasing in the country (Hlepas, 2015[8]). In 2018, the Transparency International Corruption Perceptions Index for Greece was the worse (45) after Bulgaria, three points less than its score in 2017. The 2018 Greek National Growth Strategy explicitly recognises that clientelist practices and corruption have undermined opportunities for growth (Hellenic Republic, 2018[92]) – a finding echoed by others. Regulations that limit competition and the imposition of levies on transactions that have benefitted third parties are typical examples of a system that has encouraged rent-seeking and undermined growth (Huliaras and Petropoulos, 2016[52]).

As a result, citizens' trust in Greek public institutions, including regional and local authorities, has been constantly shrinking (Hlepas, 2015[8]; Ervasti, Kouvo and Venetoklis, 2019[91]). Since 2007, trust in national governments have decreased by 25% and, in 2016, Greece ranked last among OECD countries in this indicator (Figure 4.13). Mistrust regarding the EU is also very high in Greece: it went up by 48 percentage points between 2004 and 2018. As of today, two-thirds of the Greek population tend not to trust the EU, the highest share among the EU member states. This opinion is also reflected in the high share of votes for parties against EU integration (Dijkstra, Poelman and Rodríguez-Pose, 2018[21]).

These low levels of trust impact policy outcomes. While trust is clearly a multifaceted concept – depending as much on subjective perception as on facts – its influence on the outcomes of public policy is significant and sufficiently tangible to make building trust an objective worth pursuing by public institutions (OECD, 2017[93]). Part of the answer to reinforcing trust lies in good economic management – trust will increase when incomes rise and jobs are easier to find. Experience shows, however, that good economic policies cannot do the job alone. Trust in institutions is driven not only by the substance and outcomes of policies but also by the process of policymaking. The way policies are designed and implemented, and the compliance that policymakers show with broader principles and standards of behaviour, matters in building trust (Baena et al., 2013[94]).

Decentralising decision-making may be a way to improve trust. There is evidence showing that trust is positively correlated with decentralisation. A study considering 42 countries over the period 1994-2007, for example, shows that fiscal decentralisation is positively related to citizen's trust (Ligthart and van Oudheusden, 2015[95]). In the same line, preliminary analysis suggests that the Local Authority Index is positively related to trust in local and regional government, even when other variables are controlled (Keuffer and Ladner, 2018[96]). More decentralised systems may help to build trust as they respond more efficiently to citizen's preferences. Furthermore, innovations in local public governance build trust by engaging citizens in all aspects and phases of local government operations from ideas to policy to implementation (OECD, 2019[22]).

Figure 4.13. Confidence in national government in 2016 and its change since 2007



Note: Data on the confidence in national government for Canada, Iceland and the United States in 2016 are based on a sample of around 500 citizens. Data refer to the percentage who answered "yes" to the question "Do you have confidence in national government?" (data arranged in descending order according to percentage point change between 2007 and 2016). Data for Austria, Finland, Ireland, Norway, Portugal, the Slovak Republic, Slovenia and Switzerland are for 2006 rather than 2007. Data for Iceland and Luxembourg are for 2008 rather than 2007. Information on data for Israel: http://dx.doi.org/10.1787/888932315602.
Source: OECD (2017[90]), *Government at a Glance 2017*, https://dx.doi.org/10.1787/gov_glance-2017-en.

Greece has taken large steps to improve transparency

Aware of the negative impacts of clientelism and corruption, Greece has made important efforts to strengthen transparency. In 2010, the Greek government enacted the Transparency Law (Law 3861/2010) that obliges all government entities to make public and accessible on an Internet platform all public expenses, regulatory acts, and public procurement and tendering. Some studies have shown that the publication of this information has led to self-restraint concerning some practices of maladministration and mismanagement (Hlepas, 2015[8]).

To reduce corruption and clientelist practices, Greece has also strengthened monitoring processes at all levels of government. The government has created such posts as auditors of public administration, general inspector of public administration, municipal and regional Ombudsmen, among others. This complex set of controls is completed by state supervision, which is provided in the constitution itself (Article 102, paragraph 4). Moreover, in each one of the 7 "deconcentrated administrations", the Secretary-General is responsible for state supervision of the 13 regions. Decisions over tendering, loans, expropriation, imposing of taxes and fees, among others, are monitored and checked by the Secretary-General (Hlepas, 2015[8]).

In 2014, the Greek government enacted Law 4305/2014 on open disposal and reuse of documents, information and data in the public sector. The Greek government has also developed legal requirements whereby awards are provided to public sector institutions that set up effective and innovative processes in opening up their datasets as well as in promoting its reuse (OECD, 2018[97]).

In 2012, Greece also became part of the international co-operative initiative of Open Government Partnership (OGP) to show its commitment to openness, participation and accountability. Since then, Greece has adopted three National Action Plans for Open Governance. For the preparation of the third plan, covering the period 2016-18, Greece consulted citizens and private sector representatives, as well as civil society organisations. Another important initiative was the agreement signed in 2016 with the Open

Technologies. The purpose of the agreement is to promote the implementation of open digital technologies that can support the reuse of open government data (OGD) in the field of education and research. In addition, the agreement aims to also encourage greater awareness of OGD, through workshops, conferences, etc. (OECD, 2018[97]).

This plan includes explicit commitments from regional and local governments. For example, one of the commitments of the region of Western Macedonia is to present data on their website in a user-friendly way by using tables, diagrams, comparisons to previous month/year etc. They have also committed to developing a Regional Council Platform. There are also commitments from the region of Central Crete and the municipality of Thessaloniki (Ministry of Interior and Administrative Reconstruction, 2016[98]).

Subnational governments across the OECD are increasingly developing open government and OGD. In the OGP framework, besides Greece, a number of countries have developed pilot programmes to reach regions, provinces and cities. Barcelona, London, Madrid, Melbourne and Montevideo, for example, have open government data portals where people can find data in a variety of categories (e.g. environment, population, jobs and economy, health, transport, community safety, infrastructure). There are also different datasets by categories ranging from housing (Barcelona) and household waste (London) to the number of traffic accidents (Madrid) and services for women (Melbourne). Greek local authorities could follow the example of the city of London, which is using open government data not only to improve transparency but as a tool for building accountability and promoting citizen participation in key policy issues (Box 4.26).

Box 4.26. The London DataStore to promote transparency, accountability and participation

The London Datastore is a free, open data-sharing portal facilitating access to data relating to the capital. The site provides citizens, businesses, researchers and developers over 600 datasets to help understand the city and identify solutions to London's problems. In addition to being able to access a wide variety of datasets in numerous formats (XLS, CSV, PDF, XML, etc.) for open use, the Datastore's portal provides up-to-date statistical information on the city's performance in nine areas: jobs and economy, transport, environment, community safety, housing, communities, health, London as a world city, and performance by the Greater London Authority. This function is structured to build transparency as well as accountability. First, each category provides information on the city's priorities (e.g. in transport, to upgrade most parts of the Underground and Overground, encourage cycling and walking) and then offers easy-to-understand graphs that use available data to highlight performance. For example, in the jobs and employment category, it highlights, among other things, growth in the number of apprenticeships in London versus the rest of England since 2008/09. In view of being objective and transparent, the Datastore does not hide negative results – for example in the environment category, it shows that recycling in London is down, while it is still a growing trend in the rest of England. Finally, the website also supports greater citizen participation by offering "data challenges" – encouraging citizens to use open data and smart technologies to help solve some of London's key challenges, for example crowd-sourced data to manage population health, the Future of Generation Y, and how to better deliver adult social care services in London.

Source: OECD (2017[42]), *Making Decentralisation Work in Chile: Towards Stronger Municipalities*, https://dx.doi.org/10.1787/9789264279049-en.

While the efforts made by the Greek government go in the right direction, there is still a lots of room for improvement in engagement, transparency and access to data, in particular at the local level. Indeed, many regional and local governments produce and publish data; however, these data are often not easily read and processed and are not produced by open licenses. The requirement over transparency after the crisis – and especially in the context of the MoUs, led municipalities to develop policies concerning open data. Most subnational governments comply with this requirement but publish data in a PDF form making it impossible to effectively use these data. As per the Open Knowledge Foundation, in 2016, only 11% of city data was open (Open Knowledge Foundation, 2016[99]).

Beyond the transparency of regulatory acts and the access to data, sound and transparent financial management is at the core of effective public investments for regional development. As the 2014, the OECD *Recommendation on Effective Public Investment across Levels of Governments* recognises that budgeting transparency throughout the investment cycle provides visibility to investments, clarifies recurrent budgetary implications and strengthens public accountability. Governments should make budgetary information regarding public investments publicly available to citizens and other stakeholders in a timely and user-friendly format (OECD, 2019[53]).

Box 4.27. Transparent financial management

Italy

The *Open Coesione* web portal provides analysis and monitoring on the use of regional policy resources, offering information, accessible to anyone, on what is funded, who is involved and where. The web portal contains information about every single project carried out to implement EU Cohesion Policy and more specifically: funds used, places and categories, subjects involved and implementation timeframes. It concerns more than 700 000 investment projects (around EUR 17 billion, funded by national and local governments). Users can either download raw data or surf through interactive diagrams itemised by expenditure categories, places and type of intervention, as well as have access to files on single projects and subjects involved. Data on the local economy and social context are provided as well.

Switzerland

Switzerland has developed a database that provides an overview of the projects of the New Regional Policy (NPR) as well as the projects of the previous programme Regio Plus. The database contains the projects of the cantonal and supracantonal implementation programmes as well as projects launched under the Interreg cross-border programme with Swiss participation. This database also contains the projects of the pilot programme Territory of Economic Action (PHR Economy), a common measure of the agglomeration policy (AggloPol) and the projects of the policy for rural areas and mountain regions (P-LRB). Since 2016, all NPR projects are gradually put online; a large selection of projects dating from previous periods is also available.

Source: (OECD, 2019[53])

Strengthening public engagement

Effective regional development policies are not just a government activity but require the action of a wide range of private, public and third sector actors. By involving stakeholders in the decision-making process, governments at all levels can generate ownership, trust and a sense of fairness. Broader public engagement in the decision-making process is also important for holding the government to account and maintaining confidence in public institutions. Well-managed consultation may help governments to limit corruption, capture and mismanagement, in particular for big and complex infrastructure projects (OECD, 2017[100]).

Public consultation in Greece is today much better developed than it was ten years ago. Today, almost every piece of draft legislation or even policy initiative by the government is publicly posted online prior to its submission to parliament (Box 4.28). Citizens and organisations can submit comments, suggestions and criticisms article-by-article, through this platform. For example, there were several rounds of consultation with relevant stakeholders in the development of the Partnership Agreement and all sectoral and regional Operational Programmes for the Implementation of Cohesion Policy (for which the Ministry of Development and Investments is responsible).

Box 4.28. The public online consultation process in Greece

Through the web portal opengov.gr, the Greek government ensures public consultation of legislative and regulatory acts.

Public e-consultation has four consecutive phases.

1. *Preparation*: The Department of Informatics Applications of EKDDA, in co-operation with the relevant partners of the respective ministry, prepares the website and the materials of the consultation and ensures the overall approval of the content by the prime minister's office.
2. *Public comments*: Once approved, the consultation is published and open to comment. The relevant partners of each ministry read and approve the publication of incoming comments (moderation). It is important for the successful conduct of the consultation that the relevant ministry partners, in co-operation with the EIDHR IT applications department, actively participate by responding to any comments they may receive and by publishing opinions and material for the creative feedback of the consultation.
3. *Editing conclusions*: When the deadline for consultation has expired, the ministry sends a message thanking participants and including the first conclusions. At the same time, it processes citizen comments by drafting a report on the public consultation provided by article 85, paragraph 3 of the Parliament's Rules of Procedure.
4. *Completion*: When the adopted law and the report on the results of the consultation are published, the consultation is considered complete.

Greece has also developed the website labs.opengov.gr to collect ideas and suggestions for the improvement of public e-services, service communication and email subscription services.

Source: Ministry of Administrative Reform and E-Governance (n.d.[101]), *OpenGov.gr - The Greek Open Government Initiative*, http://www.opengov.gr/.

Many municipalities and regions also have similar processes for public consultation but they are not always well developed and utilised. Consultations often consist of posting the planning document for written comment and this process is not often successful. While every programme is open to public consultation, the main characteristics (structure, topics etc.) of OPs, their topics and themes are predetermined and therefore calls for proposals are predefined by governmental authorities, limiting impact and meaningful engagement (Crowther, Quinn and Hillen-Moore, 2017[102]). The engagement of private and third sector actors at regional and local levels differs across the country, depending on the strength of local networks and levels of social trust.

Greece needs to shift from consultation formalities towards real public engagement at all levels of government. The formal process for public engagement in developing laws and regulations is one way to measure the extent to which people can become involved in government decisions on key issues that affect their lives. In Greece, the level of stakeholder engagement in developing regulations is 1.8 (on a scale of 0 to 4); lower than the OECD average of 2.4[7] (OECD, 2015[103]). However, consultation is not a true engagement. Engagement can be built through participatory governance, in which local public governance facilitates the participation and engagement of private citizens and other stakeholders in deliberations on public policy choices and the delivery of local public services (OECD, 2019[22]).

OECD countries have put in place different ways of building participatory governance. Some countries have opted to focus on transparency, for example, using open government methods such as open and competitive procurement, performance budgeting, maximum disclosure, citizens right to know and citizen-centric or participatory governance. Others have chosen to develop participatory planning and budgeting, civil society performance monitoring, social audits or direct democracy provisions (e.g. referenda on major initiatives/projects, recall of officials for dereliction of duty) (OECD, 2019[22]). Australian local governments, for example, collaborate on using common smart forms for local applications, common information and communication technology (ICT) platforms for tracking enquiries/transactions, measuring service delivery response times and surveying customers, set benchmarks for performance and measuring and reporting results. Australia's Value Creation Workshops are valuable resources for strengthening local government officials' capacity to engage citizens through training and access to relevant expertise (OECD, 2019[22]).

Better data for effective decision-making

Greece has made some efforts to improve data accessibility for citizens and policymakers. For example, the national government's "public spending" initiative provides data and visualisations on Greek public expenditure based on ideas from the UK's "Where does my money go?" (Alexopoulos et al., 2018[104]). The national government's website to track the implementation of the NSRF 2014-2020 (anaptyxi.gov.gr/el-gr) provides information on the number of projects that have been approved per region and municipality to date and their budgeted amounts, as well as its implementation stage and the problems faced during the process. It also includes helpful summary data visualisations on the thematic areas and beneficiaries by region and detailed information on specific projects in the different stages of the investment process with the respective subprojects, indicators and responsible bodies. An important feature of this database is that the source data is downloadable. Recently, the governments have also laid the groundwork for creating different "observatories" at the subnational level in order to collect information in different areas. The Regional Observatory of Social Inclusion, for example, will gather data on social inclusion issues involving a different and wide range of stakeholders. It aims to provide a geography of poverty and social inclusion in the country. The different observatories are still in their early stages of development and it remains unclear how the data collected will be finally used and co-ordinated with other sources of information.

Still, evidence-based decision-making remains undeveloped in the country. Authorities sometimes take decisions with insufficient external input, overlooking impacts on other levels of governments and underestimating opportunity costs of targeted budgetary expenditures (Council of Europe, 2017[12]). While it is true that the initiatives highlighted above go in the right direction, the available data often does not allow a clear and useful understanding of local issues to support decision-making (Alexopoulos et al., 2018[104]). The tracking of the NSRF 2014-2020 for example, does not show that "regional" data and thematic summary data is not readily available through its interface. Publicly available data also mostly focus on economic/financial datasets and, to a lesser extent, social, natural resources and legal datasets. More data is also needed on government spending, economic activity and firms and on agriculture, tourism and the environment (Alexopoulos et al., 2018[104]).

While the Hellenic Statistical Authority has made important progress in data collection and availability, the usefulness of the data for policymakers remains limited. Indeed, data available do not necessarily follow a common structure, as the hierarchy used to present data is not the same across the different datasets (some in statistics and series format, others only as cross-sections for individual years). The consistency of the data sets over time needs to be improved so that, for example, the name of regional units does not change over time and should be ready to be statistically processed (ready to be uploaded to a statistical software), especially for disaggregated data (Chapter 3).

Open data sources need to be redesigned to be more functional and usable. There is a need for more advanced tools mainly for data discovery, data visualisation (e.g. maps and charts) and user feedback. More emphasis should be placed on the use of structured and machine-processable file formats in publishing datasets and metadata (adopting existing metadata standards) (Alexopoulos et al., 2018[104]). Doing so would enable more effective browsing and discovery of datasets, and also linking and combining open government data from multiple sources.

Improving data quality and availability to inform investment and regional development strategies will help Greece to better tackle key issues for the country's development. For example, local governments need better knowledge of the conditions in surrounding communities in order to identify functional linkages and prioritise areas of joint action. Better data would also help in improving the definition of urban areas for policy purposes, particularly in the capital city of Athens for which the spatial analysis unit is much smaller than its Functional Urban Region (Chapter 3).

The central level has a key role to play in facilitating data and encouraging its use. For example, many countries in the OECD have digitised their planning documents (e.g. France, the Netherlands) – a move which benefits residents and investors as well. France's urban planning agencies provide advice and expert assessment on planning and land management issues and develop planning documents. They are a centre of expertise on spatial planning and are linked to a national federation which shares best practices, tracks major trends and provides opinions on major national and European debates related to spatial planning. This type of expertise is particularly important for smaller municipalities that have more limited capacity. The KOSTRA system in Norway has facilitated "bench-learning" and, by this means, informs policymaking. Portugal's Regional Development Composite Index (ISDR) monitors regional development and informs in a simple manner both citizens and policymakers (Box 4.29).

Box 4.29. Using data for policymaking

Norway

Norway's KOSTRA system is an electronic reporting system for municipalities and counties. It can publish input and output indicators on local public services and finances and provide online publication of municipal priorities, productivity and needs. KOSTRA integrates information from local government accounts, service statistics and population statistics. It includes indicators of production, service coverage, needs, quality and efficiency. The information is easily accessible via the Internet and facilitates a detailed comparison of the performance of local governments. KOSTRA data is frequently used by the local government themselves and by the media and researchers. Although individual local governments could use KOSTRA more efficiently (e.g. by systematic benchmarking), the system has helped facilitate comparisons of municipalities thereby promoting "bench-learning".

Portugal

Portugal has developed the Regional Development Composite Index (ISDR) to monitor regional development and inform in a simple manner both citizens and policymakers about the progress achieved with regard to development. The ISDR relies on a conceptual framework that benefits from a broad view of development that encompasses competitiveness, cohesion and environmental quality. The ISDR is calculated annually for the Portuguese NUTS 3 sub-regions. Data collection is indirect and the variables used to compute the composite index result from administrative procedures and statistical operations within the National Statistical System. The ISDR has been issued on an annual basis since 2010 by the Portuguese National Statistical System. The local finance law establishes that central government grants to associations of municipalities depend on the regional performance as captured by ISDR.

For Portugal, the greatest achievement has been having an overall composite index for regional development with general acceptance (by national, regional and sub-regional institutions), once it is produced by the National Statistics Institute, within the scope of the Portuguese National Statistical System. It also allows for an outlook of each region in one of the three components: competitiveness, cohesion and environmental quality.

Source: OECD (2019[53]), *Effective Public Investment across Levels of Government: Implementing the OECD Principles*, https://www.oecd.org/effective-public-investment-toolkit/ (accessed on 16 August 2019).

Reinforcing the administrative capacity of regions and municipalities

As in many OECD countries, capacities in Greece vary largely across subnational governments. The low level of capacities in certain regions or municipalities is probably one of the most important bottlenecks to undertaking transformative and needed investments. Strengthening capacities at the subnational level is crucial, not only to improve the capabilities to design and implement regional development policies but also to move forward in the decentralisation agenda. The government's decentralisation reform needs to be accompanied by appropriate initiatives to ensure that the greater autonomy given to regions and municipalities does not raise spatial inequalities.

Greek regions and municipalities are confronted with a double straitjacket in terms of quantity and quality of staff. On the one hand, many subnational governments are understaffed and often do not have sufficient personnel to deal with basic daily tasks. They also frequently lack the specialised staff to undertake specific responsibilities such as land use planning. On the other hand, regions and municipalities confront a qualitative challenge, as their staff sometimes lack specific skills, in particular in the use of new technologies.

Overcoming staff shortcomings and lack of qualified civil servants

Territorial and decentralisation reforms in Greece have outpaced improvements in an administrative capacity and professional skills. Since the crisis, the number of civil servants has been significantly reduced – public employment was reduced by almost 10% between 2006 and 2015 in regions (OECD, 2019[105]). The shortage of staff does not only affect EU funding-related tasks but the functioning of subnational governments as a whole. The rule of one recruitment for five exits strongly affected local government as a great number of the working force of the local entities was working under the status of temporary and seasonal employment (Dimitropoulos, 2012[16]). It limited the capacity of regions and municipalities to hire new and qualified professionals to undertake the new responsibilities devolved to them. Subnational governments have difficulties, for example, in dealing with regulations that oblige them to publish on the web local government decisions or managing the centralised system for public procurement (Torres Pereira and Mosler-Törnström, 2015[26]). This is not a challenge exclusive to Greece; in the EU, for example, two-thirds of subnational governments (65%) report that capacity to design adequate infrastructure strategies is lacking in their city/region. More than half of subnational governments (56%) report a lack of adequate own expertise on infrastructure (OECD-CoR, 2015[88]).

Greek smaller municipalities are especially affected by the lack of qualified personnel. Some Greek municipalities face shortage not only of expert administrators carrying out specific technical duties but also of personnel to perform even basic tasks (Torres Pereira and Mosler-Törnström, 2015[26]). For example, some islands municipalities have only one or less than five employees that are practically unable to take over the tasks provided by the Kallikratis reform. In those municipalities, the provision of public services is often based on voluntary contributions and engagement of individual citizens, third sector organisations and elected officials (Council of Europe, 2017[13]).

If there is a lack of personnel to deal with basic tasks, the challenge due to the lack of specially qualified staff such as civil engineers, lawyers and economists is even more acute. This is translated into poorer service provision and, in island municipalities, this means that citizens sometimes need to travel long distances to carry out simple transactions such as paying their water bills or local fees (Council of Europe, 2017[13]). To overcome low salaries and attract qualified personnel, Greece could put in place incentives for public administration employees to move to smaller and remote municipalities that might take the form of career advancements, allowances for housing and transport to personnel relocating to island municipalities.

Small municipalities depend to some extent on external assistance from larger municipalities. The Kallikratis reform introduced some provisions to deal with the shortages of administrative capacities in island municipalities. Article 204 of the Kallikratis Law, for example, specifies that the largest municipalities in the island regions are obliged to provide full administrative support to other municipalities in the regional unit that do not have the staff necessary to exercise the competencies transferred to them by the law. Island municipalities may also sign inter-municipal co-operation contracts to implement public works services and procurement and programmatic contracts (see above) with their respective region – a practice that is often employed for the implementation of technical infrastructure projects (Council of Europe, 2017[13]).

The new 1:1 attrition rule offers an important opportunity for Greece to overcome administrative capacity challenges. To make the most out of this opportunity, Greek authorities at all levels can engage in strategic workforce planning in order to fill the positions in a smart way. Strategic workforce planning would assist governments in anticipating possible future developments and maintaining a well-structured workforce of an appropriate size, which is able to meet the changing needs of the public service in general in a cost-efficient manner. For this, it is important to conduct an adequate and rigorous competency assessment of the capacity gap of municipalities and/or regions. In this task, the short-term operational dimension should be distinguished from the longer-term strategic dimension. In the short term, Greek subnational governments should ensure that the workforce is there for operational decisions. In the longer term, planning should ensure that the workforce responds to the long-term perspective of where government entities will be in a few years (OECD, 2017[42]).

For this, Greece might consider examples of OECD countries that are implementing competency management. In addition to performance management, some countries like Korea are increasingly considering competency management to identify the capabilities that senior managers should bring to their jobs, set consistent standards and reinforce the desired values and culture of the public service (Box 4.30). Typically, the required profile includes leadership capabilities, management skills, ability to achieve results and personal integrity. Competencies are commonly used in recruitment and selection, succession planning, identification of potential future leaders among middle management ranks, performance management, training and leadership development.

Box 4.30. Competency assessment in Korea and Mexico

In 2006, the Korean government introduced a competency evaluation framework for senior civil service. This framework has been used to appoint senior officials, regardless of seniority. Based on the successful operation among senior officials, the competency evaluation framework was expanded to division director-level officials in the second half of 2010. Competency evaluation has improved the reliability and fairness of human resource management. In addition, with the results of the competency assessment reflected in training, overall government competitiveness has been upgraded.

Competencies subject to assessment include strategic decision-making and commitment to change, for high-ranking government officials for example, along with skills required for effective organisation management and efficient policy execution. Assessment focuses on work competencies needed to run an organisation. Competencies are organised around three main areas, as shown below.

In Mexico, the National Council for Normalisation and Certification of Competencies (*Consejo Nacional de Normalización y Certificación de Competencias*, CONOCER) is the authority in charge of establishing competency standards and managing the National Competencies System, which aims to promote economic competitiveness and educational development. It issues the accreditation of several public and private institutions for the certification of competencies. Also in Mexico, the Federal Electricity Commission (*Comisión Federal de Electricidad*, CFE) has been certifying procurement staff for more than 15 years. The result has been a rise in the standards of procurement and it provides employees with ample room for a career in the profession.

Source: OECD (2017[106]), *Regional Demography*, https://stats.oecd.org/Index.aspx?DataSetCode=REGION_DEMOGR.

Strengthening capacity building and learning-by-doing practices

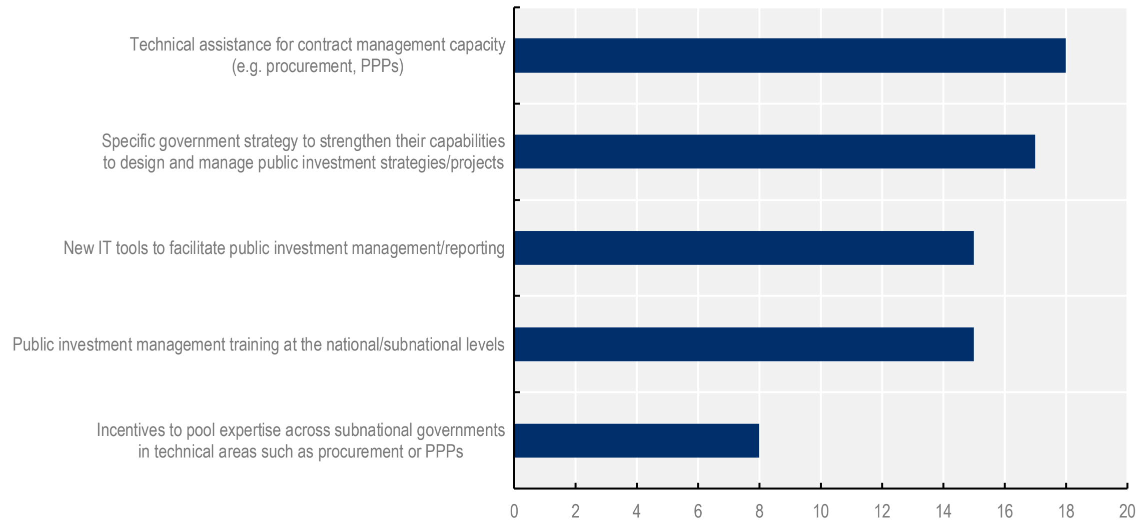
Strengthening the capacities and professional skills of subnational staff is a necessary condition to ensure that regions and municipalities can effectively cope with their responsibilities.

A majority of OECD countries have in place some mechanism to strengthen the technical skills of policymakers. Out of a sample of 26 OECD countries, 18 have put in place, for example, technical assistance for contract management capacity (e.g. procurement, public-private partnerships [PPPs], among others) and a similar proportion have developed a specific strategy to strengthen national and subnational capabilities to design and manage public investment projects (Figure 4.14) (OECD, 2019[53]). Chile, for example, has a special department – the Academy of Regional and Municipal Capacity Building to provide continuous training for regional and municipal public officials. In the context of digitalisation, some OECD countries have also adopted new IT tools or joint e-government platforms to narrow the gaps in capacity across regions or localities and facilitate peer learning. For example, KiTerritorial is a web-based toolkit developed by the Department of National Planning (DNP) in Colombia which offers specific instruments to support local leaders in the formulation of their territorial development plans (PDT). In Australia, an online mapping tool is being developed by the national government to assist applicants of the Regional Growth Fund to determine the benefit, location and coverage of their projects.

Greek regions could take a more proactive role in capacity building processes. Some small island municipalities resort to the expertise of the regions to prepare and mature technical projects related to the construction and maintenance of critical infrastructure. However, this support depends to a large extent on the willingness of regional authorities to support municipalities within their jurisdictions since they are not obliged by law to do so. Technical assistance to prepare investment projects or planning instruments, management support to implement programmes, projects or investments can be done more systematically by regions, which often have more technical and administrative capacity than municipalities. Technical support in regions also allow more targeted assistance as they are closer to their concerns than the national government. Regions could also take a more proactive role in supporting critical projects that require cross-jurisdictional co-operation and in encouraging peer learning practices. They could, for example, have the mandate to incentivise municipal co-operation for investment projects financed through the National Investment Programme or EU funds with technical support and as a political facilitator.

Figure 4.14. Capacity building in OECD countries – Monitoring of the implementation of the OECD *Recommendation on Effective Public Investments across Levels of Government*

Has your country introduced the policies/mechanisms listed below to reinforce the skills and capacities of national and subnational public officials and institutions to better support public investment for regional development?



Note: Results of the OECD Monitoring Survey with a total of 27 respondents.
Source: OECD (2019[53]), *Effective Public Investment across Levels of Government: Implementing the OECD Principles*, https://www.oecd.org/effective-public-investment-toolkit/ (accessed on 16 August 2019).

Box 4.31. Capacity building at the subnational level

Chile

The National Investment System (SNI) offers specialised training courses on the formulation and evaluation of public investment projects (*Capacitación en Formulación y Evaluación de Proyectos de Inversión Pública*) for national and subnational officials. It has a dedicated on-field training module and regional workshops (*Capacitación en Terreno y Taller Regional*) for entities in charge of formulating investment initiatives, mainly municipalities and other public services at the local level. The objective is to develop the appropriate competencies of subnational civil servants in the formulation and preparation of investment projects, as well as in the methodologies of social evaluation. The training sessions take place in the municipalities and are designed by investment analysts from the Regional Office of the Ministry of Social Development in each region. The timing is defined by the Regional Co-ordinator of Training with the Investment Co-ordinator from the Regional Office. Training sessions are designed for groups of 2 to 11 people.

Source: OECD (2019[53]), *Effective Public Investment across Levels of Government: Implementing the OECD Principles*, https://www.oecd.org/effective-public-investment-toolkit/ (accessed on 16 August 2019).

Building the appropriate capacities at the local level is also a *learning-by-doing* process in which subnational governments learn while acquiring more autonomy. This is why some countries have implemented pilot experiences in the devolution of responsibilities to subnational governments. In Sweden for example, two successful pilot experiences on asymmetric decentralisation were established at the end of the 1990s to transfer the responsibility of regional growth from regional state agencies (County Administrative Boards) to regional political bodies (elected regional councils). Since then, the responsibility has gradually been transferred from regional state agencies to regional political bodies in other counties as well (OECD, 2018[1]). Pilot experiences allow policymakers to experiment and learn while avoiding subnational governments with low capacities becoming overwhelmed with new responsibilities (OECD, 2018[1]). To build the capacities needed, the "learning-by-doing" process needs to go hand-in-hand with regular, differentiated and targeted capacity building activities and technical assistance.

Simplifying rules to design and implement regional development policies more efficiently

Improving the regulatory environment is a precondition for Greece to successfully stimulate economic activity, create jobs and raise productivity. In addition to economic effects, improving the regulatory environment should also lead to better efficiency of public administration in Greece, reduced opportunities for corruption and maladministration in public service and, therefore, increased trust in state institutions and the government (OECD, 2014[78]). Over-regulation, overlapping or constantly changing regulations can lead to higher costs, which can be burdensome especially for subnational governments with low capacities, which in most cases are island or mountainous municipalities.

Improving the regulatory environment has been a priority for the Greek government

Since the crisis, a priority for Greece has been the improvement of the regulatory environment to ensure the quality of regulation for policymakers at all levels of government. This is reflected by OECD indicators that highlights the sharpest reduction in the rigidity of product market regulation between the end of 2007 and the end of 2012 among OECD countries (OECD, 2014[78]). These trends are echoed by World Bank data that shows the business regulatory environment improved more in 2012 than during the six preceding years (OECD, 2014[78]). In 2012, Greece enacted the Law on Better Regulation that states basic principles for regulation, such as efficiency and transparency. The law, for example, makes it compulsory to conduct a Regulatory Impact Assessment (RIA) for every primary law as well as an *ex post* impact assessment of the regulations' costs, benefits and impacts (Box 4.32). Draft regulations are published on a portal (www.opengov.gr) to facilitate public consultation.

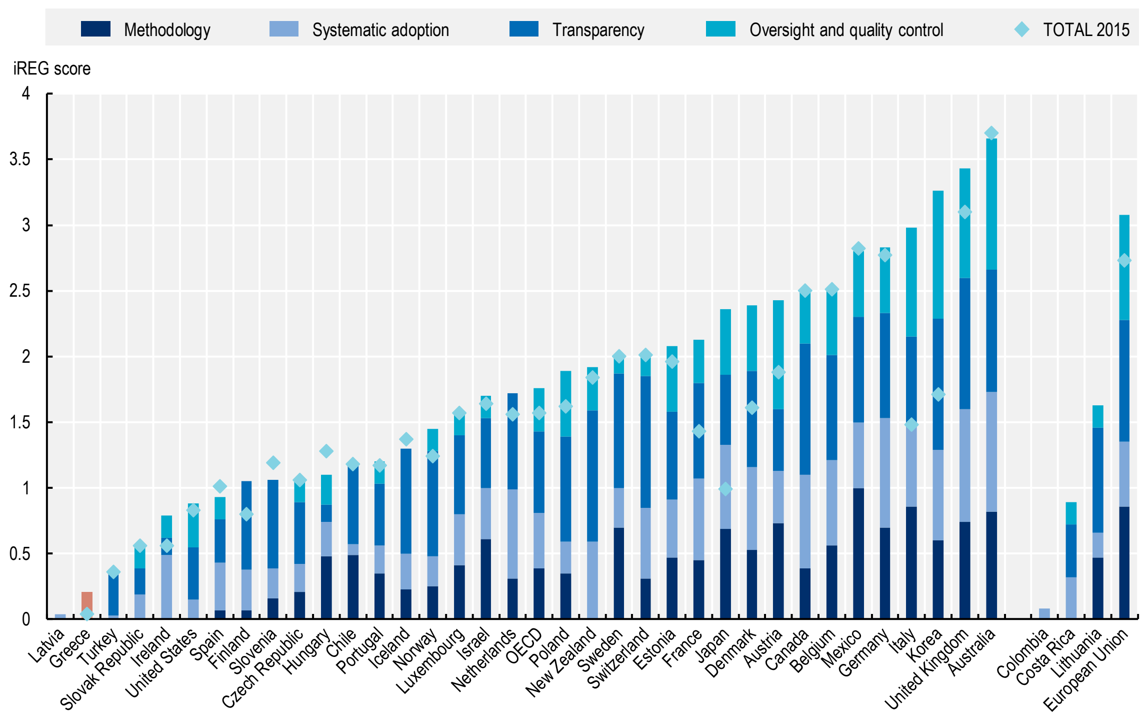
Box 4.32. Law on Better Regulation of 2012

The Law on Better Regulation adopted in February 2012 states the principles of Better Regulation – including necessity, proportionality, effectiveness and efficiency of the regulation, transparency, accessibility and the avoidance of controversial regulations – and mandates the regulator to comply with these principles. In addition to *ex ante* RIA for every legislative draft or amendment to existing regulations, it requires an *ex post* impact assessment of the regulation's costs, benefits and impacts. This must take place after three years and no later than five years after implementation. It also defines steps and deadlines of public consultation procedures for new legislation, describes procedures for the transposition of the EU law and reinforces the institutional framework for a regulatory policy through the establishment of the Office for the Support of Better Regulation in the General Secretariat of the government.

Source: OECD (2015[107]), *OECD Regulatory Policy Outlook 2015*, https://dx.doi.org/10.1787/9789264238770-en.

However, major challenges persist in fully implementing the Law on Better Regulation (OECD, 2015[107]). Public consultations, for example, are usually informal and it is unclear how comments received are considered. RIA quality is often poor due to the limited time to develop new drafts and *ex post* reviews of existing regulations, required by the law, have also rarely been used (OECD, 2018[5]). The OECD has also identified that a major challenge for implementing the Better Regulation Law is the lack of budget and appropriate skills within the Better Regulation Office of the General Secretariat of the Government (BRO), which is responsible for the co-ordination of regulatory policy and oversight of the quality of RIAs, amongst others (OECD, 2018[5]). To address this, the Ministry of Administrative Reconstruction is beginning an extensive evaluation of existing legislation, with a view to curtailing the large “stock” of regulations (OECD, 2018[5]).

Figure 4.15. Composite indicators: *Ex post* evaluation for primary laws, 2018



Note: Data for OECD countries are based on the 34 countries that were OECD members in 2014 and the EU. Data on new OECD member and accession countries in 2017 include Colombia, Costa Rica, Latvia and Lithuania. The more regulatory practices as advocated in the 2012 Recommendation a country has implemented, the higher its iREG score.
Source: OECD (2018[108]), *OECD Regulatory Policy Outlook 2018*, https://dx.doi.org/10.1787/9789264303072-en.

Greece has also improved its public procurement regulation. Law 4412/2016 on public procurement intends to solve a longstanding problem of fragmented legal framework where procurement regulation was divided horizontally between sectors and vertically between levels of government (ICLG, 2019[109]). This law has codified in a single act numerous legal acts and its provisions apply to all type of contracts regardless of their estimated value and to all type of contracting authorities irrespective of their legal status. The law also implements EU Procurement Directives in one single legislative act. One of the key significant changes introduced by this law is the overhaul of rules regarding review proceedings as well as the execution and monitoring of public contracts (ICLG, 2019[109]). However, by the end of 2018 – two years after its introduction – the law had already been amended, modified or added to through specific articles and paragraphs more than 25 times (ICLG, 2019[109]). There is also a generalised criticism that the law has also made public tenders more rather than less complex. The limited capacity of local governments to respond to the requirements of the new legal framework for public procurement has impacted municipal public investment (Greek Government, 2019[28]).

While Law 4412/2016 has been an important further step, there is still some room for improvement and greater simplification, in particular merging stages of the bidding process (dead times), from the project's announcement to its contracting. It is also important to identify the possibility of shortening the time requested for pre-approvals from the deconcentrated administration, which usually leads to a 1-2-month delay for technical projects (e.g. the process of approval of environmental licensing of projects and activities). For further simplification, when the law is amended, a transitional period could be given to correct the standard tender documents. Furthermore, legislation is still not geared towards the electronic monitoring of public contracts. A number of important issues that still need to be addressed include, among others: the electronic monitoring of awarded contracts as well as the electronic recording of onsite supervision results ("diary of works"), contract annulments, contract terminations and legal sanctions.

The Greek government has also put effort into improving regulations to attract businesses. Over the last decade, Greece undertook extensive legislative reforms to reduce administrative burdens on SMEs and improve the insolvency regime, currently in line with the OECD median level (OECD, 2019[110]). In addition, in 2018, the country established the general business registry's electronic one-stop-shop that offers entrepreneurs the possibility to fast track their company registration upon presentation of the required data and documents. This has led to a 70% reduction in registration costs (OECD, 2019[110]).

Further regulatory simplification is needed to improve regional development policy outcomes

Despite this progress, Greece's legal framework is considered complicated and strict, with an overabundance of laws. Policymakers at all levels of government identify regulatory burden as one of the main obstacles to effective and efficient use of regional development funds. Greece, as well as all EU countries, needs to deal with administrative and regulatory burden arising from EU legislation as well as the one stemming from its own national legislation. While the EU has made administrative simplification a key priority for the next programming period, these efforts need to be echoed by the Greek national government.

The administrative burden is particularly challenging for subnational governments, especially small municipalities, which often lack the adequate capacities to cope with legal requirements. Regions and municipalities often face lengthy administrative and regulatory procedures for legal checks and project approval. All municipal and regional authority decisions must be legally vetted by the state decentralised authorities, which often are viewed as a source of considerable delays and bureaucratic impediments (Council of Europe, 2017[12]). Then, municipalities often need to wait 1-2 years after developing a proposal to receive the necessary licences for public works. For example, some projects require authorisation from the Ministry of Archaeology and the Ministry of Forestry, even in wetlands with no forest. Other examples include delays in managing streets, for which authorisation is often required from the municipal authorities, the regions and central government's Ministry of the Environment (Council of Europe, 2017[12]). It has been documented that, in some cases, municipalities could not get building permits for a new hotel because of the burdensome and relatively unaccountable procedures (Council of Europe, 2017[12]). The municipality of Thessaloniki reports having to obtain 33 authorising signatures from the national government in order to install a sculpture that is 5 metres from the coastline.

Regulatory burden also affects Greek businesses, limiting the contribution of the private sector to stimulating economic activity, creating jobs and raising productivity. In 2014, an OECD project that measured and identified options for reducing administrative burdens in 13 areas ranging from company law to public procurement, tax law, and agriculture and fisheries, estimated that the cost to businesses of administrative burdens was about EUR 3.28 billion annually (OECD, 2014[78]). The study provides sector-specific concrete recommendations on the 13 areas to reduce administrative burden, as well as general recommendations focused on broader regulatory reforms. For example, for agriculture, information obligations represent a total administrative cost of EUR 315.85 million to operators in Greece. Of this, EUR 289.35 million (92%) were classified as administrative burdens. Some of the concrete recommendations to reduce administrative costs and burdens in agriculture include reducing the supporting documents required for Rural Development Programme applications or improving Rural Development Programme forms and templates by applying form design techniques to help applicants understand how to complete more of the form without expert help.

Box 4.33. Measurement and reduction of administrative burdens in Greece

In 2014, the OECD engaged with the Greek Ministry of Administrative Reform and e-government in a project to measure and identify options for reducing administrative burdens in 13 areas. Administrative burdens, stemming from 20% of laws and regulations in the sectors identified as the most burdensome and/or irritating, were quantified. The total administrative burdens identified were EUR 3.28 billion and administrative costs EUR 4.08 billion annually. Over three-quarters of the administrative burdens measured accrue in three of the priority areas: tax (VAT), company law and annual accounts, and public procurement.

The report makes 86 specific recommendations to reduce unnecessary administrative burdens and/or irritation factors for businesses in Greece. It also provides some more general recommendations that stress the need to focus on broader regulatory reforms which include setting up a proper institutional framework to support regulatory quality and better implementation of the 2012 Law on Better Regulation. These general recommendations include:

- Broadening and widening administrative burden reduction projects on other costs than just the administrative ones and citizens and public authorities.
- Continuing the process of quantifying administrative burdens; cautiously, however, and with efficiency in mind. Qualitative methods should complement the quantitative ones, to better target efforts.
- Strengthening the institutional structures supporting burden reduction, moving to a more bottom-up approach, providing sufficient political support and improving co-ordination through the establishment of a high-level committee.
- Developing guidance on the most effective and efficient means of reducing regulatory burdens including licence/permit arrangements, minimising reporting and record-keeping requirements, monitoring/testing requirements and enforcement and inspections procedures.
- Developing an evaluation strategy for burden reduction that also focus on other outcomes and effects for society than pure administrative burden reduction.
- Moving from administrative burden reduction to other broader approaches to reforming regulation, including programmed reviews of existing regulations.

Source: OECD (2014[78]), *Measurement and Reduction of Administrative Burdens in Greece: An Overview of 13 Sectors*, https://dx.doi.org/10.1787/9789264213524-en.

The Council of Europe has documented administrative and regulatory burdens and has provided specific recommendations that would help Greece in achieving a more efficient system. Among these, the council suggests that Greece could introduce more effective and better-defined time limits into legal bases that might be accompanied by “silent-is-consent” rules, implying that in the event of non-response by an authority, the applicant can assume the request was authorised. This specific recommendation might accelerate some procedures preventing subnational governments from waiting for responses and approvals from the central entities (Council of Europe, 2017[12]). Administrative simplification is also at the core of the OECD *Council Recommendation on Regulatory Policy and Governance* stating that countries should “conduct systematic programme reviews of the stock of significant regulation against clearly defined policy goals, including consideration of costs and benefits, to ensure that regulations remain up-to-date, cost-justified, cost-effective and consistent, and deliver the intended policy objectives”.

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Notes

[1] Deconcentration refers to the delegation of central government tasks to non-elected central government units based in regions. Deconcentrated state services represent the central government at the territorial level and are responsible for implementing national policies at the regional and local levels, ensuring that they are in line with subnational government policies. Deconcentrated state services may also provide national public services at the territorial level.

[2] Values from the Greek Tourism Organisation. Numbers can vary with size definition.

[3] This has been set up in view of line ministries being responsible for sectoral policies and are represented *vis à vis* ROP MAs by the Executive Units (see ESF inclusion policies, culture, education infrastructure, health, etc.) but not regarding planning of specific regional policy.

[4] In 2010, the EC, the European Central Bank (ECB) and the International Monetary Fund (IMF), colloquially called the European troika, agreed with the Greek government to a three-year financial aid programme that was outlined in an MoU. A second MoU was signed in 2012 and the third was signed in 2015. The third and last Economic Adjustment Programme expired in August 2018.

[5] For midterm regional planning, a four-year operational programme is elaborated. The purpose of the four-year regional OPs is to monitor the implementation of the Spatial and Development Planning at the regional level and to contribute to planning feedback and revision, in the context of the existing conditions. The four-year plan is set out annually in an Annual Action Plan. The technical programme is part of the Annual Action Plan. The annual budget for each year as well as the annual technical programme must be in line with the guidelines and assumptions of the relevant Annual Action Plan, as well as with the four-year OP.

[6] These are still under discussion at the time of drafting this report.

[7] Civic engagement is one dimension of citizen well-being and is a composite indicator based on voter turnout and stakeholder engagement for developing regulations.

OECD Territorial Reviews

Regional Policy for Greece Post-2020

The Territorial Review of Greece offers analysis and policy guidance to strengthen regional development and well-being. It examines Greece's regional development framework, the EU Cohesion policy and multilevel governance in Greece. Since the global financial crisis, Greece has undertaken an impressive number of structural reforms. Recovery initiated in 2017 but the current COVID-19 pandemic is slowing down Greece's efforts. The country is now facing a number of strategic development priorities including fostering digitalisation, improving entrepreneurial and business ecosystems, and addressing environmental challenges. These new priorities must also tackle existing social challenges and mitigate rising inequalities. The Review examines a range of policies that have the potential to propel inclusive growth in Greece's regions and improve the quality of life for their residents. It stresses that policies for economic growth, social capital and environmental sustainability are more effective when they recognise the different economic and social realities where people live and work. OECD work illustrates the importance to align place based regional development strategies with sectoral policies (support for private investment, infrastructure and human capital policies) in each place to generate multiplier effects. To fulfil this task, Greece will need to continue advancing the reform of its institutional and fiscal multi-level governance system.

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