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BETTER POLICIES FOR BETTER LIVES

LAUNCH VERSION

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This *Survey* is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Greece were reviewed by the Committee on 18 February 2020. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 29 June 2020.

The Secretariat's draft report was prepared for the Committee by Mauro Pisu and Tim Bulman, with contributions from Tatyana Teplova, under the supervision of Sebastian Barnes. Statistical research assistance was provided by Béatrice Guérard and editorial assistance by Heloise Wickramanayake and Michelle Ortiz.

The previous *Survey* of Greece was issued in April 2018.

Information about the latest as well as previous Surveys and more information about how *Surveys* are prepared is available at http://www.oecd.org/eco/surveys.

Basic statistics of Greece, 2019

(Numbers in parentheses refer to the OECD average)[1]

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million, 2018)	10.7		Population density per km² (2018)	83.3	(37.8)
Under 15 (%, 2018)	14.1	(17.8)	Life expectancy (years, 2018)	81.3	(80.2)
Over 65 (%, 2018)	21.7	(17.1)	Men (2018)	78.8	(77.6)
Foreign born (%, 2017)	6.0		Women (2018)	83.9	(82.8)
Latest 5-year average growth (%)	-0.4	(0.6)	Latest general election	July-2019	
ECONOMY					
Gross domestic product (GDP)			Value added shares (%, 2018)		
In current prices (billion USD)	209.9		Agriculture, forestry and fishing	4.3	(2.5)
In current prices (billion EUR)	187.5		Industry including construction	17.5	(27.3)
Latest 5-year average real growth (%)	0.9	(2.2)	Services	78.2	(70.2)
Per capita (000 USD PPP)	30.4	(46.4)			
GENERAL GOVERNMENT					
Per cent of GDP					
Expenditure (OECD: 2018)	46.2	(40.3)	Gross financial debt (OECD: 2017)	200.6	(109.0)
Revenue (OECD: 2018)	47.7	(37.3)	Net financial debt (OECD: 2017)	145.2	(69.1)
EXTERNAL ACCOUNTS					
Exchange rate (EUR per USD)	0.89		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	0.56		Mineral fuels, lubricants and related materials	31.2	
In per cent of GDP			Manufactured goods	14.9	
Exports of goods and services	37.2	(54.2)	Food and live animals	14.1	
Imports of goods and services	37.2	(50.4)	Main imports (% of total merchandise imports)		
Current account balance	-1.4	(0.3)	Mineral fuels, lubricants and related materials	26.0	
Net international investment position	-151.1		Machinery and transport equipment	18.4	
			Chemicals and related products, n.e.s.	15.5	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate (aged 15 and over, %)	43.0	(57.5)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	17.3	(5.4)
Men	51.7	(65.6)	Youth (aged 15-24, %)	35.2	(11.7)
Women	34.9	(49.9)	Long-term unemployed (1 year and over, %, 2018)	13.6	(1.4)
Participation rate (aged 15 and over, %)	51.9	(60.5)	Tertiary educational attainment (aged 25-64, %, 2018)	31.7	(36.9)
Average hours worked per year	1 956	(1734)	Gross domestic expenditure on R&D (% of GDP, 2017)	1.1	(2.6)
ENVIRONMENT					
Total primary energy supply per capita (toe, 2018)	2.1	(4.1)	CO2 emissions from fuel combustion per capita (tonnes, 2018)	5.7	(8.9)
Renewables (%, 2018)	13.0	(10.5)	Water abstractions per capita (1 000 m³, 2018)	1.0	
Exposure to air pollution (more than 10 g/m³ of PM 2.5, % of population, 2017)	99.6	(58.7)	Municipal waste per capita (tonnes, 2017, OECD: 2018)	0.5	(0.5)
SOCIETY					
Income inequality (Gini coefficient, 2017, OECD: latest available)	0.319	(0.322)	Education outcomes (PISA score, 2018)		
Relative poverty rate (%, 2017, OECD: 2016)	12.6	(11.6)	Reading	457	(489)
Median gross household income (000 USD PPP, 2017, OECD: 2016)	13.7	(23.9)	Mathematics	451	(492)
Public and private spending (% of GDP)			Science	452	(491)
Health care (2018)	7.8	(8.8)	Share of women in parliament (%)	20.7	(30.7)
Pensions (2015)	17.0	(8.5)	Net official development assistance (% of GNI, 2017)	0.2	(0.4)
Education (% of GNI, 2017)	3.1	(4.5)			

1. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Executive summary

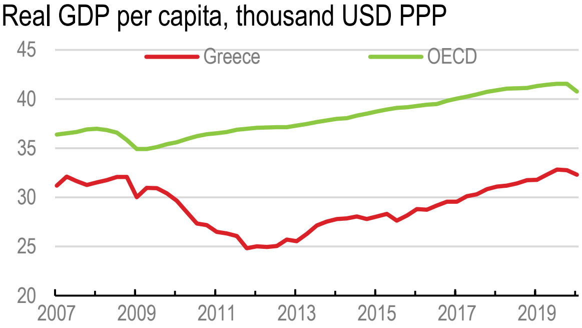
The COVID-19 shock abruptly interrupts Greece's recovery

Greece has responded swiftly to the pandemic and has effectively limited infections, but the economy has been hit hard. As in other countries, containment measures, travel restrictions, social distancing and high uncertainty have led to a temporary but extraordinary drop in production and large loss of tourism demand and employment (Table 1). The government has responded with substantial packages to strengthen the health system, buttress incomes and liquidity, and support and restart sectors most affected by the shock, such as tourism. To reinvigorate the recovery, the government has set out an ambitious reform programme focused on boosting growth and investment.

Before the pandemic hit, the Greek economy had been expanding for over three years at just below 2% average annual growth. Structural reforms, high primary budget surpluses and debt measures by European partners had sustained Greece's recovery and rebuilt confidence (Figure 1). Rising goods and tourism exports had supported growth and jobs, reducing unemployment and buttressing private consumption.

Figure 1. GDP per capita has recovered from the crisis

Real GDP per capita, thousand USD PPP



Source: OECD *Economic Outlook* database.

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Table 1. The COVID-19 pandemic has derailed the recovery

(Annual growth rates, %, unless specified)

Double-hit scenario	**2019**	**2020**	**2021**
Gross domestic product	1.9	-9.8	2.3
Total consumption	1.0	-6.5	3.0
Gross fixed capital formation	4.5	-17.3	11.0
Exports of goods and services	4.9	-13.6	-1.3
Imports of goods and services	2.8	-10.8	0.5
Employment	2.2	-3.8	-1.8
Harmonised consumer price index	0.5	0.1	0.0
Current account balance (% of GDP)	-1.4	-0.6	-0.4
Single-hit scenario	**2019**	**2020**	**2021**
Gross domestic product	1.9	-8.0	4.5
Total consumption	1.0	-5.0	4.6
Gross fixed capital formation	4.5	-14.3	7.8
Exports of goods and services	4.9	-11.1	8.7
Imports of goods and services	2.8	-8.2	9.7
Employment	2.2	-3.5	-1.0
Harmonised consumer price index	0.5	0.2	0.4
Current account balance (% of GDP)	-1.4	-0.6	-0.6

Source: OECD *Economic Outlook 107* database. The "single-hit" scenario assumes that the pandemic is brought under control before the summer of 2020; the "double-hit" scenario assumes a second wave of contagion and lockdown measures late in 2020.

In recent years, Greece has exceeded its fiscal targets and the current account deficit has narrowed. Increased revenues and better control of expenditure contributed, before the pandemic outbreak, to sustained and substantial primary budget surpluses, rebuilding fiscal credibility. Greece has successfully returned to the international bond market and rating agencies have raised its sovereign rating. The economy has become more open, although the COVID-19 shock is projected to hinder export growth.

The public debt ratio is projected to rise from already high levels due to the extraordinary fall in nominal GDP and, to a lesser extent, fiscal support following the COVID-19 shock. As the economy resumes its recovery, and the budget shifts gradually back to a primary surplus, the public debt ratio is projected to start declining again, helped by low interest rates. The European Central Bank's decision to include Greek government securities in its asset purchase programmes have contained bond yields below the levels of mid-2019.

Past labour and product market reforms have improved Greece's price competitiveness, and will stand Greece in good stead when domestic and foreign demand recover. In early 2019, Greece increased the minimum wage for the first time in many years and ended the subminimum wage. This boosted incomes without any obvious negative employment effects prior to the COVID-19 shock. Following the COVID-19 shock, the 2020 review of minimum wages has been deferred to early 2021. Mechanisms to extend sectoral collective agreements to non-signatory workplaces have been reintroduced, while conditional opt-out arrangements were introduced in late 2019.

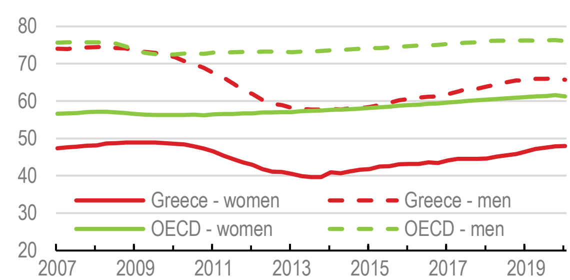
The COVID-19 shock adds to Greece's challenges

The COVID-19 shock risks exacerbating Greece's long-standing labour market challenges. The employment rate has increased over the past six years but is still one of the lowest among OECD countries and wages are low (Figure 2). Women and the young continue suffering from low employment rates. The dearth of child and elderly care centres restrict women's job opportunities as caregiving responsibilities often fall on them. The lack of prospects has pushed many talented young people to emigrate, lowering the country's entrepreneurial and innovation potential. Difficulties of integrating migrants into the labour market and education system together with limited support from other EU countries to deal with the large influx of asylum seekers compound these challenges. The COVID-19 crisis risks aggravating these problems as job growth has collapsed and a large number of discouraged job-seekers have left the labour force.

Poverty and material deprivation, while improving, are high, especially among the young and families (Figure 3). Following past reforms, Greece's social protection system was much better prepared to deal with a large shock than at the onset of the global financial crisis. The government's temporary income support measures have buffered household incomes from the COVID-19 shock. However, despite improvements in recent years, poverty rates among the young and families with children remain high while retirees fare significantly better. This and the large impact of the COVID-19 shock on the working age population and the young further underline the need to address the intergenerational imbalances of the social protection system. Pension payments as a share of GDP remain among the highest across OECD countries. Policy changes in mid-2019 will raise pension spending further over the short term, even as earlier extensive reforms will significantly reduce its weight on the economy over the medium- and long-term. The COVID-19 shock makes the need to continue modernising Greece's social protection system manifest so as to better target anti-poverty programmes to people in need and significantly strengthen retraining schemes.

Figure 2. Employment rates are low, especially for women

Employment rates, % of working age population, s.a.



Source: OECD *Main Economic Indicators* database.

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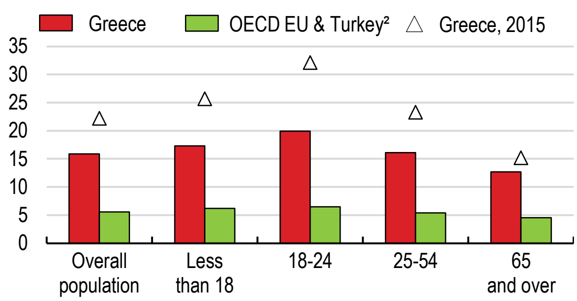
Economic activity, though shifting gradually to tradable sectors, is still concentrated in traditional and low-innovation sectors, contributing to low productivity growth. Small and low productivity firms continue to play an outsized role in the economy. Despite recent progress, such as the digitalisation of the public administration, high tax burdens, red tape, low quality regulations and a slow justice system mar the business environment, discouraging domestic and foreign investment and preventing businesses from thriving. Banks' non-performing loans (NPLs) were falling before the COVID-19 shock but they are still high, curtailing banks' capacity to finance investment. The severe liquidity constraints many firms are facing following the COVID-19 shock risks increasing NPLs further. The government has introduced temporary credit lines and guarantees to address this challenge. Nonetheless, it remains urgent to durably lower NPLs on banks' balance sheets.

People in Greece have good health but environmental quality and housing detract from people's overall life satisfaction. Air pollution in metropolitan areas is high, exposing a larger share of the population than most OECD countries to health risks. Waste treatment is over-reliant on landfills and illegal dumping is still common.

Figure 3. Poverty rates are highest among the young

Percent of population groups living in households reporting severe material deprivation, 2019 or latest year



Source: Eurostat.

StatLink https://doi.org/10.1787/888934153825

Ambitious and comprehensive reforms are key to overcoming the COVID-19 shock and durably raising well-being

The pandemic makes the short-term outlook highly uncertain. The government's COVID-19 responses announced to date will support incomes and firms into 2021. A second outbreak would further curb tourism and service demand, and call for extending the government's support. Aiding businesses and their workers to upgrade their activities and skills and to shift to sectors that promise better opportunities will accelerate the recovery and make the economy and society more resilient.

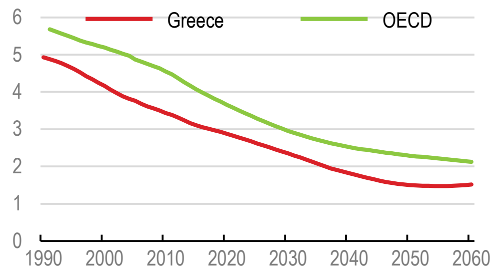
Once the COVID-19 emergency recedes, Greece can again focus on a programme of medium-term transformation to reinvigorate its recovery with stronger and inclusive growth. The government is working on a reform programme to achieve four policy objectives: protect the economy from the COVID-19 shock; achieve a sustained economic recovery; raise long-term growth; and improve inclusiveness. Consistent with this programme, this Survey puts forward an ambitious reform package to support stronger employment, productivity and investment and raise well-being. This package includes measures to encourage and help more people find jobs, boost innovation while lowering and sharing more fairly the burden of taxation and improving the public administration. These measures would increase annual trend GDP growth by 1 percentage point by 2030. Higher growth and a sustained primary budget surplus of 2.2% of GDP would ensure the debt-to-GDP ratio declines steadily into the long term.

Repair of the banking system needs to accelerate. The government is implementing a new asset protection scheme (Hercules) to help banks to dispose of the large stock of non-performing loans. The plan is expected to lower banks' non-performing loans significantly over the next two years. However, the COVID-19 shock has slowed progress, and further action is needed to address the large stock of non-performing loans that will remain and improve the quality of banks' capital.

Increasing productivity growth is key to raising living standards and offsetting the large negative effect of demographics (Figure 4). Raising productivity growth will require additional efforts to reduce barriers to competition, especially in professional services, including notaries, lawyers and retail sales of medicines, and increasing the efficiency and effectiveness of the public administration (including the justice system). This would contribute to enhance the rule of law, thus reducing the costs and uncertainties of doing business in Greece, attracting more foreign direct investment, and helping to rebuild trust in public institutions. The government's efforts to reduce red tape, raise accountability and efficiency in the public sector, including through the use of digital technologies, are welcome, and demonstrated their effectiveness during the COVID-19 shutdown period. Efforts to prevent and prosecute corruption need to be pursued following international best practices. The recent establishment of the independent National Transparency Authority goes in the right direction.

Figure 4. The population is ageing fast

Ratio of the working-age population (15-64 years) to the population aged 65 years and over)



Source: Eurostat, OECD *National Accounts* and United Nations *World Population Prospects* 2019 databases.

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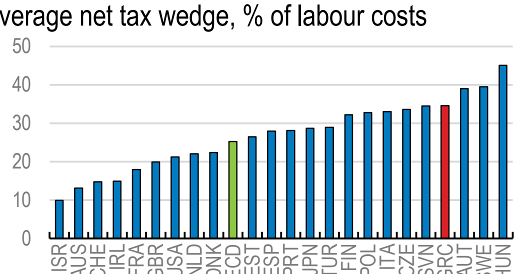
The quality of public spending needs to further increase along with the fairness and efficiency of the tax system. Further improving the design and implementation of effective spending reviews and ensuring the results are available early in the budget cycle would help reallocate resources to more effective public programmes and public investment. Further broadening of the tax base, by continuing to improve voluntary tax compliance, and fighting tax evasion are key to lowering high statutory tax rates, making the tax system fairer and safeguarding fiscal credibility (Figure 5). Reducing the high employers' social security contribution rates, especially at low incomes, would support employment and reduce informality.

Figure 5. The labour income tax wedge is high

Average net tax wedge, % of labour costs



Note: At 50% of average wage, one-earner married couple without children, 2018 policies.
Source: Joint EU Commission and OECD, "OECD Tax Wedge and Effective Tax Rates on Labour" (VS/2015/042, DI150030).

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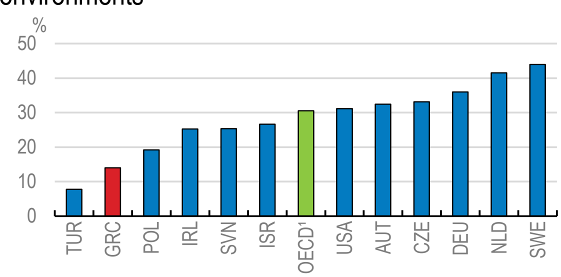
Strengthening active labour market programmes, education and professional training would improve the workforce's ability to adapt to the COVID-19 shock and to a changing labour market. Workers' skills often do not match employers' needs, while those out of work are at risk of long-term unemployment (Figure 6). Boosting the capacity of public employment services would improve job matching and jobseekers' access to skill training. Public works programmes help the very-long term unemployed to maintain work habits but there is ample scope to enhance skills so as to improve enrolees' job prospects. Implementing the active labour market and social inclusion pillars of the Guaranteed Minimum Income scheme would improve beneficiaries' chances of sustained gains in income through work. Ensuring firms can use promptly and effectively, if eligible, the newly introduced opt-out clauses in sectoral collective agreements would improve the link between wages and productivity and give workplaces more flexibility while supporting social dialogue.

Figure 6. Adult skills need to be upgraded

Share of 15-65 year olds scoring well (at least proficiency level 2) in problem solving in technology-rich environments



1. Average of available OECD countries
Source: OECD Programme for the International Assessment of Adult Competencies (PIAAC), 2012, 2015.

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Education is valued highly in Greece, but it translates poorly into readiness for work, and a low share of adults engage in lifelong learning. Overdue steps are being taken to improve the quality of school education, by providing teachers with some autonomy and appraising performance. Regularising the large temporary teacher workforce with contracts that reward performance and provide career prospects, while avoiding the rigidities of current contracts, would raise teachers' morale and teaching quality. Reforms to post-secondary education can offer the prospect of improving vocational education and providing adults with access to lifelong learning and skill training. Developing adults' digital skills is particularly urgent, given the looming risk to jobs from digitalisation and automation.

MAIN POLICY FINDINGS	KEY RECOMMENDATIONS
Responding to the COVID-19 shock while promoting sustained and inclusive growth	
The COVID-19 pandemic has set back Greece's recovery. The government has responded swiftly with temporary measures to support households' incomes and firms' liquidity. The COVID-19 crisis adds to the need to improve the efficient reallocation of resources to boost productivity and ensure a durable recovery. Over recent years fiscal consolidation has improved fiscal credibility, supported by progress in fighting tax evasion and improved tax administration. However, statutory tax rates are high while the tax base, despite progress, remains narrow. The government has reduced tax rates and plans further reductions.	Extend exceptional fiscal support measures as needed based on epidemiological and economic developments while ensuring they do not hinder the reallocation of resources towards firms and sectors with better growth prospects. Continue to fight evasion and enlarge the tax base so as to lower statutory tax rates.
The quality of public spending remains low despite recent improvements. Public investment has been cut and programme evaluations are still little used. The government plans to use spending reviews more regularly and to introduce performance budgeting.	Boost public investment to support growth and environmental sustainability, including in public transport, innovation and waste management, based on cost-benefit analysis. Ensure results of spending reviews are available early in the budget cycle.
The efficiency and capacity of the public administration is improving but remains weak in many areas, undermining the quality of public services, imposing costs on citizens and firms.	Pursue plans to accelerate the digitalisation of the public administration.
Banks' non-performing loans (NPLs) have fallen but they are still high by historical and international standards, curtailing banks' capacity to lend. A large share of banks' capital consists of deferred tax credits. The Hercules asset protection scheme is expected to reduce substantially the stock of NPLs, but a large volume will remain. The insolvency system is highly fragmented, resulting in a large number of strategic defaulters and slowing the resolution of NPLs.	Swiftly implement the Hercules scheme to dispose of non-performing loans from bank balance sheets. Urgently design and implement a strategy to address the deferred tax credits and bad loans that will remain on banks' balance sheets. Unify insolvency proceedings, ensure a better balance between the rights of creditors and debtors and accelerate enforcement of collateral.
A large share of the urban population is exposed to dangerous levels of air pollution, detracting from their well being. Fossil-fuel support measures are high and amount to about 25% of energy taxes. Effective tax rates on CO_2 emissions from energy use are high compared with other OECD countries but they vary across fuels and uses, blurring price signals.	Adopt and implement a national air pollution control programme and improve the air quality monitoring system. Review tax variation across fuels to provide a consistent carbon price signal. Review and abolish environmental harmful subsidies with outdated objectives or that are most harmful to the environment.
Major reforms over 2010-2016 significantly improved the sustainability of the pension system but spending on pensions remains high. Changes in 2019 will increase pension spending in the short term. Despite recent improvements, poverty rates among the young and family with children remain high, highlighting the intergenerational inequities of the social protection system.	Ensure pension spending does not crowd out other, better-targeted, social programmes and public investment.
Promoting productivity and innovation	
R&D spending has increased, driven by businesses but continues to be low. Despite increased government support, research and innovation policies are complex and fragmented, detracting from the general research environment. Research productivity is low and links between universities and industry are underdeveloped. Difficulties in obtaining public grants or subsidies are one the most important hurdles for innovative activities reported by Greek firms.	Consolidate agencies responsible for research and innovation policies. Simplify access to R&D grants and tax incentives.
Product market reforms have progressed in some areas. Administrative burdens on start-ups are among the lightest in OECD countries and barriers to competition in network services are close to the OECD average. In some other areas, such as professional services, regulatory barriers still restrict competition. Regulatory Impact Assessments are still little used.	Accelerate the codification of existing laws and regulations. Lower product market regulation in professional services, especially for notaries, lawyers, civil engineers and architects, and retail distribution.
The court system is slow and overburdened with a backlog of cases. Digital technologies, though progressing, are still little used and courts' performance indicators are lacking. Alternative dispute resolution mechanisms are underused because of lack of awareness and trust.	Improve judicial efficiency through more training of staff and judges and using courts' performance indicators. Better communicate the availability and benefits of alternative dispute resolution mechanisms.
A more inclusive and better performing labour market	
High taxes and social insurance contributions stifle employment and discourage formalisation, especially for low-income workers and vulnerable groups. Some recent policy changes may widen differences in effective tax rates between employment types.	Reduce social insurance contribution rates, especially at low incomes, while aligning taxation across employment types.

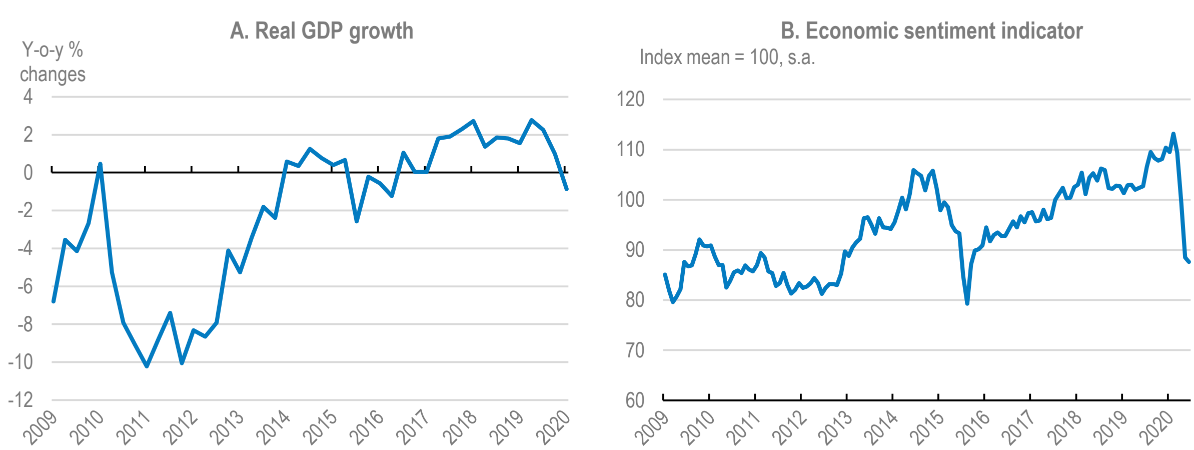
The Guaranteed Minimum Income and other social protection reforms are reducing the depth of poverty but poverty rates remain high, including for those in work.	Increase Guaranteed Minimum Income transfers, taper them more gradually and introduce in-work benefits for low-wage workers.
Education is highly valued in Greece, but many secondary school students lack basic skills. Reforms are developing schools' autonomy and quality assurance but teachers still lack opportunities to raise their skills or recognition for their performance.	Progressively move the teacher workforce onto longer-term contracts that support and reward performance and avoid the rigidity of the existing permanent contracts.
Unemployment is falling but remains high while employers often cannot find workers with the skills they need. Job-search and training programmes provide little support for re-skilling and matching jobseekers with jobs.	Employ more specialised counsellors and profiling tools in public employment services to significantly improve job-search and training support, linking them better with private job-search agencies.
Policies to support families and facilities for child and elderly care are underdeveloped. Caregiving obligations impede many from working, contributing to low fertility rates.	Boost policies to support families, prioritising expanded access to quality care for children and the elderly.

1 Key Policy Insights

Until the onset of the COVID-19 pandemic, structural reforms, improved competitiveness and fiscal credibility contributed to rising activity and incomes (Figure 1.1, Panel A) while confidence had been increasing (Figure 1.1, Panel B), reaching the highest levels since the great financial crisis. Job creation was reducing unemployment and buttressing consumption, and, along with the guaranteed minimum income and family support schemes, contributing to lower poverty. Rating agencies have upgraded Greece's sovereign rating and outlook, and Greece has successfully returned to the international bond market. In early 2020, sovereign bond yields reached their lowest level since adopting the Euro.

The external shock from the global COVID-19 pandemic sets back Greece's recovery. Containment measures temporarily shut much of production and commercial activity, while travel restrictions and uncertainty have undercut tourism. This has led to large falls in exports and loss of incomes, and is unwinding recent years' employment gains. The government's effective response to the health crisis and economic support measures are rightly cushioning the shock, supporting firms and incomes. However, the extraordinary drop in nominal GDP, along with fiscal support measures and lower revenues, will shift the budget from a substantial primary surplus to deficit and raise the already high public debt ratio.

Figure 1.1. The COVID-19 pandemic has set back Greece's economic recovery

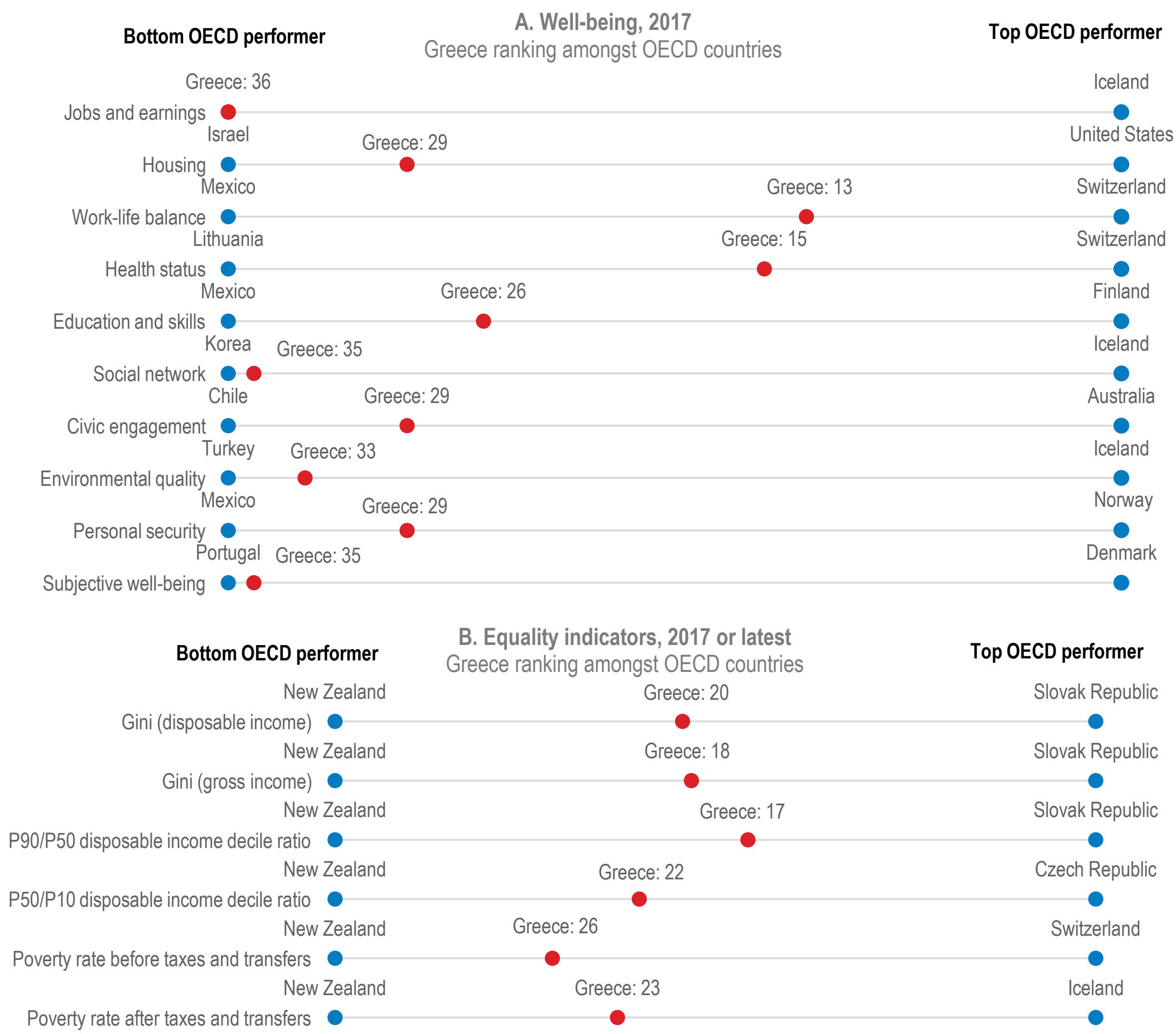


Source: OECD *Economic Outlook* database; and Eurostat.

StatLink https://doi.org/10.1787/888934153901

The COVID-19 shock comes as Greece continues to heal the economic and social scars left by the global financial crisis, and adds to its long-standing challenges. Just prior to the COVID-19 shock, real GDP was more than 20% below its pre-crisis peak. OECD models suggest long-term growth prospects remain modest, mostly on account of demographic trends and low productivity growth. Business dynamism is weak, and small and low productivity firms account for a much larger share of employment and output than in other OECD countries. Economic activity, though shifting gradually towards tradable sectors, is still concentrated in traditional and low-innovation sectors. Prior to the COVID-19 shock, banks' health had improved but the stock of banks' non-performing loans was still large and a source of vulnerabilities for investment and the recovery. The employment rate, though increasing, remained one of the lowest across OECD countries. The dearth of opportunities has pushed many young (often highly educated) people to emigrate, accelerating the ageing of the population and reducing the country's entrepreneurship and innovation potential.

Figure 1.2. Greece lags other OECD countries in many well-being and equality indicators



Source: OECD *Better Life Index* 2017; and OECD *Income and Distribution* database.

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The COVID-19 pandemic has not affected the health of Greece's population as much as in other countries as infection rates have remained low by international standards. Greeks good health and a good work-life balance contribute to their wellbeing (Figure 1.2). However, Greeks fare worse than many other OECD citizens across several well-being and equality indicators (Figure 1.2). The quality of the environment is one of the country's main assets and sustains the tourism industry but urgent efforts are needed to improve air quality and waste management as well as lowering water extraction in some critical areas to ensure higher economic growth translates to higher welfare and is environmentally sustainable. Poverty rates remain high, especially among the young, posing questions about the intergenerational fairness of the social protection system. The employment rate is still low and the quality of working conditions in many jobs is poor.

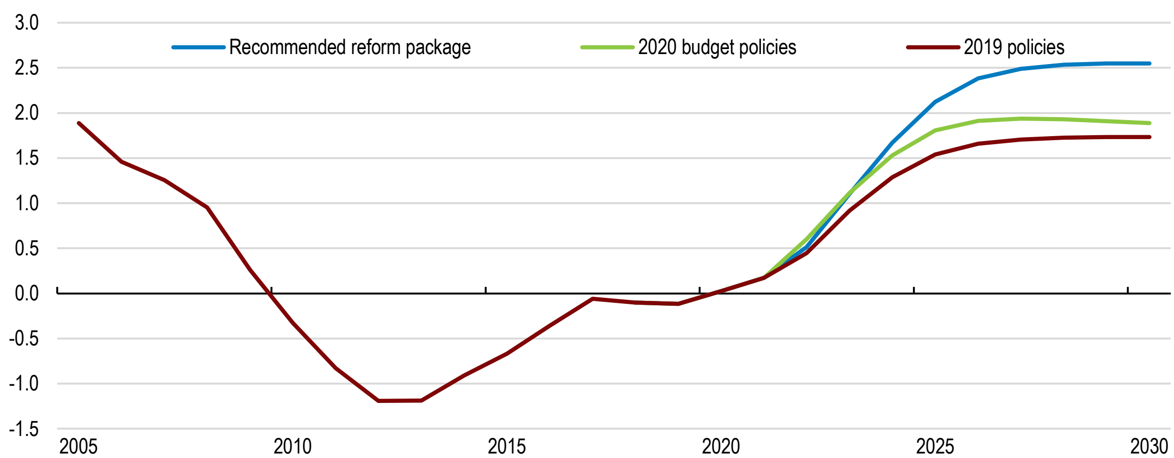
The COVID-19 crisis renews the urgency for Greece to undertake ambitious structural reforms to resume and reinvigorate the country's recovery, raise economic growth and well-being, and ensure current and future generations enjoy a high-quality environment. The great financial crisis jolted Greece's politics and changed its political economy and society in ways which, along with ongoing political stability, may help sustain the reform momentum. Successful reform implementation will depend on challenging vested interests and overcoming resistance to changes in the public administration.

The government is working on an economic recovery and reform programme covering four policy priorities (Table 1.1): protecting the economy from the COVID-19 shock; achieving a sustained recovery and closing the large output gap; raising the long-term growth rate; and achieving inclusive growth. The government has setup a high-level commission to define policy proposals to be included in a new National Growth Strategy expected in the autumn of 2020.

This Survey puts forward an ambitious recovery and reform package in line with the government's policy long-term objectives. The package focuses on improving the public administration, increasing employment, boosting innovation and investment, and improving the inclusiveness of growth. The implementation of the proposed reform package would bolster Greece's near-term recovery from the COVID-19 shock, and increase long-term GDP growth by 1 percentage point annually by 2030, with most of the increase stemming from higher productivity growth.

Figure 1.3. Further reforms would boost growth

Trend real GDP growth, %, annual



Note: The 'recommend reform package' policies are described in Table 1.4. The '2020 budget policies' include the reduction in corporate and personal income tax rates, in in social security contribution and increased public investment. '2019 policies' shows the policies in place prior to the '2020 budget policies'.
Source: Calculations based on several *OECD Economics Department Working Papers*: Guillemette, et al. (2017), "A revised approach to productivity convergence in long-term scenarios", No. 1385; Cavalleri, et al. (2017), "A revised approach to trend employment projections in long-term scenarios", No. 1384; Guillemette, et al. (2018), "Saving, Investment, Capital Stock and Current Account Projections in Long-Term Scenarios"; and United Nations population projection scenarios.

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Against this background, the main messages of this Survey are:

- Further progress on improving tax compliance and broadening the tax base will allow for reducing high tax rates while continuing to achieve fiscal targets. This will contribute to safeguard the hard-won fiscal credibility and maintain investors' confidence. Spending reviews would allow for reallocating public spending towards investment and ensuring pension spending does not crowd out social programmes.

Table 1.1. Overview of Greek government's policy priorities

Main objectives	Intermediate policy targets	Milestones
Protecting the economy from the COVID-19 shock	Strengthening the health system	Recruiting 4300 additional health workers, and expanding hospitals' care capacity. Valued at 0.2% of 2019 GDP.
	Support to households	EUR 800 transfers provided for mid-March to end-April, to workers in firms and self-employed affected by COVID-19 shutdowns and revenue losses. Extension of existing unemployment benefits, introduction of unemployment benefits for seasonal workers. Introduction of temporary short-time work scheme to run mid-July to mid-October 2020.
	Support to businesses	For affected firms, tax, contribution and loan payments have been suspended to later in 2020, 25% discount for payments made on time, and repayable advances provided. Guarantees provided for up to EUR 7.9 billion of loans. Policy support also includes temporary cuts to selected VAT rates, and a programme to support the tourism sector over the 2020 season and into 2021.
Achieving a sustained recovery and closing the negative output gap	Increase liquidity	Reduce non-performing loans ('Hercules' asset protection scheme); increase bank deposits, credit to the private sector and firms' liquidity; obtain investment grade status.
	Sustainable fiscal policy	Eliminate excess primary fiscal surpluses (including using budget reviews and budget ceilings); lower tax rates, while reducing tax evasion and broadening the tax base (through new electronic transactions requirements, e-invoicing); review primary fiscal targets in consultation with European partners.
	Improving expectations	Reduce policy uncertainty with full ownership of reform programme; meet fiscal targets and maintain a downward trajectory for public debt; send credible signals about a new growth model, including: privatisations and legislation increasing labour and product market flexibility; increasing transparency and improving public sector performance.
	Attract external funding	Attract foreign direct investment and institutional investors (projects financed by EIB, EBRD, Invest in EU); make more effective use of European structural and investment funds; make productive use of ANFAs/SMPs profits.
Increasing long-term growth	Increasing employment	Lower personal income tax and lower social security contribution rates; increase labour market flexibility; address long-term demographic trends; reverse brain drain
	Increasing investment	Open-up goods and services markets; lower the corporate income tax rate; develop Greece's capital markets; mobilise external funding; improve public sector performance (creation of a new Ministry for Digital Transformation with the objective to simplify and digitise and to make the Greek public sector fully digital by 2023; reducing bureaucracy); increase transparency and reduce corruption (National Transparency Authority, changed legislation on bribery, introduction of a 18-month limit for the state to freeze private bank accounts, working closely with FATF to ensure adherence to highest standards on money laundering and terrorism); improve judicial performance and introduce an integrated insolvency framework.
	Increasing productivity	Increase quality investment and boost R&D
	Enhancing environmental sustainability	Phase out lignite for electricity production by 2028; achieve energy-neutral economic activity by 2050; crowd in private green investment in the range of 45 billion euros; promote the circular economy by boosting waste recycling; energy-saving renovation of real estate; deregulated, competitive domestic energy market
Achieving inclusive growth	Equal opportunities	Modernise the education system giving schools and universities more operational and pedagogical autonomy; develop courses to improve digital skills; enhance intergenerational equality (with reference, among others to the pension system). Broaden the tax base across and within types of tax-payers.
	Protecting vulnerable groups	Design in-work benefits and reform active labour market programmes; restructure in-kind benefits, examining eligibility criteria; programmes targeting unprotected children and homeless; developing transition programs for areas affected by de-lignitisation
	Social services	Universal access to quality health care; universal quality child-care coverage; reliable and effective long-term care.

Source: Ministry of Finance.

- Accelerating the disposal of banks' non-performing loans is a pre-requisite for a lasting recovery in investment. Further progress in improving the business environment and raising public administration effectiveness (including the justice system) is key to lowering the costs and uncertainties of doing businesses in Greece, thus raising domestic and foreign investment and innovation. This requires: modernising the public administration; improving regulatory quality and further promoting competition; streamlining innovation policies and R&D tax incentives; and opening state-owned enterprises to private capital and management.

- Creating jobs, improving their quality and raising wages require enhancing active labour market programmes and reducing job-skill mismatches. Lifting participation and reducing informality hinges on lowering the high labour income tax wedge, ensuring that wages grow in line with workers' productivity and addressing barriers to work. Further strengthening Greece's social safety net and better targeting most vulnerable will help to reduce high poverty rates among the young and working age population and protect workers from income shocks.

The COVID-19 shock has thrown the export-driven recovery off track

Until the COVID-19 shock, the economy had sustained 3 years of gradual recovery from one of the deepest and longest recessions on record. GDP had risen to 6.5% above its 2016 trough, though it is was still more than 20% below its pre-crisis peak (Figure 1.5, Panel A). In the summer of 2018, Greece completed the third ESM financial assistance programme and was integrated into the European Semester. Greece is in the EU Enhanced Surveillance Framework, which provides a comprehensive framework for monitoring economic developments and a sustainable economic recovery.

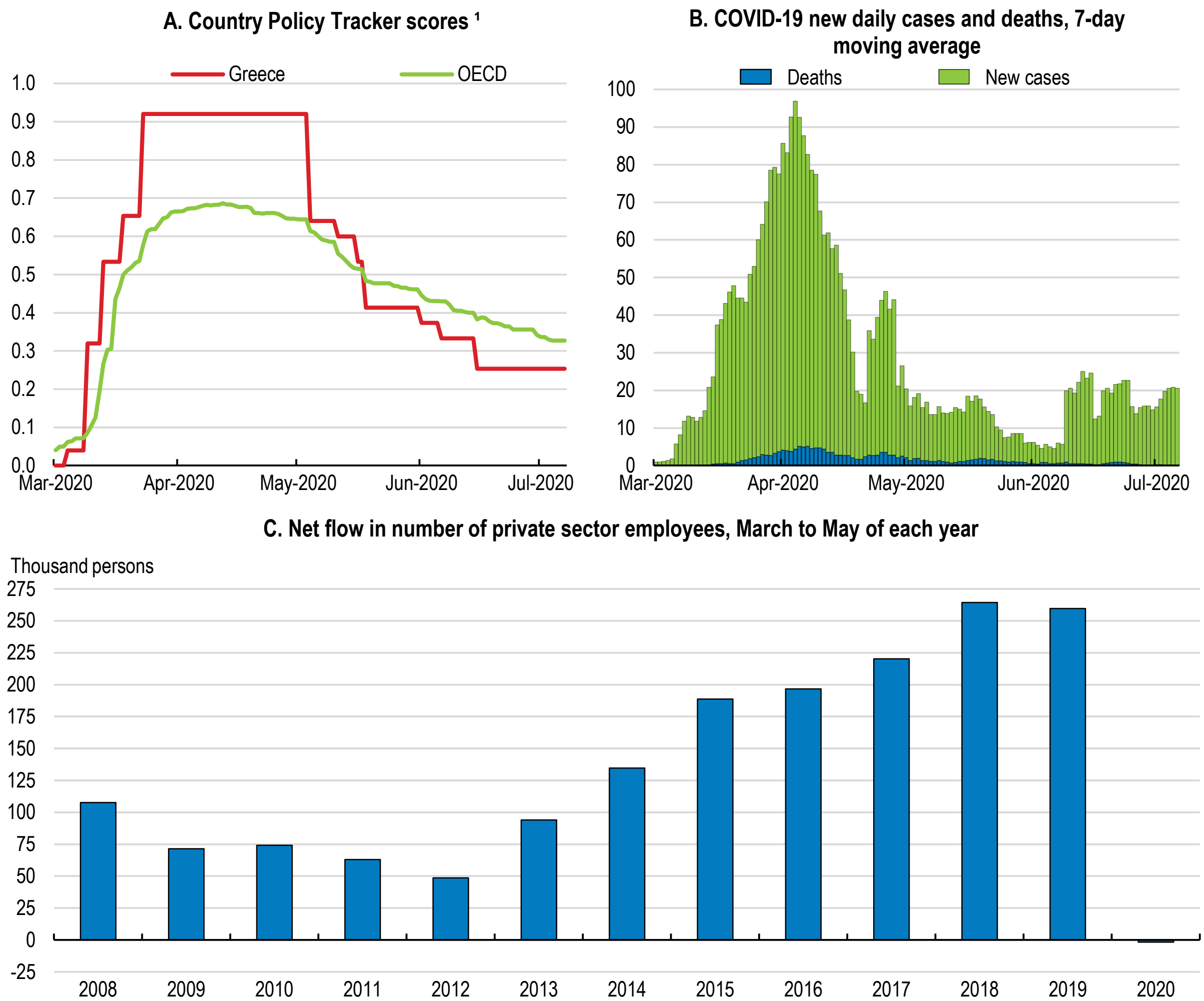
Strong broad-based export growth and, to a lesser extent, domestic demand drove the recovery. The tourism sector was a main contributor to export growth while improved price competitiveness was supporting goods exports. Rising business and consumer confidence (Figure 1.6), improving financial conditions and record-low lending rates buttressed business investment. This, however, remains highly volatile (Figure 1.5, Panel B) and, at less than 12% of GDP in 2019, remains well below the OECD average (22%). Bank lending to non-financial corporations (corrected for sales and write offs) has been increasing moderately since early 2019 (especially for tourism, shipping, construction and real estate) and continued during the first months of the COVID-19 shock. Remaining capital controls were abolished in September 2019.

The recovery brought solid job creation. Following deep labour market reforms, the employment rate increased from late 2013 until the onset of the COVID-19 shock, reaching 57%. This is the highest level since 2010 but still one of the lowest among OECD countries (discussed in Chapter 2). Meanwhile, the unemployment rate dropped below 16.0% in February 2020, from its peak at nearly 28% in 2013. Higher employment has lifted household disposable income, but the rebuilding of private savings and households' deleveraging have hindered private consumption growth. Large slack in the economy and sluggish productivity growth keep wage and consumer price inflation muted.

The COVID-19 shock sets this progress back. Authorities reacted quickly to the pandemic and successfully contained the spread of infections and avoided overwhelming the health system (Figure 1.4, Panels A and B). Cases among visitor arrivals have been an ongoing challenge, constituting over one-fifth of the total. To stop the virus's spread, Greece limited arrivals and implemented strict movement restrictions from mid-March to early May 2020. These shut production in firms generating 20% of Greece's value-added, including over 80% of accommodation, catering, education and consumer service businesses. Hiring ahead of the summer season froze (Figure 1.4, Panel C), and large numbers of workers and jobseekers dropped out of the labour force during the shutdown, raising the inactive population to levels last reached in 2009.

As the health situation improved, Greece progressively lifted restrictions in May and reopened to international visitors in June and July, accompanied by strengthened testing and healthcare. However travel restrictions and economic weakness in Greece's trading partners, sanitary protocols and uncertainty undercut demand for Greece's tourism and shipping service exports.

Figure 1.4. Greece’s strong containment measures have limited infections, but have frozen the labour market



1: The OECD COVID-19 Country Policy Tracker score is an index averaged across five containment policy components and scaled from 0 (no restrictions) to 1 (highest category of restrictions). The containment policies include domestic quarantine and movement restrictions; travel restrictions; closure of educational facilities; closure of public events and places; and obligatory closure of economic activities. The OECD average covers all OECD countries where data is available for all components.

Source: Calculations based on OECD COVID-19 Country Policy Tracker https://www.oecd.org/economy/; European Center for Disease Prevention and Control (ECDC) though Our World in Data; and Ministry of Labour and Social Protection (2020), ERGANI Monthly Reports.

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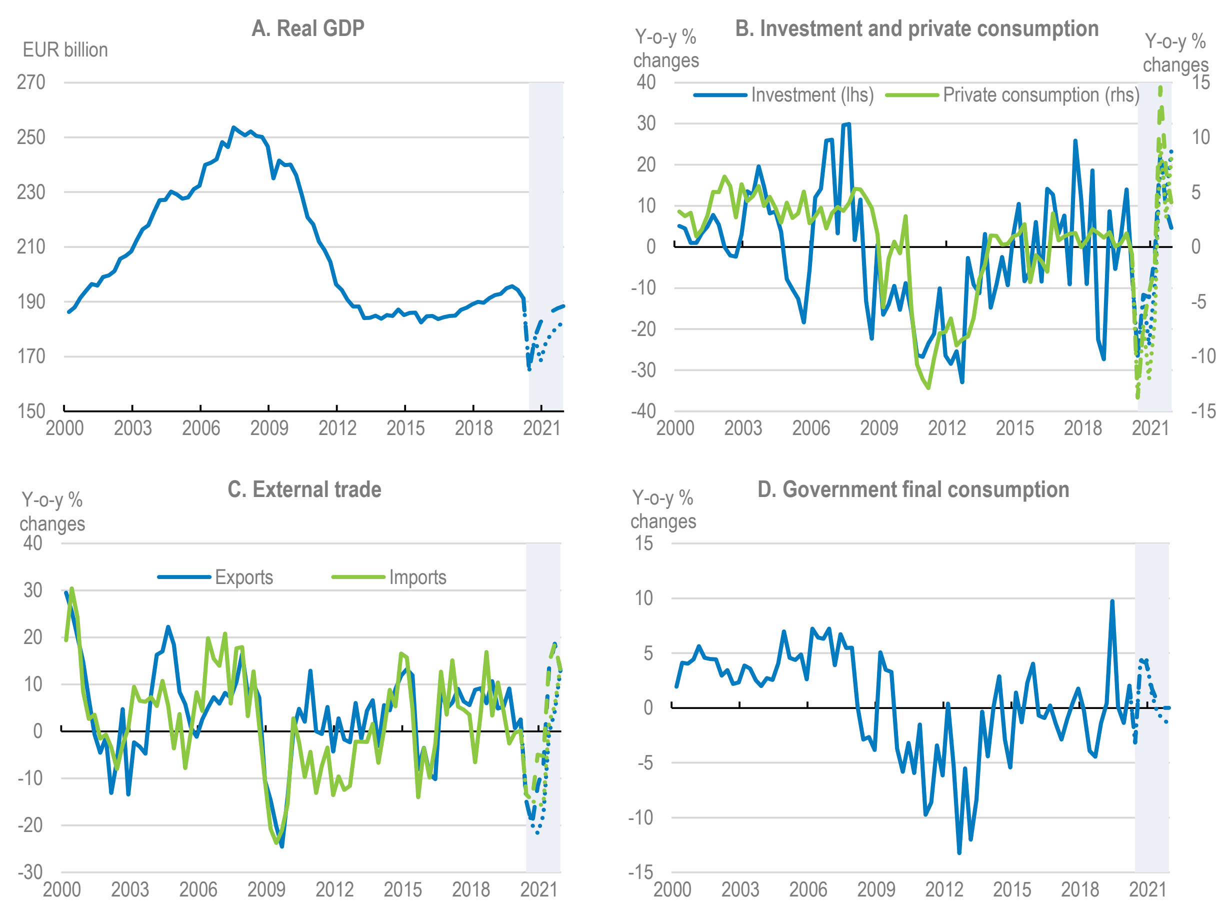
The drop in international trade following the COVID-19 shock has interrupted Greece’s growing participation in global trade and associated structural transformation initiated by the broad reforms of the past decade. Between 2009 and 2019, real exports of goods and services rose by more than 43% (to nearly 37% of GDP from about 20% in the years preceding the great financial crisis). Goods shipments, led by refined petroleum and manufacturing of metals, machinery and of clothing, have been the main driver of increasing exports, soaring by more than 70% between the end of 2009 and mid-2019. Greece has also managed to diversify the destinations of its goods exports, with an increasing share of shipments to Asian countries (Figure 1.8). These developments raised Greece’s export performance (i.e. the growth in exports relative to the growth of the country's export market) in 2017-19.

Exports and the economy, however, remain largely undiversified and concentrated in low-knowledge intensity sectors. Mineral products, especially refined petroleum, continue to account for a large share of total exports (over 30%). High-technology products (i.e. Aerospace, Computers-office machines, Electronics-telecommunications, Pharmacy, Scientific instruments, Electrical machinery, Chemistry, Non-electrical machinery, Armament) accounted for just 4.5% of total exports in 2018 (unchanged from 2007), against an EU average of 18%. Among OECD countries, Greece ranks at the bottom of the 2017 Economy Complexity Rankings (Simoes and Hidalgo, 2011[1]), along with Australia, Chile, Portugal and Turkey. Exports of agriculture and agri-food industries remain limited compared with their potential, as product quality is high.

The current account deficit has decreased markedly over the past years. The general government and, to a lesser extent, the non-financial corporate sector were the main drivers of the improvement in the current account balance on account of the large fiscal adjustment and the drop in investment by corporations. However, as domestic demand recovers the current account deficit risks starting to widen again (Figure 1.7). Greece's large net negative international investment position widened to 150% of GDP in mid-2019 from 140% in late 2017, one of the largest in the euro area. The official sector accounts for three-quarters of Greece's external liabilities. These are largely denominated in Euro with fixed interest rates, mitigating risks associated with this high level of liabilities.

Figure 1.5. The COVID-19 shock sets back Greece's export and consumption-driven recovery

Volumes, 2015 prices



Note: The shaded area indicates projections. The "single-hit" scenario is shown with a dashed line and assumes that the pandemic is brought under control before the summer of 2020; the "double-hit" scenario is shown with a dotted line assumes a second wave of contagion and lockdown measures late in 2020.
Source: OECD *Economic Outlook 107* database.

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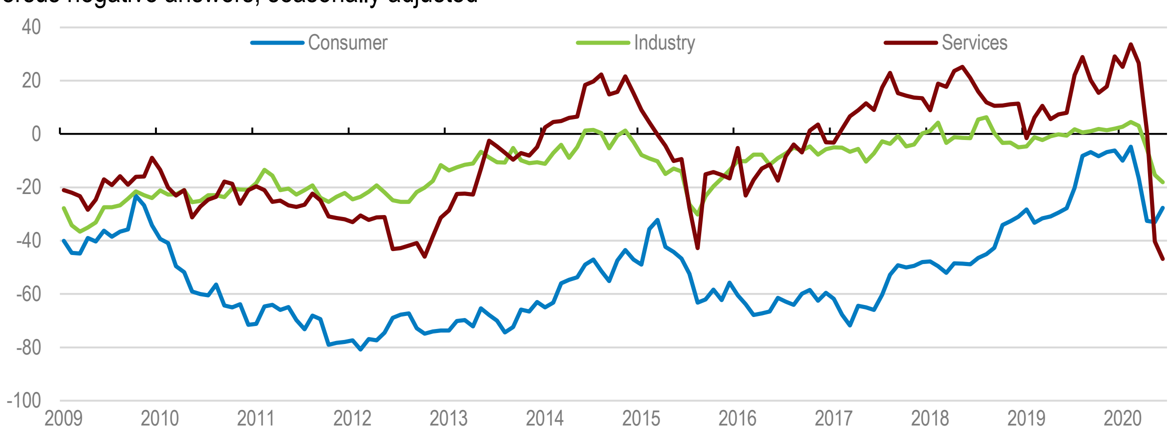
For Greece to resume a path of sustained recovery following the COVID-19 shock, boosting investment and innovation is key to raising product quality and non-price competitiveness, thus lifting export performance and wages at the same time (Bournakis, 2013[2]; Khandelwal, 2010[3]; Hummels and Klenow, 2005[4]; Sutton and Trefler, 2016[5]). The experience of central and eastern European countries between the mid-1990s and the mid-2000s show that higher domestic and foreign direct investment improves product quality and the technological intensity of exports, leading to higher export market share, even as real exchange rates appreciate (Mody, Igan and Fabrizio, 2007[6]; Leigh, Fabrizio and Mody, 2009[7]). In Costa Rica, large foreign direct investment contributed to increase the share of high technology exports from about 6% of total manufacturing exports in the mid-1990s to more than 40% in the mid-2010s, higher than in any OECD country (OECD, 2018[8]; OECD, 2016[9]).

Figure 1.6. The COVID-19 shock has reversed the rise in business and consumer confidence

Consumer and business confidence sub-components of the Economic sentiment indicator, in % balance of positive versus negative answers, seasonally adjusted



Source: Eurostat.

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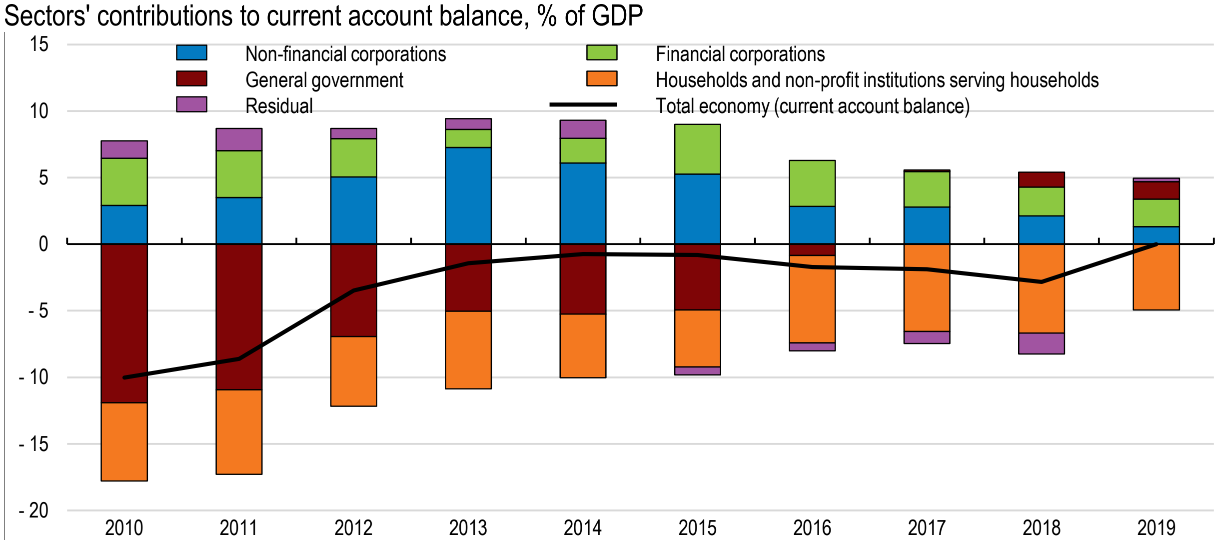
Figure 1.7. The current account deficit has narrowed, helped by the government budget shifting to surplus

Sectors' contributions to current account balance, % of GDP



Note: Each bar shows the financial balance (or net lending or borrowing) of the different sectors computed as gross savings minus gross capital formation, in percent of GDP. Their sum plus a residual term equals the current account balance of the economy.
Source: Calculations based on OECD *Quarterly Sector Accounts* database and OECD *Economic Outlook* database.

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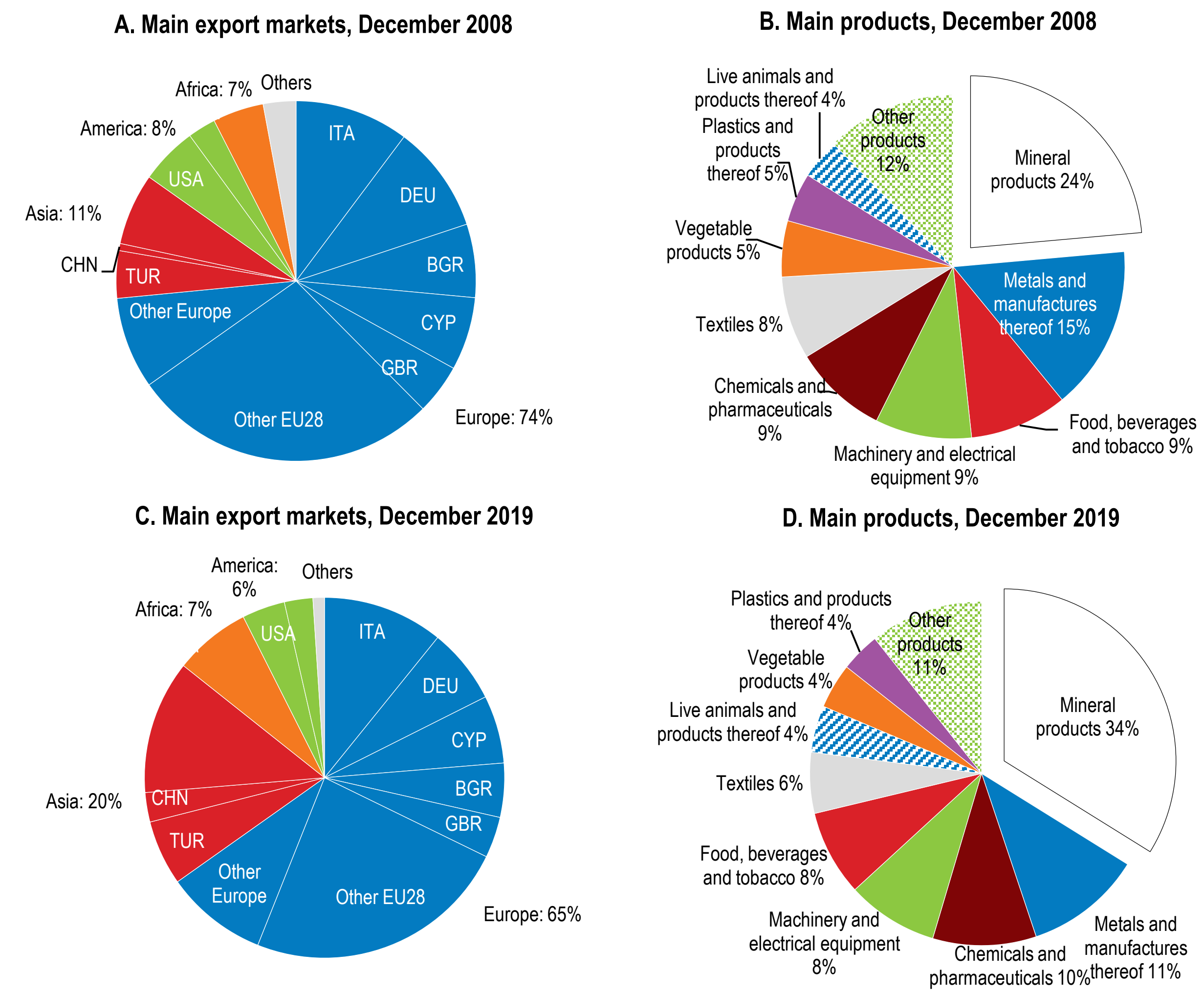
Figure 1.8. Around 65% of goods exports are bound for other European countries

12-month cumulated export flows (values)



Source: Eurostat, Comext Database.

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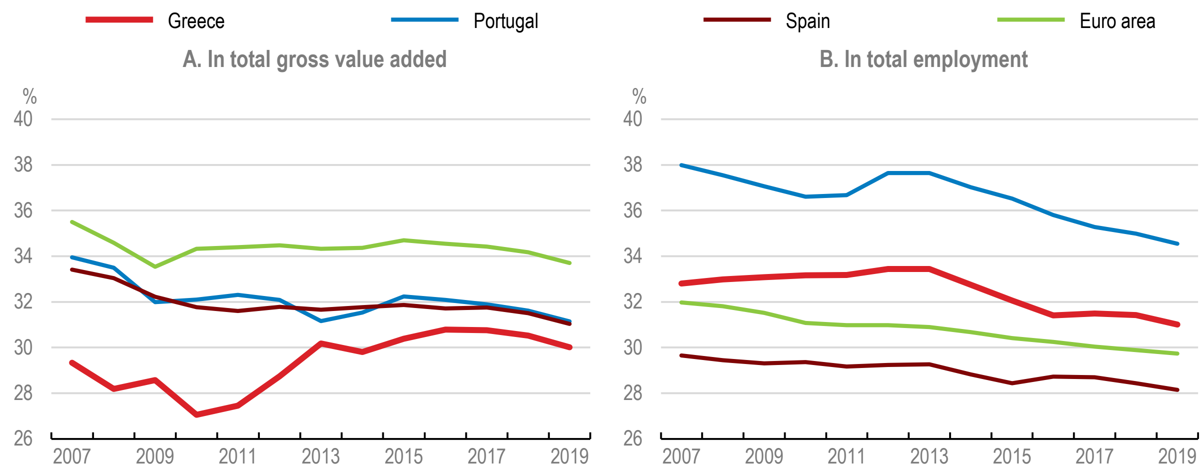
Production but not employment is gradually shifting towards tradeable sectors. Since 2010, the share of gross value added of tradable sectors has narrowed the gap with peer countries, increasing to 30% (Figure 1.9, Panel A). Classifying accommodation and food services as part of the tradable sector (as these activities are strongly linked with the tourism industry), the shift to tradable sectors was more pronounced, rising to 38%. Non-tradable sectors, however, remain the main driver of job growth. During the height of the crisis from 2009 to 2013, tradable and non-tradable sectors experienced similar job losses of around 17%. Yet, from 2013 to 2019, employment in non-tradable sectors rose by 12% (driven mainly by tourism-related services and wholesale and retail trade) while employment in tradable sectors was flat. Classifying accommodation and food services as part of the tradable sector, employment rose by 2.6% in the tradable sector and by 4.5% in the non-tradable sector from 2013 to 2017. This highlights the slow process of diversifying the Greek economy and building comparative advantage in sectors other than tourism and tourism-related services.

The government is committed to accelerate the shift of the economy towards tradable activities and to further increase its openness. To this end, the government is designing a National Strategy for Extroversion and aims to gather all policies and responsibilities concerning export promotion and attracting FDI under the Ministry of Foreign Affairs. The government needs to continue already started programmes to increase the economy's openness. These include: raising the take-up of privileged trade statuses – which allow for swifter customs procedures – as it remains low; and completing the integrated IT platform on import and export procedures (Single Window), which is being supported with EU funds. As noted in the previous OECD Economic Survey of Greece (OECD, 2018[10]), restrictions on foreign direct investment are low in Greece. Attracting more FDI hinges then on improving the general business environment by reducing red tape, lowering product market restrictions and improving the quality of infrastructure.

Figure 1.9. Production is shifting towards tradable sectors but not employment

Share of tradable activities



Note: Tradable sectors include 10 industries defined in the SNA 2008: agriculture (A), industry (BCDE), information and communication (J), financial and insurance activities (K), and other services (RSTU). Non-tradable sectors include: construction, distributive trade, repairs, transport, accommodation, food services activities (GHI), real estate activities (L), business services (MN), and public administration (OPQ).
Source: OECD Quarterly *National Accounts* database.

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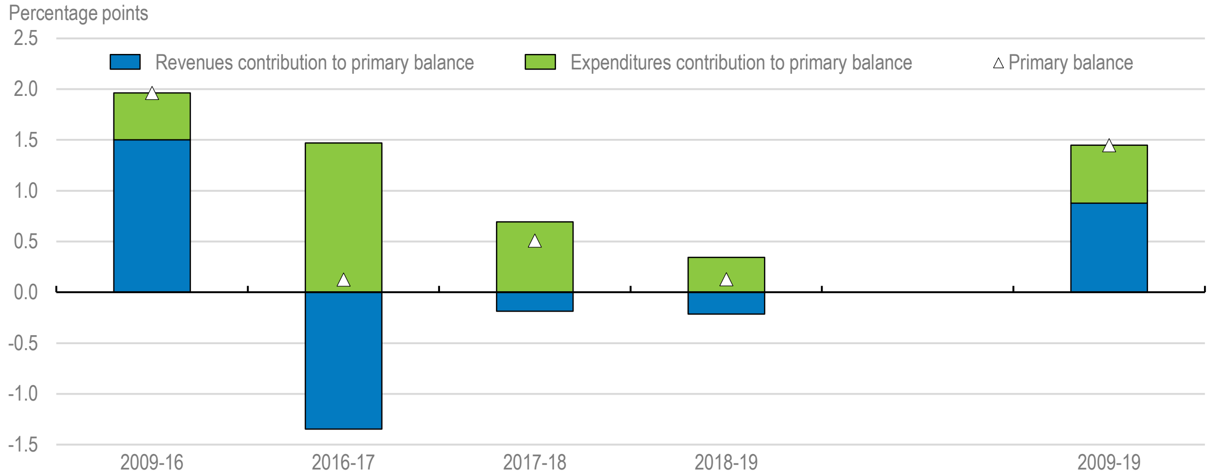
Fiscal policy credibility has improved, lowering government bond yields

Over recent years Greece has consistently overachieved its fiscal targets. Between 2009 and 2019, Greece's primary balance increased by 14 percentage points of GDP, and has met or exceeded the targets agreed under the Financial Stability Programme each year between 2016 and 2019. Initially, Greece relied mostly on revenue-raising measures to improve the primary balance (Figure 1.10). Between 2017 and 2019, expenditures contributed more than revenues to further increase the primary surplus, including due to the under-execution of the public investment budget. In 2019, public investment dropped to 2.2% of GDP, the lowest in several decades and compares with 4.4% of GDP on average since 2000.

The substantial fiscal surpluses and cash reserves accumulated over recent years, and continued government bond market access have given Greece the space to swiftly finance its response to the COVID-19 shock. The primary budget balance is projected to shift to a deficit in 2020 of 4.8% of GDP if the pandemic remains contained or 5.9% in the case of a second outbreak later in 2020, as lower activity and income reduce tax and social contribution payments and the government's support measures raise spending. The government has implemented measures to strengthen the health system and to support household incomes and firms' liquidity, totalling EUR 11.4 billion for 2020 (6.1% of 2019 GDP), detailed in Table 1.1. In addition, the government is incurring additional costs to manage renewed migrant arrivals. In response to these shocks, Greece, with other Eurogroup members, has activated escape clauses and suspended its medium-term fiscal targets. Prior to introducing these temporary measures, the 2020 budget introduced permanent tax cuts worth about 0.6% of 2019 GDP, and detailed in Box 1.1. The budget offsets the effect of the permanent cuts in tax rates by improving tax compliance, mostly by extending the use of electronic payments, and to a lesser extent by rationalising spending.

Figure 1.10. Fiscal consolidation has relied more on revenues than spending

Change in the primary balance and contributions of revenues and expenditures, yearly average, % GDP



Note: Revenues (/ expenditures) contribution to primary balance are derived from total general government receipts (/ disbursements) excluding gross government interest receipts (/ payments).
Source: OECD *Economic Outlook 107* database.

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Box 1.1. The 2019 tax reform

In December 2019 the government reduced a number of corporate and personal income tax rates as well as some VAT rates.

As regards personal income, the reforms: lower the personal income tax rate from 22% to 9% for incomes up to EUR 10 000, and increase the tax-free income threshold by EUR 1 000 for each dependent child; lower social security contributions from June 2020 for full time employees by 0.9 percentage points (0.48 percentage points for employers’ contributions and 0.42 percentage points for employees’ contributions) for employees require that employees, pensioners and professionals use e-payments amounting at least to 30% of their total income in order to be eligible for tax credits; and exempt disabled individuals from the social solidarity levy.

For indirect taxes, the reforms: reduce VAT rates on selected products from 24% to 13%; and introduce a 3-year suspension of VAT on buildings with permits issued since 1 January 2006, and on the sale of real estate property.

For corporate and investment income, the reforms: reduce the corporate income tax rate from 28% to 24% from the 2019 fiscal year; reduce the dividend income tax rate from 10% to 5%; set a capital gains tax rate at 15%; reduce asset-based taxes on real estate and investment funds; lower the tax rate on agricultural cooperatives to 10%; and modify and introduce exemptions in the tax treatment of company cars, and introduce incentives for public transport and low-emission vehicles.

For non-resident investors, the reforms: introduce lump-sum taxation of foreign-sourced income for individuals who have been tax residents outside Greece for seven of the last eight years; and introduce exemptions to capital gains taxes, to personal income tax and to the social solidarity levy for interest income from listed corporate bonds.

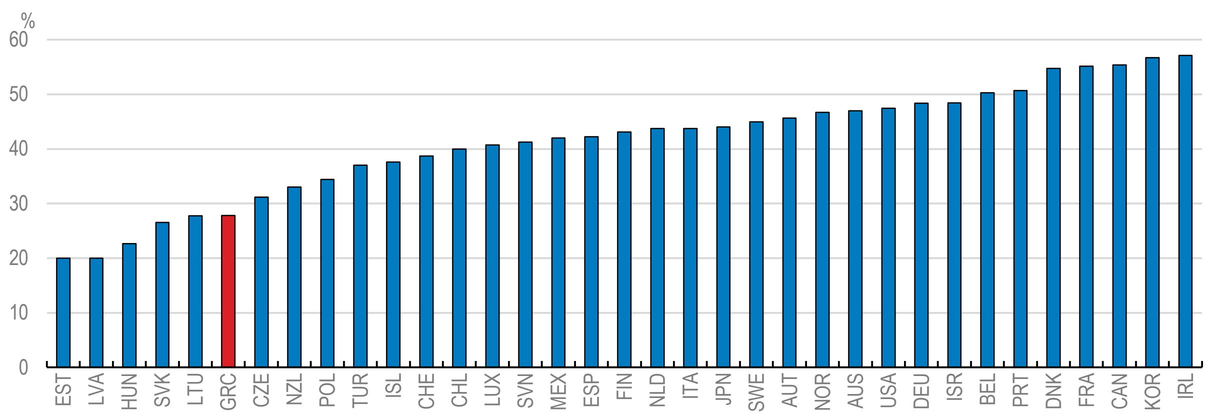
Source: Ministry of Finance

Overall, the budgetary responses to the COVID-19 shock are essential to manage the health impact, support households and firms, and protect the country's productive capacity. They will need to be extended in the case of a second outbreak. Once the emergency is over they will need to be redesigned to strengthen the ability to produce and return to work in the new post-COVID-19 economic and social context. Firms and workers will benefit from support to upgrade their activities and skills and to shift to sectors with better growth opportunities, through for instance strengthening active labour market policies, particularly retraining scheme.

The permanent lowering of high statutory tax rates while supporting the tax base by raising the required use of electronic payments, addresses one of the long-running constraints to activity and employment. The government also plans to reform the property tax (ENFIA) to broaden its base in 2021. However, the reduction in the dividend income tax and the corporate income tax rates will lower the overall tax rates on distributed profits by 11 percentage points to 28%, the sixth lowest among OECD countries (Figure 1.11). This may raise distributional concerns and create distortions by widening the gap between labour income and distributed profits tax rates for high income self-employed (as detailed in Chapter 2).

Figure 1.11. Recent reforms have markedly lowered the tax rate on distributed profits

Overall statutory tax rates on dividend income, 2020



Note: 'Overall statutory tax rates on dividend income' reports the effective statutory tax rate on distributions of domestic source income to a resident individual shareholder, taking account of corporate income tax, personal income tax and any type of integration or relief to reduce the effects of double taxation.
Source: OECD (2020), OECD Tax database.

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The economy's recovery in 2021 is projected to reduce the primary budget deficit, although more slowly in the case of a second outbreak later in 2020. The highly uncertain outlook due to the COVID-19 shock has led the authorities to defer the new medium-term fiscal strategy for 2021-2024. Greece, along with other EU countries, has triggered national escape clauses allowing for a suspension of fiscal rules and accommodating the budgetary implications of the pandemic. Under existing arrangements, from 2023 Greece was supposed to reduce its primary surplus target from 3.5% of GDP to a level consistent with its commitments under the Stability and Growth Pact. In 2018 the European Commission estimated this at 2.2% of GDP on average over the long-term. The government remains committed to adhering to the fiscal targets agreed with EU partners but the COVID-19 shock and its budgetary implications warrant reviewing the primary surplus target (3.5% of GDP) up to 2022. The resources made available by bringing forward the planned reduction in the primary surplus target, in agreement with EU partners, can be used to support an inclusive recovery from the COVID-19 shock and to address long-standing growth and social constraints by reducing the labour income tax wedge, increasing public investment and funding better-targeted social programmes.

Greece's government debt ratios, which was 177% of GDP in 2019 (the second largest in the OECD after Japan), are projected to rise in 2020 because of the large fall in nominal GDP and, to a lesser extent, larger spending and lower revenues. The debt ratio is projected to be near 190% of GDP in 2021 in the case of no further outbreaks of infections, and above 200% of GDP in the case of a second outbreak. EU partners held 73% of Greek public debt at concessional interest rates in 2019. Over the medium term, debt servicing costs and gross financing needs are projected to remain low, due to the debt measures agreed in 2018 by EU partners (Box 1.2), the government's liabilities management strategy, the European Central Bank's decision to include Greek government debt securities in its asset purchase programmes, and the Eurogroup approval of the third tranche of policy-contingent debt measures in June 2020.

Past OECD recommendation on fiscal policy

Past recommendations	Actions taken
Maintain the primary surplus agreed with official creditors and facilitate debt restructuring as needed.	Primary surplus targets have been met or exceeded each year between 2016 and 2019. In June 2018, the Eurogroup agreed on medium-term debt measures. Following its assessments of Greece's ongoing progress in implementing agreed reforms, the Eurogroup agreed to the release of three tranches of policy-contingent debt measures.

Government bond yields fell to historical lows in February 2020 with improved confidence and the international search for yield. In March they spiked, along with other peripheral Eurozone countries sovereign bond yields, as the worldwide scale of the COVID-19 shock became clear and investors fled to lower risk assets. Yields fell back below levels of mid–2019 after the ECB announced its main policy responses and that it would include Greek government securities in its purchase programmes. Rating agencies upgraded Greece's sovereign bond rating, which remains below investment grade. The weighted average residual maturity of government debt and the average time to refixing (the time it takes for the whole debt to become subject to a new interest rate) are both near 20 years. Debt servicing costs are projected to rise modestly over coming years, as the COVID-19 shock leads to increased issue of market debt which has a shorter maturity and higher interest rate than official debt.

Box 1.2. Debt restructuring measures agreed with EU partners in June 2018

The debt measures approved by the Eurogroup in June 2018 aimed to limit gross financing needs to less than 15% of GDP in the medium term and 20% of GDP thereafter. The 2018 measures consist of the following: 1) a 10-year deferral of interest payments on EUR 96 billion of the European Financial Stability Facility's loans; 2) extending the weighted average maturity of EFSF borrowing by 10 years (to 42.5 years); 3) abolishing the step-up interest rate margin related to the debt buy-back tranche of the 2nd Greek programme from 2018 onwards; 4) transferring the profits of the Agreement on Net Financial Assets (ANFA) and Securities Market Programme (SMP) to Greece until June 2022. The third and fourth measures are conditional on the ongoing enhanced surveillance of policies.

Source: Eurogroup Statement on Greece, 22 June 2018.

The recovery hinges on reviving investment

The outlook is exceptionally uncertain due to the uncertainty over how the pandemic crisis will evolve. In a single hit scenario with no further virus outbreaks after the Spring of 2020, output is projected to fall by 8% in 2020 before it recovers by 4.5% in 2021 (Table 1.3). A second virus outbreak later in the year (the double-hit scenario) is projected to increase the fall in GDP in 2020 to 9.8%, and to slow the recovery in 2021 to 2.3%. Despite the lifting of most restrictions by June 2020, a decrease in the number of international visitors and heightened uncertainty are expected to depress consumer demand and tourism into the summer season. In the double-hit scenario, weakened incomes and confidence globally are projected to depress Greece's tourism arrivals through the 2021 season. The crisis is delaying efforts to improve financing for investment, which remains essential to create jobs, raise incomes, exports and productivity.

Beyond the short-term risks of the pandemic crisis, the main challenge Greece faces is returning to a path of sustained recovery. The tourism sector, which led Greece's gains in employment and exports in recent years, is vulnerable to the COVID-19 crisis. Weak domestic and foreign demand, combined with tight liquidity constraints, may translate into renewed insolvencies and add to banks' non-performing loans, delaying progress in restoring finance for investment and undermining the emergence of new activities. Reduced fiscal revenues and measures to support household income and firms' liquidity will prolong high budget deficits and hold public debt ratios at high levels, as in many other countries. Continuing the government's strategy of issuing debt with longer maturities and benefiting from low interest rates following the ECB's interventions can limit the risks of rising annual gross financing needs. In the medium term, the COVID-19 fiscal support and tax reform poses upside risks as its impact on consumption and investment could be larger than expected. Faster progress in opening state-owned companies to private investors and reducing red tape could result in higher foreign direct investment than anticipated. Delays in markedly reducing banks' non-performing loans would hold back banks' lending and the investment recovery. Table 1.2 lists some of the main low probability events that could lead to major changes of the outlook.

Table 1.2. Low probability events that could lead to major changes in the outlook

Vulnerabilities	Possible outcomes
Fiscal targets are repeatedly missed and vested interests succeed in stopping or backtracking structural reforms.	Trust in the reform capacity of the country would wane, lowering investors' confidence and hindering domestic and foreign direct investment and imperilling public debt sustainability, and emigration of young people would continue unabated.
Deep recession in the EU and major trading partners accompanied by financial market turmoil in the context of banks' still large stock of non-performing loans (NPLs) and incomplete EU banking union.	Exports and investment growth would slow markedly, slowing the process of rebalancing the economy towards tradeable sectors. Pressure on banks could reduce the supply of credit to firms and hold back investment.
Heightened geopolitical tensions in the Mediterranean region and rising influx of refugees.	A large influx of refugees would strain national resources, harm the tourism industry and stoke social tensions.

Source: OECD.

Repairing bank balance sheets to support investment

Over the past two years, the health of Greece's banking system has improved. Bank deposits have risen by over 21% since mid-2017, driven by households and to a lesser extent domestic corporations (Figure 1.12), and continued to return following the lifting of capital controls. Banks have repaid their emergency liquidity assistance, and can access funding through the interbank and covered-bond markets. Capital ratios exceed regulatory thresholds and are close to the EU average (Figure 1.13, Panel A). More recently, banks have returned to profit and return on asset is improving, though it remains low (Figure 1.13, Panel B), due to provisioning for non-performing loans, and fragile, due to non-recurring gains in financial operations.

Bank lending rates have declined, reaching record low levels but they are still higher than in other Euro area countries (Figure 1.14), Lower lending rates and the government's temporary credit guarantee responding to the COVID-19 shock are reviving the demand for bank loans by non-financial corporations (Figure 1.15, Panel A). Loan demand is being driven by the need to finance fixed investment, inventories and working capital as well as debt refinancing (Figure 1.15, Panel B). Net flows of bank lending to non-financial corporations (adjusted for loan write-offs, reclassifications and exchange rate variations) have been positive since 2017 and in 2019 they rose by more than 2% on an annual basis. However, banks are still deleveraging and gross bank lending to non-financial corporations keeps falling as repayments and write-offs more than offset new bank loans (Figure 1.15, Panel A). In 2019 it was about 11% lower than in 2018.

Table 1.3. Macroeconomic indicators and projections

A. Double-hit scenario

	2016	2017	2018	2019	2020	2021
	Current prices EUR billion	Percentage changes, volume (2010 prices)				
GDP at market prices	**176**	**1.5**	**1.9**	**1.9**	**-9.8**	**2.3**
Private consumption	122	0.9	1.1	0.8	-8.4	3.1
Government consumption	35	-0.4	-2.5	2.2	1.9	-0.4
Gross fixed capital formation	21	9.1	-12.2	4.5	-17.3	11.0
Housing	1	-5.5	17.3	12.0	-3.0	7.7
Final domestic demand	179	1.6	-1.1	1.4	-7.3	3.2
Stockbuilding[12]	-1	0.0	1.8	-0.4	-1.7	-0.3
Total domestic demand	178	2.2	0.7	1.0	-8.1	3.0
Exports of goods and services	53	6.8	8.7	4.9	-13.6	-1.3
Imports of goods and services	54	7.1	4.2	2.8	-10.8	0.5
Net exports[1]		-0.1	1.5	0.8	-1.0	-0.6
Other indicators (growth rates, unless specified)						
Potential GDP	. .	-0.1	-0.1	-0.1	-0.3	-0.3
Output gap (% of potential GDP)	. .	-13.4	-11.7	-9.9	-18.5	-16.3
Employment	. .	2.2	2.0	2.2	-3.8	-1.8
Unemployment rate (% of labour force)	. .	21.5	19.3	17.3	19.6	20.4
GDP deflator	. .	0.6	0.5	-0.4	-1.0	0.0
Harmonised index of consumer prices	. .	1.1	0.8	0.5	0.1	0.0
Harmonised index of core inflation[3]	. .	0.3	0.3	0.8	0.4	0.2
Terms of trade	. .	-0.4	-1.9	-1.5	6.3	0.4
Household saving ratio, net (% of disposable income)	. .	-16.8	-15.0	-12.0	-9.3	-18.1
Trade balance (% of GDP)	. .	-1.0	-0.3	-0.1	1.0	0.5
Current account balance (% of GDP)	. .	-1.9	-2.8	-1.4	-0.6	-0.4
General government financial balance[4] (% of GDP)	. .	0.7	1.0	1.5	-8.8	-6.6
Underlying general government fiscal balance (% of potential GDP)	. .	6.7	6.5	6.0	1.4	1.6
Underlying government primary fiscal balance (% of potential GDP)	. .	9.1	9.2	8.4	3.7	4.0
General government gross debt (% of GDP)	. .	191.7	195.8	200.6	233.3	228.8
General government net debt (% of GDP)	. .	145.6	141.6	145.2	171.6	174.3
Gross public debt, Maastricht criterion (% of GDP)		176.2	181.2	176.5	209.3	204.7
Three-month money market rate, average	. .	-0.3	-0.3	-0.4	-0.4	-0.4
Ten-year government bond yield, average	. .	6.0	4.2	2.6	1.6	1.6

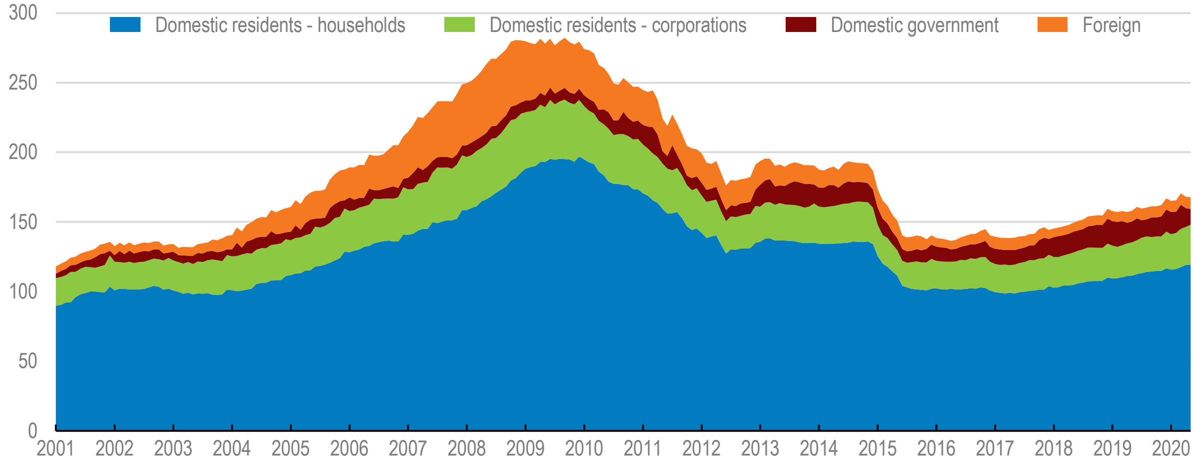
B. Single-hit scenario

	2016	2017	2018	2019	2020	2021
	Current prices EUR billion	Percentage changes, volume (2010 prices)				
GDP at market prices	**176**	**1.5**	**1.9**	**1.9**	**-8.0**	**4.5**
Private consumption	122	0.9	1.1	0.8	-6.4	5.5
Government consumption	35	-0.4	-2.5	2.2	1.7	0.6
Gross fixed capital formation	21	9.1	-12.2	4.5	-14.3	7.8
Housing	1	-5.5	17.3	12.0	0.3	6.6
Final domestic demand	179	1.6	-1.1	1.4	-5.7	4.7
Stockbuilding[12]	-1	0.0	1.8	-0.4	-1.3	-0.1
Total domestic demand	178	2.2	0.7	1.0	-6.3	4.8
Exports of goods and services	53	6.8	8.7	4.9	-11.1	8.7
Imports of goods and services	54	7.1	4.2	2.8	-8.2	9.7
Net exports[1]		-0.1	1.5	0.8	-1.1	-0.3
Other indicators (growth rates, unless specified)						
Potential GDP	. .	-0.1	-0.1	-0.1	-0.3	-0.3
Output gap (% of potential GDP)	. .	-13.4	-11.7	-9.9	-16.9	-12.9
Employment	. .	2.2	2.0	2.2	-3.5	-1.0
Unemployment rate (% of labour force)	. .	21.5	19.3	17.3	19.4	19.8
GDP deflator	. .	0.6	0.5	-0.4	-1.3	0.1
Harmonised index of consumer prices	. .	1.1	0.8	0.5	0.2	0.4
Harmonised index of core inflation[3]	. .	0.3	0.3	0.8	0.4	0.4
Terms of trade	. .	-0.4	-1.9	-1.5	5.5	0.1
Household saving ratio, net (% of disposable income)	. .	-16.8	-15.0	-12.0	-11.9	-23.6
Trade balance (% of GDP)	. .	-1.0	-0.3	-0.1	0.7	0.5
Current account balance (% of GDP)	. .	-1.9	-2.8	-1.4	-0.6	-0.6
General government financial balance[4] (% of GDP)	. .	0.7	1.0	1.5	-7.7	-4.9
Underlying general government fiscal balance (% of potential GDP)	. .	6.7	6.5	6.0	1.3	1.3
Underlying government primary fiscal balance (% of potential GDP)	. .	9.1	9.2	8.4	3.7	3.7
General government gross debt (% of GDP)	. .	191.7	195.8	200.6	220.9	214.8
General government net debt (% of GDP)	. .	145.6	141.6	145.2	167.6	165.1
Gross public debt, Maastricht criterion (% of GDP)		176.2	181.2	176.5	196.9	190.7
Three-month money market rate, average	. .	-0.3	-0.3	-0.4	-0.4	-0.4
Ten-year government bond yield, average	. .	6.0	4.2	2.6	1.6	1.6

Note: The “single-hit” scenario assumes that the pandemic is brought under control before the summer of 2020; the “double-hit” scenario assumes a second wave of contagion and lockdown measures late in 2020.
1. Contribution to changes in real GDP.
2. Including statistical discrepancy.
3. Harmonised index of consumer prices excluding food, energy, alcohol and tobacco.
4. National Account basis. Data also include Eurosystem profits on Greek government bonds remitted back to Greece, and the estimated government support to financial institutions and privatisation proceeds.
Source: *OECD Economic Outlook* 107 database.

Figure 1.12. Bank deposits have been increasing

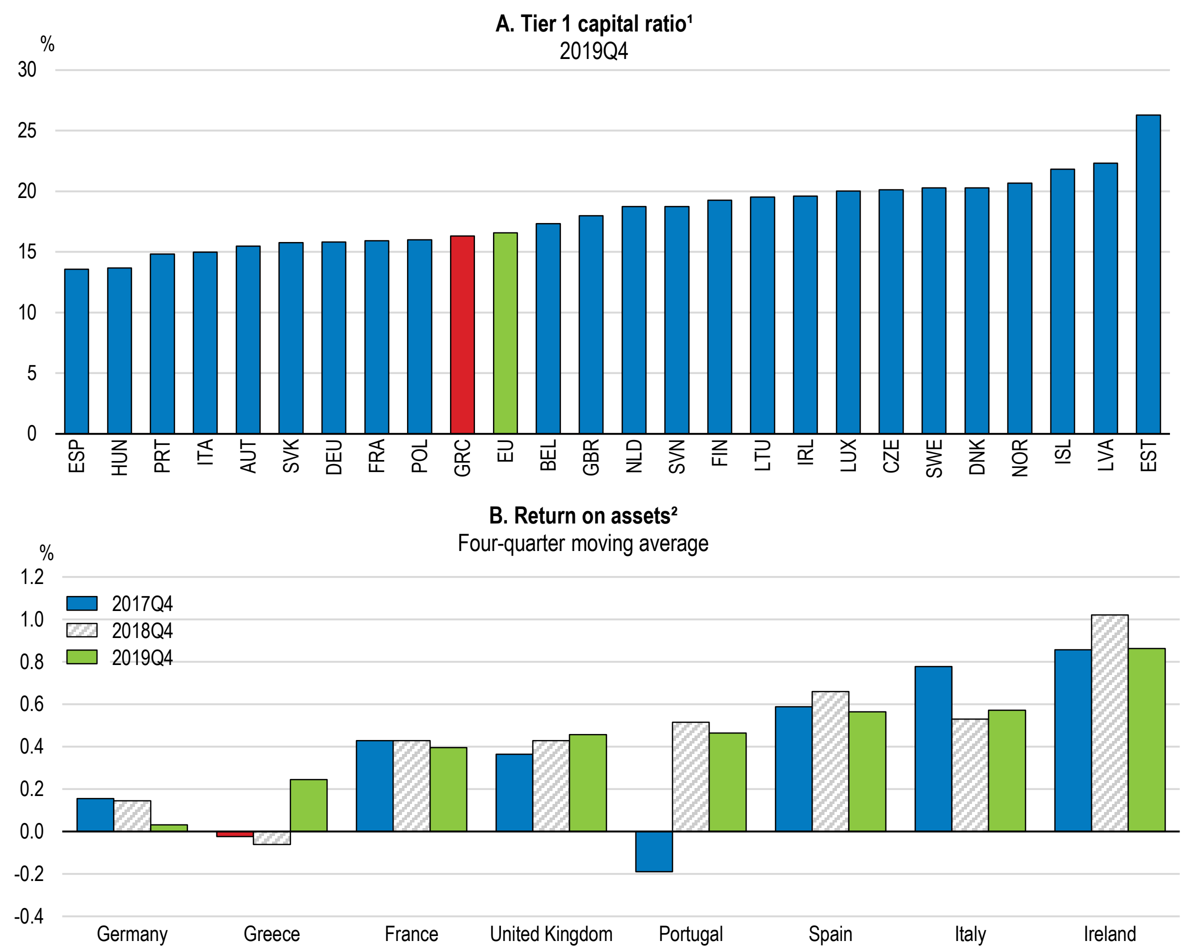
EUR billions



Source: Bank of Greece.

StatLink https://doi.org/10.1787/888934154110

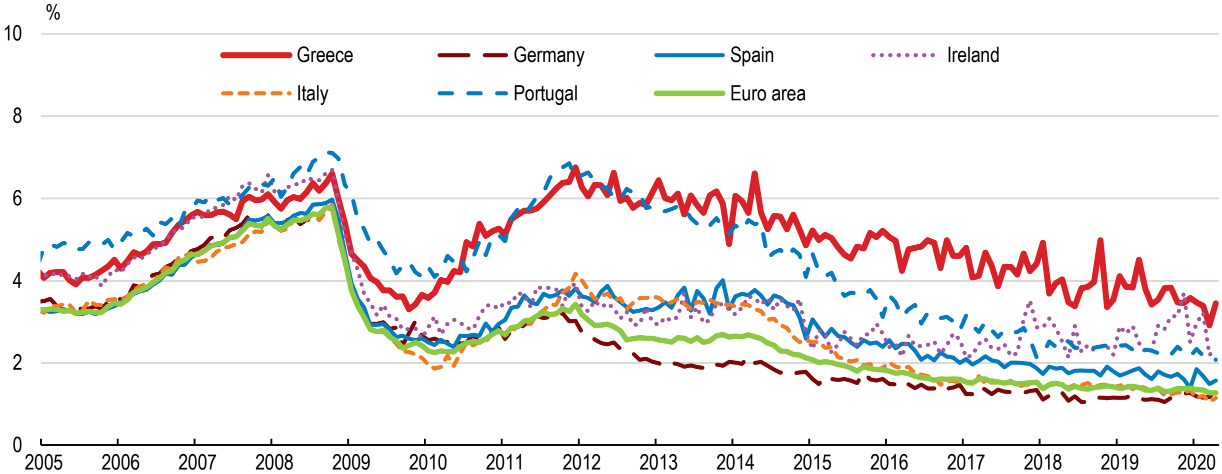
Figure 1.13. Banks' capital ratios exceed thresholds and return on assets has improved



1. % of the total risk exposure
2. The ratio is calculated by dividing annual profit or loss by total assets.
Source: European Banking Authority (2020),"Risk Dashboard, Data as of Q4 2019".

StatLink https://doi.org/10.1787/888934154129

Figure 1.14. Bank lending rates to firms have fallen, but remain higher than in other euro area countries



Source: European Central Bank, Statistical Data Warehouse, European Central Bank.

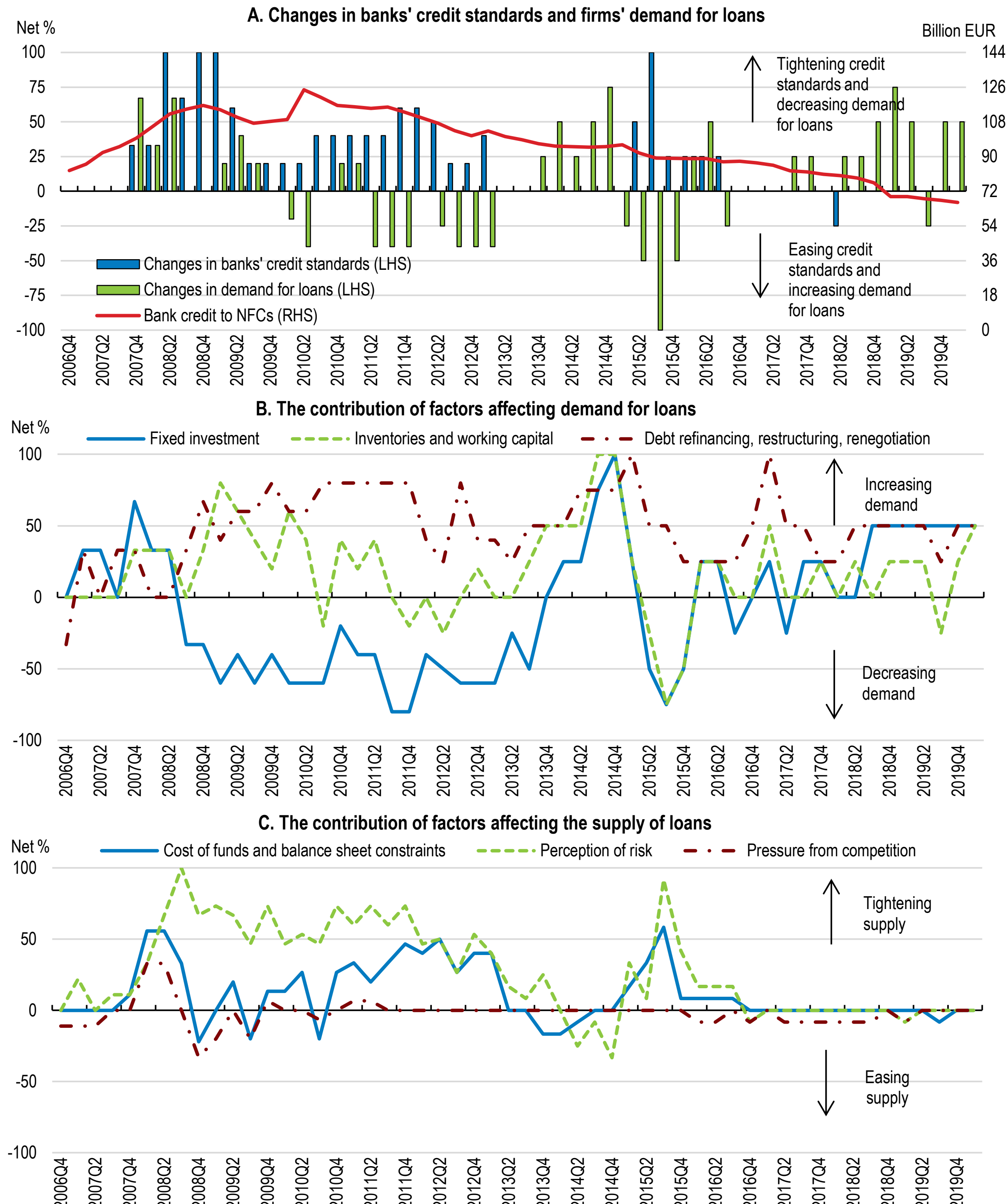
StatLink https://doi.org/10.1787/888934154148

Despite this progress, the sector still faces difficult challenges due mostly to the large stock of non-performing loans, low quality capital and low profitability. The COVID-19 shock amplifies these challenges, as the crisis is hampering loan securitisation activity globally, thus delaying steps to resolve banks' non-performing loans. The crisis also raises the risk of adding new non-performing loans, which remain high by international standards and historical experience (Figure 1.16, Panel A), especially in the case of a second outbreak and a large number of new insolvencies. The large stock of NPLs in banks' balance sheets restricts bank lending. Greek banks report that the large stock of NPLs generate additional costs relating to balance-sheet clean-up operations, increased regulatory burden and difficulties in accessing market funding. These additional costs heighten banks' risk aversion and contribute to tight credit standards and loans' strict terms and conditions (Figure 1.15, Panel C).

Given current conditions and policies, it will be difficult for the banking sector to address the high level of non-performing loans without generating balance sheet losses and lowering banks' capital adequacy ratios. Non-performing loans are a source of vulnerability for the banking sector as, net of provisions, they still amount to more than 140% of banks' total regulatory capital (Figure 1.16, Panel C). Before the COVID-19 shock, the inflow of new non-performing loans was moderating but still substantial. In 2019 it amounted to EUR 7.4 billion compared against EUR 7.7 billion over 2018. It remains above the value of non-performing loans that are cured (EUR 6.2 billion in 2019 and EUR 6.8 billion in 2018). Much of the inflows relate to re-defaults on previously restructured loans. The NPL stock was gradually declining due mostly to sales and write-offs. In 2019 NPL sales amounted to EUR 8.1 billion while write-offs amounted to EUR 4.3 billion, for a total reduction in NPLs of EUR 13.3 billion.

Accelerating the reduction of banks' NPLs is key to restoring banks' health and their capacity to lend and to finance the recovery. Thus far, consumer NPLs have declined the most, but they account for just over 10% of total NPLs. Business NPLs, which account for just over half of total NPLs, have also declined whereas residential NPLs, accounting for about one-third of total NPLs, have declined only marginally (Figure 1.16, Panel B). In 2017, banks set up strategic plans to dispose of NPLs. Initial targets aimed at reducing NPLs by 38% between June 2017 and December 2019. Between early 2017 and the end of 2019, banks managed to reduce non-performing loans by 34%, driving the ratio of NPLs to total gross loans from the peak of 49% (in early 2017) to 41% (December 2019). The small decline in the NPL ratio is attributable to the reduction in gross bank lending. According to current plans, the four systemic banks aim at reducing their average NPL ratio to below 20% by the end of 2021 (which is still well above the Euro area average), mostly through sales, securitisation and restructuring. This target is also based on the assumption of a rapid increase in gross bank lending over the next two years.

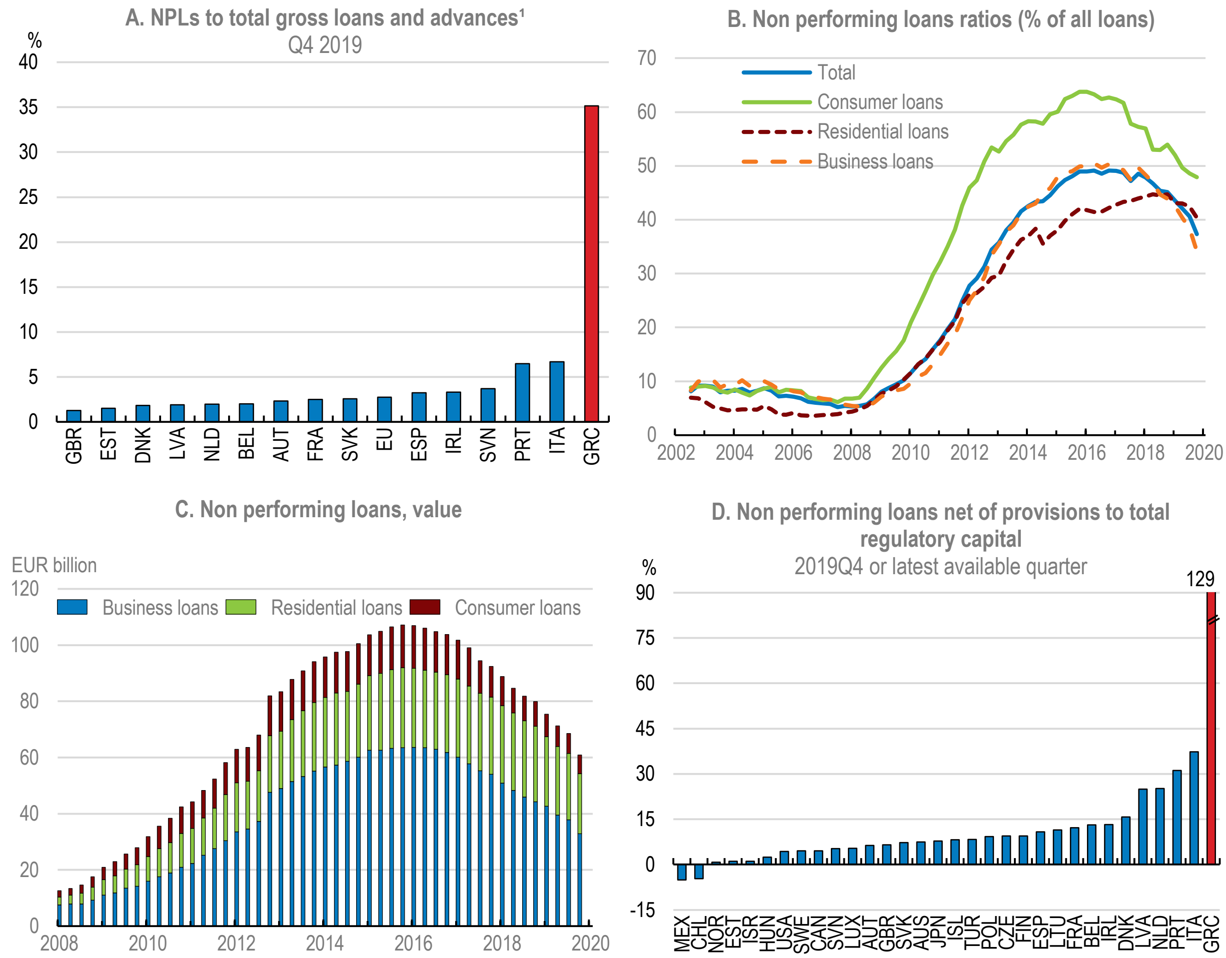
Figure 1.15. The demand for loans has increased but credit standards have yet to ease



Note: Net percentages for credit standards are defined as the difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat" and the sum of the percentages of banks responding "eased somewhat" and "eased considerably". Net percentages for the questions on demand for loans are defined as the difference between the sum of the percentages of banks responding "increased considerably" and "increased somewhat" and the sum of the percentages of banks responding "decreased somewhat" and "decreased considerably".
Source: Bank of Greece and ECB Bank Lending Survey.

StatLink https://doi.org/10.1787/888934154167

Figure 1.16. The stock of non-performing loans has been declining but remains high



1. Individual country data includes subsidiaries, which are excluded from the EU aggregate. The sample of banks is unbalanced and reviewed annually. Non-performing loans (NPLs) and non-preforming exposures (NPEs) are those that satisfy either of the following criteria: 1) material exposures that are more than 90 days past due; 2) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due. NPEs include, in addition to loans and advances, debt securities. NPL and NPE ratio are of similar magnitude in Greece. In 2019Q1 and Q2, the NPE ratio was 4.7 percentage point lower than the NPL ratio.
Source: Bank of Greece; European Banking Authority (2020),"Risk Dashboard, Data as of Q4 2019" and IMF (2020), *IMF Financial Soundness Indicators* Database.

StatLink https://doi.org/10.1787/888934154186

Banks continue to face difficult challenges relating to the quality of their capital, as deferred tax credits (DTCs) amount to nearly 60% (EUR 16 billion) of banks' regulatory capital. Deferred tax credits discourage banks from disposing of non-performing loans, as this would lead to additional net accounting losses, which could lead banks to issue equity in favour of the government (by an amount equivalent to the deferred tax credit times the net accounting loss over the bank's equity). As the issuance of new equity in favour of the government would dilute existing shareholders, this curtails banks' ability to raise new capital from private investors. Though the Greek banks' equity index doubled over 2019, it decreased by 50% since the pandemic hit and banks' equity valuations are still well below their net book value.

International experience shows that progress in disposing of NPLs from banks' balance sheets requires concerted efforts in three main policy areas (Aiyar et al., 2015[11]; Liu and Rosenberg, 2013[12]): tightening regulatory policies and improved corporate governance; developing a market for NPLs; and improving insolvency and loan foreclosure procedures.

Tightening regulatory policies and improved corporate governance

As reported in the previous OECD Economic Surveys (OECD, 2018[10]), supervisors have tightened regulatory policies substantially and these are now in line with those of EU and Euro area countries. The Hellenic Financial Stability Fund (HFSF), as the major shareholder in three of the four systemic banks, continues playing an important role in recommending and implementing corporate governance reforms. Building on a 2016 review of boards and board committees of systemic banks, the HFSF completed another review in 2017. This provided specific recommendations for further improvement in banks' corporate governance, focussing on boards of directors and their risk and audit committees. The HFSF reports that as of end-2019, about 80% of the 175 recommendations of the review have been implemented. Improvements in the banks' risk governance and risk management framework include: adding experienced and skilled independent non-executive members to boards' risk and audit committees and enhancing reporting requirements; introducing guidelines for drafting risk and capital strategies; elevating the role and the status of the chief risk officer. Entrenching good corporate governance and risk governance practices in Greek banks is key for the HFSF to divest successfully its equity holdings, which is currently planned for December 2022.

Developing a market for non-performing loans

Reforms have led over the past two years to the development of a secondary market for NPLs. Banks have sold EUR 17.4 billion of non-performing loans since the start of 2017, including EUR 8.1 billion sold in 2019. Changes to regulation of the loan servicing industry (Law 4354/2015 and its implementing regulations) have led the number of loan servicers to increase to 22 and specialised investors are showing a growing interest in Greek NPLs (EY, 2018[13]). Specialised credit servicing firms managed over EUR 30 billion of NPLs in March 2020. While part of these loans remains on banks' balance sheets, outsourcing servicing can raise the efficiency with which they are managed. Some of the provisions of the NPL law, however, appear to be still inconsistent with the 2003 securitisation law in terms of procedural and tax advantages, as noted by the previous Survey (OECD, 2018[10]) and by an in-depth study on regulatory constraints for the development of an NPL market in Greece (HFSF, 2018[14]). Aligning the provisions of the NPL law with those of the securitisation law may better support the sale of loans.

Creating a single platform for the purchase and sale of NPLs would increase transparency and improve the process of price discovery, thus helping the development of a secondary market for NPLs. This is consistent with EU Council Action Plan that has called on the European Central Bank (ECB), the European Banking Authority (EBA) and the Commission to consider setting up a NPL transaction platform. Further progress on enforcing collateral through e-auctions would contribute to increase the volume of NPL sales by reducing the costs and uncertainty in realising the value of collateral. According to data from the Hellenic Banking Association, in 2019, nearly 22 900 e-auctions were announced or started, against 22 400 in 2018. Nearly 6000 were uploaded in the first quarter of 2020. Of these 62% were actually finalised (i.e. deeds signed in front of notary) against 76% the preceding year, although in a majority of these (60%) there were no bidders and the bank purchased the asset that they had put up for auction. A non-negligible share of announced e-auctions (37% in 2019 and 22% in 2018) is suspended either because the debtor agrees to restructure its debt, the debtor filed for primary residence protection (as discussed below), or the loan was sold. Progress on completing the cadastre would expedite transactions where properties are used as collateral, without detriment to the protection of the primary residence as accorded by the law.

The government has recently put in place a new scheme, Hercules, to further develop the secondary market for NPLs. The scheme complies with EU state aid rules and involves a state guarantee similar to the one already in operation in Italy. Banks will securitise non-performing loans in senior, mezzanine and junior tranches. The state guarantee will apply only to the senior tranches, which will have at least a BB- rating from an independent agency, and will become effective only after more than half of the junior tranches are sold to private investors. The government will receive a market-based fee for the guarantee on the senior tranches. The scheme is expected to mobilise about EUR 12 billion in state guarantees and to contribute to derecognise about EUR 30 billion of NPLs (40% of the total) from banks' balance sheets. Three securitisation portfolios were submitted in the first months of 2020.

The Hercules scheme has the potential to lead to significantly reducing the stock of NPLs, but the government urgently needs to develop and implement a comprehensive solution to deal with the deferred tax credits on banks' balance sheets and the NPLs that will remain after the Hercules scheme. Banks started securitising tranches of NPLs under the Hercules scheme despite the disruption of the COVID-19 shutdown. Follow-on measures would potentially involve additional use of the state's balance sheet as repairing banks' balance sheets is prerequisite for durable investment recovery. The EU's Bank Recovery and Resolution Directive (BRRD) and state aid rules restrict the available options for government's intervention in resolving NPLs.

The Bank of Greece (Bank of Greece, 2018[15]) has put forward a proposal involving the transfer of banks' NPLs and deferred tax credits into a special purpose vehicle. Under this proposal, banks' asset quality would improve quickly, allowing banks to focus on their core activities and enhancing their ability to raise new equity in private capital markets. The scheme involves turning deferred tax credits into an irrevocable claim by the special purpose vehicle on the Greek government. According to the proposal the amount of the deferred tax credits to be transferred will equal the difference between the banks book value of NPLs (net of provisions) and market prices.

The proposals of the Bank of Greece has the merit of dealing at the same time with both problems of banks' balance sheets (high non-performing loans and deferred tax credits). It should be explored further and refined. The European Commission blueprint on asset management companies to accelerate the reduction of NPLs in Europe (European Commision, 2018[16]) describes different types of asset management companies, even involving state funds that would comply with the BRRD and state aid rules.

Improving insolvency and loan foreclosure procedures

Insolvency regimes and loan foreclosure proceedings have undergone several reforms since 2010. The bankruptcy code for corporate insolvency has been streamlined and modernised. In 2010, a law and its successive amendments regulated household insolvency offering protection to the primary residence. As detailed in the 2018 OECD Economic Survey, these reforms go in the right direction and the OECD policy indicator of insolvency regimes for Greece has improved markedly.

Yet, despite these positive developments, insolvency proceedings remain slow and recovery rates low according to the World Bank's Doing Business index (Wold Bank, 2019[17]). First, some of the reforms to the bankruptcy code apply only to new insolvency proceedings, thus excluding the large backlog of insolvency cases. Second, the insolvency framework is still too fragmented and slow. Companies' rehabilitation and restructuring are still too rare as most of the insolvencies end up as liquidation. Debtors can have recourse, in parallel or consecutively, to different insolvency mechanisms and use them as delaying tactics. For instance, many debtors resort to filings under the household insolvency law after the launch of enforcement proceedings or shortly before the auction's date so as to stave off enforcement. A study from the Hellenic Banking Association reports that 26% of all suspended e-auctions in the first half of 2019 was because debtors applied for the primary residence protection scheme.

Building on the reforms already undertaken, there is scope to unify insolvency proceedings through an organic reform. Establishing clear procedural rules linking different insolvency mechanisms and out-of-court debt settlement mechanisms will increase predictability and reduce abuses. Increasing the share of insolvent companies that emerge as going concerns in a short time is key to finding a durable solution to the debt overhang problem, restore the viability of borrowers and facilitate the quick reallocation of resource towards viable firms. The government plans to legislate for a new unified insolvency framework in mid-2020 to be operational from 2021. This is a welcome development as dealing swiftly and effectively with the large wave of insolvencies that the COVID-19 shock may generate will be key to supporting the recovery and limit the rise in NPLs. It will be important that this be accompanied by measures to facilitate the restructuring of insolvent firms based on agreements with a qualified majority of its creditors (i.e. forcing clauses, in line with the EU Directive on increasing the efficiency of procedures concerning restructuring and insolvency) and accelerate full enforcement of all kinds of collateral. The COVID-19 shock adds urgency to introducing such measures.

Out-of-court mechanisms for debt settlement remain underused in Greece. Despite recent reforms and awareness-raising efforts, they remain complex and debtors and creditors have still little awareness of and trust in them. Currently, there are two out-of-court settlement mechanisms in place, supported by electronic platforms (Box 1.3). A 2017 law established an out-of-court settlement procedure for business debt of enterprises, individual entrepreneurs, self-employed professionals and farmers. A 2019 law provides an out-of-court settlement for residential and business loans of individuals with primary residence collateral. These reforms are temporary and are to expire in July 2020 to accelerate the adoption of out-of-court procedures and contribute to reduce NPLs.

Box 1.3. Out-of-court debt settlement in Greece

Law 4469/2017 introduced out-of-court settlement procedure for business debt of enterprises, individual entrepreneurs, self-employed professionals and farmers, based on the ability to pay. In the case of multiple creditors, debt settlements can involve forcing clauses whereby the agreement of creditors representing 60% of the total debt and 40% of secured debt bind also dissenting creditors. The court must ratify such agreements for it to bind dissenting creditors. According to Law 4469 the state and social security funds participate in the settlement protection with the possibility of cancelling fines and surcharges and can spread the repayment of debts over 120 monthly instalments. Simplified settlement procedures apply to debtors owing less than EUR 300 000.

Law 4605/2019 introduced out-of-court settlement for residential and business loans of individuals with primary residence collateral. The mechanism introduced of 4605/2019 is debtor friendly as it provides protection to the primary residence, if its “objective” value is below EUR 250 000 and if the outstanding mortgage is below EUR 130 000. This new out-of-court mechanism can be initiated by the debtor (individuals or businesses of any size) by submitting an application to an electronic platform managed by the Special Secretariat for the Management of Private Debt (http://www.keyd.gov.gr).

Additionally, according to Law 4605/2019, the State can also subsidise the agreed repayments for households with yearly income below pre-defined thresholds (e.g.: EUR 26 000 for a family with a child). Law 4605/2019 altered the thresholds for the protection to the primary residence.

Source: http://www.keyd.gov.gr

The reformed out-of-court debt settlement mechanisms are still complex and slow, especially when there are multiple creditors, and have yet to contribute to reducing NPLs. Debt settlements involve technically challenging details (e.g.: valuations of assets and income of debtors, amounts owed to different creditors), causing disputes between debtors and creditors, and requiring careful evaluation by the ratifying court (HFSF, 2018[14]). This in turn delays the court-ratification process, defeating the purpose of the out-of-court debt settlements and making the debt settlement mechanism for business debts (in case of multiple creditors) akin to the recovery proceeding of the Greek bankruptcy code. These problems might be discouraging banks from participating in out-of-court debt settlements along with other factors such as poor coordination among banks in cases of multiple creditors. Moreover, households filing for household insolvency before the end of February 2019 (following Law 3869/2010) enjoyed stronger protection than under out-of-court debt settlement mechanisms. The two processes overlap in many respects, generating uncertainties and delays.

As a result, most debt-settlement proposals are still pending. Data from the General Secretariat of Private Debt (an agency of the Ministry of Finance) shows that by 19 June 2020, out of 57 363 applications (for which financial confidentiality was lifted), more than 4 308 of them were forwarded to banks and more than 1254 accepted. As regards out-of-court debt settlements involving business's debts, from August 2017 to December 2020, only 433 proposals reached completion out of 10 276 proposals deemed eligible (Special Secretariat for the Debt Management, 2020[18]). The mechanism is especially slow for settling businesses' debt involving multiple creditors, as only 5% of cases submitted up to March 2019 have been resolved. Results are better for businesses' debt involving only one creditor (37% resolved) and for the restructurings of self-employed professionals' and farmers' debts (European Commission, 2019[19]).

Out-of-court debt settlement mechanisms need to be streamlined, especially in cases of multiple creditors, with the aim of avoiding procedural abuses and shortening the court-ratification processes. Further reforms without consultation with stakeholders should be avoided. The government should also consider introducing permanent mechanisms for out-of-court debt settlement in conjunction with ongoing efforts to strengthen mediation processes in the justice system (discussed below) and to reform and unify the corporate and personal insolvency frameworks.

Past OECD recommendations on financial stability policy

Past recommendations	Actions taken
Continue to align banks' governance standards with international best practices.	The Hellenic Financial Stability Fund has continued its work to improve banks' corporate governance by monitoring banks adherence to the guidelines and supervision of Board-level and updating them.
Align tax incentives for disposing of non-performing loans with those of previous legislation and make them temporary.	The Ministry of Finance has issued instructions regarding securitisation legislation, and reinstated the favourable tax treatment of loan write-offs that had expired at the end of 2018.
Fully implement out-of-court workout procedures and e-auctions.	Legislation on out-of-court procedures and e-auctions has been updated but out-of-court workouts remains complex, subject to disputes and little used. E-auctions proceed slowly.
Fully implement the legislated insolvency reforms.	The legislation is in place but its implementation is delayed due to the slowness of the justice system and low take-up by creditors and debtors in default. Legislation to unify the insolvency regime is being prepared.
Ensure a sufficient number of well-trained insolvency professionals start operating soon.	Insolvency professionals are progressively being trained, professionally certified and entering practice.

A package of structural reforms would strengthen the recovery, improve social inclusion and reduce the public debt

Meeting the country's challenges requires, in addition to overcoming the COVID-19 shock, continuing to implement structural reforms, to boost employment, investment and productivity, and to achieve sustained primary surpluses. . The government's policy actions provide steps to address these challenges, through encouraging employment and investment as the economy recovers.

OECD estimates suggest that a comprehensive reform package would lift growth and reduce poverty into the long run by increasing employment, investment and productivity (Table 1.4) and improving fiscal sustainability. Trend GDP growth would increase by 1 percentage point by 2030 and achieve faster growth in incomes per capita ("Recommended reforms" in Figure 1.17) with most of the increase in growth from higher productivity growth.

Table 1.4. A policy reform package to boost income into the long term

Scenario	Policy goals	Policy actions	Cumulative effect on real GDP relative to baseline of policies in 2019, %			
			2025	2030	2040	2050
1	Policies to support employment and inclusiveness	Support employment by reducing the labour tax wedge by 7 percentage points. Strengthen social protection policies to reduce inequality. Support inclusive employment opportunities by raising in-kind family spending.	0.8	3.0	5.2	6.1
2	Policies to improve the investment climate	Improving judicial and public administration efficiency continues to raise the 'rule of law' indicator. In the baseline this reaches Greece's pre-crisis level in 2030. In this scenario it continues rising to the OECD average by 2050. Corporate income tax rates are lowered to 24% from 2022.	0.0	0.1	1.2	4.5
3	Boost investment in infrastructure, knowledge and human capital	Increase public investment spending to 4% of GDP by 2030 (from 3.0% projected in 2021). Use public incentives to boost R&D spending. Raise the quality of schooling, while expanding adults' participation in adult skill and training. Boost spending on active labour market policies.	0.4	2.1	6.5	11.8
4	Recommended reform package	Introduce all of above reforms.	1.2	5.2	13.4	24.2
5	Recommended reform package with faster population growth	Introduce all of above reforms and assume higher growth of the working age population (modelled as 20 000 additional adults aged between 20 and 44 entering the population each year).	1.7	7.1	19.3	35.6

Note: The baseline projections takes into account the reduction of the corporate income tax rate to 26% (as had been legislated before the late-2019 rate cuts) and assume that: recent public administration and judicial reforms will drive the perception of the quality of the rule-of-law to its pre-crisis level by 2030; 2) implemented regulatory reforms reduce the product market regulation index by 0.107 to 1.62 and the Electricity, Transport Communication Regulation (ETCR) index by 0.78 to 1.77 from 2022; 3) the Gini coefficient of income inequality is 0.9 lower following the introduction of the guaranteed minimum income and reform of family and rent support policies; 4) implemented pension reforms lead the average effective retirement age to rise to 65 by 2030 and with life expectancy thereafter.
Source: OECD calculations based on Y. Guillemette, et al. (2017), "A revised approach to productivity convergence in long-term scenarios", *OECD Economics Department Working Papers*, No. 1385, OECD Publishing, Paris.; M. Cavalleri, and Y. Guillemette (2017), "A revised approach to trend employment projections in long-term scenarios", and *OECD Economics Department Working Papers*, No. 1384, OECD Publishing, Paris.; Y. Guillemette, A. de Mauro and D. Turner (2018), “Saving, Investment, Capital Stock and Current Account Projections in Long-Term Scenarios”, *OECD Economics Department Working Papers*.

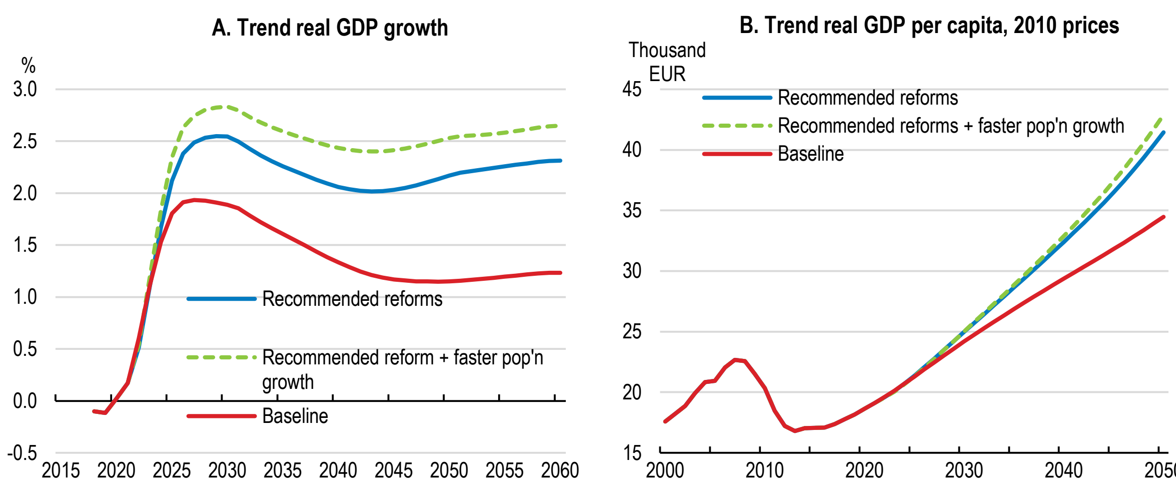
Improving the investment climate by raising the performance of the public sector and of the justice system would have a large positive impact on growth by lifting productivity and investment. This will be essential for resuming Greece’s recovery following the COVID-19 shock. Ensuring that appointments and removal of senior officials in the public administration and independent authorities take place through open, transparent and objective processes, are not politicised and are based on merit would improve trust in and the performance of the public administration. Staggering the appointment of members of boards of independent authorities would weaken the link between the political cycle and boards’ composition, strengthening their independence.

Reducing barriers to formal employment will support inclusiveness and growth especially during the first years following reforms (Table 1.4). These measures include reducing the labour tax wedge and expanding family policies (discussed in detail Chapter 2) to boost participation rates, activity and incomes. Raising Greece’s human capital by lifting the quality of its schooling and expanding access to life-long learning (as discussed in Chapter 2) alongside higher government investment in infrastructure and innovation, would support the recovery in the productive capital stock and productivity.

Continuing to swiftly implement the Ministry of Digital Governance’s multi-year transformation plan for the public administration can contribute significantly to raising the effectiveness of the public sector and to improving the quality of public services (Box 1.4). The government swiftly scaled-up digital services and work arrangements during the COVID-19 lockdown period, demonstrating the importance and effectiveness of these technologies in providing public services. Consolidating and further extending these reforms when the emergency is over is likely to require deeper changes in the organisational culture of the civil service. Even in relatively well-performing public services, organisational culture can be a barrier to digital transformation, as shown by the experience of Sweden (OECD, 2019[20]). Continuing the ongoing human resources reforms in the public administration will contribute to addressing these problems. Fully reaping the benefits of digital technologies also requires boosting digital skills, both across the public sector and the general population. As discussed in Chapter 2, quality school and tertiary education along with lifelong learning courses adult learning are key to developing digital skills.

Policies that succeed in reversing or slowing the fall in the working age population will help to support long-run growth. The "Recommended reforms + faster pop'n growth" projection simulates the effects of adding 20 000 people per year to the working age population from 2021 onwards (while applying the same annual population growth rate as in the baseline scenario). Overall, in this scenario, the working age population would raise compared with the baseline scenario by 2.7% in 2030, 5.6% in 2040 and 8.8% in 2050, although in 2050 the population will still be 12% lower than in 2018 (against 19% in the baseline scenario). The slower fall in the working age population would add 0.5 percentage point to annual GDP growth when compared to "Recommended reforms" scenario (Figure 1.17, Panel A). The gain in GDP per capita would be smaller because of the larger population (Figure 1.17, Panel B). The simulated positive impact of higher working age population on GDP growth and GDP per capita is conservative as it works only through higher employment and does not take into account the positive effects that a larger population has on innovation, and productivity (Kremer, 1993[21]; Jones, 2020[22]; Romer, 1990[23]; Aghion and Howitt, 1992[24]) .

Figure 1.17. Ambitious reforms to boost employment, investment and productivity will increase GDP growth and incomes



Note: Policy scenarios are described in Table 1.4.
Source: Calculations based on several *OECD Economics Department Working Papers*: Guillemette, et al. (2017), "A revised approach to productivity convergence in long-term scenarios", No. 1385; Cavalleri, et al. (2017), "A revised approach to trend employment projections in long-term scenarios", No. 1384; Guillemette, et al. (2018), "Saving, Investment, Capital Stock and Current Account Projections in Long-Term Scenarios"; and United Nations population projection scenarios.

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Stemming emigration, encouraging emigrants to return and successfully integrating a larger number of immigrants into the labour force would be one way to slow and reverse the decline in the working age population. Improving the business and the research environment (as discussed below) can dissuade qualified young adults from emigrating and encourage those who have left to return. Recent initiatives, such as the working group (Re-Brain Greece) initiated by the Ministry of Labour and Social Affairs with social partners and other stakeholders to develop policies to reduce the brain drain effect, should be pursued. Integrating immigrants into the labour force is proving challenging in Greece, as elsewhere, because of resource constraints and the need to adapt training to the needs of immigrants. Greece is the EU country (along with Italy and Malta) with the highest proportion of foreign-born migrants with low educational attainment, compounding integration challenges. The experience of other OECD countries shows that strong active labour market policies, which include tailored training to help immigrants adapt and certify their skills for the national labour market, combined with language and cultural education, are most effective. Box 2.2 in Chapter 2 highlights best practices from OECD countries on this issue.

Box 1.4. The plan to digitalise Greece's public administration

Digital technologies can improve governments' efficiency and raise the quality of and access to public services by simplifying processes, broadening access and improving information flows. Moreover, digitalisation of the public sector can short-cut some of the barriers to government services and promote a more productive and dynamic business environment. It can also accelerate digitisation in the private sector by encouraging firms to interact with the public administration through digital technologies.

Greece lags other EU and OECD countries in the area of digital public services. According to the European Commission's Digital Economy and Society Index 2019 (DESI) Greeks ranks 27th among EU-28 countries in the area of digital public services. Greece's government is aware of this challenge and is taking steps to extend the use of digital technologies in the public administrations as a way to reduce red tape and improve the quality of public services. Greece's digitalisation agenda shares many elements of other OECD countries' digital transformations and incorporates lessons from countries such as Estonia and the United Kingdom. The OECD Digital Government Reviews describe strategies adopted by other OECD countries to implement digital technologies in the public administration.

Greece's digitisation programme is being led by the newly created Ministry of Digital Governance. One of the task of the new Ministry is to link efforts on the digital transformation of the public sector with the administrative reforms. Specific measures of the digitisation programme include: introducing an electronic identity document (ID) and a unique citizen number; improving interoperability of public administration's IT systems; establishing a national cybersecurity authority; and creating a digital national registry of infrastructure. One of the main initiatives involves establishing a government digital portal, www.gov.gr, emulating the United Kingdom's government portal (www.gov.uk), and identifying and digitising cumbersome administrative procedures affecting a large number of people and firms. The government's clear sequencing of reforms, from early wins to medium-term actions, along with the establishment of an Observatory for Bureaucracy to identify and address impediments to reform can improve the programme's implementation and durability.

Source: Ministry of Digital Governance, Hellenic Republic (2019); OECD (2019[20]); Wellby (2019[25]); OECD (2019[26]).

Raising the fertility rate would increase, over the long term, the working age population. The experience of other OECD countries show that with the right policies fertility rates can increase significantly even over a short period. For instance, in France the fertility rate rose from 1.7 in the early 1990s to 2.1 in the late 2000s; in Sweden it rose from 1.5 in the late 1990s to 2.0 ten years later. Some of the policies included in the recommended reform package – such as generous, targeted family policies and measures to improve employment prospects and economic stability – would go towards increasing fertility rates, helping to rejuvenate the country.

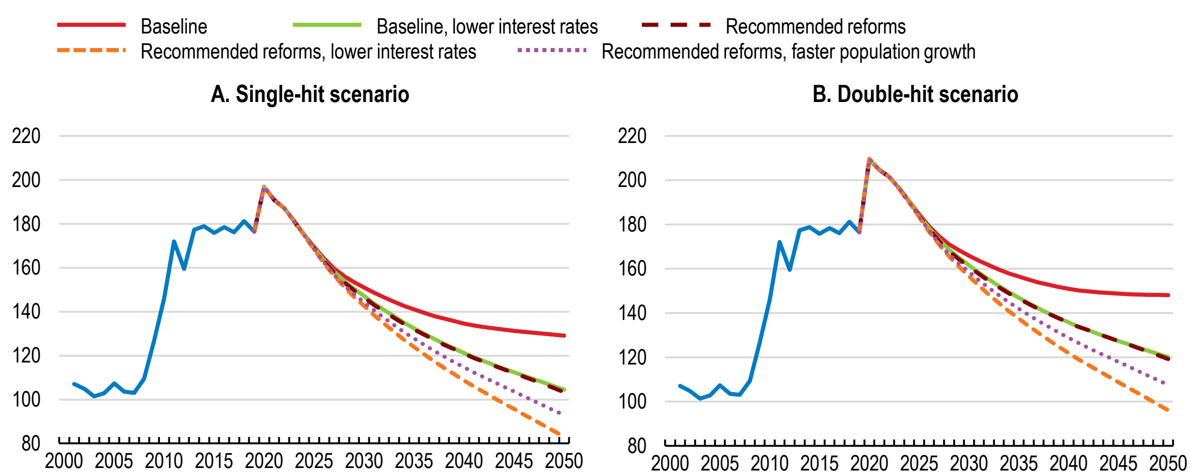
By lifting growth, with limited overall impact on net expenditure (Box 1.5) the proposed reform package would contribute to maintaining high primary surpluses for many years and safeguarding fiscal credibility.

Raising growth and achieving sustained primary surpluses (2% to 2.5% of GDP) would put the debt-to-GDP ratio on a firm downward path and reduce gross financing needs (Figure 1.18 and Figure 1.19).

Faster growth, along with lower market interest rates and longer maturity debt, would ensure that annual gross financing needs stay well below 15% of GDP (Figure 1.19). In the baseline scenario, gross refinancing needs are projected to peak in 2033 at 11%-12% of GDP in both the single-hit and double-hit scenarios, assuming an average maturity of the new market debt of 7 years. In the "recommended reforms" scenario, the gross financing needs will reach about 11% of GDP in 2033. Only in a negative scenario, consisting of a combination of lower GDP growth, lower primary surpluses, shorter average maturity of the new debt and higher average interest rates, would gross financing needs rise above the 15% of GDP threshold before 2030, which may trigger additional debt measures (as agreed by the Eurogroup). For instance, in the double-hit scenario and with an average maturity of new debt of just 4 years, annual gross financing needs would only exceed 15% of GDP briefly, reaching 15.6% of GDP in 2028.

Figure 1.18. Comprehensive structural reforms will lower the public debt ratio

Gross public debt, % of GDP



Note: Policy scenarios are described in Table 1.4 and assumptions are summarised in Table 1.6. The "single-hit" scenario assumes that the pandemic is brought under control before the summer of 2020; the "double-hit" scenario assumes a second wave of contagion and lockdown measures late in 2020.

Source: Calculations based on several *OECD Economics Department Working Papers*: Guillemette, et al. (2017), "A revised approach to productivity convergence in long-term scenarios", No. 1385; Cavalleri, et al. (2017), "A revised approach to trend employment projections in long-term scenarios", No. 1384; Guillemette, et al. (2018), "Saving, Investment, Capital Stock and Current Account Projections in Long-Term Scenarios".

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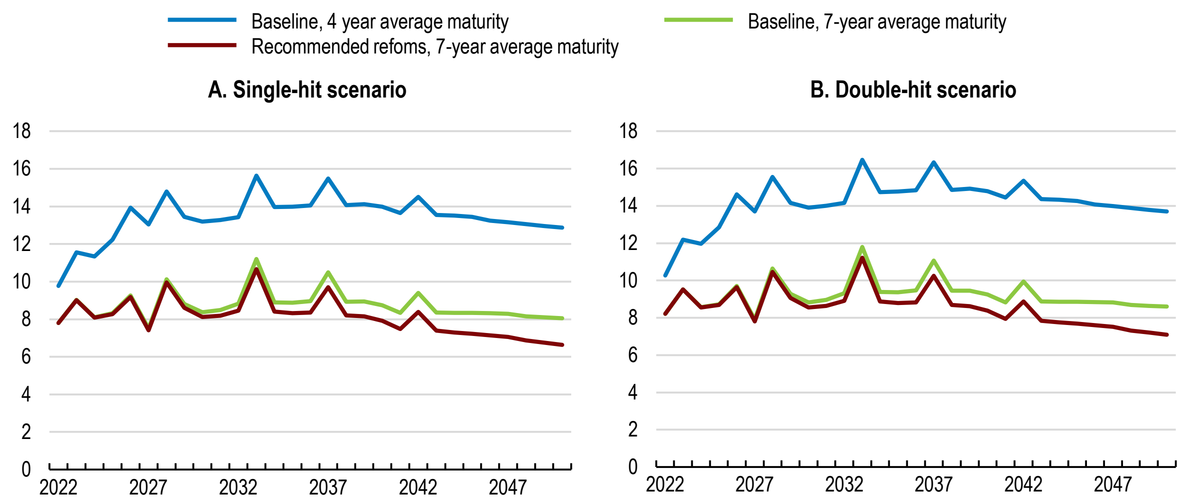
Figure 1.19. Gross financing needs are projected to remain modest under most scenarios

Annual gross financing needs, % of GDP



Note: Average maturity relates to new debt issued on government bond markets. New debt is assumed to be issued in equal annual amounts with a maturity from one year head to twice the average maturity. Policy scenarios are described in Table 1.4 and debt market assumptions are summarised in Table 1.6. The “single-hit” scenario assumes that the pandemic is brought under control before the summer of 2020; the “double-hit” scenario assumes a second wave of contagion and lockdown measures late in 2020.
Source: Ministry of Finance, OECD calculations.

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Table 1.5. Assumptions of debt simulations

		2018	2020	2022	2024	2026	2030	2040	2050
Single-hit scenario:									
Primary budget balance	% GDP	4.0	-4.8	-0.5	2.0	2.2	2.2	2.2	2.2
GDP deflator	%, annual	0.5	-1.3	0.5	1.0	1.4	1.9	2.0	2.0
Real GDP growth:									
Baseline	%, annual	1.9	-8.0	2.5	2.5	2.5	2.1	1.4	1.1
Recommended reform package	%, annual	1.9	-8.0	2.5	2.7	2.9	2.8	2.1	2.1
Recommended reform package + higher fertility rate	%, annual	1.9	-8.0	2.5	2.7	3.1	3.1	2.5	2.5
Double-hit scenario:									
Primary budget balance	% GDP	4.0	-5.9	-1.2	1.2	2.2	2.2	2.2	2.2
GDP deflator	%, annual	0.5	-1.0	0.5	1.0	1.4	1.9	2.0	2.0
Real GDP growth:									
Baseline	%, annual	1.9	-9.8	2.5	2.5	2.5	2.1	1.4	1.1
Recommended reform package	%, annual	1.9	-9.8	2.5	2.7	2.9	2.8	2.1	2.1
Recommended reform package + higher fertility rate	%, annual	1.9	-9.8	2.5	2.7	3.1	3.1	2.5	2.5
Baseline interest rate projection:									
Benchmark interest rate (Germany Bund 10 year rate)	%	0.1	-0.2	-0.2	-0.2	1.5	3.2	3.2	3.2
Official creditor interest rate	%	1.0	0.6	0.6	0.6	1.8	3.5	3.5	3.5
Market nominal interest rate	%	8.4	1.7	1.7	1.7	3.2	4.9	4.9	4.9
Low interest rate scenario:									
Benchmark interest rate (Germany Bund 10 year rate)	%	0.1	-0.2	-0.2	-0.2	1.2	2.8	2.8	2.8
Official creditor interest rate	%	1.0	0.6	0.6	0.6	1.5	3.1	3.1	3.1
Market nominal interest rate	%	8.4	1.7	1.7	1.7	2.7	4.0	4.0	4.0

Note: The “single-hit” scenario assumes that the pandemic is brought under control before the summer of 2020; the “double-hit” scenario assumes a second wave of contagion and lockdown measures late in 2020.
Source: OECD *Economic Outlook 107* database and OECD calculations.

Box 1.5. The fiscal impacts of a comprehensive reform programme

Table 1.6 presents estimates of the fiscal effects of the recommended reform package. The fiscal effects allow for limited behavioural responses. The recommended reforms with minor fiscal impacts are not presented. Reforms assessed for fiscal impact are the same as those simulated for long-term GDP effects in Table 1.4 and Figure 1.17. The overall negative fiscal impact is consistent with Greece's primary budget surplus target declining from 3.5% of GDP to 2% to 2.5% of GDP from 2023.

Table 1.6. Illustrative fiscal impacts of recommended reform package

Fiscal savings (+) and outlays (-), % current year GDP

	2025	2030
Policies to support employment and inclusiveness		
Support employment by progressively reducing the labour tax wedge (by the equivalent of 7 percentage points for singles and couples earning the average wage, and for the self-employed).[1.]	-0.80	-1.00
Strengthen social protection policies to reduce inequality, by boosting the GMI and introducing in-work benefits[1.]	-0.35	-0.35
Support inclusive employment opportunities by progressively raising in-kind family spending to the 75th percentile of OECD countries (at 1.1% of GDP)	-0.60	-0.90
Remove housing benefits from mortgagees and the EUR 2000 birth payment[1]; consolidate untargeted social expenditure and redirect savings from the cancellation of the 13th month pension.	0.4	0.4
Adjust equivalence scales for social transfers [1.]	0.02	0.02
Policies to improve the investment climate		
Continue efforts to boost tax compliance and enforcement[2.]	1.35	1.60
Boost investment in infrastructure, knowledge and human capital		
Progressively raise public investment to 4% of GDP.	-0.70	-1.00
Through public incentives, progressively boost R&D spending by 0.25% of GDP.	-0.20	-0.25
Progressively raise the quality of schooling to close the gap in PISA score with the OECD average, while expanding adults' participation in adult skill and training.	-0.60	-0.90
Progressively boost active labour market policies (so that spending reaches 20% of GDP per capita per unemployed person by 2030).	-0.35	-0.60
Revenue gain from higher growth following recommended reform package		
Increase in overall revenues[4.]	0.66	2.52
Overall budget impact of specific measures of recommended reform package	**-1.2**	**-0.45**
Memo: GDP % difference from baseline	*1.7%*	*7.1%*

Note: 1) Estimated with EUROMOD for the direct increase in transfers and revenues from the tax and benefit reforms recommended in Chapter 2, Table 2.2. 2) Potential revenue gains from reducing tax evasion are based on OECD estimates of the gap between realised and potential VAT revenues, adjusted for projected nominal GDP growth, and given revenue gains through compliance measures projected in the 2020 budget. 3) Additional expenditure to increase education quality and access to lifelong education and skill training gradually brings Greece's spending up to the OECD average. 4) Gain in public revenues from the projected expansion in GDP associated with the reform programme, calculated as the difference in projected nominal GDP between the recommended reform programme and the baseline projection, multiplied by the estimated ratio of revenues to potential output.
Source: OECD calculations

Earlier reforms improved markedly the sustainability of pensions but costs remain high

Greece's pension system underwent several reforms during the crisis. Pension funds and access rules are being unified, pension floors and ceilings adjusted, and the retirement age lifted to 67 (62 for those with 40 years' contributions) and will increase with life expectancy from 2021. A new defined-benefit pension applies to all, including existing retirees, and pension values will be unfrozen and adjust with movements in prices and in GDP from 2023 (European Commission, 2018[27]; National Actuarial Authority, 2019[28]; Nektarios and Tinios, 2019[29]).

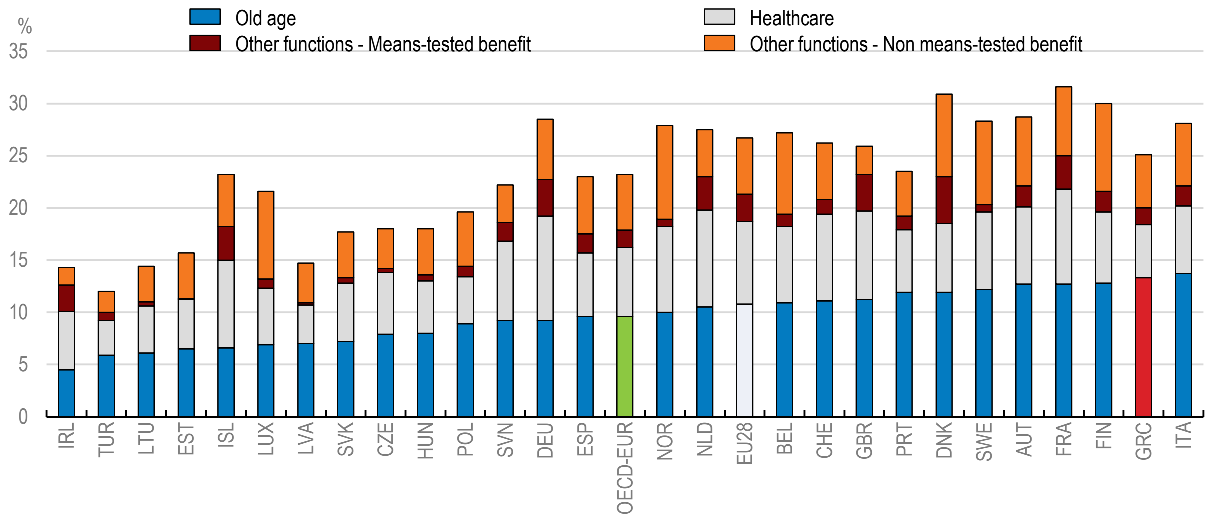
Following these reforms, Greece's pension spending remains among the highest across the OECD (Figure 1.20), but will decline from 17.3% of GDP in 2016 to 14.7% in 2020 and 13.2% in 2030 (Figure 1.21) (European Commission, 2018[30]; OECD, 2019[31]). During the reform period, severe material deprivation rates changed little among those aged over 65, despite several pension cuts that involved sacrifices for Greek retirees. At the same time deprivation rates rose substantially for younger age groups, pointing to large inter-generational inequities in Greece's social protection system.

Recently, judicial and political decisions have backtracked on some pension reforms. Pension cuts legislated to take place at the start of 2019 were reversed in December 2018. Reforms in May 2019 reinstated a 13th month pension, at a cost of EUR 0.8 billion (0.4% of GDP), and reversed earlier reforms that limited access to survivors' pensions among those younger than 55 (European Commission, 2019[32]; National Actuarial Authority, 2019[33]). These reforms have not addressed the higher risk of poverty among elderly survivor pensioners. On average in Greece, survivor pensioners receive less than 40% of their deceased spouse's pension compared with an OECD average of 54% (OECD, 2018[34]), In October 2019, a Supreme Court decision reversed some components of the 2016 and 2014 pension reforms. The decision does not have retroactive effects. To comply, in February 2020the government legislated to reinstate the pre-2014 supplementary pension rules for individuals whose combined main and supplementary pension exceeds EUR 1 300 per month, at an annual cost of EUR 240 million. This will be funded by selling part of the Supplementary Pension Fund's assets. The government also reinstated higher accrual rates for careers longer than 30 years. It cancelled the 13th month pension introduced in 2019, reallocating resources to finance the higher supplementary pensions and accrual rates. It introduced a new system of pension contributions and rights for the self-employed (discussed in Chapter 2). Any surplus that will remain after these measures are implemented should support other, better-targeted, social programmes and public investment so as to help people in poverty and boost growth. Even before the 2019 counter-reforms and the Supreme Court's decision, the pension system's sustainability remains fragile as it hinges on large increases in employment rates and productivity growth (European Commission, 2018[27]; European Commission, 2018[30]; Geppert et al., 2019[35]). Achieving this requires implementing policies, such as those in the recommended reform package proposed in this Survey, to increase employment rates across all age groups, lower labour market informality, and raise productivity growth.

Policy efforts should concentrate on safeguarding the pension reforms undertaken, addressing the remaining pockets of poverty among pensioners and strengthening the pension system's resilience. Many countries have introduced supplementary pensions (or are considering doing so) to alleviate pressures on public finances and raise the pension retirees will receive. Usually, supplementary pensions take the form of funded, defined contribution schemes, managed by private pension funds. Greece is the OECD country with the least developed funded, private pension sector – with total assets under management amounting to less than 1% of GDP in 2017 against an OECD average of 50% (OECD, 2019[36]). Gradually developing funded private pension schemes, which are supplementary to the existing public pension system, will help to diversify the sources of retirement income and to strengthen the degree of funding in the overall pension mix. In addition to boosting households' financial security and savings, funded private pensions can help to reallocate national savings toward long-term investment (Nektarios and Tinios, 2019[29]; OECD, 2018[37]).

Figure 1.20. Greece's public pension spending is high and makes up more than half of social spending

Public social expenditure by functions, % of GDP, 2017

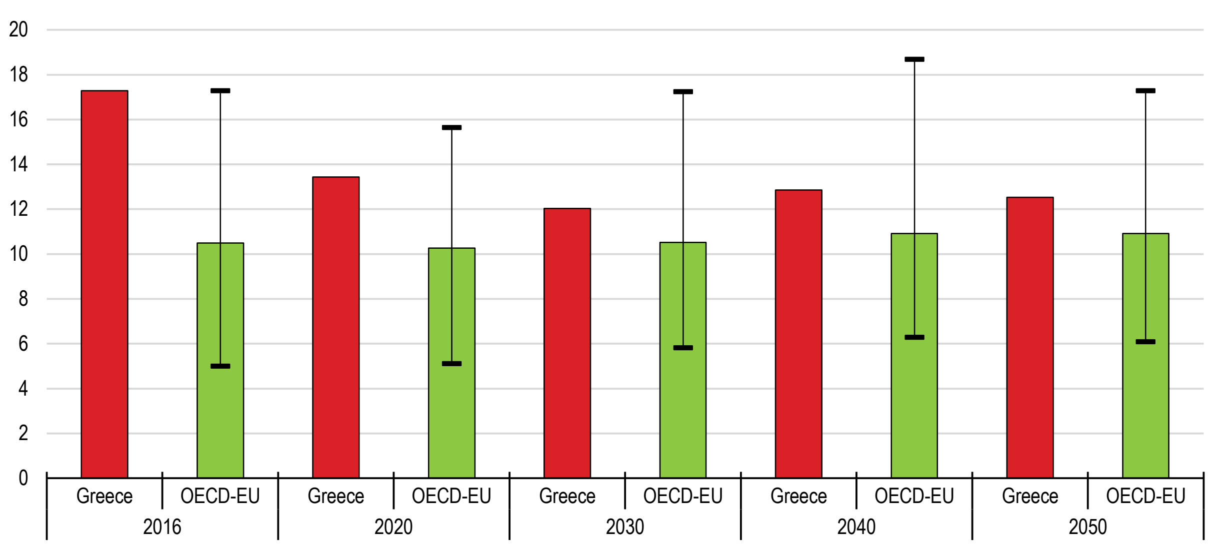


Note: OECD-EUR is the unweighted average of European OECD countries plus Turkey.
Source: Eurostat

StatLink https://doi.org/10.1787/888934154262

Figure 1.21. Greece's pension spending will decline but remains high

Gross public pensions spending, % of GDP



Note: The whiskers show the highest and lowest gross public pension spending among this group of countries. OECD-EU includes EU countries that are OECD members and Norway.
Source: Greece: National Actuarial Authority (2019), *Greek Pension System Fiche - 2019 Update*, National Actuarial Authority, Hellenic Republic. OECD-EU: European Commission (2018), The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States (2016-2070).

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Enhancing public financial management to support growth and inclusiveness

Greece remains committed to ensuring its fiscal stance is consistent with fiscal sustainability, as agreed with its European partners, once the COVID-19 shock passes. This was estimated in 2018 to entail a primary budget 2.2% of GDP on average into the long-term. The challenge will be to maintain these sizeable primary surpluses while sustaining growth and improving inclusiveness. This will require improving expenditure management and tax policies. Deep reforms since the onset of the great financial crisis have already improved public financial management. Greece's primary budget balance improvement from 2009 to 2019 (14 percentage points of GDP) in large part reflects improvements in almost all areas of budget governance (Table 1.7). These notably include the introduction of Medium-Term Fiscal Strategies and top-down budgeting, and improving external oversight, as detailed in the latest OECD Budget Review of Greece (Moretti, 2019[38]).

Table 1.7. Greece's progress on OECD Recommendations of the Council on Budgetary Governance

Budget Principle	Main weaknesses identified in 2008	Main changes up to 2018
1. Manage budgets within clear, credible and predictable limits for fiscal policy.	Limited political commitment to fiscal targets and weak top-down budgetary management.	Clear fiscal rules and strong top-down budgeting processes. Monitoring of compliance with fiscal targets across all general government.
2. Closely align budgets with the medium-term strategic priorities of government.	Annual approach to budgeting.	Annual rolling 4-year Medium-Term Fiscal Strategy.
3. Ensure that capital budgeting supports cost-effective and coherent development.	Split between the ordinary and the investment budgets should be abolished. Investment budget should be included in top-down ceilings and in programme budget presentations.	Development of basic interfaces between IT systems and use of a similar economic classification for the two budgets starting in 2019.
4. Ensure that budget documents and data are open, transparent and accessible.	Budget documentation not transparent enough (limited information on numerous special accounts and use of net budgeting). Unclear budget nomenclature, not allowing main programmes and policy objectives to be identified.	Suppression of most special accounts. New budget nomenclature. Budget documents and regular and comprehensive financial reports published through the budget cycle.
5. Provide for an inclusive, participative and realistic debate on budgetary choices.	(Not assessed as part of the Budget Review in 2008.)	Inclusive and participative budgeting not developed yet in Greece.
6. Present a comprehensive, accurate and reliable account of the public finances.	General improvement to public sector accounting (quality, timeliness, comprehensiveness) needed.	Creation of commitment registries. Transition to accruals ongoing for the whole of general government.
7. Actively plan, manage and monitor budget execution.	Focus on compliance controls and little autonomy/accountability of line ministries in spending decisions.	Cash profiles established at the beginning of the year allowing monitoring of spending. Flexibility measures provide reasonable autonomy to line ministries. Cash management supporting orderly budget execution (creation of the TSA) and sound monitoring of execution with appropriate flexibility (reserve, reallocation).
8. Ensure that performance, evaluation and value for money are integral to the budget process.	Value-for-money approach little developed but performance budgeting piloted.	Spending reviews, both targeted and general, realised in recent years. Strategy for implementing performance budgeting.
9. Identify, assess and manage prudently longer-term sustainability and other fiscal risks.	No identification of fiscal risks and assessment of long-term sustainability.	Some risks are identified and monitored. Basic disclosure in the Medium-Term Fiscal Strategy.
10. Conduct rigorous quality assurance including independent audit.	Need to modernise functions of the Court of Audit and to strengthen capacities in Parliament.	Greater independent quality assurance through the budget cycle since the creation of the PBO and Hellenic Fiscal Council. Modernisation of the Court of Audit on going.

Source: 2018 OECD Budget Review of Greece

Important reforms are still ongoing in several areas and need to be pursued. These include cash management, the unified chart of accounts, and spending reviews. The aim should be not only to control public spending more effectively but also to improve the delivery of public services, while improving the tax administration and enlarging the tax base. Progress in raising the quality of public spending is intertwined with reforms to raise the public administration's efficiency.

Past OECD recommendation on fiscal issues

Past recommendations	Actions taken
Reduce tax evasion by extending the use of risk analysis, targeted tax audits and strengthening incentives for voluntary tax compliance. Extend the obligation of having an electronic cash register to all self-employed and introduce e-invoicing.	The Independent Authority for Public Revenues is increasingly relying on risk analyses to target tax audits. An automated system now selects and prioritises audit cases. Targeted tax audits are being conducted, with targets selected using tax gap analysis and sectoral tax compliance data. Voluntary compliance is being encouraged by 2018 laws that allow taxpayers to submit tax declarations even if late but before receiving a corrective determination, and penalties are reduced if tax debts are repaid within 30 days. Taxpayers are required from 2020 to show electronic receipts for payments to the value of 30% of their income to be eligible for tax credits, otherwise a surcharge will be imposed. An electronic bookkeeping system is operating, and legislation is being prepared on e-invoicing.
Broaden the tax base and strengthen the tax administration by giving it more autonomy and freeing its resources for audits and enforcement.	The Independent Authority for Public Revenues (IAPR) is fully operational though it is still understaffed and the human resources reform is still ongoing. It will be relocated to a new building in 2020, separate from Ministry of Finance offices. The IAPR is to establish an Executive Committee to oversee the implementation of the 2019-2022 strategy.
Undertake regular spending reviews and extensive use of performance budgeting.	Spending reviews are being integrated into the budget preparation process. The Ministry of Finance has established a directorate dedicated to conducting the reviews, and an inter-ministerial committee is improving coordination.
Boost investment by frontloading the use of European structural funds, and better exploit available public land through concessions to support logistics investment.	Three logistic centres are planned, exploiting available public land and fostering logistics companies in the adjacent areas. Concession procedures for public land development are being facilitated.

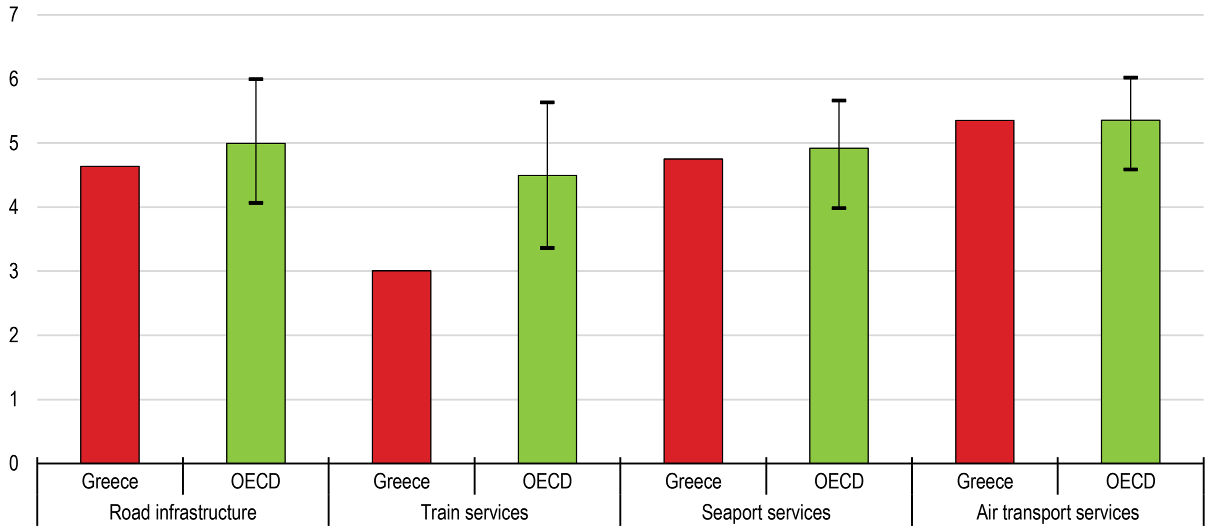
Improving the quality of public spending

As underlined by the 2018 OECD Budget Review of Greece (Moretti, 2019[38]), enhancing expenditure prioritisation and effectiveness is key to further improving public finances. To inform spending allocation decisions, a new unit in the Ministry of Finance, along with an inter-ministerial committee, are implementing spending reviews in line ministries. These reviews focus mostly on reallocating funds across programmes and allow line ministries to keep a share of any savings. The government intends to gradually integrate spending reviews into the budget process and use them as a stepping-stone towards performance budgeting. The government should ensure spending review reports are prepared early enough in the budget cycle to inform the budget. Effective spending also requires consistent and reliable costing of policies. Strengthening policy-costing capacities in the Ministry of Finance, the Ministry of Development and Investments and line ministries would improve budget execution and spending effectiveness.

Public investment spending, which is key to supporting growth and social outcomes, fell to 2.2% of GDP in 2019, 1 percentage point below the OECD average. Greece's infrastructure continues to lag other OECD countries, especially for railway services (Figure 1.22). The share of infrastructure spending funded through EU projects has risen to 85%. Road projects have dominated this spending, lifting road investment to historical highs for Greece. Road spending received 95% of inland infrastructure spending in 2017. Meanwhile, the railway sector in Greece is under-developed and shifting transport from roads (which remain dominant) to rail would help Greece to reduce emissions and reach its climate change targets (as discussed below). Overall, allocating infrastructure spending towards Greece's largest infrastructure gaps, such as in public transport, and applying cost-benefit analysis which fully incorporates environmental effects, would generate greater economic, social and environmental benefits.

Figure 1.22. Businesses perceive train services to lag other OECD countries

Scale from 1 to 7 (best), Global Competitiveness Index, 2019 edition.



Note: The bars show perceived quality of road infrastructure and efficiency of other transport infrastructure services. Whiskers indicate 10th to 90th percentile range of OECD countries.
Source: World Economic Forum (2019), *The Global Competitiveness Index 4.0 2019 Dataset*, version 20191004, and OECD calculations.

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The public investment budget (PIB) continues to suffer from inadequate project preparation and execution delays. About 80% of the PIB consists of the co-financed part of the EU structural funds. In 2019, underspending of the public investment budget amounted to nearly 8% of the budget estimate (the same as in 2018). It averaged 1.2% of GDP in 2017 to 2019. Under-spending has been mostly in projects co-financed by the EU, reflecting challenges in implementing these projects. The underspending of the public investment budget is also attributable to the incomplete land registry, which delays land acquisition procedures. The completion of the land registry is scheduled for 2022. An in-depth analysis of the public investment framework would help to identify the causes behind the recurring underspending.

The public investment budget is prepared and managed separately from the ordinary budget. While the Ministry of Finance manages the ordinary budget, the Ministry of Development and Investment manages the PIB. The presentation and reporting of the PIB has a different level of analysis than the ordinary budget – as it is organised per programme and public investment project instead of subsector of general government – and it lacks the detail, timeliness and transparency of the ordinary budget. Information on the execution of the public investment budget is available but lacks the precision and timeliness to monitor the general government budget execution throughout the year. To tackle this issue, the government has detailed an action plan to align the structure of the ordinary and public investment budget over the medium term. This plan is on-going and the government should intensify efforts in this direction, as already recommended in the 2008 Budget Review. These changes need not undermine the Ministry of Development and Investment's responsibilities over public investment decisions, including project selection and implementation. A 2019 law mandates to improve the programming, management and implementation of the part of the PIB delinked from EU funds (and accounting for about 20% of the PIB budget).

The government's payment arrears have dropped markedly in recent years, due to improved management, and after EU partners' financial assistance. At the end of 2019, the stock of general government arrears amounted to EUR 1.3 billion (0.7% of GDP), 50% lower than at the end of 2017. Most of the arrears concentrate in social security funds (40% of total) and hospitals (23%). However, improvements have slowed recently and new arrears have started to emerge again.

Past OECD recommendation on public sector efficiency and government reforms

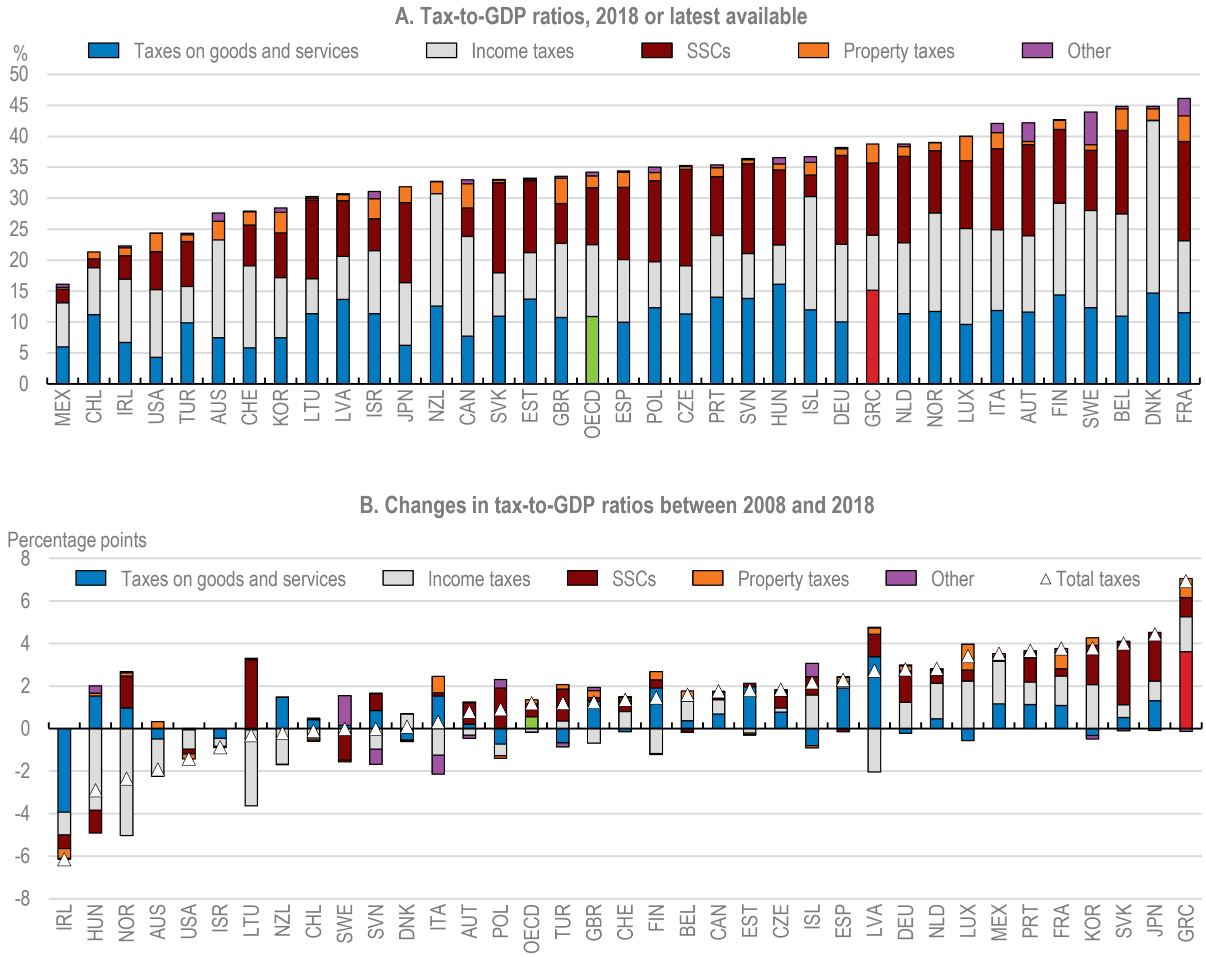
Past recommendations	Actions taken
Maintain the reform momentum focusing on implementation, enhancing public administration efficiency and continuing to fight corruption.	Reform implementation has progressed, though at an uneven pace. An inter-ministerial manual was published in June 2018, and the General Secretariat for Coordination (GSCO) was established to accelerate implementation of reforms. The Executive State Law (Law 4622/2019) strengthens the role and capacity of the Government's Presidency Office (incl. GSCO) as a self-contained structure attached to the Prime Minister, with the main task to ensure the coherence and effectiveness of the government's work. Progress has been made towards simplifying procedures and reducing administrative burdens. The National Transparency Authority has been established as a single, independent body with horizontal responsibility to enhance transparency and fight corruption, consolidating existing agencies.
Adopt key structural reforms to boost growth and enhance administrative capacity to improve overall reform implementation.	Public administration reforms have continued in different areas, such as public employment, public sector management, and justice. Permanent Secretaries have been introduced, selection procedures for senior officials reformed, and the civil servants' mobility scheme and digital organigrams are in place. Annual public servant performance assessments are in place. Goal setting is still to be introduced. The Human Resource Management Strategy is being developed with the goal of operating from 2022.
Speed up the modernisation of the public employment service.	Re-engineering of public employment services is underway, including improved communications with employers to identify skill needs, and improved IT systems to allow staff to take a more active role in job matching. Labour and social security IT systems now allow better tracking of outcomes, but are yet to be used for performance assessments.
Reduce delays and backload of cases in the judiciary by using more e-justice tools, training judges, expanding out-of-court settlements, model cases and specialised competition courts.	E-justice tools progressively being implemented. Training of judges in financial matters commenced in January 2020. Specialised courts are being set up. A new mediation framework was legislated in November 2019 which will make it mandatory, for a large number of cases, to pass through an initial informative session, promoting out-of-court dispute resolution.
Increase reform ownership by quantifying and communicating the benefits of reforms. Improve data collection and dissemination to better monitor implementation and outcomes of structural reforms.	The National Growth Strategy was launched in 2018 to deepen reform ownership and communicate benefits of reforms. It is being reviewed by the new government, with a commission established to define policy proposals to be included in a new National Growth Strategy planned to be launched in the autumn of 2020. The General Secretariat for Coordination has been established, and its website provides updated information on different government initiatives including recruitment, almost all legislation and policy initiative by the government. The Executive State Law (Law 4622/2019) provides for annual programming and monitoring by the central administration. An IT system, 'MAZI', will centrally collect and process data submitted by each Ministry on progress made on specific reforms.
Build capacity to assess the impact of reforms and reinforce coordination across line ministries.	A political committee to monitor public policies has been established. Individual agencies are quantifying the impact of some specific reforms, but without consistency or coordination.

Efforts are ongoing to tackle the structural causes of arrears. These include the lack of administrative capacity and poor coordination between different levels of governments. The removal of ex-ante audits by the Court of Auditors for entities outside the central government was a big step forward to streamline payment processes and bring Greece into line with international practices. Yet, this has shifted responsibility to government officials who often lack, especially at local levels, sufficient training and expertise in payment processes. The government is currently implementing measures to further improve the management of arrears and to eliminate net arrears based, including training to enhance payment-process expertise across the public administration. Pursuing these initiatives is crucial to ensure compliance with the EU's Late Payment Directive, which remains problematic especially in the health sector.

Making the tax system more effective

Greece's tax-to-GDP ratio surged from 31% in 2007-09 to nearly 40% of GDP in 2018, the 8th highest among all OECD countries. Taxes on goods and services, on personal income and on properties recorded the largest increases, and social security contributions also rose. Taxes on goods and services now account for the largest share of total tax receipts, followed by social security contributions, while the shares of personal and corporate income taxes in total revenues are among the lowest across OECD countries.

Figure 1.23. Greece has experienced a fast increase in tax revenues relative to GDP



Note: Unweighted OECD average.
Source: Calculation based on OECD Global Revenue Statistics database.

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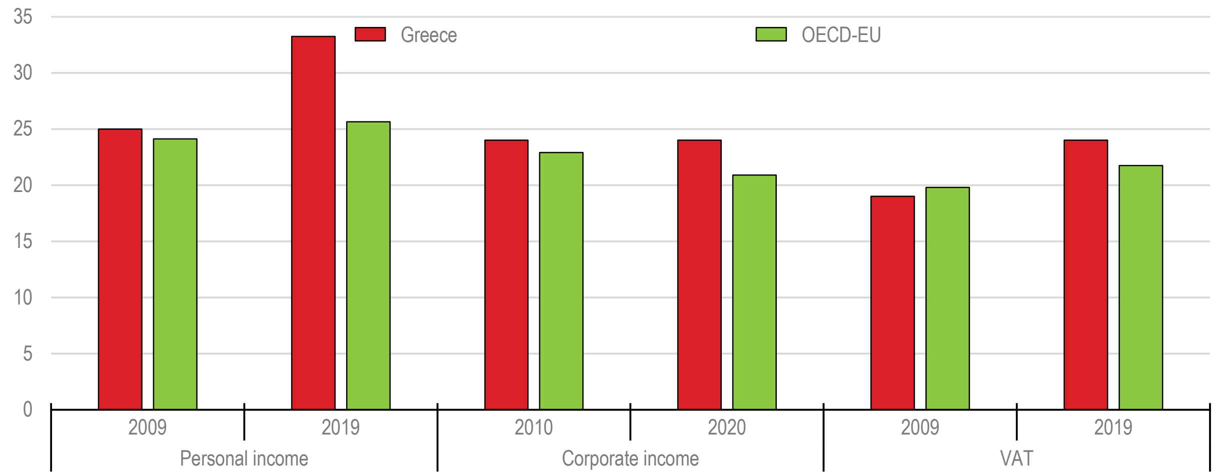
Greece's tax system is characterised by high statutory tax rates – especially for personal income taxes, social insurance contributions (discussed in Chapter 2), and for indirect taxes – a narrow base and patchy compliance (Figure 1.24). For instance, the tax-free threshold of the personal income tax (PIT) is high for a single individual, at about 50% of the average wage (Figure 1.25). The planned reduction in the tax-free personal income threshold in 2020 was cancelled in mid-2019. Greece assesses individuals' tax liabilities also on their imputed income when this exceeds their declared income. The imputed income is based on individual's assets and consumption. According to IAPR 2017 income data, 11% of people filing a tax declaration became liable for paying taxes as their imputed income was above the tax-free income threshold while their declared income was not.

VAT rates are high, but revenues are 34% (or EUR 7.3 billion) below the theoretical VAT liability, the largest gap among EU-OECD countries. Greece's high VAT gap is attributable to un- and under-declared transactions, as well as exemptions and reduced rates. Preliminary data suggests that in 2018 the VAT revenue gap should decline to 31% (HIS, 2019), indicating the benefits of recent efforts to improve tax administration and compliance (Figure 1.26).

Figure 1.24. Statutory tax rates have increased and are high compared with OECD-EU countries

Tax rates, %



Note: Average of the marginal tax rates of the different income brackets for personal income taxes; the combined corporate income tax rate for corporate income tax rate; and the standard rate for VAT rate. The OECD-EU is the unweighted average of 23 EU countries which are OECD members.

Source: OECD Tax database and OECD Consumption Tax Trends 2018.

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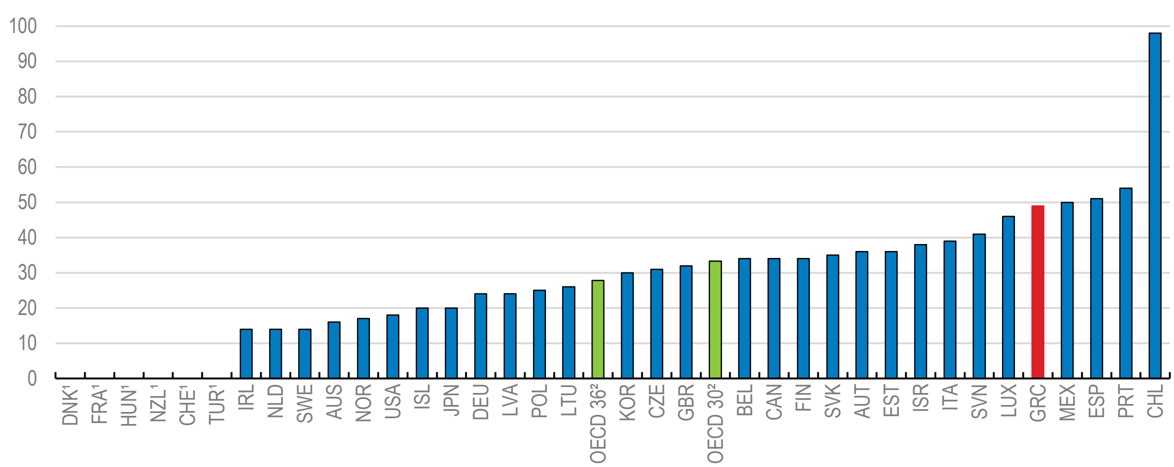
Figure 1.25. Greece's tax-free threshold is high

Income threshold where single taxpayers start paying income tax, % of the average wage, 2019



1. For those countries, the personal income tax (PIT) is levied on the first earned currency unit.
2. The OECD average 30 excludes countries for which PIT is paid on the first earned currency unit.
Source: OECD Taxing Wages 2020.

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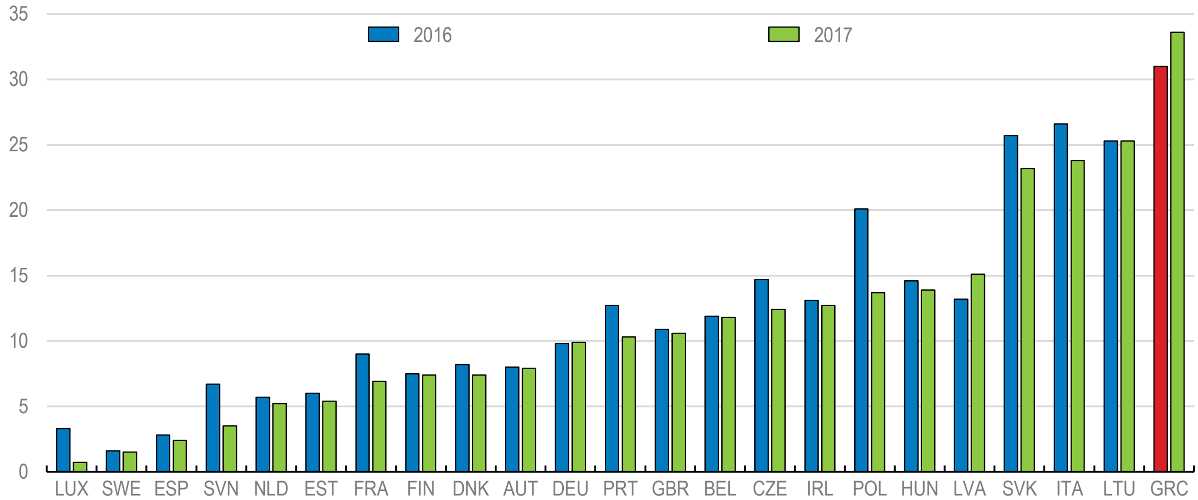
Figure 1.26. The VAT gap remains high

VAT gap estimates, % of VAT total tax liabilities



Source: EC (2019), 2019 Report on the VAT Gap, September 2019.

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In recent years, Greece has implemented wide-ranging reforms to improve tax collection and compliance by raising the transparency, accountability and capacity of the tax administration. The Independent Authority of Public Revenue (IAPR) was established in January 2017 and is operational. The shift to electronic payments following the introduction of capital controls has also contributed to improve tax compliance, especially VAT. However, there is still ample scope for further increasing the share of electronic payments – which remains low compared with other EU countries – especially in key tax evading industries such as professional services (Hondroyiannis and Papaoikonomou, 2017[39]; Hondroyiannis and Papaoikonomou, 2020[40]). New measures introduced in the 2020 budget, which raised the minimum ratio of purchases made through electronic means to total income used as condition to access personal income tax credit, go in the right direction.

New measures introduced by the IAPR include risk analyses, targeted treatments of different taxpayer types and strengthened tax audits (based on risk analyses) and efforts to enhance voluntary tax compliance. The IAPR is increasingly relying on IT systems to monitor bank accounts and uncover undeclared income. The IAPR is computing VAT and personal income tax gaps and their results are already being used to target tax audits more effectively. In 2019, 6 000 out of a total of 25 000 cases were targeted based on specific criteria, including VAT and personal income tax gap analysis.

A more systematic approach to manage the tax debt, which is still large at about EUR 105 billion (56% of GDP), is proving effective. The IAPR has re-oriented resources towards recovering collectable tax arrears and progressively writing off those deemed to be uncollectable. New procedures have slowed down the accumulation of new tax debt. These involve sending reminders about forthcoming tax-payment deadlines, contacting all taxpayers who missed the deadline within the first 30 days and following up on those who still do not pay. Moreover, risk analysis procedures are being increasingly used to evaluate and prioritize each month’s unpaid tax debt cases. As results of these efforts, the collection of tax debts is increasing (averaging EUR 5.3 billion per year in 2016-18 against EUR 3.6 billion per year in 2013-15) whereas the new tax debt (i.e. the tax debt added each year to the books) is declining. In the first 10 months of 2019 the tax debt rose by just EUR 0.78 billion against EUR 4.29 billion in 2018.

There is, however, still scope to improve further the tax administration. Implementing the IAPR Reform Action Plan ("Blueprint") for 2019-2022, including the development of IT systems, is key to continuing the modernisation of the tax administration and improving tax compliance. The IAPR urgently needs to accelerate the hiring of qualified personnel and implement the long-delayed human resources reform.

Improving the business environment

Enhancing regulatory quality and competition

Enhancing competition by reducing regulatory barriers is key to strengthening incentives to invest and innovate. The complexity of legislation and regulation in Greece hampers firms' investment and innovation. As underlined in the previous OECD Economic Survey, the 2012 law on Better Regulation provides a good framework to ensure regulatory quality as it mandates regulatory impact assessment (RIA) is for all primary laws. However, RIA quality is low due to the short time period in which new drafts are developed (OECD, 2018[41]). The Better Regulation Office lacks budget and skills. Ex-post evaluations of regulations continue to be used only seldom and their quality suffers from unclear methodology and low transparency.

Greece's regulatory quality would benefit from pursuing the codification plan started in 2016. A 2019 law strengthened the mandate of the Central Codification Committee (KEK) and technical work for the unified Labour Law Code and Code of Labour Regulatory Provisions is expected to end by the autumn of 2020. Ensuring stronger inter-ministerial coordination with a leading role by the Central Codification Committee is crucial to maintain the momentum of these reforms.

Over recent years, Greece has undertaken reforms to open up markets to competition, which are still ongoing. Between 2013 and 2016, the OECD conducted, in co-operation with the Hellenic Competition Commission (HCC), three Competition Assessment Reviews that helped identify barriers to competition in selected sectors and ways to improve the overall regulatory framework. The Reviews covered 14 sectors in total and made 773 recommendations. Most of the recommendations have been legislated, but implementation remains uneven.

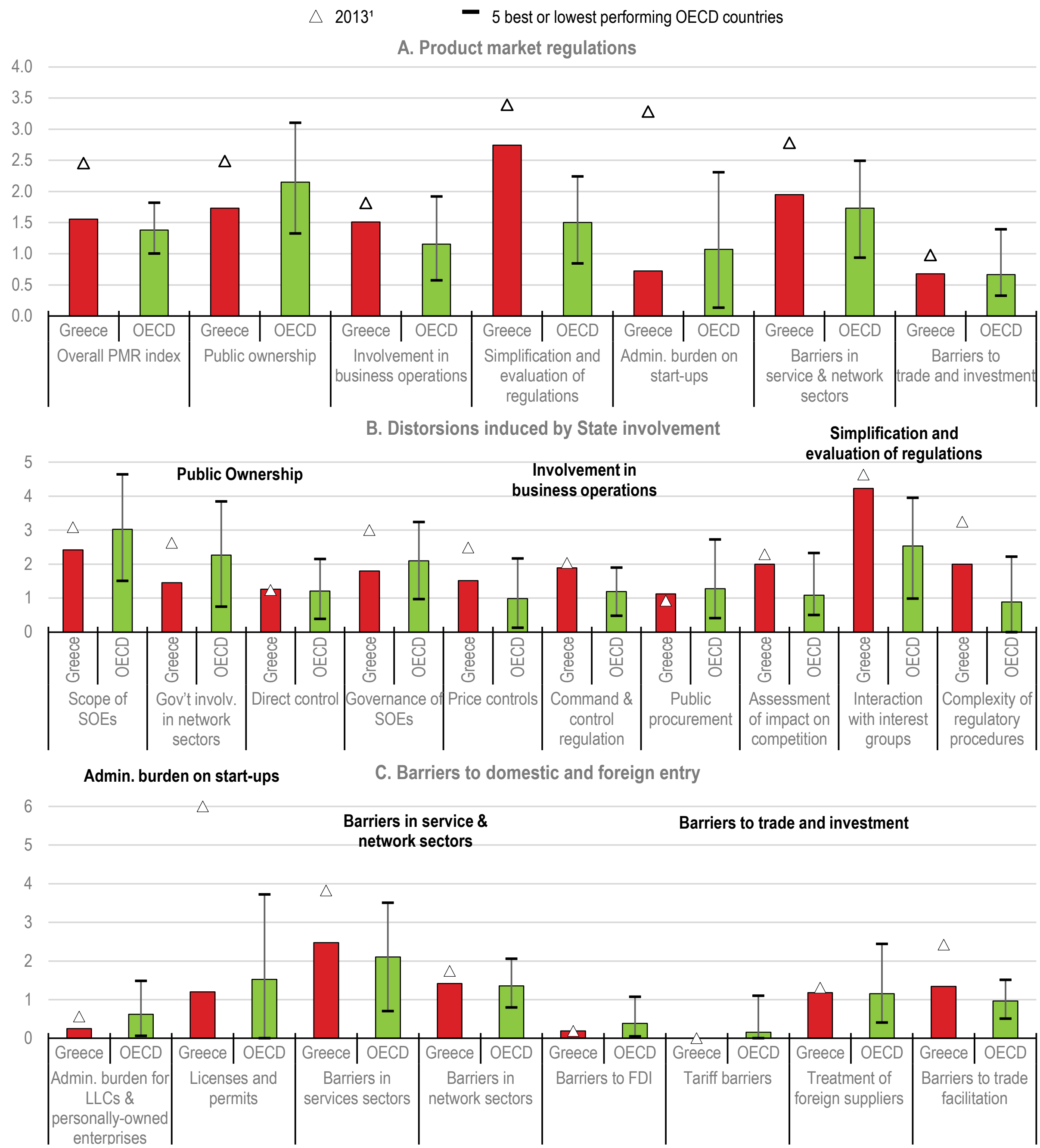
The 2018 OECD Product Market Regulation (PMR) indicators show substantial improvement in Greece's product-market regulatory environment since 2013 (Figure 1.27). Improvement has been particularly notable in reducing licence and permit burdens, easing the administrative burdens for start-ups, improving the governance of state-owned enterprises, reducing the complexity of regulatory procedures, and by reducing government involvement in network sectors, especially rail and natural gas.

The 2018 PMR shows that the level of public ownership is below the OECD average and state-owned enterprises' corporate governance is now aligned with most key OECD best practices (Figure 1.27). The Hellenic Corporation of Assets and Participations has continued evaluating corporate governance practices in state-owned enterprises by reviewing (and replacing, if needed) executive boards and enhancing internal and external audit capabilities. The administrative burden on start-ups are among the lightest in the OECD and the barriers to competition in network services are close to the OECD average. In most network sectors, Greece has a competition-friendly regulatory set-up that is in line with other OECD countries (Figure 1.28).

However, the state's regulation of business operations is still high compared with other OECD countries, due to widespread price as well as command and control regulations. Resuming privatisations after the COVID-19 emergency is over, while pursuing the overarching strategy to improve the management of state-owned assets as set out by the Hellenic Corporation of Assets and Participations, would contribute to attracting additional private capital and raise assets' performance. Moreover, the lack of thorough and regular RIAs, as highlighted above, means that evaluation-impact studies of new regulations on competition are seldom used. Lobbying activities remain unregulated and members of legislative bodies, of cabinet and appointed public officials do not have to observe a cooling off period when they leave their post. Introducing a cooling-off period, as well as rules to discipline the interaction between public officials and stakeholders and lobby groups would be beneficial.

Figure 1.27. OECD product market regulation in Greece has improved since 2013

Index scale from 0 to 6, from most to least competition-friendly regulations, 2018. Whiskers indicate range of OECD countries between 5 best and top 5 lowest performing countries



Note: Lower scores indicate lower product market regulation. Averages include only OECD countries included in the PMR database. If the bar is missing, it's the value is 0. The United States and Estonia have not completed the PMR data collection, are not included in the PMR database.
1. 2013 score calculated with the 2018 PMR methodology, using information collected in the 2013 PMR questionnaire and, where that does not provide the needed information, by investigating the regulatory arrangements that prevailed in 2013.
Source: OECD 2018 PMR database and OECD calculations.

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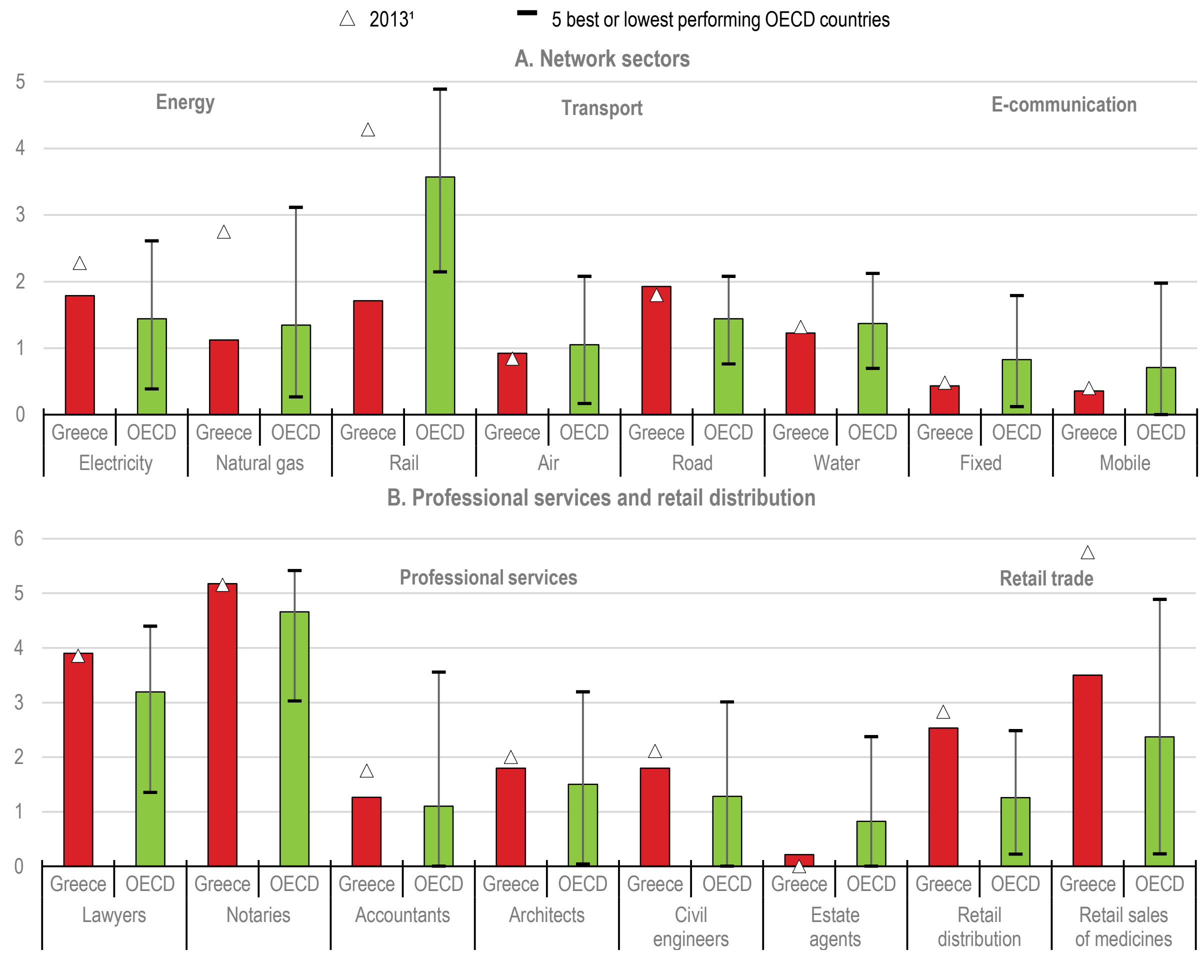
Figure 1.28. There is scope to lower restrictions to product-market competition in many sectors

Index scale from 0 to 6, from most to least competition-friendly regulations, 2018. Whiskers indicate range of OECD countries from top 5 best to top 5 lowest performing OECD countries



Note: Lower scores indicate lower product market regulation. Averages include only OECD countries included in the PMR database. If the bar is missing, it's the value is 0. The United States and Estonia have not completed the PMR data collection, are not included in the PMR database.
1. 2013 score calculated with the 2018 PMR methodology, using information collected in the 2013 PMR questionnaire and, where that does not provide the needed information, by investigating the regulatory arrangements that prevailed in 2013.
Source: OECD 2018 PMR database and OECD calculations.

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From 2010 Greece undertook extensive reforms to streamline regulation of regulated professions including easing entry restrictions. The reform opened up to competition 75% of the 350 regulated professions in Greece (OECD, 2018). Despite these reforms, regulatory barriers to competition in professional services are still higher than the OECD average, especially for lawyers, notaries and, to a lesser extent, civil engineers and architects (Figure 1.27). For instance, lawyers face advertising restrictions, a complete ban on cooperating with other professions and cannot establish limited liability partnerships. The Hellenic Competition Commission issued a number of recommendations, including for example: for lawyers: the removal of fixed minimum fees, advertising restrictions, and also territorial restrictions on where lawyers can practice in Greece; for notaries: the relaxing of rules on fixed fees and the maximum number of notaries allowed to operate per prefecture; for architects/engineers: the removal of fixed minimum fees; for chartered accountants: the removal of fixed minimum fees. Regulation to retail distribution is also highly restrictive to competition because of burdensome registration and licensing regimes.

Past OECD recommendations on product market regulation

Past recommendations	Actions taken
Simplify regulatory impact assessments and build a network of civil servants with regulatory-quality expertise.	The Law of the Executive State (4622/2019) establishes the General Secretariat of Legal and Parliamentary Issues, with the task of ensuring coherence and coordination in drafting laws, and the effective implementation of the principles of better regulation, as well as supporting the Cabinet and collective government bodies. It introduced a new regulatory impact assessment framework that would accompany each new law introduced to the Parliament, which the government is working to make operational.
Expand the scope of the "silence is consent" rule, ex-post monitoring compliance and one-stop shops; ensure they have the resources to operate effectively.	The silence-is-consent rule covers most economic activities and is gradually being expanded. A 2018 law set a new general framework for inspections (i.e. ex-post monitoring compliance), which is expected with the help of regional governments to gradually cover all inspection domains. The inspection legislation is being prepared for end-2021. The management of issuing licences, notifications and inspections will be digitised with the Integrated Licensing Information Management System (ILIMS). The website www.notifybusiness.gov.gr allows for electronic submission of notifications concerning the installation, operation and update of business activities (in selected sectors).
Ease regulations in network industries and strengthen the capacity and independence of regulatory agencies.	For energy, a law passed in 2019 reformed the national energy regulator and restructured the gas sector. Steps have been taken the ease the licencing process for renewables projects.
Finalise and implement the state asset management strategy and link it with the privatisation programme.	The state management strategy is being implemented:
Complete the land registry.	Work is progressing with the goal of completing the land registry by mid-2021. Forest maps have been completed for 95% of the country. Of the estimated 39.1 million total active titles in Greece, cadastral mapping has been completed for 12.9 million (33%); 22.7 million (60%) are in progress (out of which 8.5 million or 37.5% have already been declared); and the contracts are currently suspended for 2.7 million (7%) titles due to court procedures. Measures are being taken to address ongoing barriers to completing the cadastre.
Swiftly implement the planned creation and privatisation of new competitors in the electricity market. Further promote competition in the gas supply sector.	Entry of private generators into the electricity market is behind schedule, in part due to failed tender offers for the lignite plants. There is some competition in the wholesale, gas and renewable energy markets. Laws passed in late 2019 aim to develop the electricity market, and provide greater contestability in the electricity market between the dominant Public Power Corporation and other participants, and phase out lignite-based electricity generation by 2028. The privatisation of the gas supply sector is ongoing. Laws passed in late 2019 aim to liberalise the energy market by developing energy derivatives and intraday markets, and the wholesale market, including monitoring and enforcing regulations. Measures to developing gas trading, including developing a balancing platform, a virtual trading platform, and interconnection points, have been implemented. 2019 laws provide for splitting the commercial and infrastructure components of the gas distribution operator and for creating an arm for international projects.
Fully operationalise the national single window for exports as foreseen by the National Trade Facilitation Strategy.	A new inter-ministerial policy and coordination committee is being set up at the General Secretariat for International Economic Cooperation and Extroversion. - The National Trade Facilitation Strategy has been superseded by the National Extroversion Strategy implemented by the new government.
Strengthen the Hellenic Competition Commission's advocacy work by allocating more resources to its work outside the area of law enforcement.	Salaries of staff are not competitive compared with opportunities in the private sector and causing difficulties in hiring qualified personnel. Work to improve cooperation with other regulatory agencies continues. Training of judges, practitioners and the business community by HCC on competition issue continues.
Reduce restrictions to competition in sectors such as manufacturing, construction and wholesale.	The 3rd Joint OECD-HCC Competition Assessment Project was concluded in 2016 after reviewing legislation in five designated sectors of the Greek economy (e-commerce, construction, media, wholesale trade and selected subsectors of manufacturing such as chemicals, pharmaceuticals and media). Using the methodology provided in the Competition Assessment Toolkit, the project team examined 1 288 sector- relevant pieces of legislation, identified 577 possible restrictions to competition and made 356 recommendations to correct them by less restrictive policies.
Ease the remaining barriers to trade and investment that prevent Greece from expanding its exports, such as limitation on foreign equity participation in maritime services or airport regulations.	No progress on foreign equity participation in maritime services or airport regulations.
Fully implement the new export promotion action plan to promote exports and help SMEs reach international markets.	Export promotion activities were reorganised into a dedicated unit in the Ministry of Foreign Affairs.
Further reduce regulatory procedures and administrative burdens on start-ups to enhance productivity and investment.	Electronic one-stop shops are operating and the time to register new businesses has been cut drastically

Strengthening the rule of law and ramping up efforts to fight corruption

Greece suffers from high levels of perceived corruption when compared to other OECD countries (Figure 1.29, Panel A and B). The ongoing fight against corruption and economic crimes is key to improving the business environment and the functioning of the public administration. In 2019 Greece established an independent authority against corruption, the National Transparency Authority (NTA). The NTA brings together the General Secretariat Against Corruption (an agency within the Ministry of Justice, Transparency and Human Rights established in 2015) and five inspectors-controllers bodies for the public sector so as to eliminate overlaps and improve coordination in fighting corruption. The NTA has a broad mandate ranging from preventive actions to investigation on anti-corruption and public sector integrity matters as well as having an awareness-raising role. The NTA is responsible for the design, monitoring, and evaluation and revision of the National Anti-Corruption Action Plan, which was thoroughly updated in cooperation with the OECD in June 2018.

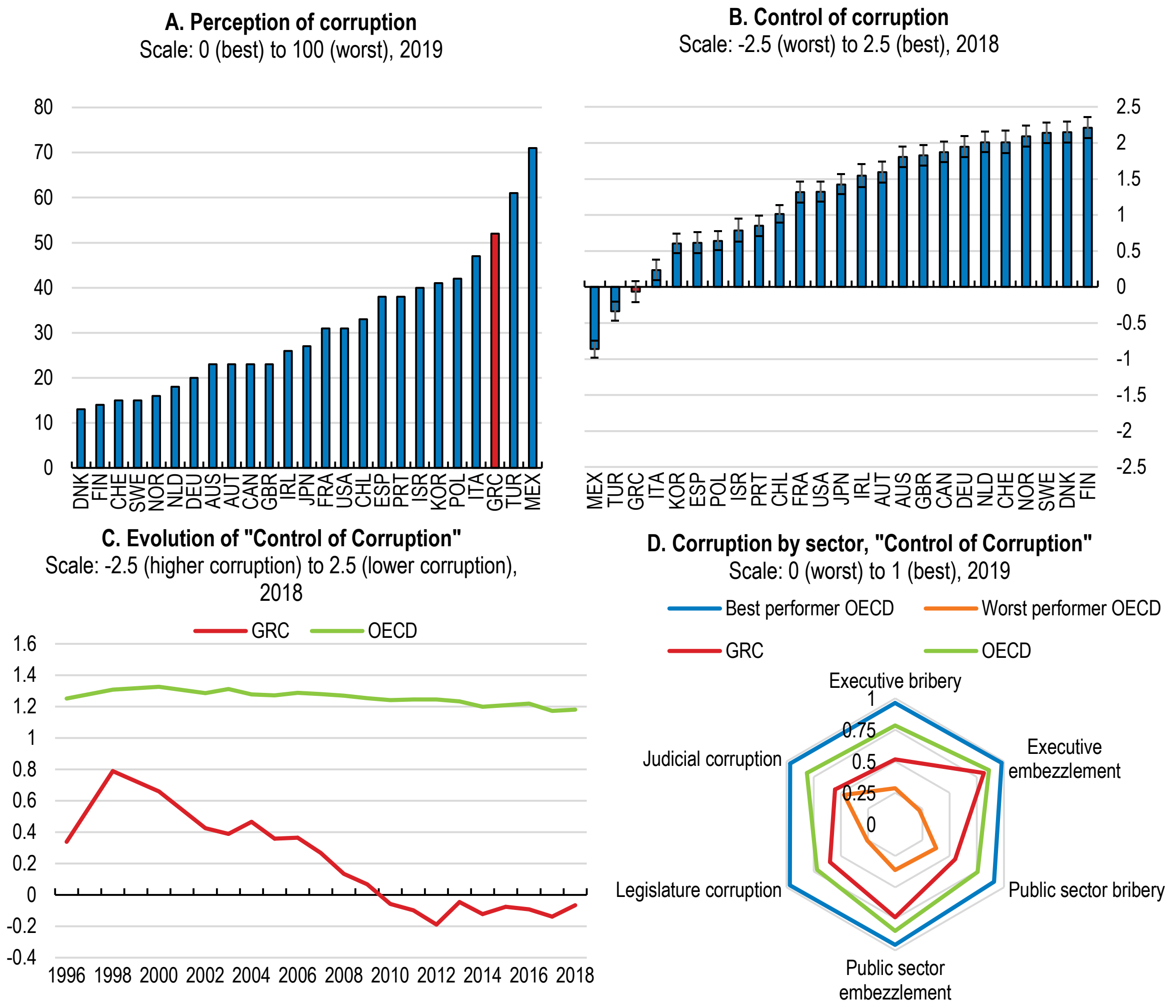
The newly established NTA currently builds on the existing technical support on anti-corruption that was provided by the OECD and the European Union from 2016 to 2018. The project aimed at increasing integrity and reducing corruption. It focused, among others, on high-risk policy areas such as health, public procurement, tax, customs, and local government entities. The project (2016–2018) has been instrumental in promoting a whole-of-government and society-wide approach to fight corruption. Further reforms are under way to regulate lobbying activities and to develop a framework for managing conflicts of interest in the public sector.

These efforts are bearing fruit and Greece's scoring in the control of corruption has improved (Figure 1.29, Panel C). Continued progress in this area hinges on developing and implementing sector specific anti-corruption plans targeting high-risk sectors, such as public works, environment the maritime sector, similarly to what is being done in the defence sector, public procurement and health. Strengthening the role and capacity of the Anti-Fraud Coordination Office (AFCOS) would support Greece's efforts to combat the misuse of EU funds and state aid. Regulating lobbying activities and enhancing whistleblowing protection would greatly contribute to enhance transparency and prevent corruption. Constitutional changes passed in late 2019 have streamlined immunity-waiver procedures for ministers and members of parliaments, which however remain complex. This coupled with slow judicial proceedings, poses problems for prosecuting high-level corruption cases (European Commission, 2019[32]).

After the latest changes to Greece's Criminal and Criminal Procedure Codes in late 2019, the main active bribery offence remains a misdemeanour (punishable by imprisonment or a fine). However, the offence is punished as a felony in the case of a breach of duty by a public official. Although the latest amendments have reversed the changes of mid-2019 that downgraded all cases of the offence to simple misdemeanour, the inadequacy of the sanctions applicable remains a critical issue. For example, even if the value of the bribe/advantage is considerable or there are aggravating circumstances for such an offence (except for a breach of duty by the official), the act would be punished with reduced sentences as a misdemeanour.

Improving the efficiency and predictability of the justice system is key to improving the business environment and increasing investment, particularly from foreign sources. Foreign companies report that Greece's courts do not consistently provide fast and effective recourse (Department of State, 2018[42]) The OECD Policy Framework for Investment highlights that an ineffective justice system hampers business investment and commercial activities (OECD, 2015[43]). Ongoing initiatives to improve the efficiency of the court system include: establishing new specialised chambers in courts for certain types of cases and training judges; reforming the Code of Operation of Courts and the Judiciary and the Code of Court Employees; and improving the Code of Civil Procedure. Moreover, the Integrated System for the Inter-Operability of the Civil and Criminal Courts is being rolled out nationally.

Figure 1.29. Perceived levels of corruption are high in Greece but controls are improving



Note: Panel A shows the Corruption Perception Index (CPI) which originally scores from 0 (worse) to 100 (best) on an inverted scale (i.e. 100 - CPI); Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.

Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Institute; University of Gothenburg; and University of Notre Dame.

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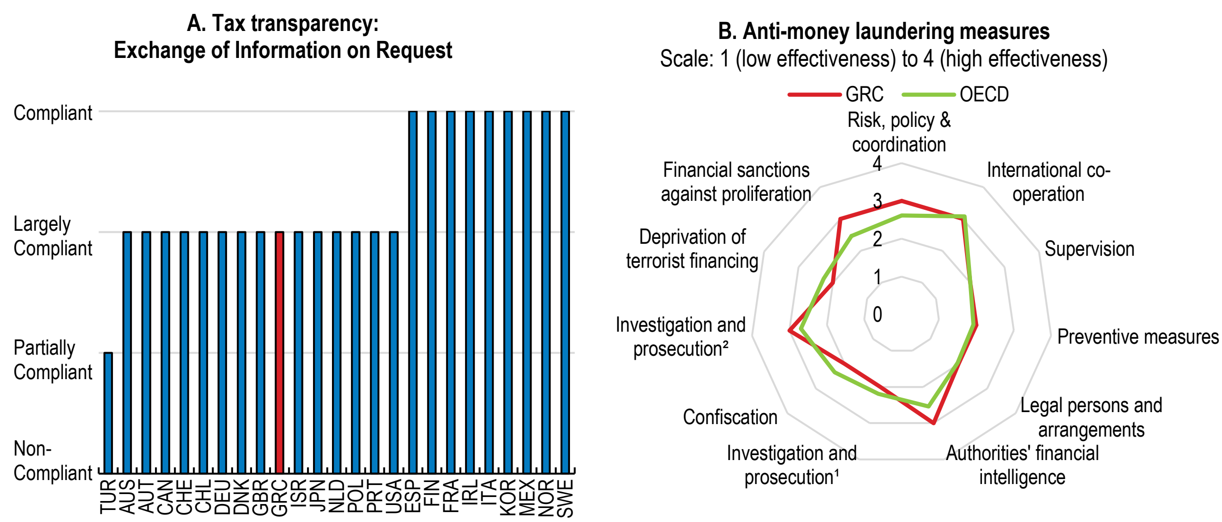
Figure 1.30. There is still scope to improve the framework to fight economic crimes



Note: Graphs show latest information available for each country. Panel A summarises the overall assessment on the exchange of information in practice from peer reviews by the Global Forum on Transparency and Exchange of Information for Tax Purposes. Peer reviews assess member jurisdictions' ability to ensure the transparency of their legal entities and arrangements and to co-operate with other tax administrations in accordance with the internationally agreed standard. The figure shows first round results; a second round is ongoing. Panel B shows ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country's measures are effective against 11 immediate outcomes. "Investigation and prosecution[1]" refers to money laundering. "Investigation and prosecution[2]" refers to terrorist financing.
Source: OECD Secretariat's own calculation based on the materials from the Global Forum on Transparency and Exchange of Information for Tax Purposes; and OECD, Financial Action Task Force (FATF).

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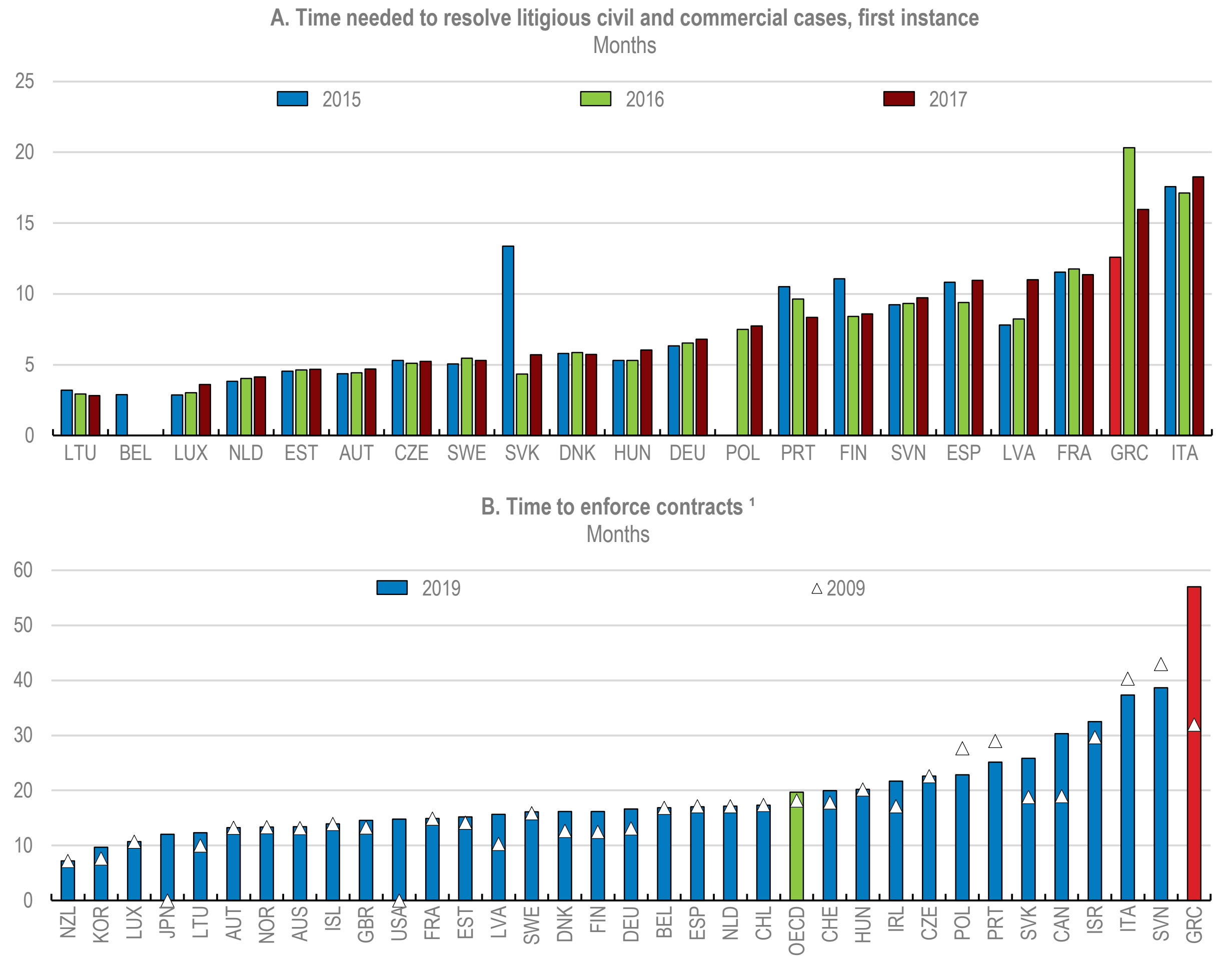
While trust in the judiciary is rising, it remains below the EU average. Eurobarometer data reveals that the share of people reporting to trust the Greek's justice system increased from 45% in 2014 to 49% 2018. The low trust in Greece's civil justice system is due to a confluence of factors, including significant delays in resolving disputes, defective enforcement of sentences, improper government influence and low accessibility and affordability, in addition to high level of perceived corruption in the judicial system (Figure 1.29, Panel D). In civil and commercial cases, Greece has the longest disposition time (the maximum number of days needed for a court to reach a decision on a case, given the number of cases solved in a year and those that remain unresolved) among European countries (Figure 1.31, Panel A). The time to enforce contracts is also the longest among OECD countries (Figure 1.31, Panel B).

Limited access to justice for SMEs is particularly problematic, given their large role in the Greek economy. SMEs associations complain that the justice system is overly complex, slow and expensive. SMEs try to avoid – as much as possible – legal disputes considering that processes can take years and lawyers' fees can amount to as much as the value of many business claims. This hinders SMEs growth. For Italy, Giacomelli and Menon (2016[44]) find that long civil proceedings hamper firms' growth.

Reform efforts are underway to improve the efficiency and effectiveness of the justice system with the financial and technical assistance of the EU. They have been focussing on: organisational changes to courts and operational and procedural issues; expediting case processing; enabling and facilitating recourse to alternative dispute resolution mechanisms; encouraging the adoption of information technology. The Integrated System of Civil and Criminal Justice Management (OSDDY-PP) is being rolled out nationally, while legislation has been passed with the aim to digitise important parts of administrative law proceedings.

Figure 1.31. The justice system is slow



1. The time to enforce contracts is recorded in calendar days, counted from the moment plaintiff decides to file the lawsuit in court until payment. The average duration of the following three different stages of dispute resolution is recorded: (i) filing and service, (ii) trial and judgment, and (iii) enforcement.

Source: EU (2019), EU Justice Scoreboard 2019; World Bank (2019), Doing Business database (DB 2020 and DB 2010).

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Despite recent efforts, alternative dispute resolution (ADR) mechanisms – extra-judicial and judicial mediation, judicial arbitration – remain underused. As a result, people and businesses see in-court proceedings as the only option to resolve disputes, overburdening the court system. Recent progress includes a working group headed by the Supreme Court focusing on improving compulsory mediation, while a Central Committee of Mediation has been active in certifying new mediators and new training centres (European Commission, 2019[32]). Moreover a new mediation law approved in 2019 mandating participants in a large number of civil, commercial and family cases attend information sessions on alternative dispute resolution before the cases reach the courts. The same law instructs lawyers to inform their clients in civil cases on alternative dispute resolution mechanisms

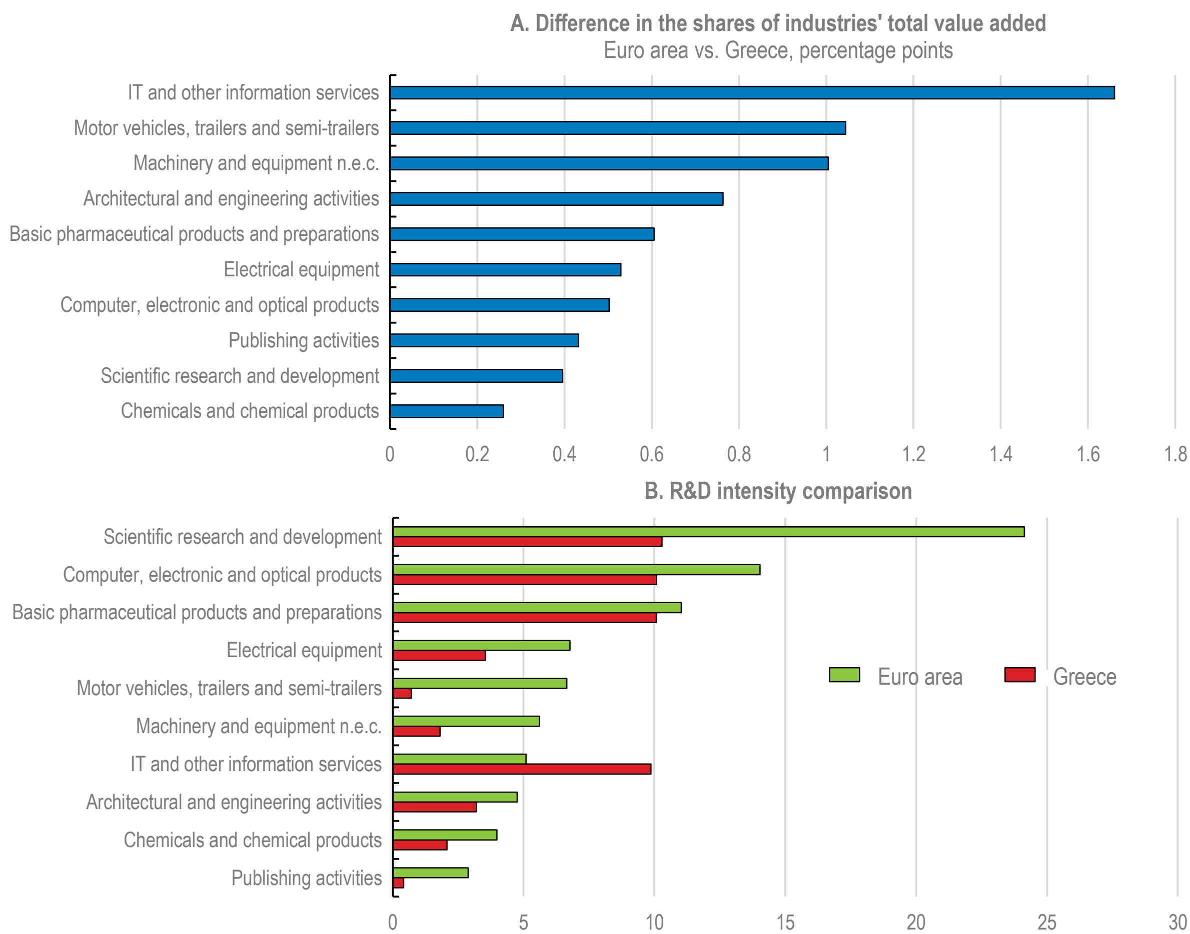
Efforts to increase awareness of and trust in alternative dispute resolution need to be pursued. Increasing the availability of online information about the judicial system and ADR would go in this direction, as Greece ranks low in this dimension compared with other EU countries (European Commission, 2019[45])).

Boosting innovation

In the long term, innovation is the cornerstone of productivity growth. Greece's consistently slow productivity growth is partly attributable to the structure of the Greek economy, as low-innovation sectors, such as trade, food and beverages industries, account for a larger share of GDP than in most OECD countries. However, low business R&D spending is also common in most sectors that in other countries feature high R&D intensities, such as scientific research and development and computer electronic and optical products (Figure 1.32). IT and other information services is the only sector in which Greece's R&D intensity is higher than the Euro area average. To contribute to faster productivity growth, higher and more effective R&D spending needs to go hand in hand with improvement in firms' financing. Specific firm-level results for Greece based on the framework by Demmou, Franco and Stefanescu (2019[46]) indicate that the negative effects of financial frictions on productivity growth is larger in intangible intensive sectors.

Figure 1.32. Low R&D spending is pervasive across industries

Top 10 most R&D-intensive industries in Euro area, 2017 or nearest year



Note: R&D intensity by industry is defined as the ratio of an industry's R&D expenditure to the industry's gross value added. Industries are identified by divisions of the ISIC-Rev. 4 classification.
Source: OECD Research and Development Statistics and National Accounts Statistics (databases).

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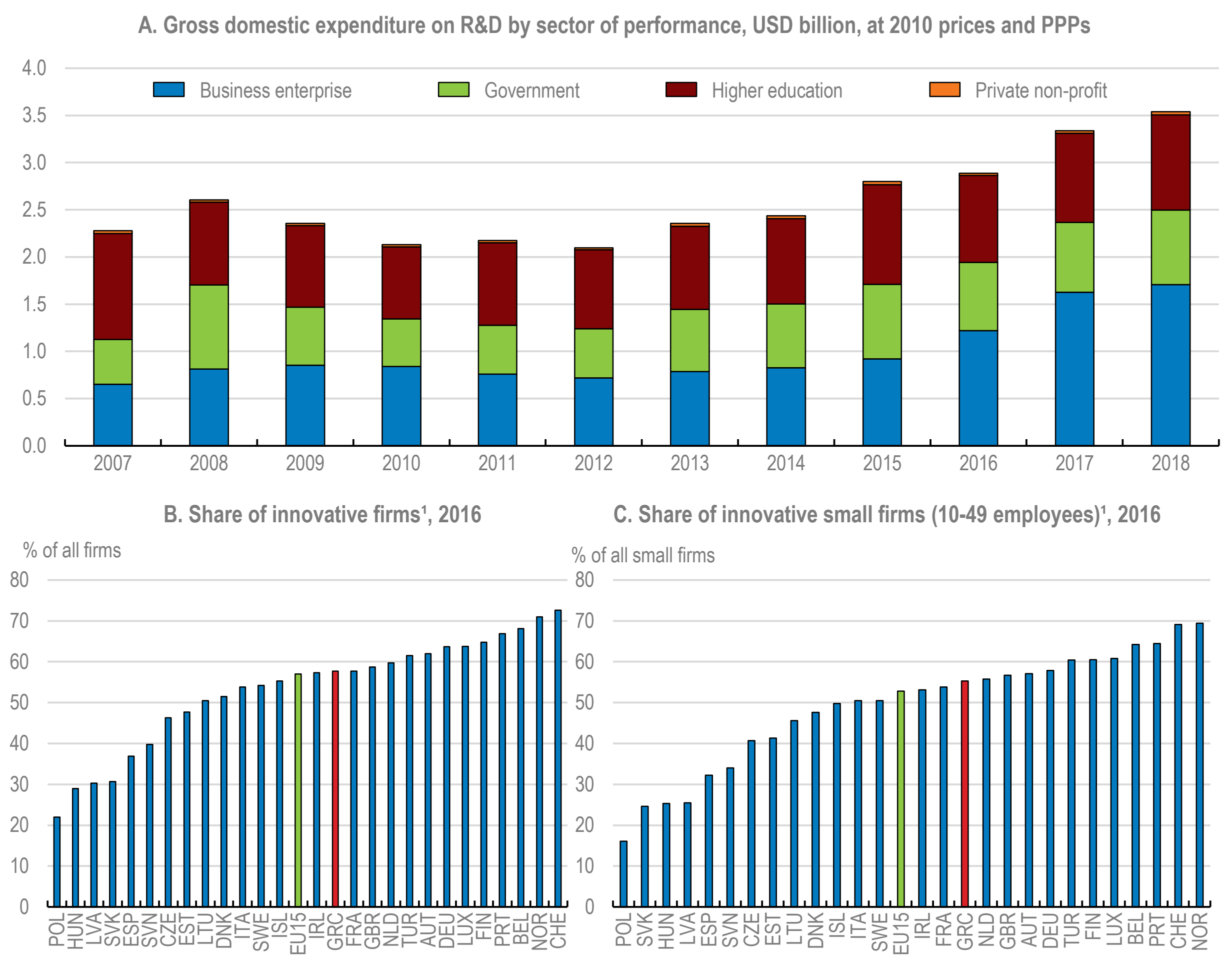
In 2018, gross expenditure on R&D was 1.18% of GDP, not far from the 2020 target of 1.2% of GDP set in the National Growth Strategy. Between 2012 and 2018, support from EU funds and policy changes have allowed gross expenditure on R&D to increase by more than 50% (Figure 1.33, Panel A), Business R&D

spending drove the recovery in total R&D spending, increasing by more than 70% and reaching about half of total R&D expenditure from about a third. The share of innovative firms rose sharply, increasing Greece's rank to the middle of OECD countries (Figure 1.33, Panel B and C).

These positive developments need to continue if Greece is to narrow the innovation gap with other OECD counties and bolster productivity growth. Despite the recent increase, gross expenditure on R&D (as a share of GDP) is still lower than most OECD countries (Figure 1.34, Panel A). Moreover, most of the R&D spending concerns the deployment of existing technologies and the purchase of machinery and equipment, rather than scientific activities (Figure 1.34, Panel B). The productivity of R&D activities is low (Figure 1.35).

The barriers to innovation activities most frequently reported by firms are difficulties in obtaining public grants or subsidies in addition to the lack of internal and external finance (Figure 1.36). As underlined in the previous OECD Economic Survey (OECD, 2018[10]), the institutional framework of research and innovation policies is highly fragmented and suffers from a lack of coordination, besides undergoing frequent changes. For example, supervision of public research centres is split among different ministries and subject to different processes.

Figure 1.33. Gross expenditure on R&D has been increasing



1. Firms having either introduced an innovation or having any kind of innovation activity (including enterprises with abandoned/suspended or on-going innovation activities).
Source: OECD *Research and Development Statistics* database and Eurostat.

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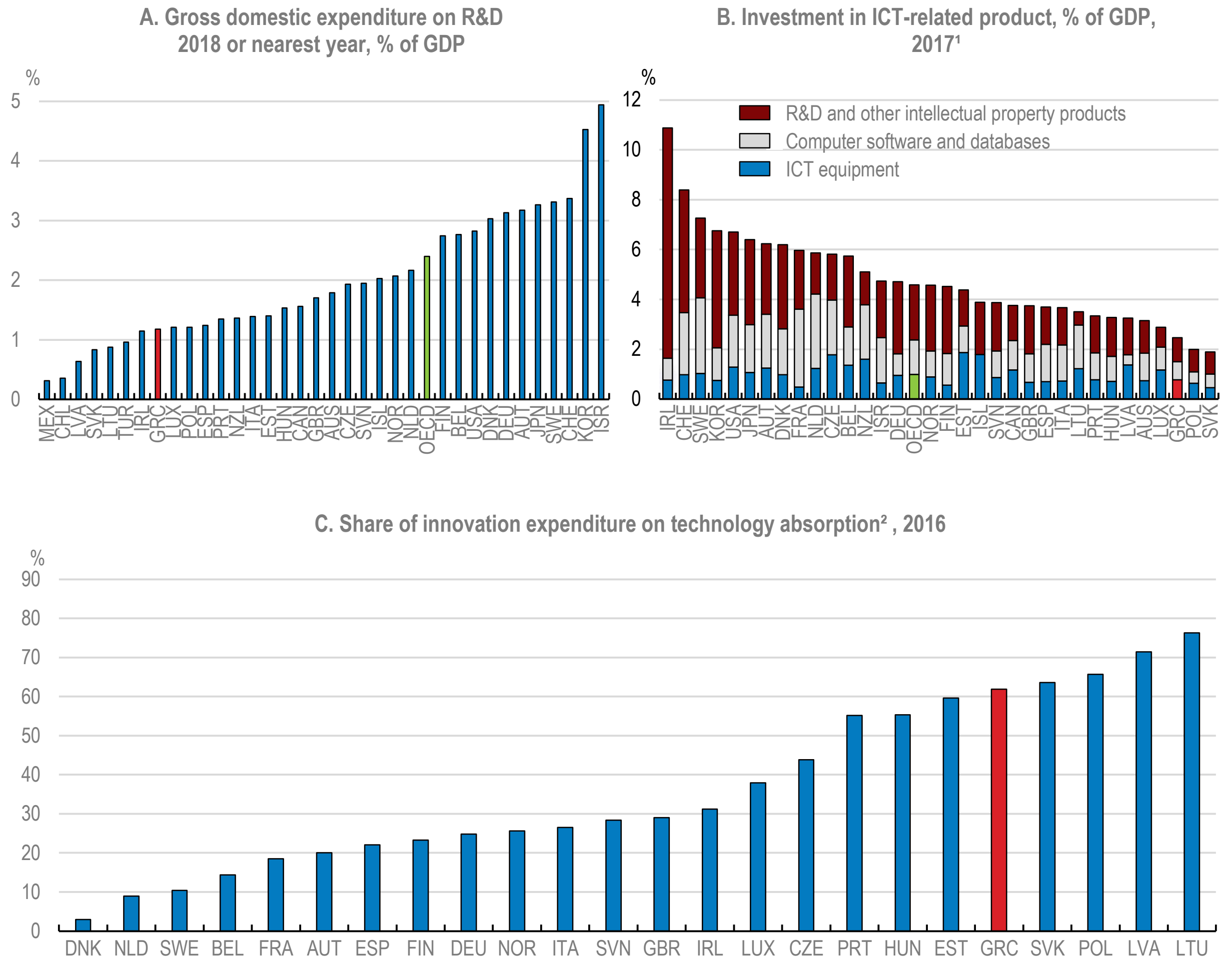
Figure 1.34. Spending for innovation is low and concentrated mostly on existing technology



1. Investment in ICT equipment, computer software and databases, R&D and other intellectual property products. For Mexico, data only include ICT equipment (i.e. "computer hardware and telecommunications").

2. Share of machinery, equipment and software acquisition in total innovation expenditure. 2014 share for Netherlands.

Source: OECD *Main Science and Technology Indicators* database; OECD (2019), *Measuring the Digital Transformation*; and Eurostat.

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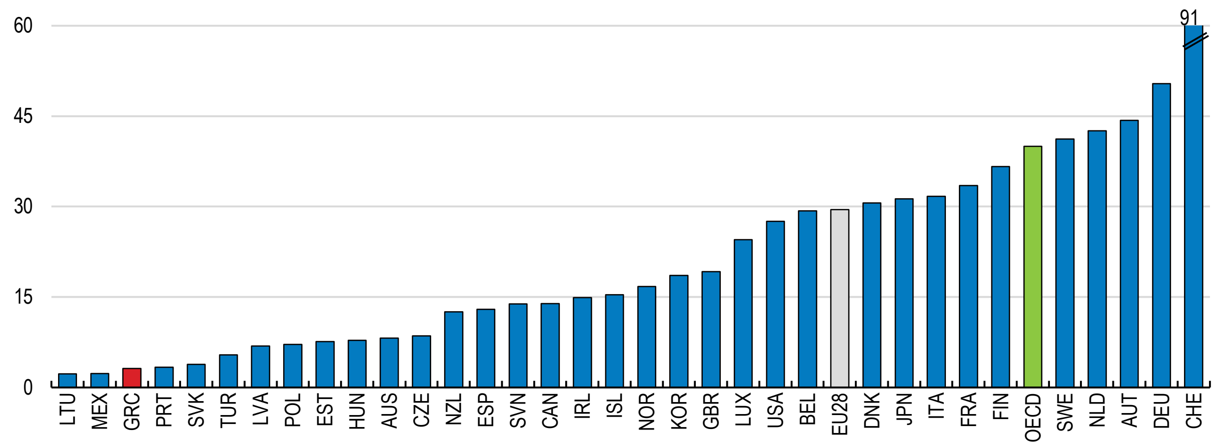
Streamlining the complex institutional framework of Greece's research and innovation policies will contribute to boosting R&D. The National Strategic Plan for Research and Development 2014-2020 and the National Research and Innovation Strategy for Smart Specialization 2014-2020 recognise the fragmentation and complexity of the R&D institutional framework and the problems it entails. Despite this, progress in tackling these challenges has been slow. Though the Hellenic Foundation for Research and Innovation (HFRI) has garnered some good results, its establishment in 2016 has not led agencies to consolidate, as recommended in the previous OECD Economic Survey (OECD, 2018[10]). Enhancing central coordination of R&D policies would also generate synergies and avoid duplication (OECD, 2018[10]).

Research in Greece suffers from the emigration of talented scientists. According to experimental OECD indicators on the international mobility of scientific authors, in 2016 Greece experienced the largest net outflow of scientific authors (2% of authors). This indicates that overall Greece offers an unfriendly research and innovation environment (GSRT, 2014[47]). The establishment of the Hellenic Foundation for Research and Innovation (HFRI) in 2016 is a step in right direction. The HFRI supports high quality research and has been successful in funding some important research projects and in attracting back to Greece a number of young researchers. Its practices in selecting and funding research projects could be extended to other research funding agencies.

Figure 1.35. Research productivity is low

Patent applications to the European Patent Office per 1000 researchers 2017 or latest year available



Source: Calculations based on data from Eurostat and OECD Main Science and Technology Indicators database.

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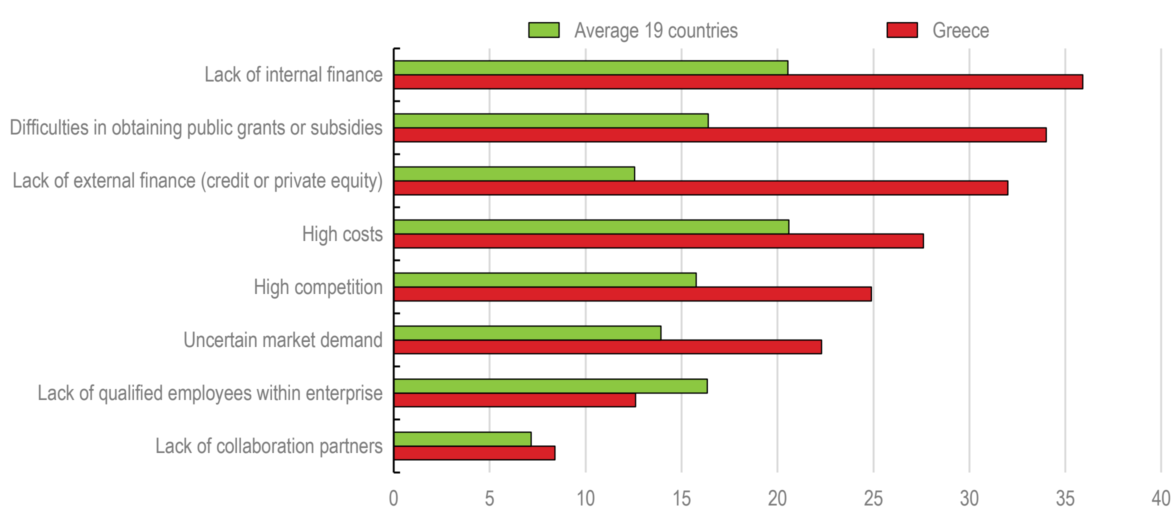
Figure 1.36. Accessing finance is the chief barrier preventing businesses' innovative activities in Greece

Share of innovative enterprises reporting specific barrier against innovation activities as important in the industry sector (excluding construction), %, 2016



Note: Unweighted average according to data availability among Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Portugal, Slovakia, Slovenia and Switzerland.
Source: Eurostat (2018), *Community Innovation* Survey.

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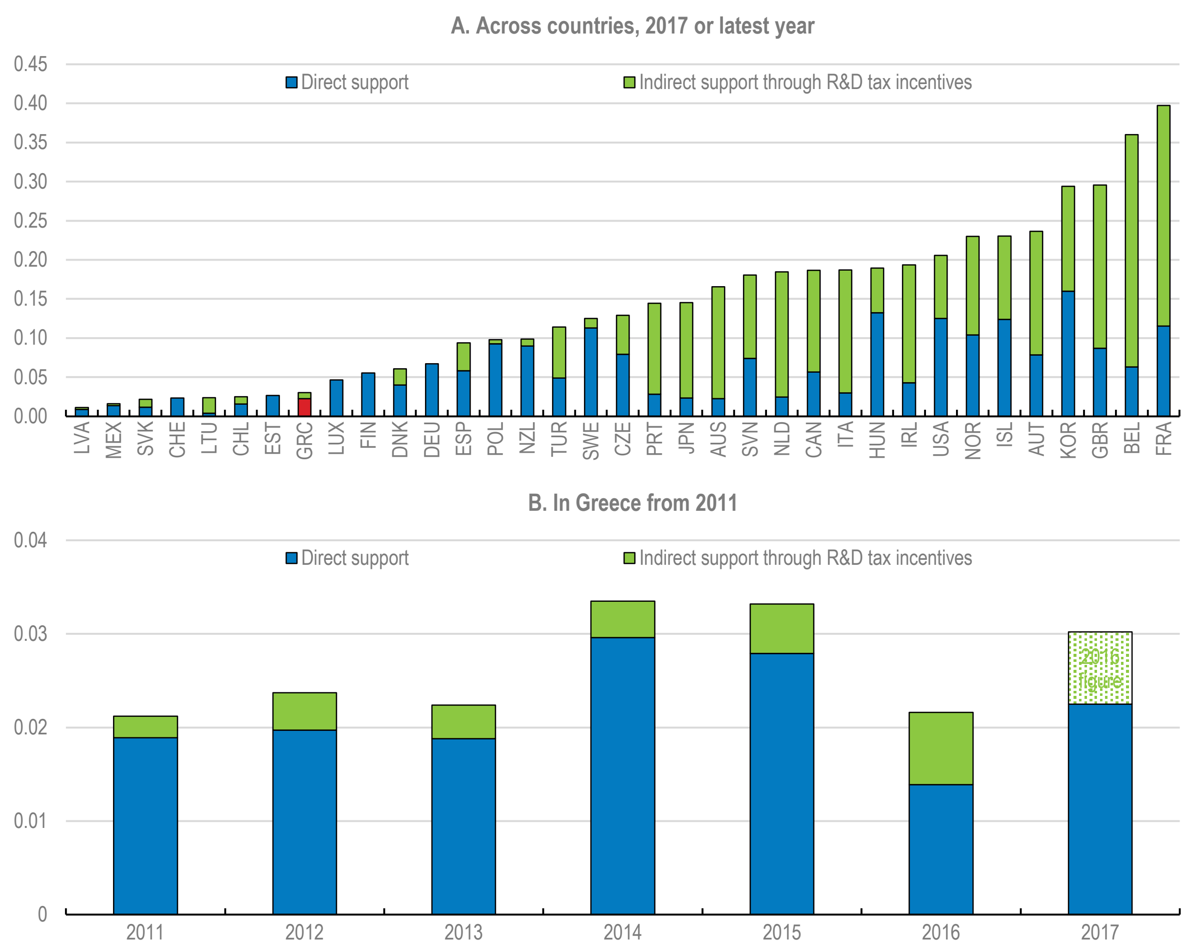
Ensuring support measures for business R&D are effective and easy to access

Most OECD countries provide R&D tax incentives and direct support measures (such as grants) to private companies to encourage research and innovative activities (Appelt et al., 2016[48]). Greek government support to business R&D has increased in the recent past but it is still low compared with most OECD countries (Figure 1.37, Panel A). Direct government support accounts for 85% of the total (Figure 1.37). In 2013, Greece enhanced the R&D tax relief it offers to enterprises by moving from an incremental scheme to a volumetric one. These changes increased noticeably the generosity of the R&D tax relief for both large firms and SMEs, allowing Greece to move toward the middle of the OECD ranking (Figure 1.38).

However, firms seem to have exploited only partially the more generous R&D tax relief. Between 2012 and 2015 (the last year for which data are available) the cost of the tax support for R&D increased only marginally (Figure 1.37, Panel B). The government should ensure that the R&D tax incentives are clear, automatic and easy to access, and that SMEs like large firms are aware of them.

Figure 1.37. Greece's government support for business R&D activities has increased but it is still low compared with other OECD countries

Government support to business R&D activities, % of GDP



Note: Indirect support through R&D tax incentives in Greece is not available for 2017. 2016 value is shown.
Source: OECD *R&D Tax Incentive Indicators - OECD R&D tax expenditure* (RDTAXEXP) dataset 2019/1.

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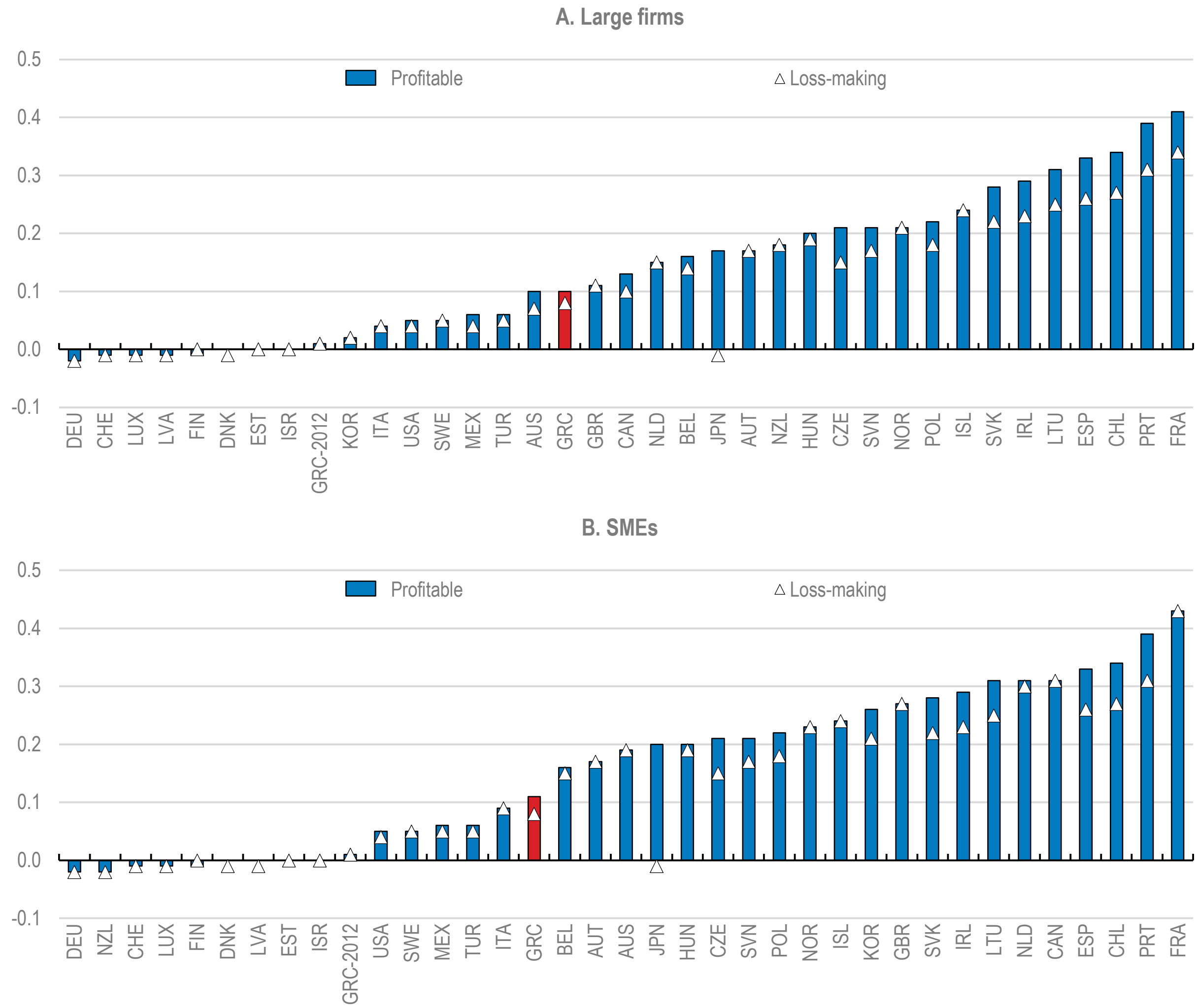
Figure 1.38. The generosity of Greece R&D tax incentives has increased

Implied marginal R&D tax subsidy rates based on the B-index, 2019



Note: This is an experimental indicator representing a notional level of tax subsidy rate under different scenarios (profitable/loss-making). International comparability may be limited. The tax subsidy rate is calculated as 1 minus the B-index, a measure of the before-tax income needed to break even on USD 1 of R&D outlays (Warda, 2001). The index is calculated for a representative firm according to whether it can claim tax benefits against their tax liability in the reporting period.
Source: OECD *R&D Tax Incentive Indicators - OECD R&D tax expenditure* (RDTAXEXP) dataset 2019/1.

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Encouraging the commercialisation of innovations through patents

The steep increase in R&D since 2015 has not generated a corresponding rise in the number of patents. Patent applications to the Hellenic Industrial Property Organisation have hovered at 550 per year. The low number of patents of Greek enterprises could be attributable high share of R&D expenditure relating to the deployment of existing technologies and the purchase of machinery and equipment. Moreover, many firms, especially SMEs, can be unaware of the benefits of patents.

Close links between universities and the business sector can help firms to develop innovations and to ensure that research has commercial applications. Several barriers hinder the commercialisation of research developments by universities and public research institutes. These include: weak links between industry, universities and public research institutes; academic careers based solely on publication records with no consideration of inventions and patents; and a generally hostile attitude in universities to patenting scientific developments. A comparative analysis of EU countries (Geuna and Rossi, 2011[49]) shows that where university management of IPRs has traditionally been weak, academic researchers have traditionally patented their inventions individually. The recent decision to establish two innovation districts (in Athens and Thessaloniki) holds the promise of strengthening synergies among researchers and entrepreneurs.

Deepening barriers to industry-university collaboration will require a multipronged approach aimed at removing obstacles to such collaboration and reforming tertiary education institutes to raise research and teaching quality. Many universities in OECD countries have established technology transfer offices to improve university-industry collaboration and their intellectual property rights' management. Empirical evidence suggests that the increase in the number of patents owned by European universities in the 2000s is associated with the establishment of technology transfer offices and the improved performance of already existing technology transfer offices. Moreover, in many countries technology transfer offices have been instrumental in improving the management of IPRs by universities and encouraged knowledge transfer from university to industry (Geuna and Nesta, 2006[50]; Geuna and Rossi, 2011[49]). Because of the small size of Greek universities and the substantial costs technology transfer offices can entail (for example for specialist staff), the Greek government could consider the establishment of national or regional technology transfer offices covering more universities.

To strengthen university-industry links and university patenting, the establishment of technology transfer offices should be flanked with reforms to the tertiary education system to enhance the quality of research and teaching. As underlined in the previous OECD Economic Survey (OECD, 2018[10]), these reforms include granting universities more autonomy in their governance and resource use, adopting transparent and well-designed financing mechanisms – also based on research and teaching quality assessment – and strengthening incentives to consolidate courses, departments and institutions. The merging of 14 technical institutes with 22 universities over 2018 and 2019 to create 25 tertiary education institutions may improve over time the quality and demand for tertiary vocational training. To this end, the government could mandate an independent assessment of the reform with the view of designing a plan to fully realise the benefits from consolidation and regularly evaluate the newly created institutions. Mowrey and Sampat (2004[51]) underlines how reforms to enhance inter-institutional competition and autonomy within the national university system, as well as support to technology commercialisation and start-up formation, can be important to encourage university to patent scientific developments. In 2019, Greece took steps in this direction by granting tertiary institutions more administrative autonomy with the aim of enhancing their self-governance and their capacity to attract qualified academics and students.

Past OECD recommendations on innovation

Past recommendations	Actions taken
Enhance access to ICT networks and enable SMEs to engage in e-commerce to allow small firms to participate in global trade.	No progress.
Promote a venture capital system with important direct links to university research and innovation to boost entrepreneurship.	Measures to support venture capital in Greece are progressing. The Hellenic Development Bank was established in part to support and promote entrepreneurship, innovation and business competitiveness, and facilitate business access to funding sources, as well as managing venture capital and financial capital. By December 2018, the 'Development Fund for New Economy' embarked on the administration of Public Funds dedicated to the establishment and grow of SMEs active in fields such Innovation and Industry 4.0 activities. Some progress on integrating university research and innovation into the venture capital and other innovation financing measures. The Equi-Fund initiative (co-financed by ESI Funds) supports venture capital, and the Innovation Window is targeted at researchers and innovators, who are still at the research stage.

Protecting the environment

To raise well-being and ensure current and future generations enjoy a healthy environment, Greece like other OECD countries has to address a large array of environmental challenges (Figure 1.39). The main challenges concern: high reliance on fossil fuels, urban air pollution; waste management and water extraction (in some specific areas). The government is developing ambitious plans to tackle them in the coming year.

Greece's greenhouse gas emissions per unit of GDP have declined for several years and in line with the OECD average (Figure 1.39, Panel A). GHG emissions not covered by the EU Emissions Trading System (EU ETS) declined by 28% between 2005 and 2017, putting Greece on track to meet its targets to reduce related emissions by 4% by 2020 and by 16% by 2030. Further measures are needed to progress towards net zero emissions by mid-century. The National Energy and Climate Plan 2021-2030 includes ambitious actions in this area, such as reducing GHG emissions not covered by the EU ETS by 33% by 2030. The EU system of carbon policies and the new European recovery fund can support Greece in achieving these goals.

Greece's energy mix has been shifting from oil and lignite to natural gas and renewable resources. However, as highlighted in the OECD Environmental Performance Review of Greece (OECD, 2020), total primary energy supply is still heavily dependent on fossil fuels and Greece ranks among the ten most carbon-intensive economies in the OECD. The recent announcement of the National Energy and Climate Plan 2021-30 to phase out lignite electricity generation by 2028 goes in the right direction.

Energy intensity is below the OECD average, yet its reduction has been slower than in most other OECD countries (Figure 1.39, Panel B). Transport accounts for the highest share of final energy consumption, followed by the residential sector and industry, as in other countries. The use of renewable energy sources has increased since 2009 (due mainly to wind and solar photovoltaics) and played a part in reducing CO_2 per unit of GDP. In 2018, renewables accounted for 13% of total primary energy supply and 31% of electricity generation, above the respective OECD averages of 10% and 26%. The country is on track to reach the overall binding target of 18% share of renewables in gross final energy consumption by 2020, as required by the EU Renewable Energy Directive. Moreover, the National Energy and Climate Plan 2021-30 raises the target for the share of renewables in gross final energy consumption to at least 35% by 2030.

Past OECD recommendations on environmental sustainability

Past recommendations	Actions taken
Phase out fossil-fuel support measures.	The 2020 budget provides for tax incentives to use of public transport and zero-emission company cars. In late 2019 the government announced that lignite electricity generation will be phased out by 2028.
Enforce EU standards for waste disposal and urban waste-water treatment.	Progress has been achieved on the legal, institutional and planning aspects of waste management, necessary to promote waste prevention, increase waste recycling and expand the extended producer responsibility schemes. Concrete steps towards a comprehensive circular economy policy in Greece include: (i) the adoption of the National Circular Economy Strategy and corresponding action plans in 2018, updated in 2019 to extend up to 2023; (ii) and the 2017 Law on Recycling, aligning existing legislation with circular economy principles; and (iii) the setting up of a circular economy multi-stakeholder forum to encourage business models and innovations in line with circular economy objectives. Furthermore, a Circular Economy committee, consisting of production agencies/components as well as environmental NGOs has been established to enforce the fulfilment of EU related targets and to enhance the effectiveness of National Circular Economy strategy through engagement of the public authorities with the market representatives and the civil society.

Emissions of major air pollutants have decreased faster than economic activity since 2009. However, the share of the population exposed to dangerous level of fine particulates ($PM_{2.5}$) is markedly higher than the OECD average (Figure 1.39, Panel D) and the mortality rate from $PM_{2.5}$ and ozone pollution is among the highest in the OECD. The EU's National Emission Ceilings Directive mandates countries to design and publish a national air pollution control programme but Greece is one of the few EU countries that has yet to comply with this. The national air pollution control programme was scheduled to be completed by March 2020. Such a plan needs to look in a holistic way at options to reduce air pollution such as switching to low carbon energy sources, improving energy efficiency, reducing car dependency and moving to zero emission vehicles. Considering access restrictions for the most polluting vehicles in Athens and Thessaloniki would also contribute to reducing air pollution.

In 2017, Greece's revenues from environmentally related taxes amounted to 4% of GDP, the second highest among OECD countries. Energy taxes account for the bulk of environmental taxes and petrol prices are among the highest in the OECD. The taxation gap of petrol with diesel is still large however.

Effective tax rates on CO_2 emissions from energy use are high compared with other OECD countries, but they vary across fuels and uses, blurring carbon price signals. Fossil-fuel subsidies (i.e. tax expenditures and budget transfers) are among the highest rates in the OECD, accounting for more than 25% of energy tax revenue. Electricity, heating oil and water tariffs are subsidised for low-income households, although targeting is patchy (discussed in Chapter 2). Developing a national catalogue of environmentally harmful subsidies, as done recently by Italy, would be a first step towards identifying those with outdated objectives and those that are most harmful to the environment, and then to abolish these.

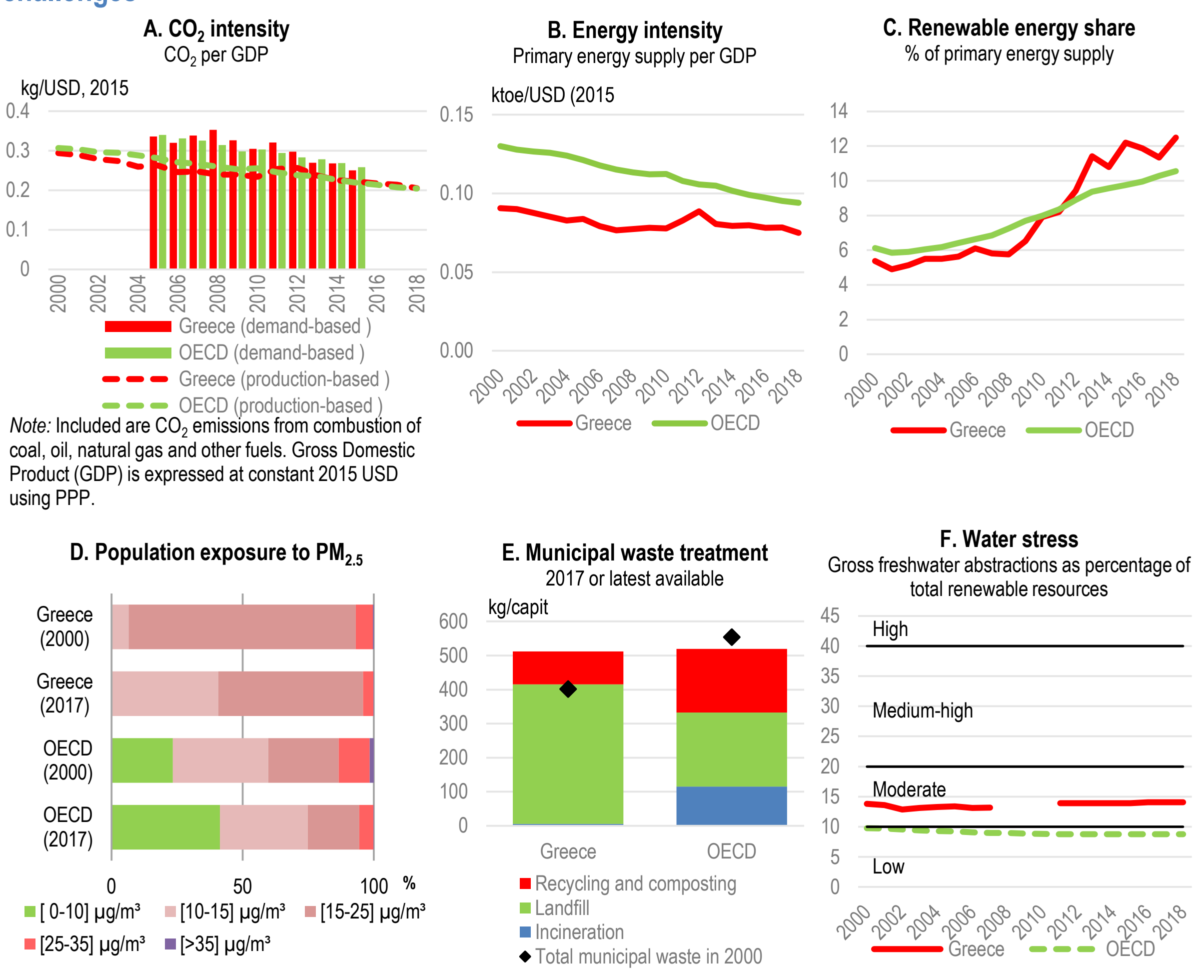
The State of the Environment report identifies waste management as the most challenging environmental issue (NCESD, 2018[52]). Lack of infrastructure and poor data along with weak enforcement beset the waste management sector. In 2017, 80% of municipal waste generated was sent to landfill, nearly twice the OECD average (Figure 1.39, Panel E). Landfill management is problematic as more than 50 dumping sites do not comply with EU requirements and hazardous waste management remains deficient. Because of these long-standing problems, Greece has not reached the EU target of halving the amount of landfilled biodegradable municipal waste from the 1995 level by 2013. It is at risk of missing the 2020 Waste Framework Directive target of preparing half of municipal waste for reuse/recycling (OECD, 2020), along with other 20 EU member states.

To tackle these challenges, Greece adopted a National Circular Economy Strategy and action plan in 2018. The 2017 Law on Recycling aligned existing legislation with circular economy principles. Progress has been made in closing illegal landfills and expanding extended producer responsibility systems. A 2018 tax has reduced consumption of single-use plastic bags. However, waste collection charges are generally based on property size, which hinders progress in separating collections. Pay-as-you-throw schemes, which link waste management fees to the amount of waste produced by each household (with higher charges for unrecycled waste) are still little used. Extending their use would strengthen incentives for recycling and reducing waste. Two recent initiatives go in the right direction. One provides incentives to local authorities for the separate collection of biological waste (which accounts for about 40% of municipal waste). Another imposes a tax on waste disposed in landfills and set prices in all municipalities to discourage landfills. Opening up waste management activities to competition would promote efficiency of operations and improve the quality of services provided.

Most bathing waters are of excellent quality and compliance rates with Drinking Water Directive requirements are high. However, Greece has one of the OECD's highest rates of water extraction per capita (Figure 1.39, Panel F) dues to leakage in the distribution system and subsidies linked to partial cost recovery and tax-exempt electricity use (European Commission, 2018[53]) (National Bank of Greece, 2015[54]). Tax exemptions on electricity apply to agricultural activities, including irrigation which is the main water user. Such tax exemptions encourage inefficient use of water resources, contributing to high abstraction rates. In some water bodies, groundwater is threatened by salinisation caused by over-extraction and seawater intrusion in coastal aquifers. Wastewater treatment has improved in large agglomerations: 90% of the wastewater load is collected and treated in urban wastewater treatment plants. The remaining 10% is dealt with by individual systems. Replacing them with collection systems and treatment plants where population density is high enough would further improve the treatment of wastewater.

Greece also needs a climate change adaptation strategy that is commensurate to the risks it faces. Through Law 4414/2016, the country has defined the policy and institutional framework for climate adaptation, while also endorsed its first national adaptation strategy to define specific needs towards adaptation. All 13 regions of the country are completing their respective regional adaptation action plans that will comprise the overall national adaptation plan. As other countries around the Mediterranean, Greece will be particularly heavily exposed to the consequences of climate change. Droughts, heat waves and wildfires are expected to increase particularly strongly (Intergovernmental Panel on Climate Change, 2019[55]) with summer warming 40% greater than the global mean. Fresh water availability is likely to decrease by up to 15% under the 2 degrees warming scenario, among the largest losses in the world, while demand will rise. Future scenarios consistently point to significant risks for ecosystems, food and human health in the coming years (Cramer et al., 2018[56]).

Figure 1.39. Air pollution, waste management and water stress are the main environmental challenges



Note: Included are CO_2 emissions from combustion of coal, oil, natural gas and other fuels. Gross Domestic Product (GDP) is expressed at constant 2015 USD using PPP.

Source: OECD *Green Growth Indicators* database; OECD *Environment Statistics* database; OECD *National Accounts* database; IEA *World Energy Statistics and Balances* database; and OECD *Exposure to Air Pollution* database.

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MAIN POLICY FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Responding to the COVID-19 shock while promoting sustained and inclusive growth	
The COVID-19 pandemic has set back Greece's recovery. The government responded swiftly with temporary measures to support households' incomes and firms' liquidity. The COVID-19 crisis adds to the need to improve the efficient reallocation of resources to boost productivity and ensure a durable recovery. Over recent years fiscal consolidation has improved fiscal credibility, supported by progress in fighting tax evasion and improved tax administration. However, statutory tax rates are high while the tax base, despite progress, remains narrow. The government has reduced tax rates and plans further reductions.	**Extend exceptional fiscal support measures as needed based on epidemiological and economic developments while ensuring they do not hinder the reallocation of resources towards firms and sectors with better growth prospects.** **Continue to fight evasion and enlarge the tax base so as to lower statutory tax rates.** Introduce targeted incentives for the use of electronic payments in industries with high risk of tax evasion, such as professional services.
The quality of public spending remains low despite recent improvements. Public investment has been cut and programme evaluations are still little used. The government plans to use spending reviews more regularly and to introduce performance budgeting.	**Boost public investment to support growth and environmental sustainability, including in public transport, innovation and waste management, based on cost-benefit analysis.** **Ensure results of spending reviews are available early enough in the budget cycle.**
The efficiency and capacity of the public administration is improving but remains weak in many areas, undermining the quality of public services and imposing costs on citizens and firms.	**Pursue plans to accelerate the digitalisation of the public administration.** Train staff in payment processes including at local level. Stagger the appointment of members of boards of independent authorities.
Banks' non-performing loans (NPLs) have fallen but they are still high by historical and international standards, curtailing banks' capacity to lend. A large share of banks' capital consists of deferred tax credits. The Hercules asset protection scheme is expected to reduce substantially the stock of NPLs, but a large volume will remain. The insolvency system is highly fragmented, resulting in a large number of strategic defaulters and slowing the resolution of NPLs.	**Swiftly implement the Hercules scheme to dispose of non-performing loans from banks' balance sheets.** **Urgently design and implement a strategy to address the deferred tax credits and the bad loans that will remain on banks' balance sheets.** Align tax incentives for disposing of non-performing loans with those of previous legislation and make them temporary. Create a platform for purchase and sale of NPLs, along the lines of the EU Council Action Plan. **Unify insolvency proceedings, ensure a better balance between the rights of creditors and debtors, and accelerate enforcement of collateral.**
A large share of the urban population is exposed to dangerous levels of air pollution, detracting from its well-being. Fossil-fuel support measures are high and amount to about 25% of energy taxes. Effective tax rates on CO2 emissions from energy use are high compared with other OECD countries but they vary across fuels and uses, blurring price signals.	**Adopt and implement a national air pollution control programme and improve the air quality monitoring system.** **Review tax variation across fuels and uses to provide a consistent carbon price signal.** **Review and abolish environmental harmful subsidies with outdated objectives or that are most harmful to the environment.** Extend separate collection of waste, and expand the use of "pay as you throw" systems. Enforce the landfill tax.
Major reforms over 2010-2016 significantly improved the sustainability of the pension system but spending on pensions remains high. Changes in 2019 will increase pension spending in the short term. Despite recent improvements, poverty rates among the young and family with children remain high, highlighting the intergenerational inequities of the social protection system.	**Ensure pension spending does not crowd out other, better-targeted, social programmes and public investment.**
Promoting productivity and innovation	
R&D spending has increased, driven by businesses, but remains low. Despite increased government support, research and innovation policies are complex and fragmented, detracting from the general research environment. Research productivity is low and links between universities and industry are underdeveloped. Difficulties in obtaining public grants or subsidies are one the most important hurdles for innovative activities reported by firms.	**Consolidate agencies responsible for research and innovation policies.** **Simplify access to R&D grants and tax incentives.** Strengthen the advisory and steering role of the General Secretariat for Research and Technology and the National Council of Research and Innovation. Establish technology transfer offices in universities to strengthen university-industry collaboration.
Product market reforms have progressed in some areas. Administrative burdens on start-ups are among the lightest in OECD countries and barriers to competition in network services are close to the OECD average. In some other areas, such as professional services, regulatory barriers still restrict competition. Regulatory Impact Assessments are still little used.	**Accelerate the codification of existing laws and regulations.** **Lower product market regulation in professional services, especially for notaries, lawyers, civil engineers and architects, and retail distribution.**
The court system is slow and overburdened with a backlog of cases. Digital technologies, though progressing, are still little used and courts'	**Improve judicial efficiency through more training of staff and judges and using courts' performance indicators.**

MAIN POLICY FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
performance indicators are lacking. Alternative dispute resolution mechanisms are underused because of lack of awareness and trust.	**Better communicate the availability and benefits of alternative dispute resolution mechanisms.** Consider introducing permanent mechanisms for out-of-court debt settlements in conjunction with ongoing efforts to strengthen mediation processes in the justice system.
A more inclusive and better performing labour market	
High taxes and social insurance contributions stifle employment and discourage formalization, especially for low-income workers and vulnerable groups. Some recent policy changes may widen differences in effective tax rates between employment types.	**Reduce social insurance contribution rates, especially at low incomes, while aligning taxation across employment types.**
The Guaranteed Minimum Income and other social protection reforms are reducing the depth of poverty but poverty rates remain high, including for those in work.	**Increase Guaranteed Minimum Income transfers, taper them more gradually as beneficiaries' earn more and introduce in-work benefits for low-wage workers.**
Education is highly valued in Greece, but many secondary school students lack basic skills. Ensuring schools provide students with solid literacy and numeracy skills and competences aligned with labour market needs will require modernising the school system.	**Progressively move the teacher workforce onto longer-term contracts that support and reward performance and avoid the rigidity of the existing permanent contracts.**
Unemployment is falling but remains high while employers often cannot find workers with the skills they need. Job-search and training programmes provide little support for re-skilling and matching jobseekers with jobs.	**Employ more specialised counsellors and profiling tools in public employment services to significantly improve job-search and training support, linking them better with private job-search agencies.**
Policies to support families and facilities for child and elderly care are underdeveloped. Caregiving obligations impede many from working, contributing to low fertility rates.	**Boost policies to support families, prioritising expanded access to quality care for children and the elderly.**

References

Aghion, P. et al. (2004), "Entry and productivity growth: Evidence from microlevel panel data", *Journal of the European Economic Association*, Vol. 2/2-3, pp. 265-276, http://dx.doi.org/10.1162/154247604323067970. [58]

Aghion, P. and P. Howitt (1992), "A Model of Growth Through Creative Destruction", *Econometrica*, Vol. 60/2, p. 323, http://dx.doi.org/10.2307/2951599. [24]

Aiyar, S. et al. (2015), "A Strategy for Resolving Europe's Problem Loans", *IMF Staff Discussion Note*, No. 15/9, International Monetary Fund, Washington DC, https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2016/12/31/A-Strategy-for-Resolving-Europe-s-Problem-Loans-43286 (accessed on 17 October 2019). [11]

Appelt, S. et al. (2016), "R&D Tax Incentives: Evidence on design, incidence and impacts", *OECD Science, Technology and Industry Policy Papers*, No. 32, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jlr8fldqk7j-en. [48]

Bank of Greece (2019), *Overview of the Financial System*, Bank of Greece, http://dx.doi.org/ISSN 2529-068. [68]

Bank of Greece (2018), *Overview of the Greek Financial System*, Bank of Greece. [15]

Bournakis, I. (2013), "Costs, knowledge and market structure: understanding the puzzle of international competitiveness with Greek export data", *International Review of Applied Economics*, Vol. 28/2, pp. 240-269, http://dx.doi.org/10.1080/02692171.2013.858669. [2]

Cohen, W. and R. Florida (1998), "Industry and the Academy: Uneasy Partners in the Cause of Technological Advance", in Noll, R. (ed.), *Challenges to the Research University*, Brookings Institution, Washington, D.C. [62]

Cramer, W. et al. (2018), *Climate change and interconnected risks to sustainable development in the Mediterranean*, Nature Publishing Group, http://dx.doi.org/10.1038/s41558-018-0299-2. [56]

Crespi, G. et al. (2011), "The Impact of Academic Patenting on University Research and its Transfer", *Research Policy*, Vol. 40/1, pp. 55-68, http://dx.doi.org/10.1016/J.RESPOL.2010.09.010. [66]

Demmou, L., G. Franco and I. Stefanescu (2019), *Productivity Growth and Finance: The Intangible Assets Channel - A Firm Level Analysis*, OECD. [46]

Department of State, U. (2018), *Investment Climate Statements*, https://www.state.gov/reports/2018-investment-climate-statements/ (accessed on 16 November 2019). [42]

European Commision (2018), *AMC Blueprint*, https://eur-lex.europa.eu/legal-content/NL/TXT/?uri=CELEX:52018SC0072. [16]

European Commission (2019), "Enhanced Surveillance Report - Greece, November 2019", *Institutional Papers*, Vol. 116, http://dx.doi.org/doi:10.2765/114254. [19]

European Commission (2019), *Enhanced Surveillance Report: Greece, June 2019*, European Commission Directorate-General for Economic and Financial Affairs, Brussels, http://dx.doi.org/10.2765/93517. [32]

European Commission (2019), *The 2019 EU Justice Scoreboard*, European Commission, http://dx.doi.org/10.2838/457497. [45]

European Commission (2018), *Commission Staff Working Document Impact Assessment, Accompanying the document Proposal for a Directive of the European Parliament and of the Council on the quality of water intended for human consumption (recast), Document SWD(2017) 449 final*, https://ec.europa.eu/transparency/regdoc/rep/10102/2017/EN/SWD-2017-449-F1-EN-MAIN-PART-1.PDF. [53]

European Commission (2018), *The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States (2016-2070)*, http://dx.doi.org/10.2765/615631. [30]

European Commission (2018), *The 2018 EU Justice Scoreboard*, European Union, http://dx.doi.org/10.2838/72153. [67]

European Commission (2018), *The 2018 pension adequacy report - Current and future income adequacy in old age in the EU. Volume II, Country profiles*, European Commission, http://dx.doi.org/10.2767/653851. [27]

EY (2018), *Opportunity out of Adversity: Investing in the Greek Non-Performing Loan Market*, https://www.ey.com/Publication/vwLUAssets/ey-opportunity-out-of-adversity-investing-in-the-Greek-non-performing-loan-market/$FILE/ey-opportunity-out-of-adversity-investing-in-the-Greek-non-performing-loan-market.pdf (accessed on January 2020). [13]

Geppert, C. et al. (2019), "Labour supply of older people in advanced economies: the impact of changes to statutory retirement ages", *OECD Economics Department Working Papers*, No. 1554, OECD Publishing, Paris, https://dx.doi.org/10.1787/b9f8d292-en. [35]

Geuna, A. and L. Nesta (2006), "University Patenting and its Effects on Academic Research: The Emerging European Evidence", *Research Policy*, Vol. 35/6, pp. 790-807, http://dx.doi.org/10.1016/J.RESPOL.2006.04.005. [50]

Geuna, A. and F. Rossi (2011), "Changes to University IPR Regulations in Europe and the Impact on Academic Patenting", *Research Policy*, Vol. 40/8, pp. 1068-1076, http://dx.doi.org/10.1016/J.RESPOL.2011.05.008. [49]

Giacomelli, S. and C. Menon (2016), "Does weak contract enforcement affect firm size? Evidence from the neighbour's court", *Journal of Economic Geography*, p. lbw030, http://dx.doi.org/10.1093/jeg/lbw030. [44]

GRECO (2018), *Corruption prevention in respect of members of parliament, judges and prosecutors: Compliance Report Greece*, GRECO and Council of Europe, http://www.coe.int/greco (accessed on 16 November 2019). [59]

GSRT (2014), *National Research and Innovation Strategy For Smart Specialization 2014-2020*, General Secretariat for Research and Technology, Ministry of Economic Development, http://www.gsrt.gr/Financing/Files/ProPeFiles20205/Executive%20Summary-2015-09-17-v04(1).pdf (accessed on 30 August 2019). [47]

Hall, B. and D. Harhoff (2012), "Recent Research on the Economics of Patents", *Annual Review of Economics*, Vol. 4/1, pp. 541-565, http://dx.doi.org/10.1146/annurev-economics-080511-111008. [65]

HFSF (2018), *Second Update of HFSF's Study on Non - Regulatory Constraints & Impediments for the Development of an NPL Market in Greece*, Hellic Financial Stability Fund, http://www.hfsf.gr/en/publications.htm (accessed on November 2019). [14]

Hondroyiannis, G. and D. Papaoikonomou (2020), "The effect of card payments on VAT revenue in the Euro area: evidence from a panel VECM", *Journal of Economic Studies*, Vol. ahead-of-print/ahead-of-print, https://doi.org/10.1108/JES-03-2019-0138 (accessed on 17 January 2020). [40]

Hondroyiannis, G. and D. Papaoikonomou (2017), "The Effect of Card Payments on VAT Revenue: New Evidence from Greece", *Economics Letters*, Vol. 157, pp. 17-20, http://dx.doi.org/10.1016/j.econlet.2017.05.009. [39]

Hummels, D. and P. Klenow (2005), "The Variety and Quality of a Nation's Exports", *American Economic Review*, Vol. 95/3, pp. 704-723, http://dx.doi.org/10.1257/0002828054201396. [4]

Intergovernmental Panel on Climate Change (2019), *Climate Change and Land An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.Summary for Policymakers.*, https://www.ipcc.ch/site/assets/uploads/2019/08/Edited-SPM_Approved_Microsite_FINAL.pdf (accessed on 21 October 2019). [55]

Jones, C. (2020), *The End of Economic Growth? Unintended Consequences of a Declining Population*, National Bureau of Economic Research, Cambridge, MA, http://dx.doi.org/10.3386/w26651. [22]

Khandelwal, A. (2010), "The Long and Short (of) Quality Ladders", *Review of Economic Studies*, Vol. 77/4, pp. 1450-1476, http://dx.doi.org/10.1111/j.1467-937x.2010.00602.x. [3]

Kremer, M. (1993), "Population Growth and Technological Change: One Million B.C. to 1990", *The Quarterly Journal of Economics*, Vol. 108/3, pp. 681-716, http://dx.doi.org/10.2307/2118405. [21]

Leigh, D., S. Fabrizio and A. Mody (2009), "The Second Transition : Eastern Europe in Perspective", No. IMF Working Paper No. 09/43, International Monetrary Fund, https://www.imf.org/en/Publications/WP/Issues/2016/12/31/The-Second-Transition-Eastern-Europe-in-Perspective-22708 (accessed on 17 December 2019). [7]

Link, A. and M. van Hasselt (2019), "On the Transfer of Technology from Universities: The impact of the Bayh–Dole Act of 1980 on the Institutionalization of University Research", *European Economic Review*, Vol. 119, pp. 472-481, http://dx.doi.org/10.1016/J.EUROECOREV.2019.08.006. [60]

Liu, Y. and C. Rosenberg (2013), "Dealing with Private Debt Distress in the Wake of the European Financial Crisis A Review of the Economics and Legal Toolbox", *IMF Working Papers*, https://ideas.repec.org/p/imf/imfwpa/13-44.html (accessed on 1 August 2017). [12]

Mody, A., D. Igan and S. Fabrizio (2007), "The Dynamics of Product Quality and International Competitiveness", No. Working Paper No. 07/97, IMF, https://www.imf.org/en/Publications/WP/Issues/2016/12/31/The-Dynamics-of-Product-Quality-and-International-Competitiveness-20647 (accessed on 16 December 2019). [6]

Moretti, O. (2019), "Budgeting in Greece", *OECD Journal on Budgeting*, Published online first, https://dx.doi.org/10.1787/2f5e7d7a-en. [38]

Mowery, D. et al. (2001), “The Growth of Patenting and Licensing by U.S. Universities: An Assessment of the Effects of the Bayh–Dole Act of 1980”, *Research Policy*, Vol. 30/1, pp. 99-119, http://dx.doi.org/10.1016/S0048-7333(99)00100-6. [64]

Mowery, D. and B. Sampat (2004), “The Bayh-Dole Act of 1980 and University? Industry Technology Transfer: A Model for Other OECD Governments?”, *The Journal of Technology Transfer*, Vol. 30/1-2, pp. 115-127, http://dx.doi.org/10.1007/s10961-004-4361-z. [51]

National Actuarial Authority (2019), *Ageing Projections Exercise 2018, 2019 Update- Greek Pension System Fiche- September 2019*. [33]

National Actuarial Authority (2019), *Greek Pension System Fiche - 2019 Update*, National Actuarial Authority, Hellenic Republic. [28]

National Bank of Greece (2015), *Unlocking the potential of Greek agro-food industry, Sectoral report*, National Bank of Greece, Athens, https://www.nbg.gr/greek/the-group/press-office/e-spot/reports/Documents/Sectoral%20Report_Agriculture%202015.pdf. [54]

NCESD (2018), *Greece State of the Environment Report, Summary*, National Center for the Environment and Sustainable Development, Athens, http://ekpaa.ypeka.gr/images/Greece%20State%20of%20the%20Environment%20Report%20Summary%202018%20English%20Version_WEB.pdf. [52]

Nektarios, M. and P. Tinios (2019), “The Greek Pension Reforms: Crises and NDC Attempts Awaiting Completion”*, Social Jobs &Protection Discussion Paper*, No. 1906, World Bank Group, Washington, D.C., http://documents.worldbank.org/curated/en/572351556878896140/The-Greek-Pension-Reforms-Crises-and-NDC-Attempts-Awaiting-Completion. [29]

Nickell, S. (1996), “Competition and corporate performance”, *Journal of Political Economy*, Vol. 104/4, pp. 724-746, http://dx.doi.org/10.1086/262040. [57]

OECD (2019), *Digital Government Review of Argentina: Accelerating the Digitalisation of the Public Sector*, OECD Digital Government Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/354732cc-en. [26]

OECD (2019), *Digital Government Review of Sweden: Towards a Data-driven Public Sector*, OECD Digital Government Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/4daf932b-en. [20]

OECD (2019), *Pension Markets in Focus 2019*, OECD Publishing, Paris, http://www.oecd.org/daf/fin/private-pensions/globalpensionstatistics.htm (accessed on 10 January 2020). [36]

OECD (2019), *Pensions at a Glance 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/b6d3dcfc-en. [31]

OECD (2018), “Are survivor pensions still needed?”, in *OECD Pensions Outlook 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/pens_outlook-2018-10-en. [34]

OECD (2018), *OECD Economic Surveys: Costa Rica 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-cri-2018-en. [8]

OECD (2018), *OECD Economic Surveys: Greece 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-grc-2018-en. [10]

OECD (2018), *OECD Pensions Outlook 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/pens_outlook-2018-en. [37]

OECD (2018), *OECD Regulatory Policy Outlook 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264303072-en. [41]

OECD (2016), *OECD Economic Surveys: Costa Rica 2016: Economic Assessment*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-cri-2016-en. [9]

OECD (2015), *Policy Framework for Investment, 2015 Edition*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264208667-en. [43]

Perkmann, M. et al. (2013), "Academic Eengagement and Commercialisation: A Review of the Literature on University–Industry Relations", *Research Policy*, Vol. 42/2, pp. 423-442, http://dx.doi.org/10.1016/J.RESPOL.2012.09.007. [61]

Romer, P. (1990), "Endogenous Technological Change", *Journal of Political Economy*, Vol. 98/5, Part 2, pp. S71-S102, http://dx.doi.org/10.1086/261725. [23]

Simoes, A. and C. Hidalgo (2011), "he Economic Complexity Observatory: An Analytical Tool for Understanding the Dynamics of Economic Development", *Workshops at the Twenty-Fifth AAAI Conference on Artificial Intelligence.*, https://oec.world/en/profile/country/grc/. [1]

Special Secretariat for the Debt Management (2020), *http://www.keyd.gov.gr/*. [18]

Sutton, J. and D. Trefler (2016), "Capabilities, Wealth, and Trade", *Journal of Political Economy*, Vol. 124/3, pp. 826-878, http://dx.doi.org/10.1086/686034. [5]

Welby, B. (2019), "The impact of digital government on citizen well-being"*, OECD Working Papers on Public Governance*, No. 32, OECD Publishing, Paris, https://dx.doi.org/10.1787/24bac82f-en. [25]

Wesley, M., R. Nelson and A. Wals (2002), "Links and Impacts: The Influence of Public Research on Industrial RandD", *Management Science*, Vol. 48/1, pp. 1-23, https://www.jstor.org/stable/822681?seq=1#metadata_info_tab_contents (accessed on 18 September 2019). [63]

Wold Bank (2019), *Doing Business 2020: Comparing Business Regulation in 190 Economies*, The World Bank, http://dx.doi.org/10.1596/978-1-4648-1440-2. [17]

2 Rejuvenating Greece's labour market to generate more and higher-quality jobs

Greece's labour market entered the COVID-19 shock following several years of sustained employment growth and with wages picking up. Unemployment remained high and employment rates were low, especially among women, the young and older workers. The shock led to a sharp fall in labour force activity and has stalled new hiring. The improved social protection and temporary support measures have helped to support households' incomes and protect jobs during the COVID-19 crisis. However, high tax and social security contribution rates, together with little in-work support for the low-paid, continue abetting high structural informality. This heightens insecurity – by excluding many workers from activation policies or social and employment protection – and weakens productivity. Boosting the capacity of employment services and activation policies would support the recovery from the COVID-19 shock, in addition to durably improving employment prospects especially of long-term unemployed. Giving workplaces further flexibility to adapt collective agreements to specific circumstances would help align wage growth with productivity developments and help businesses to weather the COVID-19 shock. Building on the population's solid education levels by equipping workers with the skills needed by the labour market can support employment and incomes. This will require a substantial boost to professional education and training at all levels and ages. This chapter applies the 2018 OECD Jobs Strategy to Greece to identify reforms that can help to overcome the COVID-19 crisis and create a virtuous cycle between productivity, job creation, and well-being.

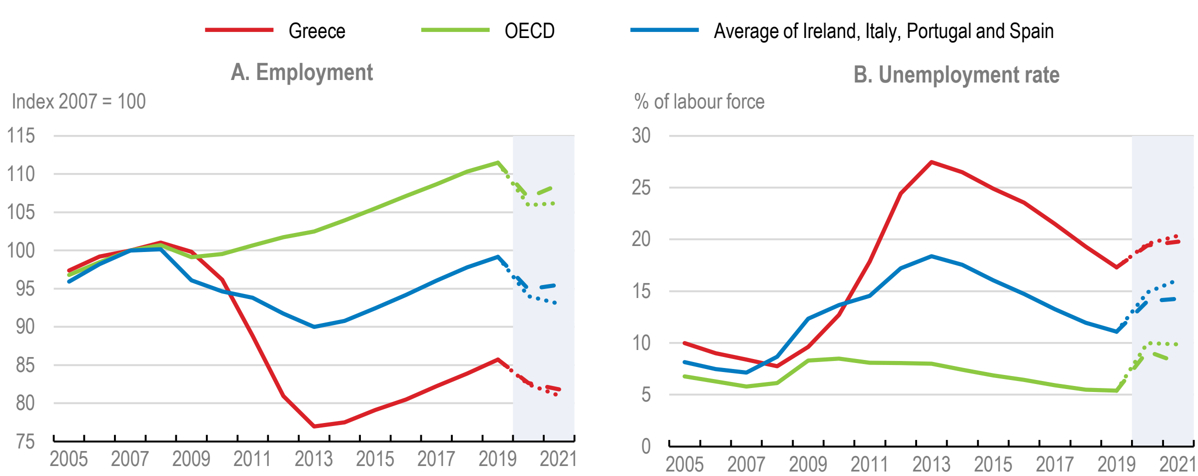
The COVID-19 shock has stalled Greece's labour market recovery, accentuating long-standing challenges

Prior to the shock of the COVID-19 pandemic, Greece's labour market was recovering after years of high unemployment. Over recent years, jobs growth reduced high unemployment rates (Figure 2.1), incomes were rising and workers were working longer in life. Reforms succeeded in raising enrolment in new, well-targeted social protection programmes and made inroads into poverty. Labour activation policies were reengineered and take-up is strong of those that are effective. The government has started reducing the considerable tax and social contribution wedge on labour income, and plans further reductions.

The COVID-19 shock has led to a temporary but extraordinary drop in production and large loss of tourism demand and employment. New hiring have frozen and large numbers are dropping out of the labour force. The government has responded with substantial packages to strengthen the health system, buttress incomes and liquidity, provide temporary flexibility to employment arrangements and a short-time work scheme, and support the sectors most affected by the shock, such as tourism. As described in Chapter 1, demand is likely to remain weak for some time, delaying the recovery in employment and adding to the challenge of high unemployment.

While Greece's labour market was improving prior to the COVID-19 shock, large and long-standing gaps remain relative to other OECD countries in terms of the number and inclusiveness of jobs, the quality of jobs (Figure 2.2), and prospects for skill development. Employment rates, though increasing, remain low, particularly among young adults, women and older workers. Youth and women have particularly poor employment outcomes, as a large share are outside the labour market, education or training (Figure 2.3), leading to low incomes and poverty. Many youth, including the most skilled, emigrate. Meanwhile the working-age population is falling due to net outwards migration and to an ageing population as fertility has been low for a long time and continues to decline.

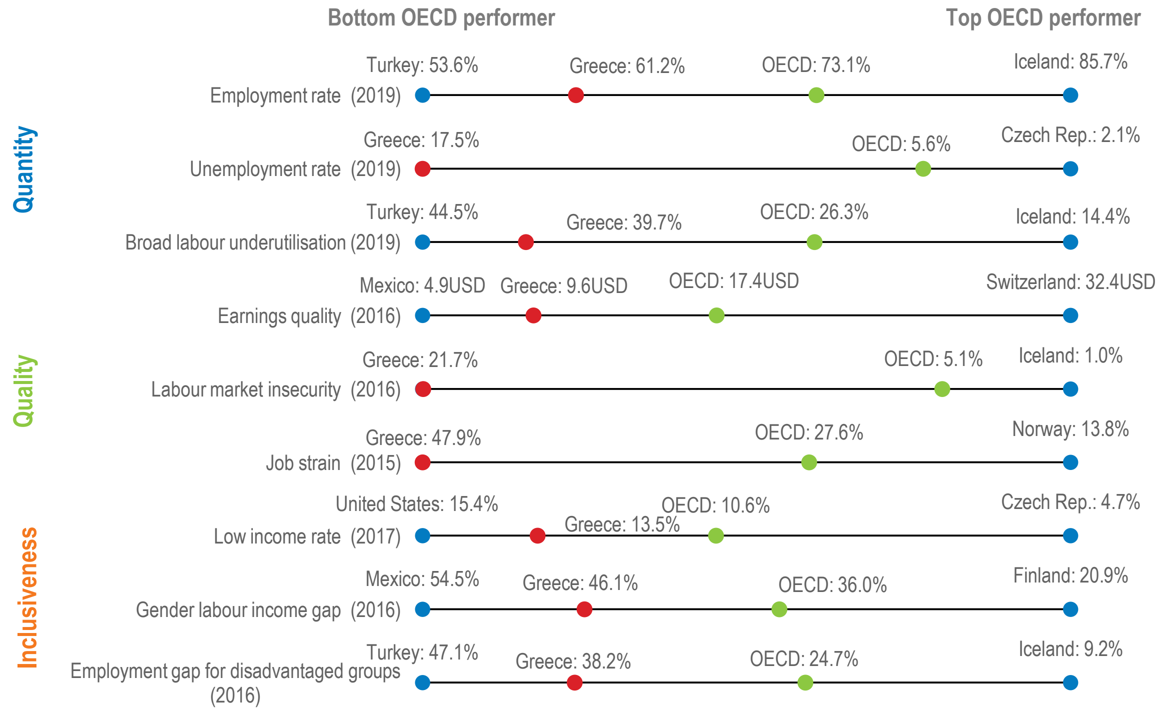
Figure 2.1. The COVID-19 shock sets back the recovery of Greece's labour market



Note: The shaded area indicate projections. The "single-hit" scenario is shown with a dashed line and assumes that the pandemic is brought under control before the summer of 2020; the "double-hit" scenario is shown with a dotted line assumes a second wave of contagion and lockdown measures late in 2020.
Source: OECD *Economic Outlook 107* database.

StatLink https://doi.org/10.1787/888934154642

Figure 2.2. The quantity and quality of jobs in Greece lag other OECD countries



Note: Employment rate: share of working age population (20-64 years) in employment (%). Broad labour underutilisation: Share of inactive, unemployed or involuntary part-timers (15-64) in population (%), excluding youth (15-29) in education and not in employment (%). Earnings quality: Gross hourly earnings in PPP-adjusted USD adjusted for inequality. Labour market insecurity: Expected monetary loss associated with the risk of becoming unemployed as a share of previous earnings. Job strain: Percentage of workers in jobs with a combination of high job demands and few job resources to meet those demands. Low income rate: Share of working-age persons living with less than 50% of median equivalised household disposable income. Gender labour income gap: Difference between per capita annual earnings of men and women (% of per capita earnings of men). Employment gap for disadvantaged groups: Average difference in the prime age male's employment rate and the rates for five disadvantaged groups (mothers with children, youth who are not in full-time education or training, workers aged 55-64, non-natives, and persons with disabilities; % of the prime-age men's rate).
Source: OECD (2018), *OECD Jobs Strategy* https://www.oecd.org/employment/jobs-strategy/country/; OECD *Employment* database, www.oecd.org/employment/database; and OECD *Income Distribution* database (IDD), http://oe.cd/idd.

StatLink https://doi.org/10.1787/888934154661

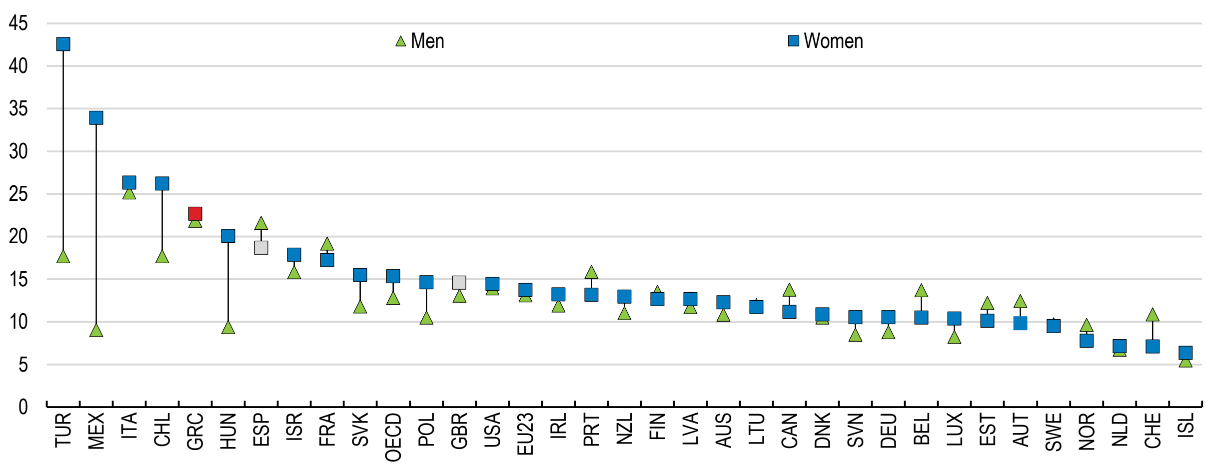
Among those in work, employment over a long period has become increasingly polarised, and since the start of the great financial crisis a growing share of jobs are low-skilled (Figure 2.4), pay the minimum wage and are often temporary or involuntary part-time. Meanwhile firms in high productivity sectors have created a low share of jobs (Figure 2.5). Employment quality has deteriorated for many, especially the large number who are self-employed or work in very small firms where productivity is low. A large share working as self-employed do so for lack of alternative opportunities rather than in pursuit of a business project, and do not seek to grow, which dampens the economy's potential (Fajnzylber, Maloney and Montes-Rojas, 2009[1]; Joshi, Prichard and Heady, 2013[2]). Tax and social contributions are high, especially at low incomes for the self-employed. Informal or undeclared activity is rife, and weakens working conditions and productivity. Employment protection is typical of European OECD countries, and reversals of the substantial crisis-period relaxation in employment protection were cancelled by the incoming government in August 2019. Yet the labour market has continued to lack dynamism.

For those out of work, systems to match jobseekers with opportunities or training are underdeveloped. Many jobseekers do not have the skills employers need (Figure 2.6), even though workers generally have a good level of education. Older women have spent less time in education and have lower professional skills than older men, contributing to their lower employment rates. Care and other responsibilities combine with scarce voluntary part-time or flexible working arrangements to impede many women of all ages from seeking jobs or developing their skills. Those out of work are at the highest risk of poverty, although improved social protection is lowering this risk, while poverty among those in work doubled during the crisis to the highest rate among OECD EU countries.

Rejuvenating Greece's labour market is key to achieving a sustained and reinvigorated recovery after the COVID-19 shock, and to improving well-being and inclusiveness. This chapter applies the OECD's Job Strategy (2018[3]) and identifies priorities to address Greece's labour market challenges (Box 2.1). Expanding employment is central for the recovery and to raising the labour market's performance. First, strengthening the social protection system is essential for redressing poverty, and supporting resilience and employment, especially in response to the deep if transitory COVID-19 shock. Second, improving public employment services is a prerequisite for effectively linking jobseekers with work and skill development opportunities, and will be essential for the recovery from the COVID-19 shock, and for implementing a mutual-obligation social safety net. Third, reducing the large labour income tax wedge, as fiscal space allows, will encourage employment and formalisation. Fourth, it will become increasingly important to ensure that wage growth aligns with productivity developments. Fifth, in the longer-term, improving the quality of schooling and raising adults' participation in quality life-long learning will prepare Greece's workforce for emerging opportunities.

Figure 2.3. A large share of youth are not in work or education

Percentage of 18-24 year-old NEETs (neither employed nor in education or training), 2018 or latest available



Source: OECD (2018), *Education at a* Glance database, http://stats.oecd.org.

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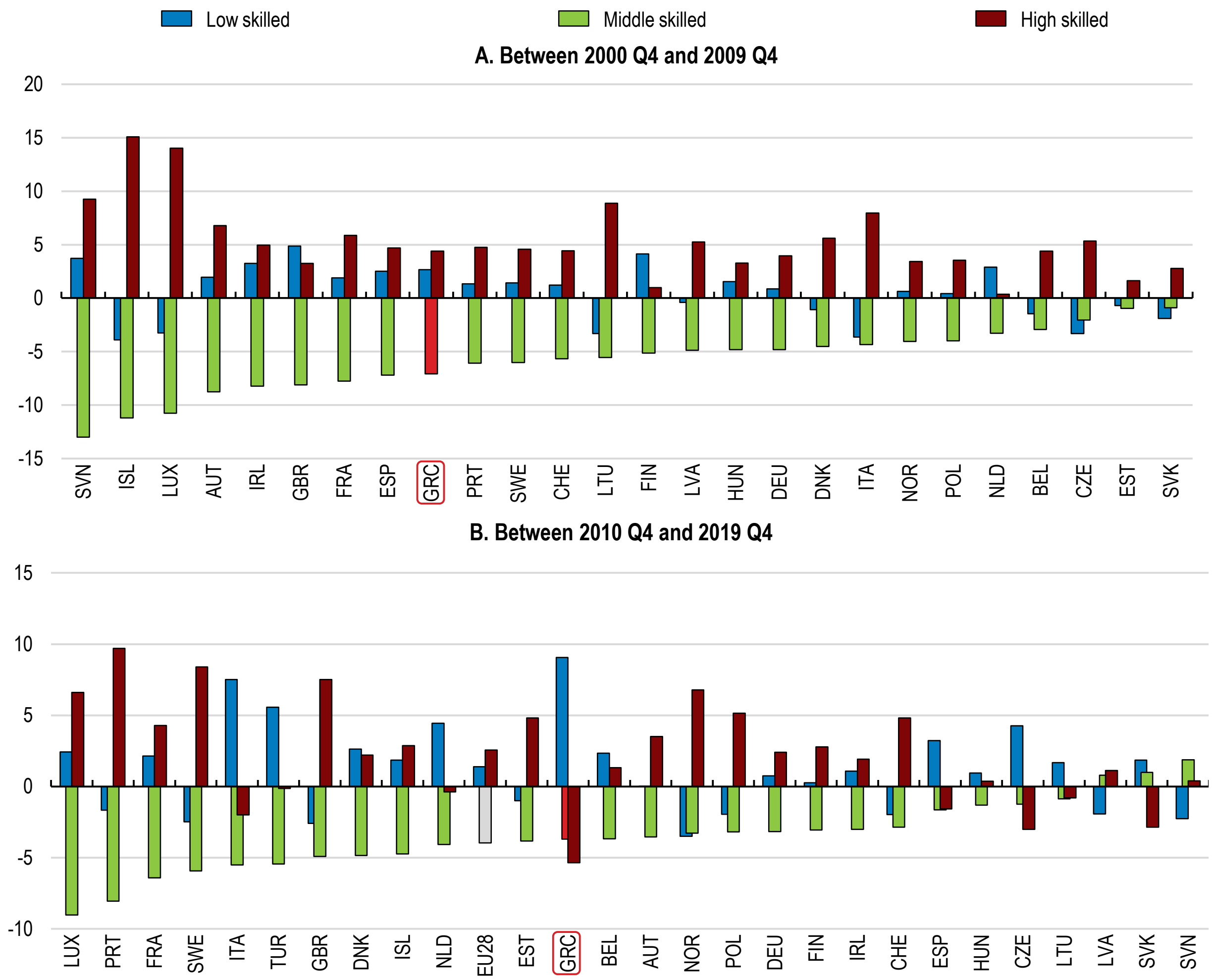
Figure 2.4. Like other countries, Greece has experienced polarisation away from mid-skill jobs

Percentage point change in share of total employment



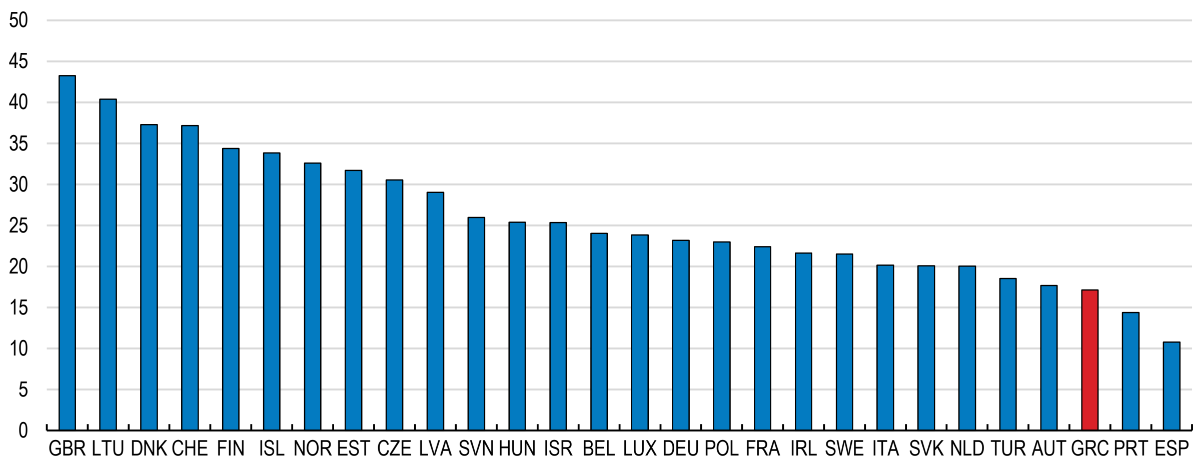
Note: Total employment refers to civilian employment excluding agricultural workers. High-skilled occupations include jobs classified under the ISCO-88 major groups: legislators, senior officials, and managers (group 1), professionals (group 2), and technicians and associate professionals (group 3). Middle-skilled occupations include: clerks (group 4), craft and related trades workers (group 7), and plant and machine operators and assemblers (group 8). Low-skilled occupations include: service workers and shop and market sales workers (group 5), and elementary occupations (group 9).

Source: Calculations based on Eurostat data.

StatLink https://doi.org/10.1787/888934154699

Figure 2.5. Few jobs are being created in high productivity sectors

Percentage of jobs created by new firms in sectors with above-median productivity, as a share of all employment created by new firms, 2016

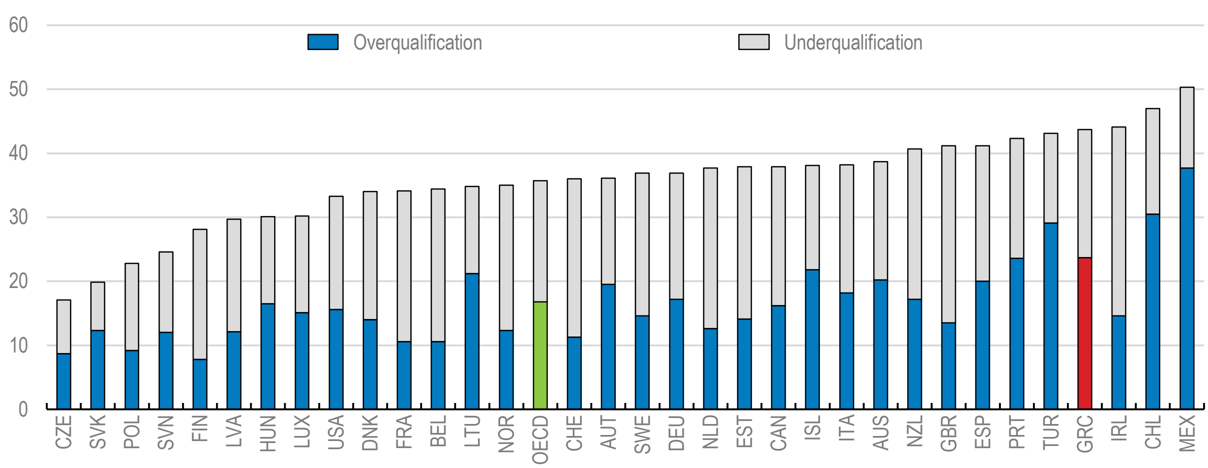


Note: Median labour productivity (value added per person employed) was calculated at the sectoral level (in ISIC REV.4: section-level and a selection of division-level manufacturing sectors) separately for each country and year.
Source: OECD (2018) *Structural and Demographic Business Statistics* database.

StatLink https://doi.org/10.1787/888934154718

Figure 2.6. Skill mismatch is high

Percentage of mismatched workers, 2016



Note: Data refer to 2015 for Canada, Chile and Turkey 2015 and to 2013 for Germany. Countries are ranked in descending order of the prevalence of total mismatch (underqualification and overqualification). OECD is the unweighted average of the countries shown.
Source: OECD *Skills for Jobs* database, 2018, https://stats.oecd.org/Index.aspx?DataSetCode=MISMATCH

StatLink https://doi.org/10.1787/888934154737

Box 2.1. Implementing the OECD Jobs Strategy in Greece

The 2018 OECD Jobs Strategy provides a comprehensive set of policy guidelines to harness the opportunities provided by new technologies and markets, while helping workers to adjust and ensuring that the benefits of growth are shared broadly. The new Jobs Strategy stresses the links between strong and sustained economic growth and the quantity of jobs, and recognises job quality, in terms of both wage and non-wage working conditions, and labour market inclusiveness as central policy priorities. It recognises the virtuous cycle between raising productivity and incomes and expanding job opportunities. Supporting dynamism requires providing the labour force with resilience and the ability to adapt to challenges and opportunities.

Greece's labour market performance is summarised relative to other OECD countries across a dashboard of indicators of job quantity, quality and inclusiveness (Figure 2.2). This confirms that expanding the quantity of jobs, redressing labour market insecurity, raising the quality of jobs, and improving labour market inclusiveness are priority challenges for Greece. Expanding employment is central to these challenges, as it is key to reduce unemployment as well as to enhance labour market security, tackle widespread poverty and improve integration of underrepresented groups. Improving the resilience and adaptability of Greece's labour market to future challenges requires improving productivity growth, lifting skills and maintaining the crisis-period reforms to labour market institutions.

Sources: (OECD, 2018[4]; Crivellaro, Hijzen and Schwellnus, 2019[5])

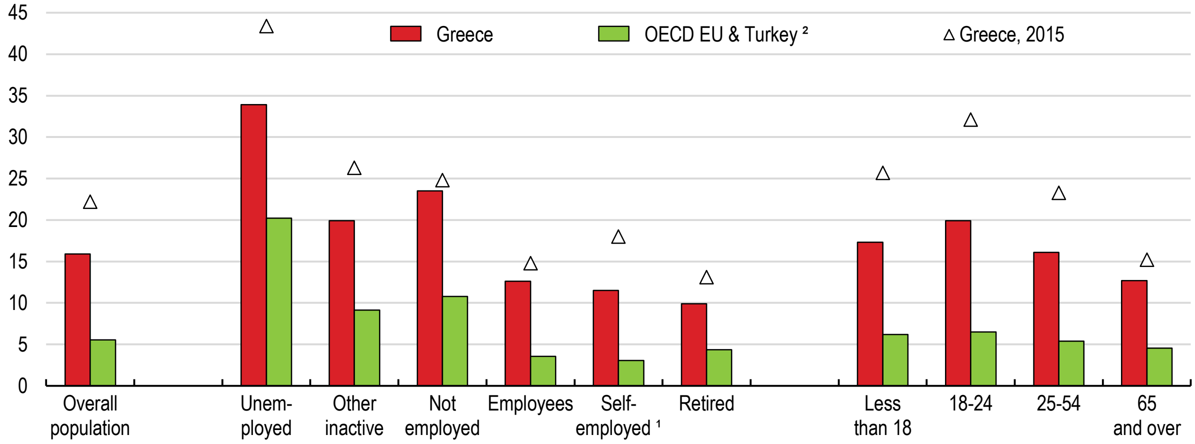
Social protection to support employment, redress poverty and improve resilience

Greece is addressing many of the weaknesses in its social protection system that contributed to poverty, vulnerability and low employment, and that were highlighted by previous OECD Economic Surveys (2018[6]) and the OECD Social Protection Review (2013[7]). Following reforms over recent years, Greece is joining other OECD countries in providing a universal social safety net for very low income households, and has introduced targeted family and housing support programmes. Along with employment and income growth, these policies have contributed to lowering poverty rates (Figure 2.7) over recent years and provided a safety net during the COVID-19 pandemic.

As the scale of the COVID-19 shock became clear, Greece swiftly introduced additional temporary measures to support the income of the employed (equivalent to 2.4% of 2019 GDP) and of jobseekers (equivalent to 0.2% of 2019 GDP). These extended unemployment benefits and provided one-off cash transfers to workers directly affected by shut-down orders during the second quarter of 2020, valued at 1.4% of 2019 GDP. It legislated a temporary short-time work scheme ('SYN-ERGASIA' or 'cooperation') to support employment and incomes of employees of firms suffering reduced turnover from mid-June to mid-October 2020 (0.5% of 2019 GDP). Extending such income and employment support, depending on epidemiological developments, would reduce the impact of the COVID-19 crisis, especially in the case of a second outbreak later in 2020.

Figure 2.7. Poverty though falling remains high, especially among the young and those out of work

Percent of population groups living in households reporting severe material deprivation, 2019 or latest



Note: The severe material deprivation rate is the proportion of the population group living in households unable to afford at least four of the following items: unexpected expenses, a one-week annual holiday away from home, a meal involving meat, chicken or fish every second day, the adequate heating of a dwelling, durable goods like a washing machine, colour television, telephone or car, or are confronted with payment arrears. This indicator of well-being and poverty is not affected by income underreporting. Data by employment type for Greece refer to 2018.
1. 'Self-employed' is the category 'employed other than employees'.
2. EU countries that are OECD members plus Turkey. 2018 data except 2017 for Ireland, Slovakia and Turkey, 2016 for Iceland.
Source: Eurostat.

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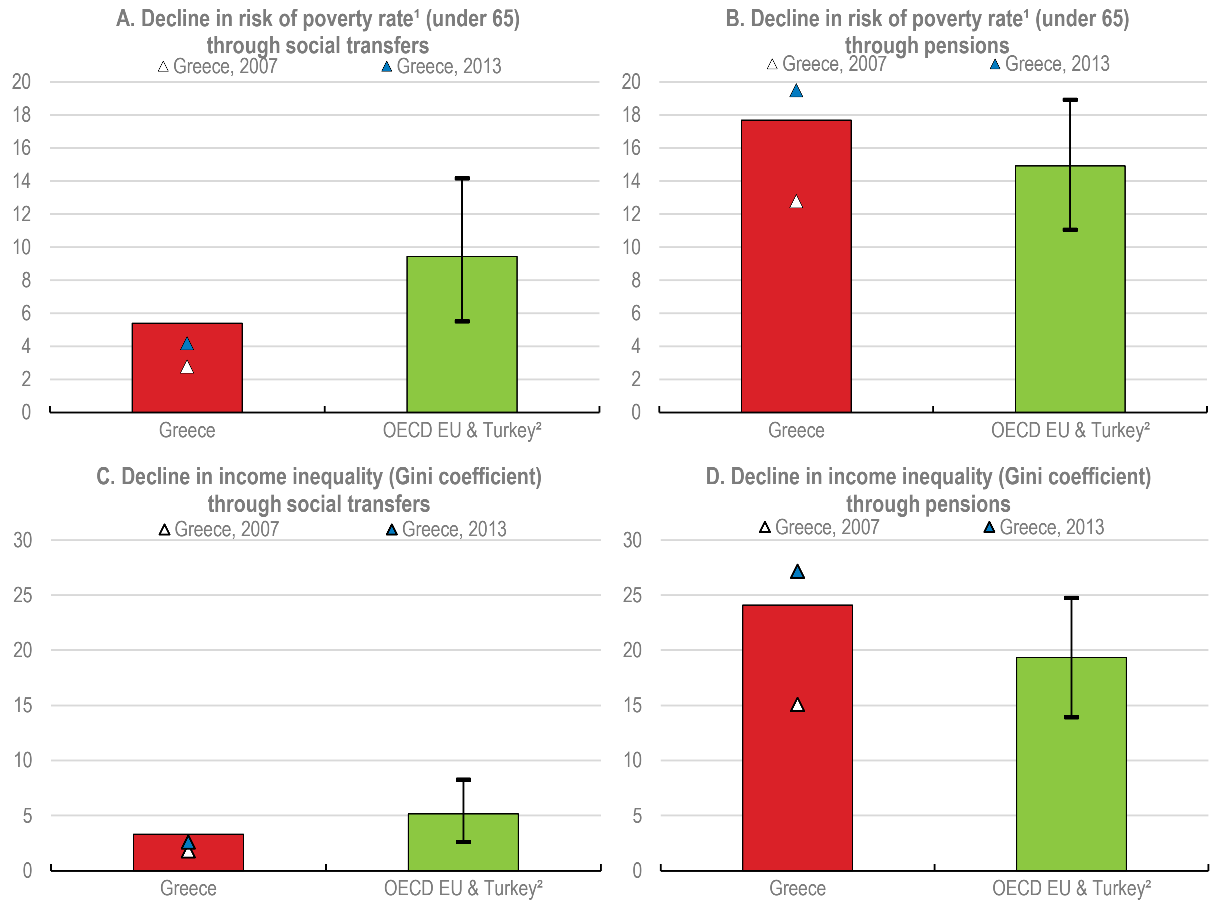
Despite the temporary responses to the COVID-19 shock, social protection in Greece remains weak and poverty high, especially among families and young people (Figure 2.7). This leaves many households without sufficient protection against shocks. While recent reforms have substantially improved targeting, social transfers in Greece reduce poverty and inequality by less than other countries, while pensions make an oversized contribution (Figure 2.8). Some social protection programmes and administrative functions are being consolidated, but different programmes continue to have different, uncoordinated eligibility criteria and entitlement rules and are administered by different institutions, leading to duplication and inefficiencies. Monitoring and evaluation systems are still lacking (Ziomas et al., 2018[8]). The social protection system also does not address barriers to entering work, or ensure that those in work avoid the risk of poverty. Reducing the fragmentation of Greece's social protection schemes, many of which are a legacy of the crisis, would contribute to redressing these weaknesses. Closing programmes that do not achieve their intended effects in an efficient way will free funding to increase the scale of programmes that perform well. In addition, improving the performance of the social protection administration is crucial.

Figure 2.8. Pensions rather than social transfers reduce inequality and poverty in Greece

2019 or latest available



1. At 50 % of median income.
2. European countries that are OECD members plus Turkey.
Source: OECD calculations based on Eurostat data.

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Establishing a social safety net in Greece

Greece is developing the role of targeted income support in its social protection system. For very low income households facing severe poverty, the new guaranteed minimum income programme provides a safety net. Families with dependent children and slightly higher, but still low, income can now receive income support through the reformed family support, reducing the risk of child poverty. Low income households who rent or have a mortgage can now access the new rent support, which will reduce high rates of housing cost distress. As these programmes become fully operational, Greece's can prioritise helping households provide care to dependents, and measures to reduce the risk of in-work poverty.

The Guaranteed Minimum Income is supporting poor households' incomes but job-search and training programme are still weak

The Guaranteed Minimum Income (GMI) programme is the flagship of Greece's social protection reforms. The programme ensures that all households receive a minimum income, which is adjusted for the household's size and composition. For a single household this minimum is EUR 200 per month, with EUR 100 provided for each additional adult and EUR 50 for each child. The household's monthly declared total income (before taxes but after social insurance contributions, and excluding 20% of income from employment) over the previous six months is subtracted from their GMI transfer, so if the household declares income above the GMI transfer value s/he would not be eligible for the GMI. When fully operational, recipients will be obliged to engage in a tailored programme of job search, skill training and other social support activities.

The GMI is more effective than many comparable schemes in other countries at reaching poor and vulnerable households. It was rolled out nationally in 2017 and take-up peaked in 2018 at 277 000 households covering 660 000 individuals (7% of the population), at a cost near 0.4% of GDP. A 2018 evaluation found it reached one-third of extremely poor households (i.e. households with a disposable income of less than 40% of the median) and 37% of households in the bottom income decile, while only 1.6% of recipients were not poor (Marini et al., 2019[9]). The poorest households receive most of the transfer amounts. A higher share of recipients are unemployed, have completed little schooling, not own their residence, have disabilities, have children and are not Greek than the general population.

Improving outreach efforts and access points would allow the GMI to reach a larger share of its target population. Many households in the bottom decile do not apply as they are either unaware of the programme, do not know how to apply or believe they would be ineligible. Among all successful applicants, 40% pay someone to help them complete the application, most often an accountant, despite free municipal social services and community centres to help applicants and the GMI's effective information systems.

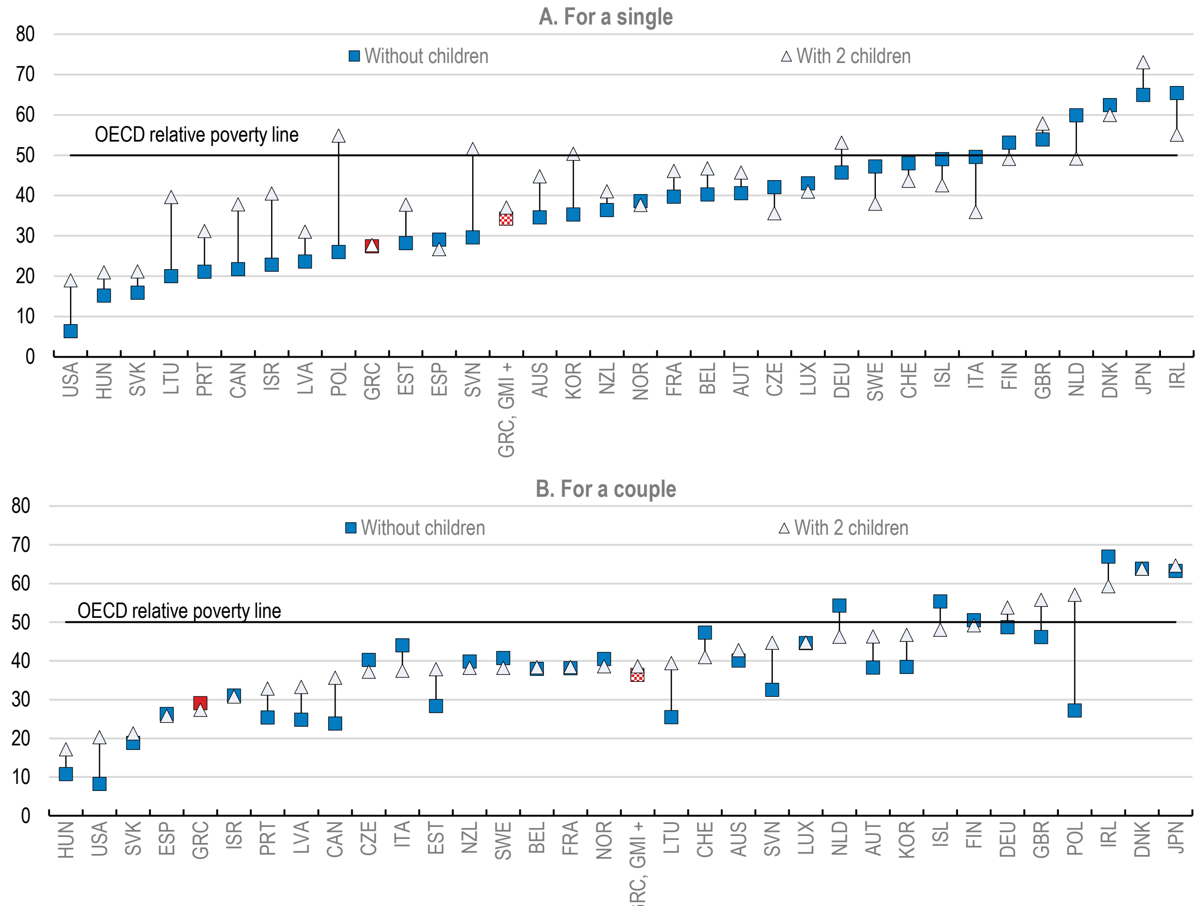
The GMI's transfers are lower than most other countries' guaranteed minimum income transfers, and are insufficient to lift recipients above the poverty line (Figure 2.9). Raising Greece's transfer amounts by 25% would bring the GMI's generosity closer to similar schemes in other OECD countries (Figure 2.9). It would largely benefit the lowest income decile, reducing the poverty rate by 1.1 percentage point from 10.9% at a cost of about 0.15% of GDP additional to its current budget of 0.4% of GDP (Figure 2.10, Table 2.1). Increasing the GMI transfer values, along with ensuring the social support and labour activation pillars operate effectively, would strength the GMI's contribution to the labour force's resilience by reducing the risk of poverty and supporting a return to work.

Full-time employment is the best antidote to poverty (Causa, Hermansen and Ruiz, 2016[10]), and the GMI's social support and labour activation pillars are vital to help recipients move out of poverty and into lasting work. These pillars create a mutual obligation between the wider community and recipients. Six years after the first pilot projects, these pillars are not yet operational and while GMI recipients are required to register for job search, they do not need to actively seek work, accept reasonable job offers, or undertake training, or social support or other active labour market programmes. Social workers and Community Centre staff are expected to encourage recipients to participate in these programmes, yet in 2018 few recipients were aware of these programmes. The government has a goal of rolling out nationally in 2020 programmes to connect GMI recipients with these labour activation pillars. Pursuing this timetable and making the second and third pillars of the GMI operational and obligatory is critical if the programme is to achieve its long-term objectives, and should be a prerequisite to any increase in the GMI transfer amount.

The GMI transfer rules disregard 20% of any income earned from work, then subtract the remaining employment income from the value of the benefit transfer. This means that households are only a little better off from gaining income from formal employment, and creates an incentive to not declare income. Since 2018 income earned from vocational training programmes has been fully disregarded in assessing GMI transfer values, and this is an example of an incentive to improve employability. Disregarding a larger share of employment income would improve incentives for households to gain income, for example by working longer hours, especially if the GMI transfer values are increased to provide greater income support.

Figure 2.9. The Guaranteed Minimum Income transfers are modest compared with most countries' programmes

Net household income of jobless households receiving guaranteed minimum income, as a % of median disposable income in the population, 2018 policies



Note: "GRC, GMI +" includes a 25% increase in the transfer values of the GMI and an in increase in equivalence scales for larger households to the "proposed scale" presented in in Table 2.2. For Italy, data has been adjusted to reflect the Citizen's Income policy rules introduced by the decree of January 2019.

Source: Calculations based on the OECD Tax-benefit model.

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Targeted support for low income families

A redesigned family benefits and new, targeted rent allowance complement the Guaranteed Minimum Income (GMI) by extending social protection to low income households who may otherwise be at risk of poverty. They particularly support families and younger households, which suffered the largest increases in poverty rates during the crisis years. Such measures were recommended in the previous OECD Economic Survey of Greece (2018[6]), and social welfare reviews (OECD, 2013[7]; Bodewig et al., 2016[11]). They address long-standing weaknesses in Greece's social protection, and together transfer more funds to a larger population than the GMI.

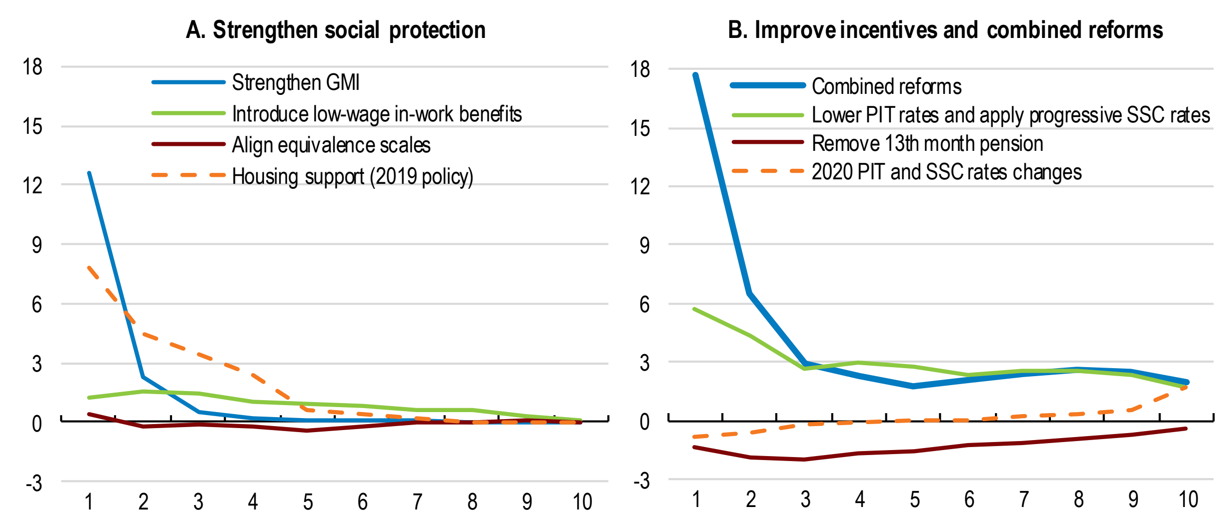
The redesigned family benefit scheme, introduced in 2018, absorbs a previous child benefit and a large family benefit (Leventi et al., 2018[12]; Ziomas et al., 2018[13]). The long-recommended reform boosts means-tested support to low-income households with children, the group that suffered most from the increase in poverty during the crisis. High poverty rates among children and the young are a concern as poverty early in life has negative and persistent effects in adult lives. The reforms provide for consistent means-testing as the GMI programme across different household sizes, however they increase benefits for larger households by a more generous scale than the GMI. Aligning these scales with the GMI's scale would improve the consistency of the overall social protection system.

The means-tested housing benefit, introduced in 2019, supports households who rent or pay a mortgage if they have modest earnings (less than EUR 7 000 per annum for a single person). It provides EUR 70 per month for a single-person household and EUR 35 per month for each additional household member, up to EUR 210 per month. Take-up has been rapid and in-line with initial expectations: 240 000 applications, corresponding to 6% of the Greek population, were accepted by April 2019 (European Commission, 2019[14]). Together these measures may improve households' ability to relocate, and complement other measures to settle household debts in default (discussed in Box 1.2).

The support to lower income renters is likely to reduce poverty and inequality, and improve access to housing in Greece, especially among low income households (Figure 2.10, Table 2.1). About one quarter of all households rent in Greece, below the OECD average, and there is effectively no social housing (OECD, 2019[15]). Renters in Greece face very high housing costs relative to their incomes. 83% of households who rent at market rates spend more than 40% of their net income on housing costs, compared with one-quarter across other OECD European countries. The support to lower income households with mortgages improves their repayment capacity and reduces their risk of poverty. The share of homeowners in Greece with mortgages, at 11%, is well below most other OECD countries. Around 29% of homeowners face housing cost overburden, whether they hold a mortgage or not. Given these benefits are new, their effectiveness at reducing housing cost stress and reducing new mortgage defaults should be monitored.

Figure 2.10. Stronger social protection and reducing the labour income tax wedge would support households across the income distribution

Change in mean disposable income, by income decile, %



Note: The combined reforms includes all reforms presented here, unless otherwise indicated, plus the birth grant introduced in the 2020 budget. Box 2.2 **Error! Reference source not found.**provides more details of the recommended reforms. In addition, 'Housing support (2019 policy) provides low-income households who rent or repay a mortgage with housing cost support. It was introduced in 2019 and is not included in the combined reforms scenario. '2020 PIT and SSC changes' refers to the cuts in personal income tax rates, including a 4 percentage point reduction in employer social insurance contribution rates added to a 3 percentage point reduction in employee social insurance contribution rates, and the shift in self-employed social insurance contribution rates to discretionary rates with a flat minimum. These were introduced in 2020 and are not included in the combined reforms scenario.
Source: OECD and Ministry of Finance calculations using EUROMOD model (see note to Table 2.1).

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Table 2.1. Effects of recent and recommended tax and benefit policy reforms on poverty, inequality, public finances and work incentives

Change in indicator relative to baseline of 2019 policies and 2017 household income [table restructured]

Scenario	**Fiscal impact** (change in revenues less change in transfers relative to baseline, EUR millions)	**Poverty rate** (percentage point change; national relative poverty line)[1]	**Poverty gap index** (index point change)	**Inequality in disposable income**	
				Change in Gini coefficient (0-100)	**Change in quantile ratio** (S80/S20)
Baseline level, 2018:	--	10.85	2.89	30.47	4.86
1. Reforms introduced 2019-2020 (A + B):	***-2,081***	***-1.60***	***-0.62***	***-0.40***	***-0.23***
A. 2019 housing support policy	*-604*	*-1.22*	*-0.52*	*-0.76*	*-0.29*
B. 2020 Tax and social insurance rate reforms:	*-1,477*	*-0.38*	*-0.09*	*0.36*	*0.06*
2020 budget and legislated cuts in labour income tax and social contribution rates	-1,178	-0.59	-0.17	-0.02	-0.03
In addition, apply the 2020 shift to minimum flat social insurance contributions for self-employed [2]	-298	0.21	0.08	0.38	0.09
2. Recommended reform package (A + B): [3]	***-2,723***	***-3.01***	***-1.16***	***-1.01***	***-0.45***
A. Social protection reforms	*-762*	*-2.13*	*-0.94*	*-0.77*	*-0.35*
Strengthen the Guaranteed Minimum Income:	-383	-1.82	-0.83	-0.60	-0.29
Raise transfers by 25%, to EUR 250 / month for a single household	-282	-1.13	-0.62	-0.43	-0.20
Increase income disregard from 20% to 50%	-100	-0.69	-0.20	-0.17	-0.08
Introduce low-income in-work benefits	-419	-0.46	-0.09	-0.21	-0.05
Reform the equivalence scale to increase social safety net support for larger households and to treat households consistently across programmes	40	0.16	-0.02	0.05	0.00
B. Tax and social insurance rate reforms	*-1,961*	*-0.88*	*-0.22*	*-0.24*	*-0.09*
Reduce employer and employee social security contributions by a total of 7 percentage points	-1,510	-0.30	-0.04	0.01	0.00
Reform self-employed social insurance contributions: maintain progressive rates, convert flat fees into rates, and remove lower presumed income floor	-451	-0.58	-0.18	-0.25	-0.10

1. The poverty line is 50% of the median household disposable income, equivalised using the square root of the household size. 2. The 2020 reforms to self-employed social contribution rates will allow the self-employed to choose to insure more than the minimum amount of their income for future pension payments at one of 5 contribution levels. In the simulations presented here, those with monthly self-employment income up to EUR 1 336 (66% of the self-employed) are assumed to select the first (i.e. lowest) contribution level. Those with monthly self-employment income exceeding EUR 1 336 are assumed to select the second contribution level. 3. The recommended reform package does not include the effects of the reforms introduced in 2019 and 2020, but does includes the effects on poverty rates and income inequality of the EUR 2000 birth grant introduced in the 2020 budget.

Note: Box 2.2 provides more detail of the recommended reforms. EUROMOD simulations use a representative sample of the population.

Source: OECD and Ministry of Finance calculations using EUROMOD model, version 11.0+. EUROMOD is maintained, developed and managed by the Institute for Social and Economic Research (ISER) at the University of Essex and the Joint Research Centre (JRC) of the European Commission, in collaboration with national teams from the EU member states. The European Union Programme for Employment and Social Innovation 'Easi' (2014-2020) financially supports extending and updating EUROMOD. The results and their interpretation are the authors' responsibility. The EUROMOD simulations presented here use microdata from the EU Statistics on Incomes and Living Conditions (EU-SILC) made available by Eurostat (59/2013-EU-SILC-LFS) / (259/2018-EU-SILCLFS) together with national variables provided by the Greek National Statistical Office (ELSTAT), and the Greece version of the EU Statistics on Incomes and Living Conditions made available by Eurostat and ISTAT (166/2015-EU-SILC).

Consolidating in-kind low-income programmes

Greece continues to provide various small, non-targeted social transfer programmes. Some were introduced early in the crisis to reduce the costs of various services for the increasing number of very low income households. For example, eligible low income households receive reduced tariffs for heating oil, electricity, water and public transport. However, take-up of these measures among the lowest income households is low. Only 10% of Guaranteed Minimum Income (GMI) recipients benefitted from social tariffs on water and less than half from reduced electricity tariffs in 2018 (Marini et al., 2019[9]). Further, energy poverty is often related to non-income factors, such as the age of buildings and type of heating used (Ntaintasis, Mirasgedis and Tourkolias, 2019[16]). Greece has developed an observatory that will help identify energy poor households and better target assistance (EC, 2019[17]).

Subsidising energy and other utility costs supports some households' disposable income but may work against environmental and sustainability goals. The heating oil subsidy reduces households' heating costs, but encourages consumption of heating oil, adding to air pollution. Instead, directly supporting vulnerable households through income transfers that are decoupled from energy consumption, for example by boosting the GMI, would be a more effective way to improve wellbeing. Supporting building renovation and insulation, through programmes such as "saving at home", and expanding gas central heating would alleviate energy poverty more effectively while addressing environmental challenges.

Box 2.2. Recommended package of social protection, income tax and social contribution reforms

The recommended reform package of social benefits, taxes and social contributions is made up of:

- Strengthening the Guaranteed Minimum Income: increase transfer rates and eligibility thresholds by 25%, and increase the disregard of employment income from 20% to 50%.
- Introducing low-income in-work benefits: a reimbursable tax credit for dependent employees, with eligibility assessed on the basis of the individual's total gross earnings. The benefit would start topping-up earned income as GMI transfers start to decline – i.e., with wages above EUR 200 per month for a single person. The in-work benefit would reach a maximum of 10% of the minimum wage as gross wages reach 80% of the value of the minimum wage, remain at this level until gross rages reach 105% of the value of the minimum wage, and then decline at a rate of 75% of the increase in gross wages.
- Reforming the equivalence scale: weight children at 0.3 across social protection programmes.
- Reducing the labour income tax wedge. For dependent employees, maintain the reductions in income tax rates introduced in 2020; remove the Special Solidarity Levy on income; and, implement the reductions in social insurance contribution rates effective after 2020. For the self-employed, maintain the discount in social security contributions for liberal professionals and own-account workers but do not shift to flat-rate contributions; set unemployment insurance contributes at 4.25% of income, removing the minimum threshold on low incomes. For the incorporated self-employed: cut corporate income tax rates legislated for 2020 while maintaining dividend income tax rates at 15%.

Social transfers to support employment

Ensuring work pays

A well-designed social benefit system is key to improving families' well-being and reducing poverty. By ensuring that work pays and helping people to care for dependent relatives, effective social benefits lift barriers to work, support employment and raise fertility. They also encourage low-wage earners to work and to declare their employment income (Bartels and Shupe, 2018[18]).

In-work poverty rates in Greece are the highest across OECD EU countries, having doubled during the early years of the crisis. 12.6% of employees lived in households suffering severe material deprivation in 2018 (Figure 2.7). Among those in work, the risk of poverty is highest among those with temporary or part-time jobs, those with little education, and those living in larger households.

Currently Greece has few policy measures to protect workers from poverty, given the low eligibility thresholds of the Guaranteed Minimum Income. While raising the minimum wage rate would lift earnings, the effect on poverty rates is likely to be limited, as many minimum wage earners live in households with other income sources, and higher minimum wages may put jobs at risk given low productivity levels and rife informality. Tax and benefit policies would be the most effective instrument to support both employment and incomes of those with low earnings. The cuts to income tax and contribution rates in 2020 and 2021 will support low wages earners' disposable incomes. As discussed above, raising the GMI transfers and discounting a larger share of employment income when assessing eligibility would reduce poverty risks for low income earners.

Greece could aim to join the growing number of OECD countries that provide in-work benefits, once other components of Greece's social protection and tax enforcement system are operating effectively. A simple in-work benefit policy for Greece would provide a net income transfer to individuals working as employees a minimum number of hours, with the transfer depending on their total gross earnings. The scheme could start topping up earned income as the SSI transfers start to decline, ensuring that recipients' overall income continues to rise as they earn more from work. One approach would be to transfer a maximum of 10% of the minimum wage (i.e., EUR 65 per month), at gross earnings just below the full-time minimum wage, and then reduce the benefit gradually as gross earnings rise. Other tax and contribution policies would continue to apply. This scheme would reduce poverty and inequality at modest fiscal cost (Figure 2.10, Table 2.1) once the risk of under-declared wages is well controlled and it encourages recipients to earn higher income in the formal economy. Alongside a strengthened Guaranteed Minimum Income and progressive income tax and social contribution rates (discussed below), it would contribute to incomes and work incentives at low incomes (Figure 2.11).

Figure 2.11. A strengthened Guaranteed Minimum Income, with low-wage in-work benefits and progressive tax and contribution rates would support low-wage incomes and work incentives

Average net effective tax rate, by income decile

Note: The average net effective tax rate is the sum of personal income tax and employee or self-employed social security contributions minus cash benefits, as a percentage of gross labour income. The recommended reforms are described in Table 2.1 and Box 2.2.
Source: OECD and Ministry of Finance calculations using EUROMOD model (see note to Table 2.1).

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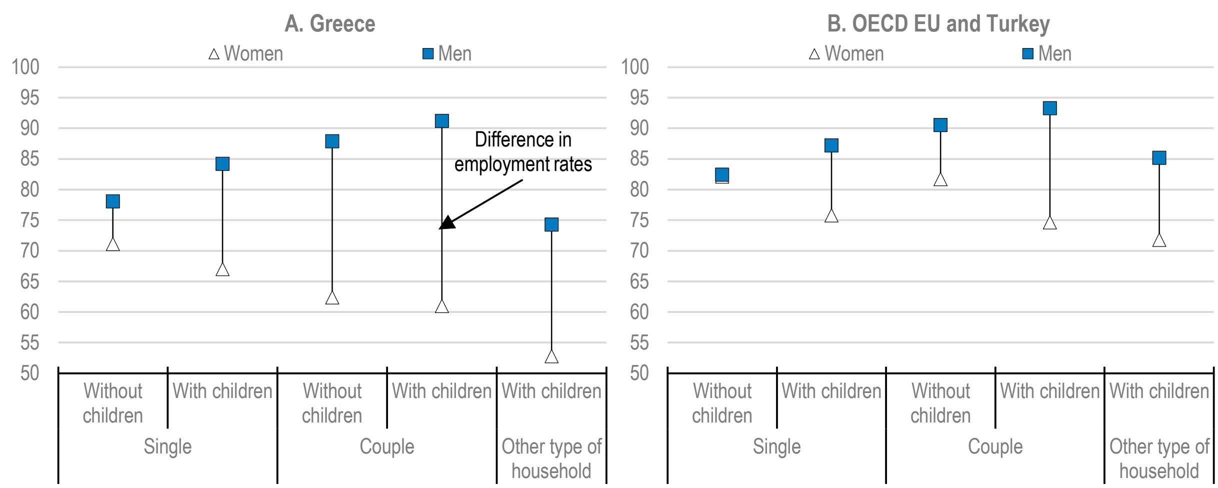
Supporting caregivers

Care obligations can limit caregivers' work and education options, constraining their income. In Greece, like many other countries, this particularly affects women living in couples with dependent children or dependent adults (European Commission, 2016[19]), and is likely to have been accentuated during the COVID-19 crisis. In households with care obligations, fewer women work than men and the difference in employment rates is greater than in most other countries (Figure 2.12). Care obligations add to other impediments that women face to working, such as lower educational levels of many older women, or the few part-time or flexible working options that push women into extended career breaks following childbirth or other major events. Cross-country experience shows that the most effective policies to support families' incomes and encourage fertility are those that help caregivers combine family obligations with work (Olivetti and Petrongolo, 2017[20]; Olivetti and Petrongolo, 2016[21]; Luci and Thevenon, 2011[22]). Greece's 2020 budget introduces a EUR 2 000 payment for new-born babies, with generous means-testing criteria. While such policies provide one-off support to families, such untargeted policies are not an effective way to improve well-being or fertility rates. Greece could reallocate the funds to boost policies that help caregivers combine family obligations with work and other opportunities, especially in the case of a second COVID-19 outbreak, for example by boosting the number and quality of childcare places, as discussed below.

Figure 2.12. Females living in households with dependents are less likely to work in Greece

Employment rate of adults (aged 25-54 years) by their household type, %, 2019



Note: Panel B: EU countries that are OECD members plus Turkey.
Source: Eurostat.

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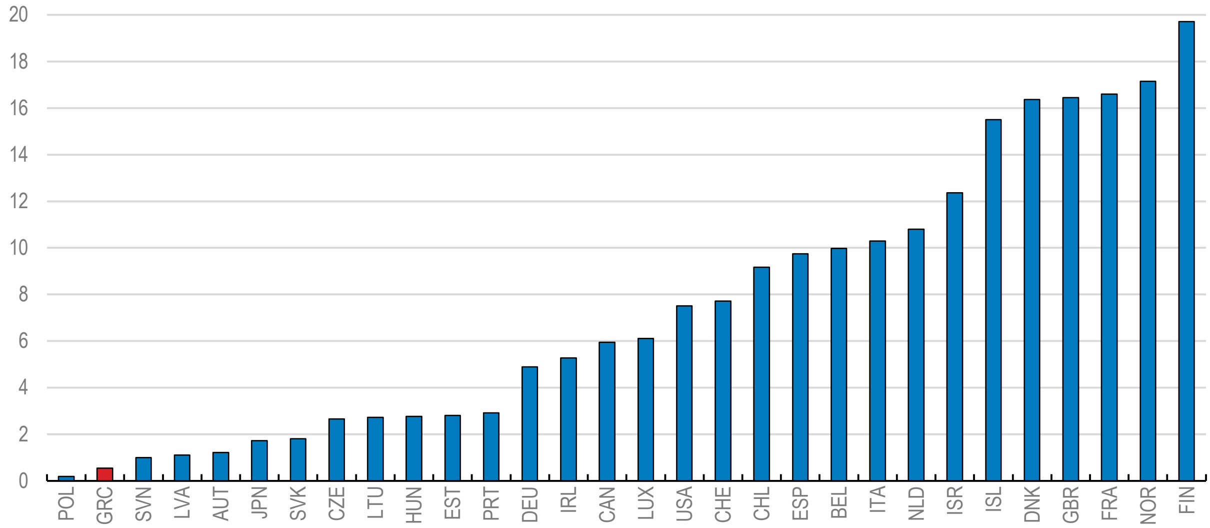
Greece's rapidly ageing population and lack of care facilities mean that relatives are spending more time caring for elderly relatives. Most policies in this area focus on the needs of those needing care rather than the needs of the caregiver. Greece has abolished tax credits for elderly care, and very few care places are available (Figure 2.13). The overhaul of disability support is welcome and will provide households with disabled members greater better support, even if the overhaul is taking longer than planned (European Commission, 2019[14]; Ziomas et al., 2018[8]). Greece can follow other OECD countries in developing home-based care options, which are more cost effective for low-care needs – and preferred by patients and their families (OECD, 2017[23]). For example, the Netherlands' Buurtzorg model of decentralised home care is growing rapidly and being replicated by other countries, and may work well in Greece. It relies on self-governing teams of nurses to look after all aspects of care for a pool of patients. Nurses are supported by coaches. Administration is minimised and centralised (Gray, Sarnak and Burgers, 2015[24]; OECD, 2019[25]). Sweden encourages hospitals, primary health care providers and social services to innovate and collaborate in providing care by giving demonstration projects grants. One successful project set up mobile teams which provide proactive early interventions at home (OECD/European Union, 2013[26]). In Greece, home care support programmes need to be designed carefully, to ensure that they ensure the primary caregiver has more time for work and leisure, and so as that households do not become ineligible for support once the primary caregiver starts working due to means tests.

Figure 2.13. Greece lacks care personnel

Practicing care personnel, per 1000 population, 2018 or latest available



Source: OECD (2019), *Health Statistics* database.

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Consolidating social transfer rules and administration

Greece is streamlining its fragmented administration of social protection. One authority, the Organisation for Welfare Benefits and Social Solidarity (OPEKA), is now responsible for paying social protection transfers. Greece is developing integrated social protection IT systems and linking programmes with the new network of local Community Centres. These Centres will become the service centres providing access to social protection policies, many active labour market policies and other government services, and can help recipients better navigate the system. Tackling remaining fragmentation across different programmes' design and their administration, and implementing a robust auditing and monitoring and evaluation framework, will require fully implementing these reforms (Ziomas et al., 2018[8]).

Currently Greece applies different equivalence scales to adjust different programmes' benefits and eligibility thresholds for household size (Table 2.2). Making these consistent would make the social protection system fairer and more coherent. The choice of equivalence scale varies between countries, but countries are generally moving towards applying one single scale. The scale should reflect the 'economies of scale' when more people live under one roof, such that transfers give equivalent support per person regardless of their household sizes. Greece's Guaranteed Minimum Income (GMI) provides a relatively low scaling for larger households, and a large number of single person households have registered, which may reflect households raising their overall benefits by splitting for the purposes of their GMI application (Marini et al., 2019[9]). Raising the equivalence scale for the GMI and bringing it into line with other social benefits would improve the coherence of social protection. Applying the 'proposed scale' shown in Table 2.2 across social benefits would support the lowest income families while improving targeting (Figure 2.10, Table 2.1).

Table 2.2. The current Guaranteed Minimum Income equivalence scale is less generous to larger households

Equivalence scales for household size, ratio to a single person household

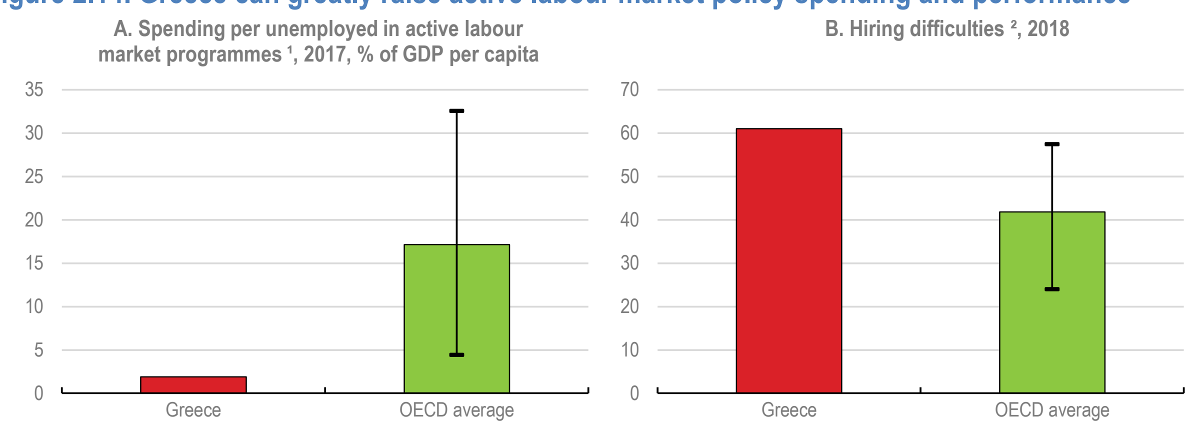
Rule	Current scales			Proposed scale	OECD ('Square root scale')	Eurostat ('OECD modified')
	Guaranteed Minimum Income	Rent allowance	Child benefit[1.]			
	1 for household head, 0.5 per additional adult and 0.25 per child. Maximum: 4.5.	1 for first member, 0.5 for additional members. Maximum: 3	1 for household head, 0.5 per additional adult or first child if no adult; 0.25 per child	1 for household head, 0.5 for each additional adult and 0.3 for each additional child	Square root of the household size	1 for household head, 0.5 for each additional adult; 0.3 for each child under 14
1 adult	1.00	1.00	1.00	1.00	1.00	1.00
2 adults	1.50	1.50	1.50	1.50	1.41	1.50
2 adults + 2 children	1.75	2.50	2.00	2.10	2.00	2.10
3 adults + 2 children	2.50	3.00	2.50	2.60	2.24	2.60
2 adults + 4 children	2.50	3.00	2.50	2.70	2.45	2.70

1. Child benefit equivalence scale only applies to means testing, and not the benefit amount.
Note: Where applicable, children are assumed to be dependents or younger than 14.
Source: OECD calculations, OECD *Tax and Benefits* database, Eurostat.

Improving employment outcomes through active labour market policies

Even before the COVID-19 crisis, Greece was taking important steps to strengthen its active labour market policies to the levels of access and effectiveness provided in other OECD countries (Figure 2.14). Effective active labour market policies can contribute to addressing many of the weaknesses in Greece's labour market. In conjunction with policies to support investment and activity, the COVID-19 shock makes them even more essential to protect the labour market and to support the recovery. In the longer-run, they can contributing to raising Greece's relatively low employment rates (Bredgaard, 2015[27]; Card, Kluve and Weber, 2017[28]). They can improve the quality and inclusiveness of employment by developing jobseekers' skills and helping employers access the skills they need (Figure 2.14). They can improve immigrants' contribution to the labour force (Box 2.3). They can reduce the risk that the jobless slip into long-term unemployment and then out of the workforce, with the associated losses in skills and well-being. However international experience has found active labour market policies tend to be less effective for youths or older workers (Card, Kluve and Weber, 2017[28]), which are groups with particularly weak employment in Greece, suggesting Greece will need additional efforts to improve these groups' employment prospects.

Figure 2.14. Greece can greatly raise active labour market policy spending and performance



Note: The value for OECD is an unweighted average across the available countries (33 in panel A and 26 in panel B). The 10th and the 90th percentiles of the distribution are also indicated.
1. Benefit administration programmes are not included for Greece.
2. % of employers reporting difficulty in filling jobs.
Source: OECD *Labour Market Programmes* database; OECD *Economic Outlook* database; and OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, https://doi.org/10.1787/9789264311756-en.

StatLink https://doi.org/10.1787/888934154889

Box 2.3. Active labour market and education policies to better integrate immigrants in Greece

Immigrants make up a substantial share of Greece's population, estimated at 11.6% in 2019, although the total number declined over the 2010s (United Nations, 2019[29]). Significant numbers of new immigrant arrivals in recent years included large numbers of refugees and children. At least 186 000 immigrants arrived in Greece from outside the EU between 2013 and 2017 while an estimated 32 000 child immigrants were in Greece in mid-2019 (Simopoulos and Alexandridis, 2019[30]; UNICEF, 2020[31]; UNHCR, 2019[32]).

Immigrants of all types can help lift Greece's long-term prospects by bringing skills and experience, and by slowing the decline in the working age population, as discussed in Chapter 1. To realise their potential contribution, immigrants need the professional skills demanded by employers, and the language and social skills to integrate into workplaces and society. Recognising academic qualifications earned outside Greece would support this process, however Greece has not ratified the Lisbon Convention on Recognition of University Qualifications.

Experience across OECD countries finds that migrants, especially new arrivals, benefit strongly from targeted adult learning and vocational education. Vocational education certifies skills, connects immigrants with the labour market, and contributes to the workforce's quality. It works best when programmes include work-based learning and with a strong involvement of social partners (Jeon, 2019[33]). VET can also encourage immigrants to regularise their status and participate in the formal economy, rather than working informally, often in low-quality jobs and unregulated conditions (Berbec et al., 2019[34]; ILO, 2018[35]). Greece's ongoing efforts to improve its vocational education system can also benefit immigrants. For example, the pilot programme "A new beginning with the Vocational Lycea" includes measures to integrate young immigrants into vocational education, and to improve language and other country-specific skills. With scale, this benefits both the immigrants and overall labour market.

Sweden has developed several examples of successful programmes for integrating immigrants. To help refugees assess their skills and qualifications for different occupations, Sweden provides multi-lingual, online career guides. The guides were developed together with employers' organisations, and counsellors from the public employment services assist immigrants with the guides (OECD, 2016[36]). Such guides could be integrated into Greece's re-engineered public employment services.

Targeted programmes to encourage employers to hire immigrants can help the transition into regular work. For instance, Swedish employers hiring newly-arrived immigrants can benefit from several subsidised employment schemes which seek to provide immigrants with local labour market experience. Participants must undertake language training alongside their work, and are provided with mentors (Kuczera and Jeon, 2019[37]).

Integrating school-age children into the education system is also essential to reap immigration's long-term benefits. Greece has developed reception classes to prepare children for school, including recently arrived immigrants. International experience finds that such classes work best to integrate immigrant children and families into the community if immigrant children attend general education alongside additional, out-of-hours tutoring and support (Simopoulos and Alexandridis, 2019[30]).

Developing tailored programmes of active labour market policies

The government's priority has been to use active labour market policies to improve the job-readiness of the long-term unemployed and first-time jobseekers. Led by the Ministry of Labour, it is moving from providing ad hoc access to limited active labour market policies to a more systematic "open framework" menu approach. The public employment service centres will provide one-stop access points at community centres where counsellors help jobseekers construct a package of active labour market policies that caters to their specific needs. Other OECD countries have found that such coordinated, individually tailored approaches are fruitful and can improve employment outcomes if there are enough skilled counsellors and IT systems are effective (OECD, 2015[38]). Greece is testing these reforms in pilot programmes. Rolling them out will require investments in personnel and systems that can be complex to implement, as Italy's ongoing efforts to raise the capacity of its public employment services illustrate (OECD, 2019[39]).

The 'menu' of active labour market policies in Greece includes public works programmes, wage subsidy programmes, programmes promoting entrepreneurship, and training and work experience programmes for youths and longer-term unemployed. The public employment service coordinates access to these, alongside its core role of matching jobseekers with job openings. The government is expanding these programmes' capacity and improving how they operate. This expansion needs to accelerate if the programmes are to catch up with the labour force's large needs, amplified by the COVID-19 shock, or the level of active labour market policies provided in other OECD countries.

The government is planning to better align active labour market policies with labour market conditions. The mix of policies offered in Greece, like in other countries, needs ongoing adjustment for the changing characteristics of different groups of jobseekers, and of overall economic and labour market conditions. Policies focused on jobseekers' skills tend to be more effective during economic downturns and for the long-term unemployed, as the training programmes do not take participants out of work. Two to three years after the skills programme, participants are more likely to be working than those who did not participate. Policies that subsidise employment by the private sector can also be effective for the long-term unemployed. "Work first" policies that combine job search assistance with sanctions for not taking up work, and these tend to boost participants' employment rates in the short-term (Levy Yeyati, Montané and Sartorio, 2019[40]; Martin, 2015[41]; OECD, 2015[42]).

Reforms aim to improve the monitoring of the labour market's skills needs. A system has been setup that identifies employers' needs and the workers available for different occupations at national and regional levels. Greece can broaden this effort into improving its general labour market monitoring and evaluating labour market policies, by better collecting data and establishing a practice of evaluating programmes' effectiveness. Ongoing monitoring and evaluation of the "open framework" reforms of active labour market programme, including continued tracking of participants' labour market performance, can improve the mix of active labour market policies and raise each policy's effectiveness (OECD, 2018[3]).

Placing employment services at the core of active labour market policies

Public employment services play a smaller role in Greece's labour market than in most other OECD countries. Even though jobseekers in Greece are more likely to contact the public employment service (OAED) than in other European countries, it finds a lower share of jobseekers their jobs. OAED suffers from long-standing under-resourcing, with too few well-trained staff and poor information systems (Millán et al., 2017[43]). Yet Greece's public employment service faces greater demands than most countries' given the large number of long-term unemployed and adults outside the labour force, even if a smaller share of workers change jobs each year in Greece than in other European countries.

Greece is making much-needed investments and reforms to OAED, drawing on models from other countries' employment services. Successful employment services in OECD countries have a low counsellor-to-jobseeker ratio, and counsellors are well-trained and share jobseekers' social backgrounds. Counsellors' primary roles are to get jobseekers into work and to build good relationships with employers (OECD, 2015[38]). They also coordinate and direct jobseekers' access to social protection and to other active labour market policies, and monitor compliance with these programmes. To develop these capabilities, OAED has hired 335 new counsellors, is training its staff and improving its human resource management. It is rolling out improved internet sites and call centres, and a data-assisted system to support caseworkers profiling jobseeker's employability. Such improvements in database and IT systems can be effective especially when resources are scarce (Desiere, Langenbucher and Struyven, 2019[44]; Feiler, Schulz and Anderson, 2015[45]; DG Employment, 2014[46]). To assess the effectiveness of reforms, OAED has developed strategic and operational goals and implemented a performance management system (European Union, 2019[47]).

Greece's public employment service may become more effective if it dedicates special outreach and counselling services to employers with particular staffing needs and to harder-to-employ job seekers. OAED's unit for large employers has already borne some fruit (European Commission, 2019[48]). OAED could consider providing tailored services to address the specific needs of Greece's seasonal tourism employers or many smaller firms, for example. Across its services, ensuring that frontline staff understand the needs of and maintain contact with employers in their local labour market is important (OECD, 2015[38]; European Commission, 2012[49]; De Koning, 2012[50]). Following jobseekers once they find work or enter training would help OAED learn which techniques work well and to adapt and strengthen its services.

A number of private employment service firms operate independently of the public employment services in Greece. Both the public and private services may benefit from improving their communications and coordination. Finland and Spain among other OECD countries have strengthened this cooperation to better address long-term unemployment (ICON-INSTITUT Public Sector, 2018[51]). Sharing information between public and private systems about job postings and jobseekers would be a first step. This collaboration may help encourage employers to register higher skilled and better-paid positions with the public service, and for higher skilled jobseekers to engage with the public service, improving labour market inclusiveness and skill matching. A strong public and private collaboration may also improve employment services for Greece's many small businesses, which lack the scale to manage human resources internally.

Greece should consider complementing the current job training voucher scheme with vouchers that provide access to employment services. The vouchers would allow jobseekers to choose between public, private or not-for-profit employment service providers. In this expanded scheme, jobseekers would give their chosen employment service provider their voucher. The provider would receive the voucher's value when the jobseeker starts work with a contract with at least a minimum duration. The value would depend on the jobseeker's profile and assessed likelihood of finding lasting work, with algorithms adjusting these values in light of outcomes. Such a voucher system can reward effective employment service providers, allowing them to expand their capacity, and provide jobseekers with more options. This system needs to be designed carefully and its performance to be monitored and assessed regularly, to ensure that employment services exceed minimum standards and cater to all jobseekers (discussed in Box 2.4).

Effective hiring support schemes can help jobseekers find work

Supporting employment by subsidising the cost of employing workers absorbs the largest share of Greece's active labour market spending (Figure 2.15). Especially during the early years of the crisis, the government subsidised social security contributions for priority groups of workers, such as youth, women and the long-term unemployed. These schemes were designed to encourage employers to keep workers in a job or to employ workers who risked being excluded from the labour market, such as young or older jobseekers or migrants. Few employers took up these schemes, due to the complexity of registering plus weak underlying labour demand (European Commission, 2014[52]; European Commission, 2015[53]).

Employment subsidies can encourage employers to hire and provide work experience to groups who otherwise would not find work. They can be effective, temporary measures during demand downturns, such as the COVID-19 shock, and are faster to implement than, for example, expanding skill-training programmes or setting up public works schemes. However they can also be administratively complex, especially if they are narrowly targeted. Complex applications or narrow targeting discourage employers from taking up the support, as has been Greece's experience, even if this reduces the risk that the schemes subsidise jobs that would exist anyway. Consulting social partners and especially targeting employers can improve effectiveness. Schemes that provide priority groups of jobseekers with vouchers that reimburse employers some employment costs are easier to administer and take-up has proved stronger.

Box 2.4. Bolstering access to employment services through private providers

To address weaknesses in their public employment services, several OECD countries have bolstered the role of private service providers. This can improve the efficiency and performance of employment services, provide services to more jobseekers and improve the quality of job matching and the stability of employment, at lower cost than the public systems. In many countries private employment services find jobs for several times more jobseekers than the public services. Some OECD countries, such as Australia, have closed their public services and the public sector limits its role to coordinating, overseeing and financing private agencies. In others, such as Italy, the public sector maintains a network of public employment services and funds jobseekers' access to both public and private employment services. These mixed or private systems can expand access and the effectiveness of employment services, but their performance can be mixed, as ensuring that private providers meet quality standards and support all jobseekers, including difficult cases, can be challenging.

Italy introduced the "assegno di ricollocazione" job search voucher in 2017 as part of broader reforms to active labour policies. Italy's public employment services have suffered from similar long-standing weaknesses as Greece's, including limited resources, thin staff capacity, weak IT systems and little role in placing jobseekers. To boost access to employment services, the government allowed jobseekers to opt for vouchers to pay for access to either a public or private employment service provider. The value of this voucher is based on the jobseeker's likely employability, which is constantly updated with data on outcomes. An operator at the service provider profiles the jobseeker, and this profile determines the level of assistance the jobseeker is likely to need and the funds that the service provider will receive if the jobseeker enters an employment contract of at least 6 months' duration.

Design issues with Italy's voucher scheme limited its early success. The voucher gave access to a limited package of services, rather than broader services such as training and upskilling needed by the jobseekers who are long-term unemployed or have never worked. For jobseekers receiving social benefits that require active job search, the vouchers' conditions were seen as stricter than the standard scheme, discouraging them from choosing the voucher. The voucher operated in parallel with subnational governments' schemes, creating duplication. The vouchers have lacked broad political support and they were suspended in 2019 but the current government plans to reinstate them in 2020. Given these experiences, Greece could achieve better outcomes by expanding the range of active labour market policies funded by the voucher, ensuring that the voucher's job search and other obligations are equivalent to alternative schemes, and avoiding duplicative schemes.

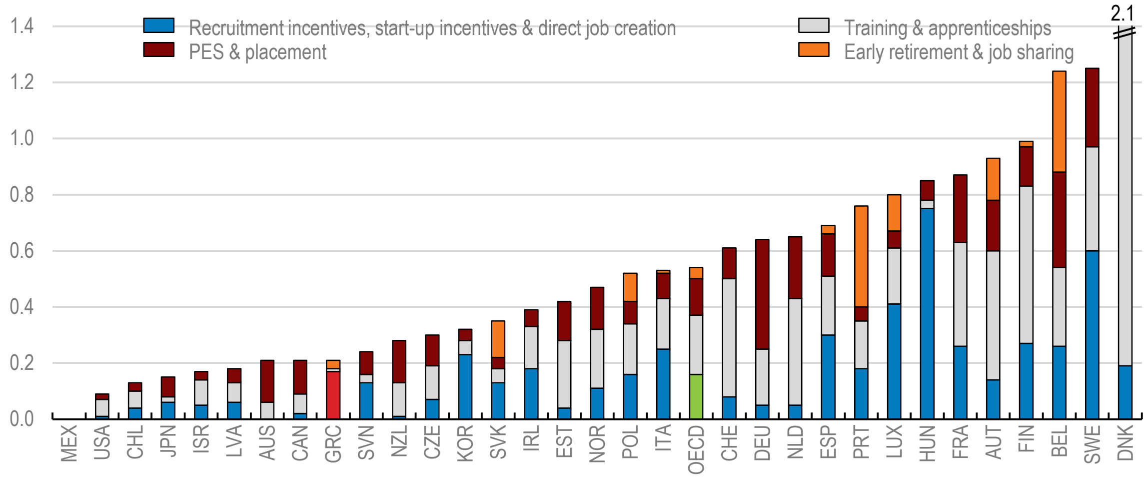
Sources: Education and Employment References Committee (2018[54]); (OECD, 2019[55]); (OECD, 2017[56]); (Pastore, 2019[57])

Public works programmes can support incomes and employability

Greece has prioritised public works programmes among its active labour market policies. Public work programmes can bring broad well-being and social protection benefits (European Commission, 2013[58]; World Bank, 2019[59]). They reintroduce participants to the habit of work, supporting their human capital and reducing the risk of continuing unemployment or of dropping out of the labour force. They provide participants with a basic, safety net income, buttressing consumption during crisis periods, and so complement other social protection policies. The goods and services participants produce benefit the community. However public works programmes are unlikely to solve the unemployment challenge, especially relative to their cost and once employment is recovering (Card, Kluve and Weber, 2017[28]).

Figure 2.15. Employment subsidies absorb most of Greece's small active labour market policies

Labour market policy spending by policy type, % of GDP, 2017 or latest



Source: OECD (2019), *Labour Market Programmes* database.

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Greece's public works programme 'Kinofelis Ergasia' targets mostly middle-aged long-term unemployed who have become disconnected from the workforce. Participants are selected based on their time unemployed, their age, and if they receive the Guaranteed Minimum Income. Activities are mostly construction and public works, and administration and social services. The largest group of participants have been unemployed for at least 5 years and have very low household income. Participant questionnaires and focus groups on entry and completing the programme found large improvements in social engagement, mental health and perceptions of self-worth (ILO, 2018[60]). Participants and the broader community see the social value of the Kinofelis work projects (ILO, 2018[60]), and experience in other countries suggests that this recognition supports participation (European Commission, 2013[58]). Demand to participate in the programme has far outstripped its capacity, despite little advertising, and 90% of selected participants take up the programme, which is far higher than for other active labour market measures.

The government plans to continue the Kinofelis programme. Expanding its capacity would support incomes and activity through the COVID-19 shock, and make inroads into the human and economic costs of very long-term joblessness in Greece. The programme's target capacity is 36 500 beneficiaries, which is a small fraction of the 460 000 who have been searching for work for over 2 years, and far smaller than the public works programmes developed following recent crises elsewhere in Europe and in middle-income countries such as Argentina (Tcherneva, 2012[61]; ILO, 2018[62]). The cost is moderate compared with other European countries' programmes, at EUR 6 844 per participant (based on its initial budget of EUR 308 million for 45 000 participants). This cost reflects that participants receive the minimum wage and benefits such as vacation leave, and that the programme provides some training. Some other countries limit programme costs by paying participants their social protection benefits plus a top-up and limiting training, while other countries, such as Austria, have much more expensive programmes which include extensive training.

Given the needs of the long-term out-of-work, the government could enlarge the capacity of Kinofelis by expanding its range of projects. Projects managed by private sector employers, rather than government bodies, can add to the number of places and improve participants' chances of moving into ongoing private sector work (Card, Kluve and Weber, 2017[28]; Levy Yeyati, Montané and Sartorio, 2019[40]; Kluve et al., 2019[63]), as they provide work cultures and practices that are more like standard jobs (ILO, 2018[60]). Ongoing monitoring and reporting on Kinofelis' performance, particularly how different projects perform for different types of beneficiaries, can improve the benefits of participating. Better monitoring and information systems may also better place participants into projects given their skills.

Better integrating Kinofelis with other active labour policies through the public employment service-led ‘open framework’ (described above) would improve the programme’s benefits (European Commission, 2013[58]). Requiring participants to regularly engage with the public employment services while they participate in the programme, rather than the current interviews on entry and exit, may help them find jobs or more advanced training after they complete their Kinofelis project. The OAED counsellors can use their intermediary role to more actively direct jobseekers to the Kinofelis projects that would best develop or use their skills, and can also support Kinofelis participants move into regular work or into longer-term training after the programme. OAED counsellors can improve the candidate selection process, drawing in a broader range of candidates, while applying more transparent selection processes (ILO, 2018[62]). An ILO evaluation found that the selection criteria need to better ensure that the most vulnerable applicants can access the programme, that a better balance of female applicants are accepted, and that candidates are accepted for projects that apply their existing professional skills (ILO, 2018[62]).

Reforming the tax system to encourage formalisation and inclusiveness

Greece’s labour tax and social insurance contribution rates impose a large wedge between the cost of employing a worker and their take-home pay, contributing to low employment, under-declared work and informality, and lowering productivity and incomes. Across all wage levels, household types and employment types the wedge is wider in Greece than in most other OECD countries (Figure 2.16). High social insurance contribution rates for employers and employees are the main cause of this large wedge, while personal income tax rates are also high (as discussed in Chapter 1). The wedge is particularly onerous for low income self-employed (Figure 2.17), as some social contributions are levied as fixed fees while others have minimum contribution amounts that apply regardless of reported income. In 2020 the government has shifted self-employed social insurance contributions to a minimum charge plus a voluntary scale, in response to a 2019 court decision, which will accentuate the high contribution wedge for low income self-employed while reducing the wedge for higher income self-employed.

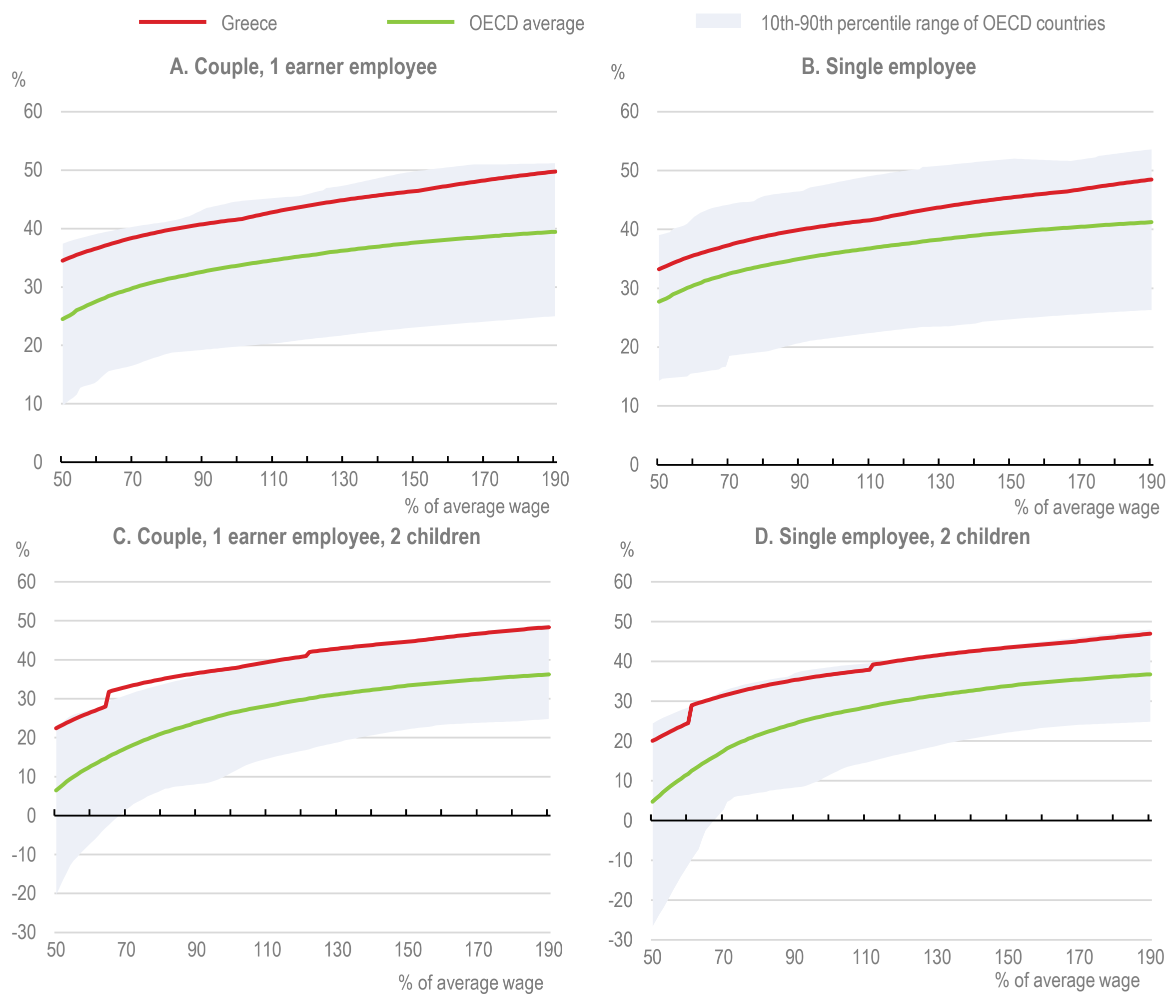
High labour tax and social contribution wedges contribute to many of Greece’s poor outcomes in terms of employment, job quality and incomes. Higher tax wedges reduce long-term output (Akgun, Cournède and Fournier, 2017[64]), and discourage employment and investment in skills. The low-skilled and other vulnerable groups suffer most from high tax wedges, as these groups have a weaker bargaining position, and they tend to be more sensitive than other workers to net income in deciding on whether to work.

High wedges discourage employers and employees from declaring work and incomes, especially when tax morale, confidence in public institutions and the effectiveness of government are weaker (Joshi, Prichard and Heady, 2014[65]; Torgler and Schneider, 2007[66]). Estimates vary, and suggest that as much as 33% of total employment (25% excluding the agricultural sector), was informal in Greece in 2012, the highest of any European OECD country (International Labour Office, 2016[67]), although the share may have fallen in recent years as the government pursues action plans to reduce informality. This narrows the tax base, leading to the few taxpayers who pay taxes to face higher tax and contribution rates. For those working informally, it brings poor working conditions, little regulatory protection, and less scope to invest, grow and to raise productivity and incomes. Strong incentives for informality have the more pernicious effects of undermining the rule of law and payment culture, and harming investment, particularly foreign direct investment (OECD, 2015[68]).

High self-employment rates and a large number of microenterprises, as is the case in Greece (Figure 2.18), is often associated with higher risk of tax evasion and under-declared incomes. The self-employed and micro enterprises have more opportunities to avoid tax obligations than dependent employees or larger corporations, as they have fewer transactions that third parties observe and report (Alm, Deskins and McKee, 2008[69]; Kleven et al., 2011[70]). For example, the self-employed increase their deductions more than dependent employees in response to higher tax rates (Cerqua, 2018[71]). Estimates suggest that as much as half of self-employed income was unreported in Greece prior to the 2009-16 crisis (Artavanis, Morse and Tsoutsoura, 2016[72]). Significant income under-reporting appears to have continued since the crisis, despite better monitoring and enforcement. For example, income tax data over 2017-2018 indicate that a much larger share of self-employed report very low incomes than do dependent employees. In contrast, the Survey of Income and Living Conditions household survey shows a smaller difference in material deprivation rates (another indicator of very low income) between the self-employed and dependent employees (Figure 2.19). Greece's minimum assumed income for social insurance contributions and flat fee for unemployment insurance are in part responses to assumed under-reporting of income. Yet, these are blunt instruments as they create very high tax wedges at low income, fostering informality. Strengthening the tax administration and enforcement in general, such as by further promoting electronic payments (discussed in Chapter 1), is a better and more efficient way to lower undeclared income.

Figure 2.16. Tax and social insurance contribution wedges are high in Greece

Average tax wedge, sum of net personal income tax and social insurance contributions, as a % of labour costs, at indicated % of average wage for indicated household types, 2019 policy rules



Source: OECD (2020), *Taxing Wages* database.

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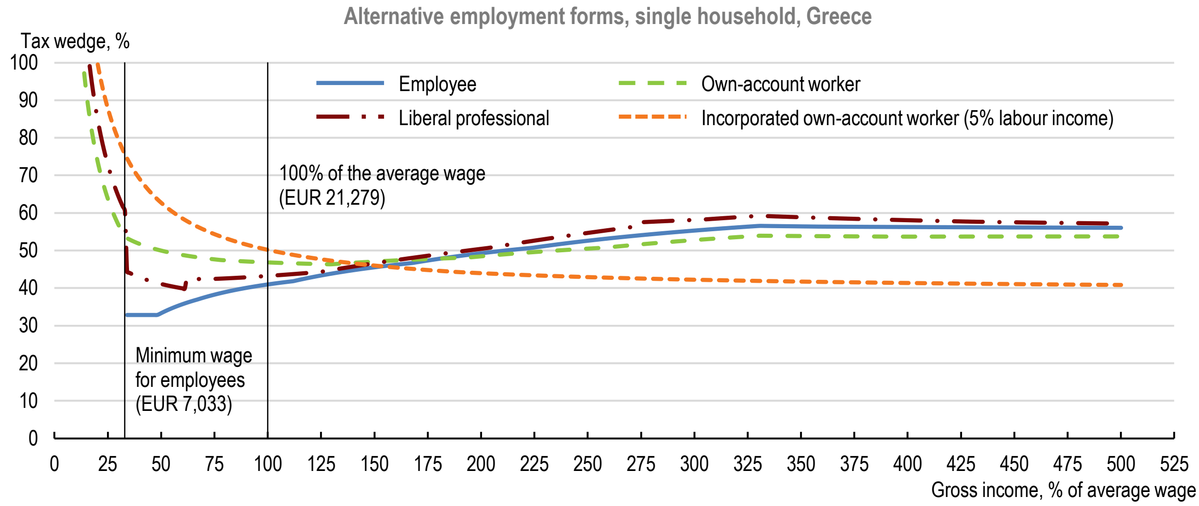
Figure 2.17. Tax and contribution rates differ between employment types

Average tax wedge, sum of net personal income tax and social insurance contributions, as a % of labour costs, at indicated % of average wage for a single household, 2018 policy rules



Source: OECD calculations. Methodology is described in Milanez and Bratta (2019), Annex - Taxation and the Future of Work: How Tax Systems Influence Choice of Employment Form, *OECD Taxation Working Papers*, https://dx.doi.org/10.1787/6b20cce5-en.

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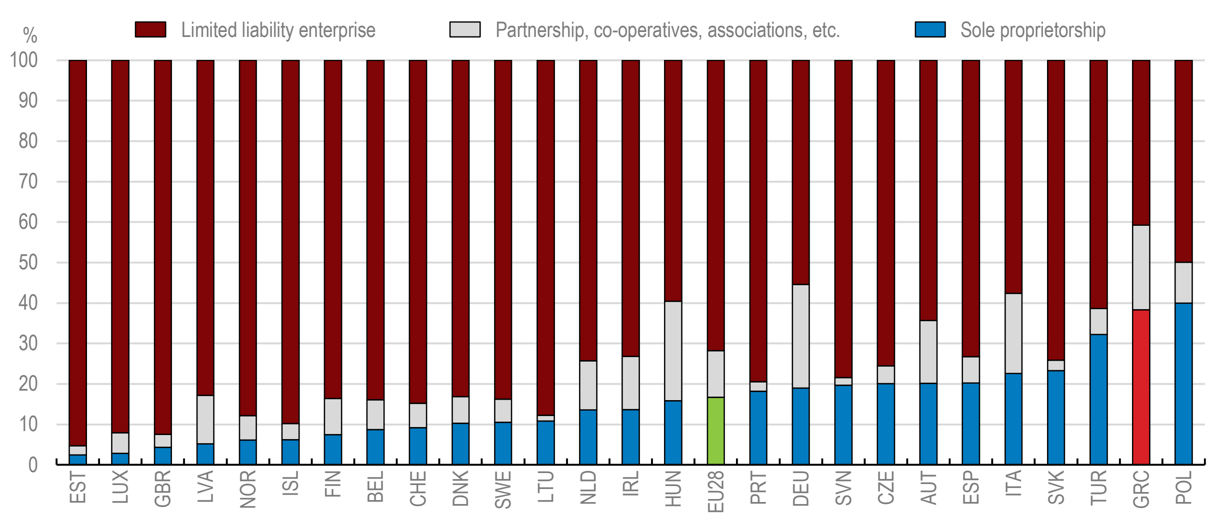
Figure 2.18. A large share of workers in Greece are self-employed

Employment by business's legal form, % of total business employment, 2017 or latest



Note: Business sector excluding activities of holding companies.
Source: Eurostat.

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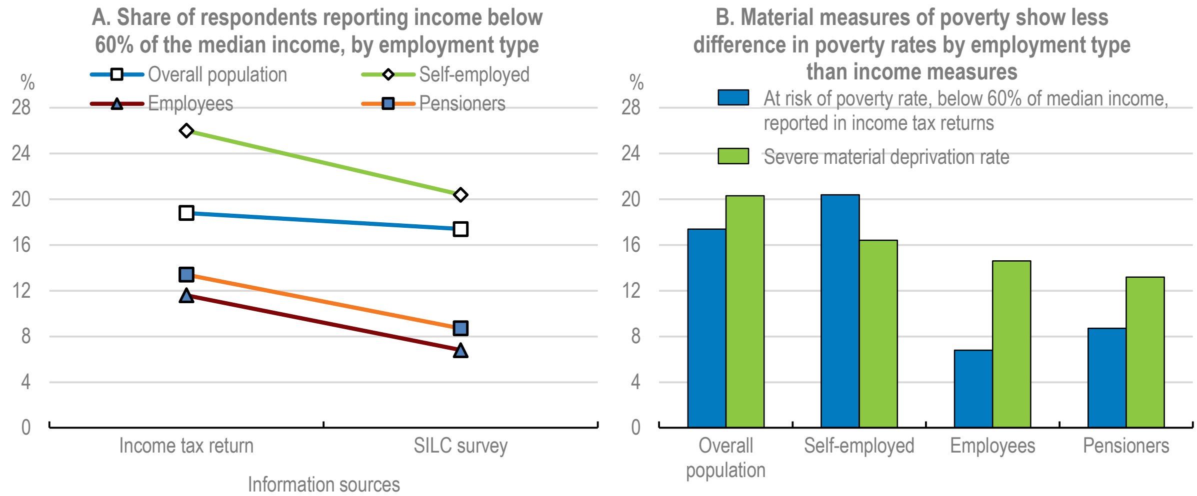
The government's 2020 budget and earlier legislation will reduce the tax and contribution wedge across the earnings distribution and employment types. The budget introduces a lower labour income tax band for annual incomes below EUR 10 000 of 9%, compared with 22% previously, reduces higher marginal income tax rates by 1 percentage point and reduces social insurance contribution rates by 5.0 percentage points by 2023. These cuts are broadly welcome and further cuts should be pursued over time, as fiscal space becomes available, to reduce Greece's social insurance contribution rates towards OECD averages, alongside broadening the progressive income tax system and minimising evasion.

Figure 2.19. Greece's self-employed more often report low incomes to tax authorities than to other surveyors



Note: Panel A: Share of each group of respondents reporting income below 60% of the median income in their 2018 income tax returns, or to the Survey of Income and Living Conditions (SILC) and administered annually by ELSTAT. Panel B: The at-risk-of-poverty rate refers to the share of respondents living in households reporting income in their income tax returns below 60% of the median equivalised income; the severe material deprivation rate is the share of respondents living in households unable to afford at least four of the following items: unexpected expenses, a one-week annual holiday away from home, a meal involving meat, chicken or fish every second day, adequate heating of a dwelling, durable goods like a washing machine, colour television, telephone or car, or are confronted with payment arrears, reported in the SILC survey.
Source: Eurostat and Ministry of Finance of Greece.

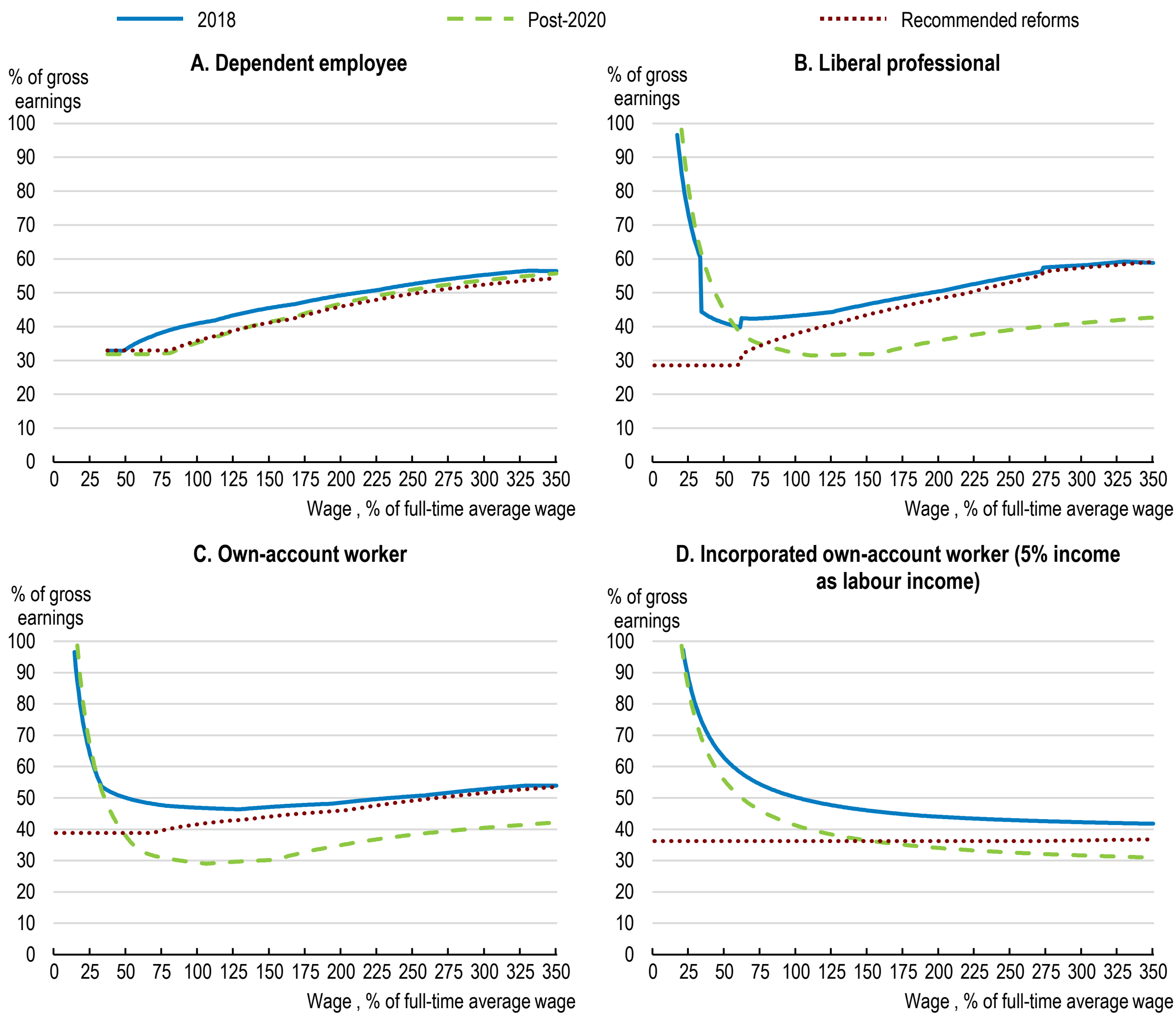
StatLink https://doi.org/10.1787/888934154984

For the self-employed, in 2020 the government has shifted pension and health insurance contribution rates to a minimum floor regardless of income, with the option of paying higher contributions for a higher level of pension coverage. Self-employed starting work will be able to pay reduced contributions for 5 years. This reform is in response to a 2019 court ruling about the treatment of self-employed social insurance contribution rates. By imposing a flat, minimum fee, it will accentuate the self-employed's very high wedge at low incomes while reducing contributions at higher incomes (Figure 2.10, Figure 2.20 and Table 2.1). Converting the flat social insurance contribution fees, including pension insurance contributions, into rates so contribution values rise with higher income, would moderate tax and social contribution rates for the very low income self-employed while maintaining some progressivity in the overall tax and contribution obligations for the self-employed. Figure 2.20 shows the effects of the legislated and planned tax and contribution reforms on the overall tax wedge compared with 2018 policies, and this recommended reform, for different employment types (detailed in Box 2.2). The recommended reform would support low-income households, reducing inequality, at a modest fiscal cost (Table 2.1).

Cuts to corporate and dividend income tax rates in 2020 risk encouraging higher income self-employed, notably liberal professionals, to incorporate and draw their income as dividends, rather than operating as a sole proprietor. These cuts will further widen the difference between overall tax rates for the incorporated self-employed and the rates for unincorporated self-employed, particularly liberal professionals (principally, doctors, lawyers, engineers and architects) (Figure 2.20, Panels B and D). International evidence finds that the self-employed who are higher skilled and who can earn higher incomes, often liberal professionals, are also the most likely to incorporate and benefit from the lower tax rates (Levine and Rubinstein, 2016[73]). An effective tax system is neutral such that economic merit rather than tax advantages drive decisions about employment form and legal structures (Milanez and Bratta, 2019[74]). Such distortions in Greece's tax and contribution system can be countered by taxing dividend income in the same way as other personal income. This recommended reform would counterbalance the reduction in the tax wedge for the incorporated self-employed due to the cut in the corporate income tax rate, and would better align tax wedges across alternative employment types for a given income level (as seen by comparing the 'Recommended reforms' lines between the panels in Figure 2.20).

Figure 2.20. Reforms should lower labour tax and contribution rates and reduce the difference in tax wedges between employment types

Overall net tax and social contribution payment wedges as a percent of gross earnings



Note: 'Post-2020' includes reforms to tax and social insurance rates that have been legislated to be implemented from 2020. 'Recommended reforms' are described in Box 2.2.

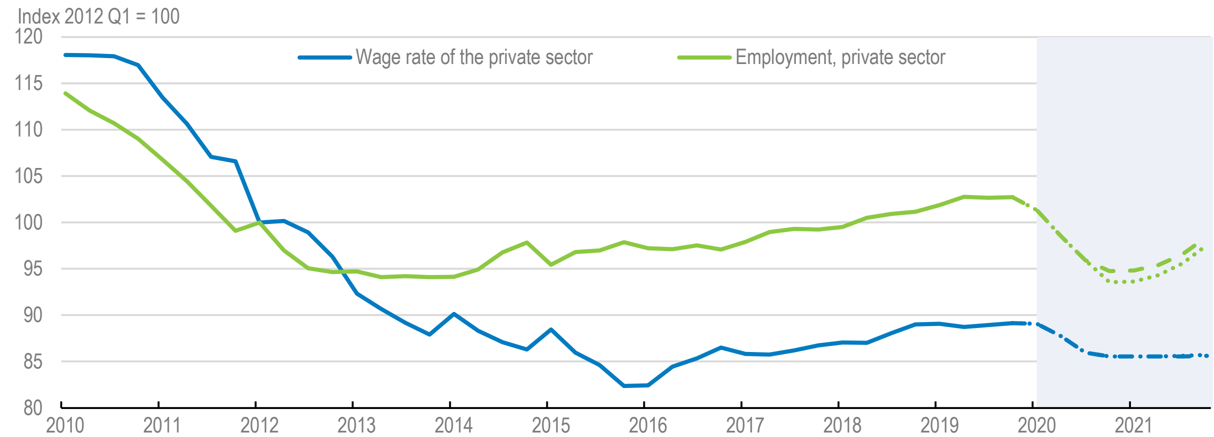
Source: OECD calculations. Methodology is described in Milanez and Bratta (2019), "Annex - Taxation and the Future of Work: How Tax Systems Influence Choice of Employment Form", *OECD Taxation Working Papers*, https://dx.doi.org/10.1787/6b20cce5-en.

StatLink https://doi.org/10.1787/888934155003

Wage-setting mechanisms to generate more jobs and raise productivity

Increasing the number of good-quality jobs is essential for Greece's recovery and for sustained gains in living standards. In the early 2010s, major reforms to employment protection brought it into line with most other OECD countries. As described in the previous Economic Survey of Greece (OECD, 2018[6]), Greece then lowered the minimum wage and public sector wages, and gave firms greater scope to negotiate firm-level wage agreements. Following these reforms, wages fell sharply, helping to restore price competitiveness and stem employment losses. While lower wages have contributed to the recovery in employment (Figure 2.21), they reduced living standards. Employment started to recover in mid 2014 while wages began rising only in the first quarter of 2017. The COVID-19 shock is projected to temporarily reverse both of these recoveries, raising the unemployment rate from already high levels, and further reducing relatively low employment rates. The median wage remains low and the wage distribution is relatively compressed. The labour market rewards better skills less than in most other OECD countries, as shown for example by analyses of adults' competencies and labour market outcomes (Hanushek et al., 2017[75]; Hampf, Wiederhold and Woessmann, 2017[76]).

Figure 2.21. The COVID-19 shock sets back the gradual recovery in jobs and wages



Note: Projections are shaded. Wage projections relate to total employment. The "single-hit" scenario is shown with a dashed line and assumes that the pandemic is brought under control before the summer of 2020; the "double-hit" scenario is shown with a dotted line assumes a second wave of contagion and lockdown measures late in 2020.
Source: OECD *Economic Outlook* 107 database.

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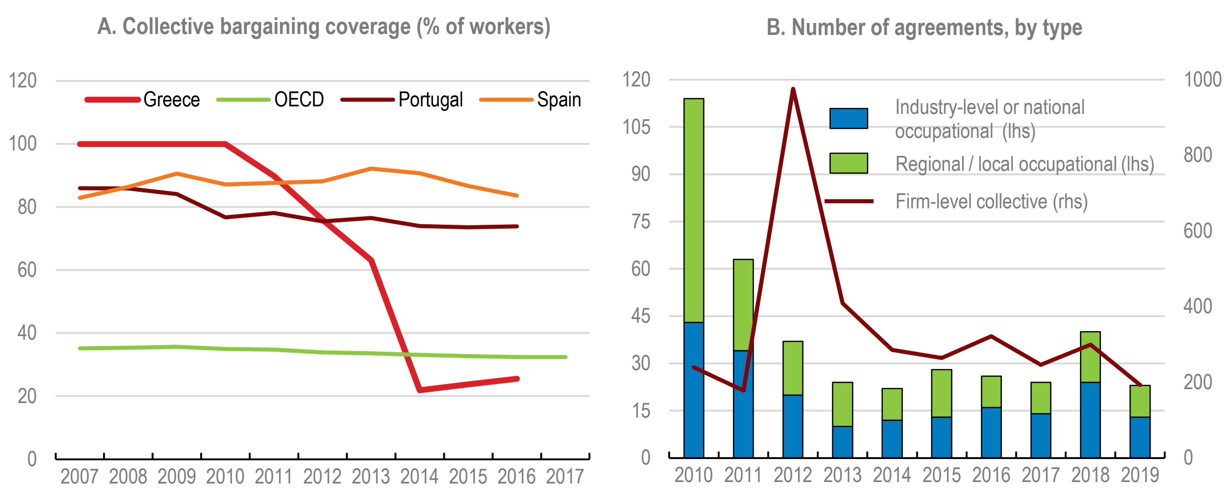
Wage bargaining to support more jobs and improving conditions

Sectoral collective agreements are regaining importance in Greece's wage-setting system. Two procedures that support collective agreements were suspended in 2011. These allowed for administrative extensions, whereby worker and employer representatives that have signed a collective agreement could request the government to extend the agreement to firms that had not signed the agreement, and the requirement that working conditions agreed at the firm level should favour workers compared with those signed at a central or sectoral level. 2011 measures also allowed "associations of persons" to enter firm-level agreements in the absence of trade union representatives.

These reforms led to a surge in firm-level agreements (Figure 2.22), and the share of the workforce covered by collective agreements dropped by 65 percentage points (European Trade Union Institute (ETUI), 2019[77]). Most firm-level agreements during 2011 to 2014 were signed by smaller firms and cut wages, which supported employment (Giannakopoulos and Laliotis, 2018[78]). Since then, the pace that firm-level agreements have been entered has slowed. They have mostly been used by medium-sized and larger firms in more externally-focused production sectors, and have on average stabilised wages at rates well above the minimum wage (Giannakopoulos and Laliotis, 2017[79]). In the absence of firm-level agreements, many employees' wages fell to the minimum wage rate as collective agreements lapsed.

The extension and favourability procedures were reinstated when Greece completed the Stability Support Programme in August 2018. The number of sectoral collective agreements initially picked up (Figure 2.22, Panel B). Fifteen out of 16 occupational and 23 sectoral collective agreements were extended across workplaces employing 220 000 workers in sectors including banking, shipping, hotels and restaurants, and mining. The agreements typically applied to workers earning wages well above the minimum, and provided for modest rises. Among these sectoral collective agreements, only one has addressed non-wage aspects of working conditions, by providing for reduced working hours and greater parental allowances. In October 2019 the government gave the Minister of Labour discretion to extend sectoral collective agreements, and to exclude firms facing temporary financial hardship from extensions of hardship. It also allowed certain categories of firms to include special or opt-out clauses in collective agreements, in circumstances that are still to be defined. Since then, no extension of sectoral collective agreements has been signed. The reforms' effects on sectoral collective bargaining should be monitored, and further amendments considered if social dialogue and sectoral collective negotiations weaken.

Figure 2.22. Wage-setting in Greece has shifted away from collective agreements



Source: J. Visser, ICTWSS Database version 6.0. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. June 2019, http://uva-aias.net/en/ictws, and OECD updating; Hellenic Ministry of Labour, ERGANI database.

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Careful amending of Greece's wage-setting practices would support the recovery of employment in sectors with better long-term prospects, raising employment quality, access to work and productivity. The experience of several OECD countries suggests that a decentralised system of firm-level agreements, coordinated within and across sectors through sectoral collective agreements and with flexibility for firms to adjust conditions, would be effective in a context such as Greece (OECD, 2018[80]). Greece's many small employers, which have few resources and often lack employee representatives to negotiate firm-level agreements, suggests a need for a strong role for sectoral collective agreements with flexibility, as discussed in (OECD, 2018[6]). In a coordinated decentralised system, sectoral collective agreements act as an anchor for working conditions. Social partners at the firm level may agree to adjust these. To provide this flexibility, sectoral collective agreements need to include derogation or opt-out clauses that prescribe the areas and parameters where social partners at the firm level may diverge from the sectoral collective agreement (Ibsen and Keune, 2018[81]). These clauses can allow, for example, firms in lower cost and lower productivity regions to agree to lower wage and working conditions than those provided in the sectoral agreements under certain conditions. Reforms introduced in October 2019 allow firms that become financially distressed to derogate from sectoral collective agreements, which can support employment during downturns.

Sectoral collective agreement negotiations in Greece could gain flexibility if they covered aspects of working conditions beyond wage rates, such as working hours or training. This would allow social partners to negotiate wages alongside other aspects of working conditions, to benefit all partners, although this should avoid adding undue complexity and rigidity to working conditions. This is possible under current legislation but rarely done in Greece. To promote decentralised bargaining of issues other than wages, Italy has introduced fiscal incentives. It applies lower tax rates to productivity-linked wage and other working condition improvements negotiated at the firm level. Take-up has grown strongly, and Italy's 2017 budget expanded the programme (OECD, 2019[39]; Labartino, Mazzolari and Morleo, 2019[82]).

Reviving and strengthening the ability of "associations of persons" to sign agreements at the firm level would support coordinated decentralised wage-setting by improving workers' representation in negotiations. These associations cover only a small share of the workforce (Daouli et al., 2016[83]), even if some remain active in entering firm-level collective agreements. To negotiate effectively with employers, the associations need greater protection and support. Extending to them the protection trade union representatives enjoy and introducing a mediator in negotiations to share information and aid discussions would support social dialogue and outcomes.

Coordinated sectoral collective agreements are likely to be more effective if they are negotiated by representatives of a wide cross-section of the employers and workers in a sector. For firms that do not participate, extending sectoral collective agreement across all firms in a sector levels the playing field, improves coordination and reduces the cost of negotiating wage conditions for small firms, if extensions mechanisms are well-regulated and social partners are able to adapt the terms of the collective agreement to firms' conditions. In 2019 the government amended Greece's extension arrangements, by providing the Minister of Labour with discretion to extend agreements if a contracting party requests the extension, subject to an assessment of the extension's impact on employment and competitiveness. It maintained the requirement that the agreement applies to employers employing more than 50% of the employees in the sector or profession. The amendments also provide the Minister of Labour with discretion to exempt firms in financial distress from collective and sectoral agreements. These amendments somewhat tighten the circumstances for extensions, while maintaining significant discretion for the Minister.

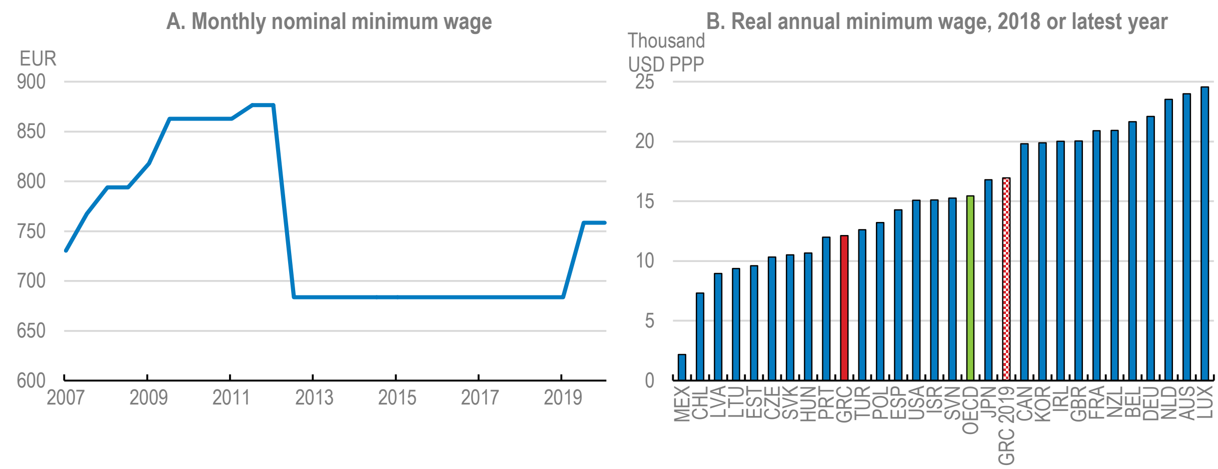
Poor employment data collection and dissemination have led to difficulties and disputes in verifying the share of workers represented by the signatories of sectoral collective agreements. In practice, much of the data recorded in the Ministry of Labour's private employment database ERGANI are not accessed, limiting its usefulness in wage negotiations and collective agreement extension decisions. For example, sectoral collective agreements are not matched to an economic sector. Pursuing ongoing upgrading of the ERGANI database, keeping it up-to-date, recording employees' contracted work hours and employees on non-standard contracts, integrating social partners' membership lists, and giving ready access to the data would support the system of decentralised coordinated agreements.

To improve wage agreement negotiations and social dialogue, Greece is strengthening the role of its mediation and conciliation processes. Effective mediation services build trust between social partners by supporting dialogue and sharing labour market information and contribute to the success of sectoral collective agreement systems (OECD, 2018[3]; Ibsen, 2015[84]). Crisis period reforms in Greece restricted access to arbitration until mediation had been exhausted. Greece could expand the role and capacity of its Organisation for Mediation and Arbitration (OMED). It could draw on the model of Sweden's or of Belgium's federal labour mediator, which provides a neutral chairperson in negotiations, processes to mediate conflicts if necessary (Ibsen, 2015[85]; Belgium Federal Public Employment, Labour and Social Dialogue Service, 2018[86]; OECD, 2019[87]). It also provides practical services, such as meeting rooms and preparing official minutes, which could particularly help Greece's many small employers.

Ensuring the minimum wage support jobs and incomes

In February 2019, Greece increased the statutory minimum wage by 11%, from EUR 586 to EUR 650 per month, and ended the subminimum wage for under 25-year-olds of EUR 510 per month. This was the first change in minimum wages since they were cut by 22% in 2012 and frozen. The increase brings Greece's minimum wage rates to near the middle of OECD countries in absolute terms (Figure 2.23). Relative to average labour productivity, it is now higher than in most other OECD countries. After the increase, 19% of private sector wage-earners were reported to be paid the full-time minimum wage or less (due to part-time work), 4 percentage points more than prior to the increase, while fewer workers were registered in the lowest wage category, between EUR 0 and EUR 400 per month. Meanwhile reported wages rose for workers paid more than the minimum wage (Figure 2.24).These movements are consistent with the increase prompting employers to report the wages that they had previously not declared (Bank of Greece, 2018[88]; Beliziotis et al., 2018[89]).

Figure 2.23. The 2019 increase lifts Greece's minimum wage to near the middle of OECD countries



Source: Eurostat; OECD earnings database and OECD calculations.

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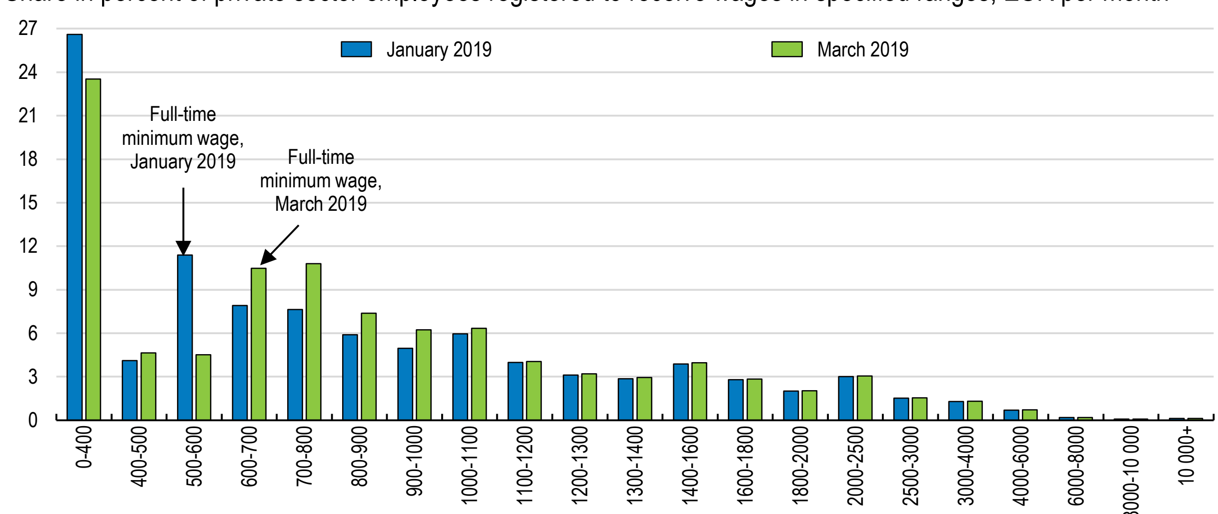
Figure 2.24. Following the 2019 minimum wage increase, wages rose across the lower end of the wage distribution

Share in percent of private sector employees registered to receive wages in specified ranges, EUR per month



Note: The minimum wage increase was increased and the youth sub-minimum wage was removed in February 2019. Data reflect wage rates reported by employers to the Ministry of Labour's ERGANI database. Missing values are excluded.
Source: ERGANI database, Hellenic Ministry of Labour, Social Insurance and Social Solidarity.

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Minimum wage increases bear the risk that some low-productivity workers are priced out of the market and lose their jobs. The extent to which this happens depends on local labour market conditions, as well as the level of the minimum wage prior to the increase and the size of the increase (OECD, 2015[90]). In many labour markets the risk of job losses due to minimum wage increases seems to be low (Dube, 2019[91]). In Greece, the risk could be higher since many small firms with thin margins employ minimum wage workers (Azar et al., 2019[92]). However growth in employment overall did not significantly slow in the quarters following the February 2019 minimum wage increase, as strong demand conditions allowed the increase to raise incomes for low-skilled and vulnerable workers without pricing them out of jobs.

The February 2019 minimum wage increase was the first under Greece's new process. Like other OECD countries, Greece has made an independent committee of experts central to regular reviews of the minimum wage rate. It reports its opinion on the appropriate wage adjustment, in light of its assessment of the state and prospects of the economy and the labour market and after consulting with social partners. Appointing and removing members through an open, transparent and objective process, based on merit, would improve the objectiveness of and trust in the committee's recommendations. Staggering their appointment would weaken the link between the political cycle and the committee's composition, strengthening its independence.

The government is not bound to follow the committee's advice and the 11% increase legislated by the government in January 2019 exceeded the committee's recommendation to increase the minimum wage by between 5% and 10%. A review is underway on the 2019 minimum wage review process. The government has postponed the next minimum wage review to January 2021 following the disruption from the COVID-19 pandemic. Explaining any differences between the government's decision and the committee's recommendations would strengthen the committee's credibility and the process's integrity.

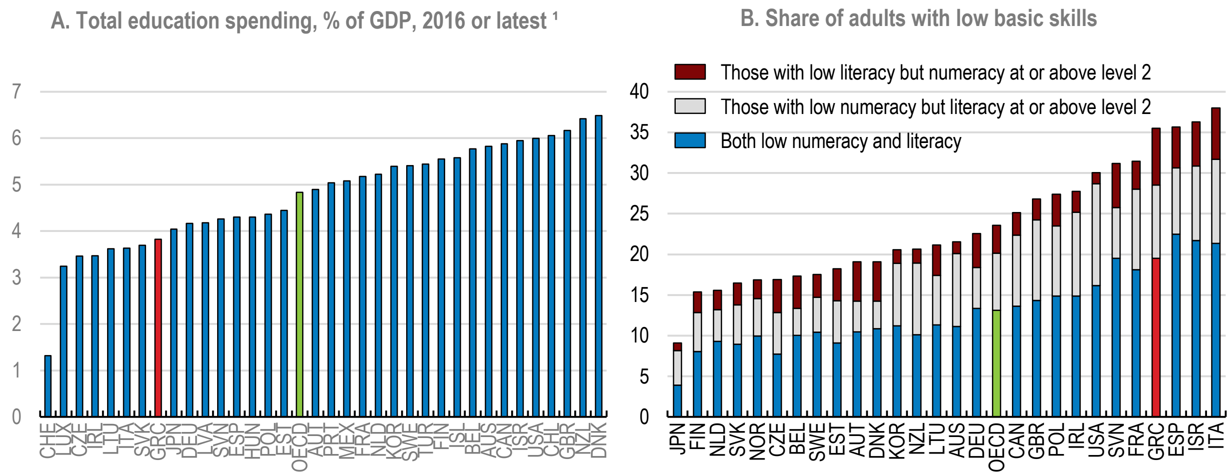
The subminimum wage for youth provided a 13% discount on the basic wage rate for under 25 year-olds. It is likely to have slowed employment loss among under-25 year olds during the crisis years (Karakitsios, 2016[93]). But it discouraged youth from entering the workforce (OECD, 2018[6]), and youth employment rates remain low (Figure 2.3). When the government ended the subminimum wage, it reduced employers' social security contributions for younger workers by 6.7 percentage points. This is a step in the right direction, given Greece's high social security contribution rates and large cuts can encourage firms to hire (Boeri and Garibaldi, 2019[94]). But this cut did not offset the end of the subminimum wage and the increase in the minimum wage, and overall the changes raised the labour cost of young workers by 20% (European Commission, 2019[14]). As recommended in the previous Economic Survey (OECD, 2018[6]), prescribing discounts to wage rates for new workers with the discount declining as workers gain experience could encourage employers to employ workers without experience, regardless of their age. Such adjustments for experience are likely to become more important for supporting employment following the COVID-19 shock.

Strengthening education and professional skills

Greece has started to improve the performance of its education system. Strengthening general skills and professional competencies is essential for improving employability, incomes and well-being in Greece. Reflecting the high social value given to education, households spend near the OECD average on education relative to their incomes. Public education spending, by contrast, has fallen behind most other OECD countries in the years after the crisis (OECD, 2019[95]) (Figure 2.25, Panel A).

Despite relatively low spending, Greece's education system performs reasonably well on a number of dimensions. Fewer high school students dropout and those from disadvantaged backgrounds perform better than OECD averages (OECD, 2016[96]; OECD, 2019[95]). Students spend more years in education than in most other OECD countries, and university enrolment rates are high and rising. Over half of children complete higher levels of education than their fathers and 62% complete higher education levels than their mothers (Elstat, 2020[97]). Participation in science, technology, engineering and mathematics (STEM) education is strong and has been rising. Greece's best graduates go on to world-leading academic and professional careers.

Figure 2.25. Education spending is lagging and many adults would benefit from skill upgrading



1. OECD unweighted average of available countries. Data do not cover early childhood education.
Source: OECD *Education at a Glance* database; and *Building Skills for All in Australia. Policy Insights from the Survey of Adult Skills* (PIAAC 2012 and 2015).

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Yet education needs are large in Greece, as described in Greece's Quality Assurance Authority for Primary and Secondary Education annual report (Matsangouras, 2019[98]), as well as the previous Economic Survey (OECD, 2018[6]) and the recent Education Review of Greece (OECD, 2018[99]). Many upper secondary students lack basic skills, and a smaller share of school students achieve strong outcomes than in other countries (Figure 2.26). Graduates have poor employment prospects. Low levels of student well-being and citizen satisfaction with the system underline the need for reforms. A larger share of adults than in other OECD countries has skills that are either weak or that are not adapted to their workplace's needs (Figure 2.25, Panel B). Meanwhile, most employers report difficulties filling vacancies. Ensuring all adults have solid professional skills, built on foundations of a strong general education, is vital for supporting employment, raising productivity and incomes, and improving general well-being. As the economy recovers, supported by new activities and modes of production, new opportunities will emerge which higher skilled workers will be best positioned to access.

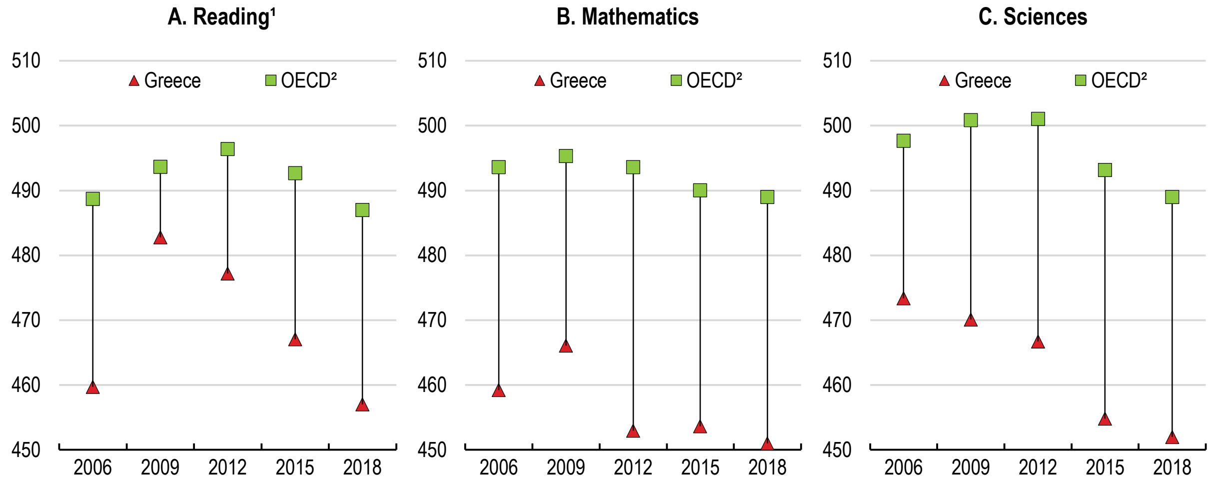
Greece's 2017-2019 educational reform plan is a significant start to developing a performance-focused culture, improving support for teachers, and giving tertiary education bodies greater autonomy. Following this plan, a comprehensive, multi-year reform programme would best address the performance gaps across all levels of Greece's education system. Greece's limited education budget and tight fiscal space mean that reforms need to improve the benefits from education with few additional resources, which a long-term and sequenced programme can help achieve. Developing a consensus vision across participants of education in Greece would give direction to the reform programme and reduce the risk of policy shifts and reversals (OECD, 2018[99]).

Improving the quality of general education

The government is extending compulsory pre-school education to four-year-old children. This is an important shift that will bring Greece into line with many other OECD countries (Figure 2.27) and was recommended in the previous OECD Economic Survey (2018[6]). High participation in early childhood education and care can improve educational outcomes, broaden skills, and raise social mobility, at lower cost than interventions later in life. It reduces primary caregivers' caring responsibilities, lifting an important barrier to women working.

Figure 2.26. Greece school students' test performance continues to lag other OECD countries

Mean PISA score in reading, mathematics and sciences



1. The PISA reading assessment is comparable across years.
2. The OECD aggregate covers all OECD countries except Austria and the USA for reading and all OECD countries excluding the USA for mathematics and sciences.

Source: OECD, *PISA 2006, 2009, 2012, 2015 and 2018* databases.

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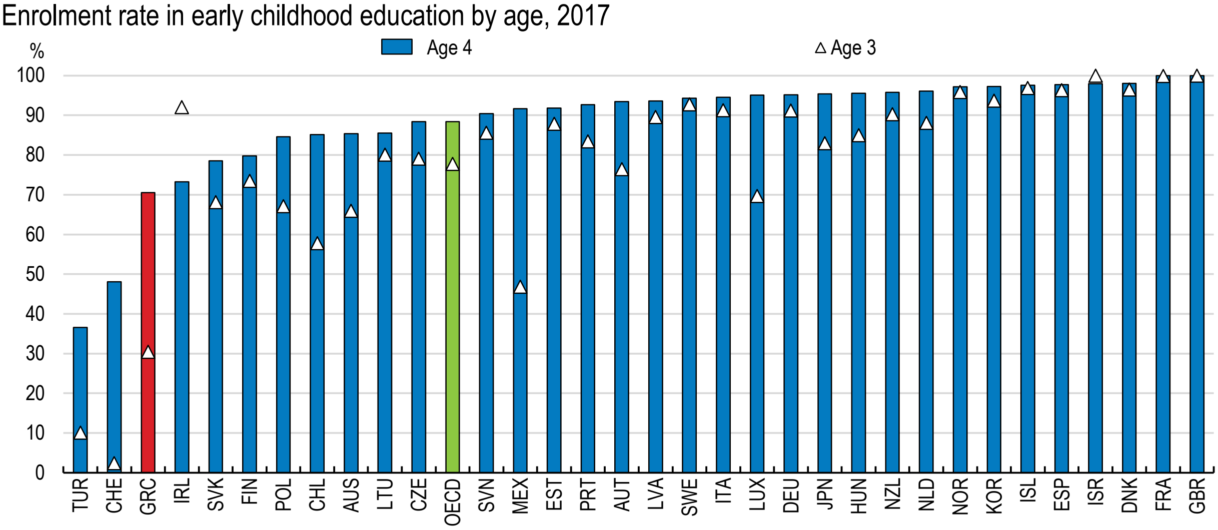
Figure 2.27. Few young children in Greece participate in early childhood education

Enrolment rate in early childhood education by age, 2017



Source: OECD (2019), "Enrolment rate in early childhood education" (indicator), https://doi.org/10.1787/ce02d0f9-en.

StatLink https://doi.org/10.1787/888934155136

The Ministry of Education is responsible for managing compulsory preschool education and providing the facilities, whereas municipalities, supervised by the Ministry of the Interior, provide infant and childcare. Shifting responsibility at this level to the Ministry of Education should raise the pedagogical quality of pre-school education, as the Ministry will recruit and manage preschool teachers alongside other teachers, and can link preschool activities with the school curriculum. The shift will free space in municipalities' childcare facilities for younger children. But the lack of space in the Ministry of Education's facilities is holding back the roll-out in 40 municipalities, including some of Greece's main cities. Realising the benefits of compulsory pre-school education will require accelerating investment in the roll-out, first to provide quality facilities across Greece, then in the pedagogical standards of early childhood teaching.

Raising teaching quality is, appropriately, the focus of reforms in primary and junior high school. Greece is strengthening the Quality Assurance Authority to develop criteria and evaluation systems for primary and secondary schools. The reform will help schools address weaknesses, tailor training and reward performers. Evaluations will not apply to individual administrators or teachers. The government recognises that evaluation and quality improvement requires a consensus, given the legacy of distrust between teachers, administrators, parents and the Ministry (OECD, 2017[100]). For evaluations to help raise education quality, the Quality Assurance Authority should develop an evaluation and assessment approach that applies at the three levels of the education system, of schools and of students; that is focused on improving practices and building capacity; that conducts evaluations collaboratively and constructively, and that make evaluations a recurring part of the regular school system calendar rather than high-profile, occasional events (OECD, 2013[101]). Developing data management and analysis capacity at the Quality Assurance Authority and among those being assessed can improve confidence in the transparency and objectivity of evaluations.

Greece has the opportunity to renew and redress the conditions, performance and morale of its teacher workforce. Due to recruiting freezes during the crisis years, the Ministry of Education employed 14% of all teachers and over one-fifth of primary school teachers on temporary contracts during the 2016/17 school year, rising to 16.7% of all teachers the following year. These teachers were placed in many hard-to-fill teaching positions and have played an oversized role responding to refugee needs. Most do not know whether their contract will be renewed or where they will teach from one year to the next. In contrast, teachers employed under public service rules on permanent contracts enjoy job stability but little scope for professional progress beyond moving to a school in a more coveted location (OECD, 2018[99]). A large share of this permanent workforce will retire over the next decade. To fill one gap in the teaching workforce, the government is in the final stages of recruiting 4 500 special needs teachers. To renew the general teacher workforce, the government should consider a reformed teacher contract, which rewards performance and provides prospects of professional advancement, without the inflexibility of the current permanent teacher contracts. It can recruit the renewed workforce from the contract teachers and other newly trained teachers, ensuring they bring needed teaching skills, such as adapting curriculums to their classrooms, working autonomously, and in teaching digital skills. Other OECD countries have undertaken similarly significant teacher employment reforms as part of broader measures to raise their education system's performance, and Colombia's reforms provide salient lessons for Greece (Box 2.5).

Preparing tertiary graduates for work

Tertiary education, especially at universities, is highly valued in Greece, and participation has risen over recent decades to among the highest rates across OECD countries. However tertiary education provides fewer benefits than in other OECD countries. Completion rates are lower, students acquire fewer general or professional skills, and employment prospects are poorer (OECD, 2016[102]; OECD, 2017[100]; OECD, 2018[99]). Meanwhile, most students see vocationally-focused technical education as a poor alternative to university studies.

Greece has taken steps to integrate professional experience into post-secondary education. These reforms can improve students' employability, a long-standing weakness in Greece (OECD, 2018[99]), but they lack scale. New bodies have been charged with upgrading vocational education and training, ensuring it better responds to labour market needs, with consulting with social partners to reform course curricula, and with connecting teachers and employers. New evaluation and graduate tracking systems will assess the effectiveness of these measures. A programme introduced in 2016-17 offers a 9-month apprenticeship to students who graduate from secondary school with vocational certificates. Only around half of these apprenticeships were in private firms, reflecting slow take-up by employers. The programme's capacity is limited, with 3 700 students enrolled in 2018, up from 3 100 in 2017. These measures need to grow to become core components of Greece's post-secondary education system. Students are more likely to participate if they receive effective guidance about their learning options and career prospects beyond upper secondary school (OECD, 2010[103]), and the government's planned measures to develop education and career guidance merit pursuing.

Box 2.5. Lessons from Colombia's reforms to teacher employment framework

Colombia has made important reforms to its teacher employment framework since 2002, focused on entry requirements, recruitment, salaries and evaluation. Colombia's experience can be instructive for Greece, as the education systems share many challenges and reform goals, including to improve teacher working conditions and to develop a performance, evaluation and development culture across the education system. Challenges faced in implementing Colombia's reforms highlight the importance of effective, ongoing dialogue and adequate financing for the success of such reforms.

Colombia now recruits new teachers into permanent staff positions by a highly competitive merit contest, with candidates required to have minimum qualifications but are not required to have previous experience. This allows teachers to enter the profession from other careers. Candidates who fail the merit contest can be offered temporary contracts to fill temporary needs, such as through short-term contracts. Successful candidates must pass a rigorous probationary period and evaluation by their school leader before they obtain permanent positions. Greece may draw from this framework in regularising its temporary teacher workforce.

Teachers under the new framework are evaluated at least annually by their school leader. Salary increases and promotions depend on the teacher passing an evaluation of competencies, and the system-wide number of promotions and salary increases are limited. Following reforms in 2016, the competency evaluation focuses on teachers' pedagogical and classroom management skills, and is largely based on the evaluation of a classroom video, plus a survey of the school community, a self-evaluation and the results of the two previous performance evaluations carried out by the school leader. Teachers not succeeding in the evaluation can take a professional development course in an accredited faculty of education, and be promoted on passing this course, although the number of places are limited.

The reforms have generated some challenges. Difficult relations with the largest teacher union have complicated their implementation, and the political economy of education reform is also complicated in Greece. The framework favours teachers' rights rather than students' needs. It has left remoter and more difficult areas struggling to attract high performing teachers, and, like in Greece, to rely instead on teachers on temporary contracts. Greece should ensure that reward and conditions make teaching in remote and difficult areas attractive for the highest performing teachers. Maintaining the rigor of teacher selection and evaluations, and ensuring that school leaders provide consistent and constructive feedback have been ongoing challenges in Colombia. Even under the reformed framework, teachers have little opportunity to lead and grow professionally while remaining in the classroom, and skilled teachers leave the classroom to take on leadership or administrative roles, while unions have opposed efforts to create in-classroom leadership roles.

Colombia left existing teachers' employment framework in place, leaving them the choice to shift to the new framework if they wished. While maintaining the legacy system may have reduce opposition to the reform, it has weakened collaboration and collegiality, due, for example, to differences between colleagues in pay, conditions and competencies. The legacy framework does not require regular evaluations, and provides pay rises based on qualifications and years of service rather than evaluations. Nonetheless, Colombia's teachers are more satisfied with their profession than in other countries. Greece may also consider allowing the existing workforce to continue under their current arrangements, given that many are approaching retirement age.

Source: (Radinger et al., 2018[104]; OECD, 2018[99])

In a significant reform to tertiary education, Greece has merged 14 technical institutes with its 22 universities to create 25 tertiary education institutions. The previous OECD Economic Survey of Greece (2018[6]) recommended encouraging tertiary education institutions to consolidate. The merger brings technical and theoretical courses together within the same institution. It allows for Centres of Vocational Education to be located in universities, which, over time, may improve the quality and demand for tertiary vocational training. The next step is to bring related departments together, so as that there can be greater cross-over between theoretical and technical programmes, and for students enrolled in academic programmes to access technical education. The incoming government halted this reform for the 2019-2020 academic year as it embarked on a review of the vocational education and training framework. The government should ensure that the review is independent and takes a view to design a plan to fully realise the benefits from consolidation, and that it regularly evaluates the newly created institutions.

The consolidated universities are gaining autonomy over their budget, following a 2019 law. A 2020 law links funding to objective criteria including the number of students, and the size and geographical dispersion of the institution, as well as outcome indicators including graduates' labour market outcomes and research production. This is important progress from previous arrangements, which detached funding from needs or performance. Including outcome indicators in funding considerations rewards institutions for better performance, and other OECD countries, such as Austria, have recently made similar reforms. Ensuring that tertiary institutions' funding reflects their research achievements can also support Greece's research and innovation performance, as discussed in Chapter 1. Care needs to be taken to ensure funding arrangements create appropriate incentives. For example, linking funding to graduation rates or penalising high student repeat rates may encourage institutions to graduate students regardless of their achievement.

For these shifts in funding to be effective, institutions' management need greater autonomy over decisions such as personnel and programme offerings (OECD, 2018[99]). Better information about labour market needs and students' performance should accompany greater autonomy. The government is boosting the role and resources of the National Independent Quality Assurance Body (ADIP), to standardise higher education institutions' evaluations and to make them public. Publishing performance indicators would entrench a virtuous circle of evaluation and reward, lifting performance.

Most university students in Greece graduate late. During the crisis years this reflected few job opportunities, alongside financial incentives to remain a student given free courses and various income allowances. Altering these arrangements such that students lose benefits and start incurring fees if they fail to graduate after a reasonable delay would encourage students to find work and to study courses that employers demand, while reducing institutions' teaching costs. For example, Hungary has introduced such measures, and reduces or cuts financial support if students remain in a programme more than 2 semesters beyond its length.

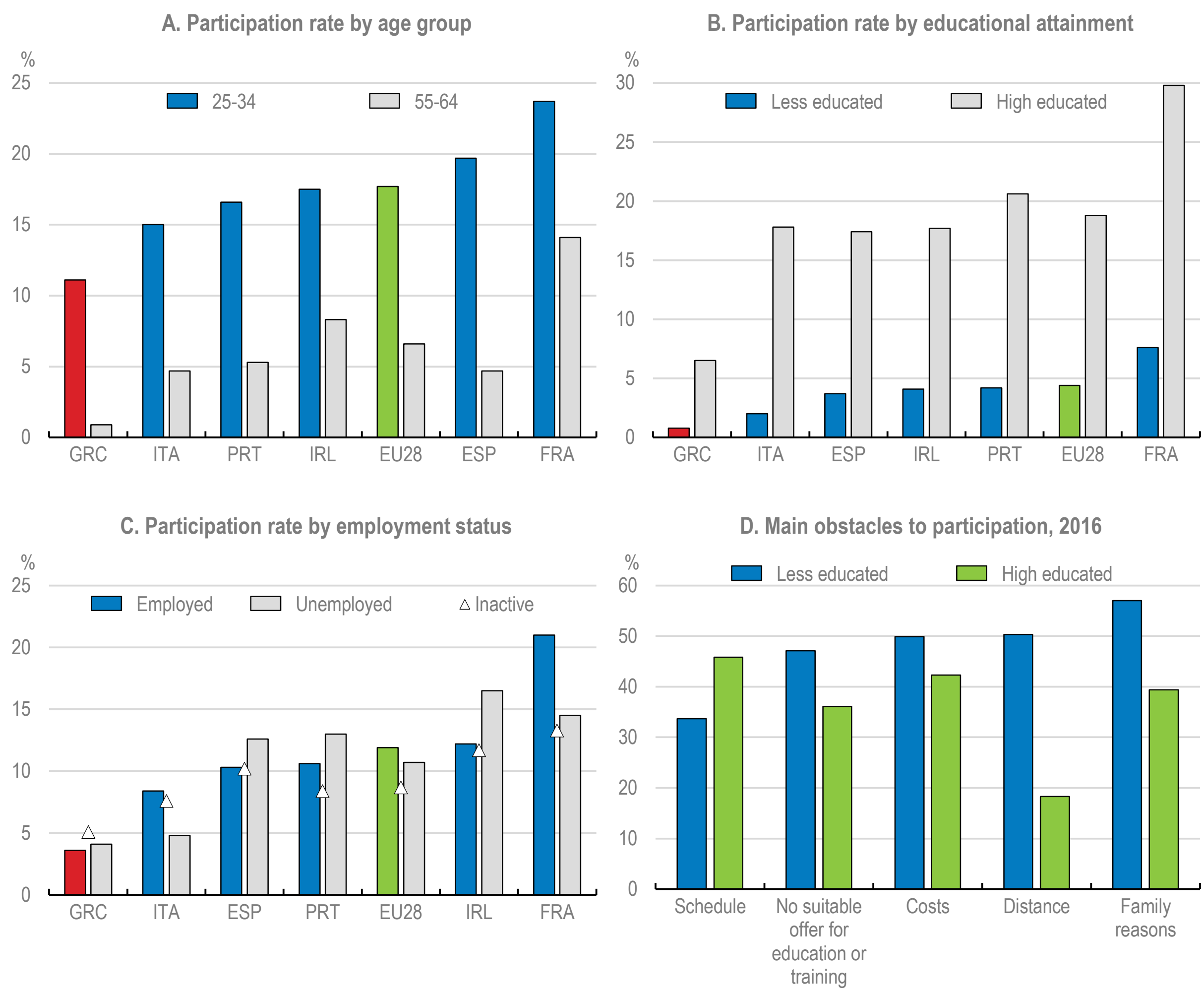
Tertiary education institutions will need to adapt their courses to more diverse student profiles. Low birth rates and recent emigration will reduce the number of high school graduates entering tertiary education over the coming decade. In their place, institutions could develop degree courses adapted to the learning and practical needs of adults with work and care responsibilities, building on the successful expansion of fee-paying Master's degree courses in recent years. A 2017 law authorised tertiary education institutions to collaborate with regional employers to offer two-year vocational education courses, and these could offer an entry point for adults, although the incoming government suspended these for the 2019-20 academic year pending a review of vocational education. Greece's tertiary institutions could also welcome more international students. Currently 11 000 more tertiary students from Greece study abroad than students come to study in Greece. Attracting foreign students, especially in fields where Greece has recognised expertise, would diversify institutions' funding sources and strengthen their outwards orientation and diversity. Finally, better distance learning options would benefit residents of remote regions, who currently have little access to tertiary education (OECD Territorial Review, forthcoming).

Life-long learning and skill training to improve career prospects

In Greece, adults who participate in lifelong learning and skill training courses report that the courses are effective and useful for their work. They benefit from higher government spending per participant than in other OECD countries (OECD, 2019[105]). Yet fewer adults participate in Greece than in other OECD countries, even among those groups who are more likely to participate (Figure 2.28). Low participation in part reflects lack of access and few quality places. Funding for lifelong learning and adult skill training is low, and far fewer enterprises in Greece provide their employees with training than in other OECD countries. Some individuals instead undertake job-related training with their own resources (Kersh and Toiviainen, 2017[106]; OECD, 2019[105]; OECD, 2019[95]). Low participation also reflects low demand for adult learning and skill trainings, as course quality is not certified and can be poor (European Commission, 2019[48]; GHK, 2011[107]), and training brings participants few benefits in terms of better wages or employment prospects (Fialho, Quintini and Vandeweyer, 2019[108]).

Figure 2.28. Greece lags behind in access to and participation in adult learning

Participation rate and obstacles to participation in education and training among adults aged 25-64, 2019



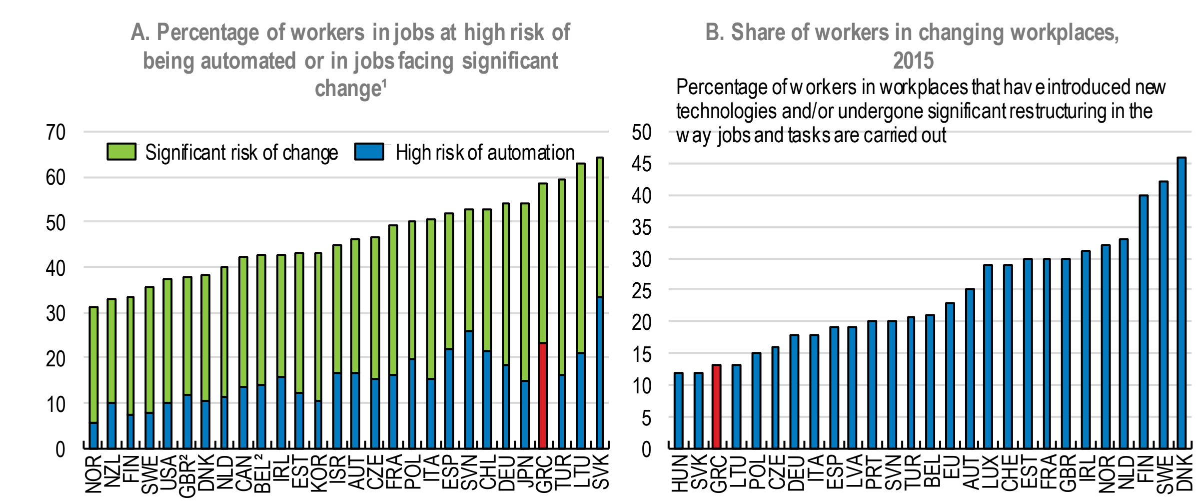
Note: Includes formal as well as non-formal education and training. The reference period for participation is the four weeks prior to the interview. Low educational attainment refers to below upper secondary education (ISCED 0-2) and high refers to tertiary education (ISCED 5-8).
Source: Eurostat.

StatLink https://doi.org/10.1787/888934155155

There is a vital need to expand access to quality lifelong learning and skill training to support employment, productivity, incomes and well-being. The recovery from the COVID-19 shock is likely to accentuate the need for workers to be able to upgrade their activities and skills, and to shift to sectors that promise better opportunities. Solid basic skills are the building block for life-long learning and adaptability, but are weak for many adults in Greece (Figure 2.28, Panel B) (International Labour Office, 2011[109]). Quality training courses can help to redress these. Training courses can better prepare adults for the likely disruption from automation and technological change (Figure 2.29) as raising adults' digital skills is a particularly pressing need in Greece (Figure 2.30; Box 2.6), and will be essential for shifting public services to digital platforms, as discussed in Chapter 1 (Marcolin, Miroudot and Squicciarini, 2018[110]; OECD, 2019[111]). Lifelong learning can improve well-being, social integration and avoid exclusion, particularly helping newly arrived migrants (Box 2.3). It can help older groups to overcome limited educational or professional development opportunities earlier in their lives, as this affects particularly older women in Greece. It is also core to most countries' active labour market policies, and bosting adult learning and skill training options would raise the performance of Greece's public works programmes described above (European Commission, 2019[48]).

Successive governments have developed plans to reform and strengthen the adult training system, although implementation has been small scale and patchy and often lacked follow-up. Currently a National Strategy for Lifelong Learning is in place, which features measures to ensure course offerings better respond to the skills needs in priority sectors and of local labour markets (Hellenic Republic, 2018[112]). Meanwhile new private training providers are raising participation. Greece is piloting projects with the European Agenda for Adult Learning (ERASMUS+) to upgrade adult skill training. Reforms in other OECD countries, such as in Portugal since 2013, show the importance of ensuring access, quality and relevance of adult education, while building awareness of the value of adult skills (OECD, 2018[113]).

Figure 2.29. Workers are underprepared for the looming disruption to jobs from automation



1. Significant risk of change and high risk of automation refer to probabilities of automation ranging between 50% and 70% and higher than 70%, respectively.
2. The data cover Flanders for Belgium, and England and Northern Ireland for the United Kingdom.
Source: Nedelkoska, L. and G. Quintini (2018), "Automation, Skills Use and Training", *OECD Social, Employment and Migration Working Papers* No. 202, OECD Publishing, Paris; and OECD (2019), *Employment Outlook 2019*.

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Expanding access to quality skill training

Greece's many small private training providers can expand the availability of adult and skill training. They require support to boost their capacity and the quality and pertinence of their courses, which is patchy. Greece could boost the capacity and remit of its National Organisation for the Certification of Qualifications and Vocational Guidance (EOPPEP) which could offer guidelines, training for trainers, and support materials such as good practice examples and self-evaluation tools. Greece's National Accreditation and Certification System could certify the skills that participants learn, which would improve the employment and wage benefits from adult skill training and help participants make better-informed choices. Training providers that meet those standards could be allowed to provide publicly-funded courses, such as to active labour market policy participants. As an evaluation and certification culture becomes more established, Greece could follow other countries and publish quality grades of training providers and courses (OECD, 2019[105]).

Over 30% of adults in Greece do not participate in skills training and life-long-learning due to the high costs involved. 46% of adults contribute to the cost of their training compared with around 20% on average across the OECD (OECD, 2019[55]). Employers pay for only one-third of participants, the lowest share across OECD countries and overall government funding is also among the lowest in the OECD. The costs of skill training go beyond the direct cost of the course, and include incidental costs for the participant of materials, transport and caring for dependents, and the cost for employers of absent employees. This disruption is greater for Greece's many small workplaces.

Skills training can be particularly beneficial during temporary economic downturns such as the COVID-19 shock, as furloughed workers are not giving up work to participate, and the training can help workers to move to activities with stronger prospects (Card, Kluve and Weber, 2017[28]). As a priority to improve access to training, Greece could provide workers with personal training accounts, drawing on elements of the training accounts developed in countries including France, Italy, the municipality of Vienna, and Singapore (OECD, 2019[114]; OECD, 2019[115]). Employers and employees would both contribute to the account. Currently employers must contribute 0.24% of salary costs to a training fund if they do not provide training and this could contribute to the account. Tax credits could encourage contributions above the required minimum. The government may top up these accounts for priority groups, such as registered jobseekers or social transfer recipients, those with little formal education, with disabilities or other characteristics that make finding work harder, or those working in sectors undergoing significant structural change.

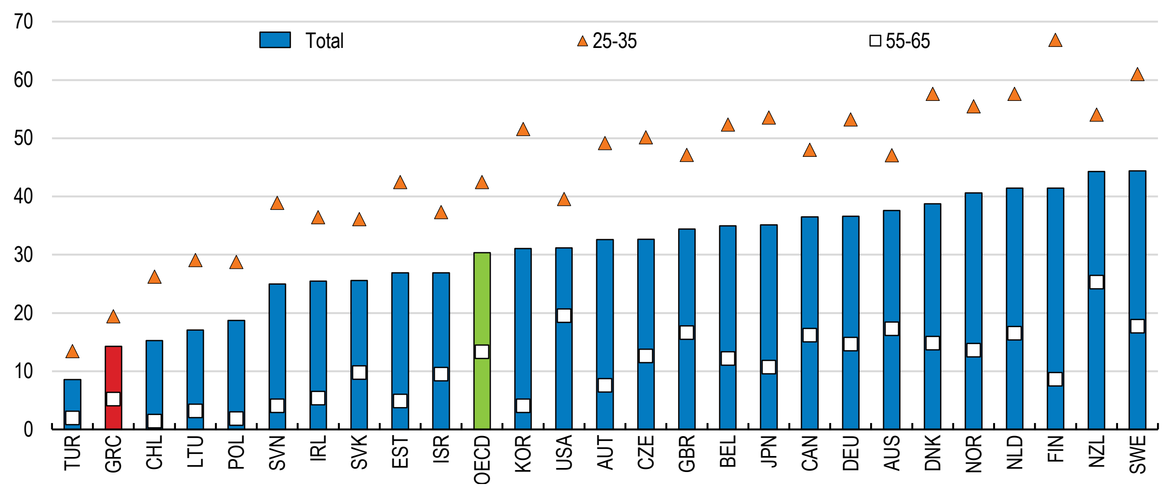
To encourage employers to support their workers' training, the employer may be able to fund trainings with their workers' training funds. To enable adults to undertake longer, more rewarding training programmes the government could offer to 'credit' workers' training accounts, that workers repay through future income (Card, Kluve and Weber, 2017[28]; Levy Yeyati, Montané and Sartorio, 2019[40]),. Greece could follow many other countries in providing statutory education and training leave, which can also help training to be seen as standard practice.

Alongside raising training capacity, raising skill levels will require boosting demand for life-long learning and skill training. Clear, accessible information about courses helps. Many countries, including Greece, have information campaigns that provide guidance on specific programmes that provide skills in high demand. More flexible delivery methods can help adults participate, such as flexible schedules and modular programmes. Drawing low-skill adults with little formal work experience into training is particularly challenging. More proactive outreach activities can bring results, such as Brussels' use of mobile information centres that go to these groups (OECD, 2019[105]).

Greece's large and growing older population present particular training challenges, as their skills depreciate as they spending time out of work, and as the nature of work changes. Other countries have found targeted interventions to be effective and Greece could draw on these. The Netherlands provides workers aged 45 or older with subsidised guidance on their current job and the skills that could improve their career opportunities. Australia is expanding a 'career transition assistance' programme which provides jobseekers aged over 45 with career and job seeking guidance and functional literacy training. To support employers upgrading existing workers' skills, the German public employment services covers 75% of the cost of training workers aged 45 or older, and microenterprises receive 100% of the cost, which has contributed to extending working lives.

Figure 2.30. Adults in Greece need to boost their digital skills

Share of individuals scoring at Level 2 or Level 3 in the PIAAC proficiency in problem-solving in technology-rich environments task, by age



Note: Problem solving in technology-rich environments measures adults' abilities to solve the types of problems they commonly face as ICT users in modern societies. Adults scoring at Level 2 or Level 3 can solve problems that require the co-ordinated use of several different applications, can evaluate the results of web searches, and can respond to occasional unexpected outcomes. For most countries, data refer to 2012; for Chile, Greece, Israel, Lithuania, New Zealand, Slovenia and Turkey, data refer to 2015. The OECD average is population weighted.
Source: OECD Programme for the International Assessment of Adult Competencies (PIAAC), 2012, 2015.

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Box 2.6. Building skills so the digital future benefits all

Take-up of digital technologies has grown rapidly in Greece over the past decade. Digital technologies can benefit all aspects of life. They boost firms' productivity, open markets and allow new firms to prosper. For workers, this means new opportunities and better pay and working conditions. Digital technologies can improve how the state interacts with its citizens by making public services, from healthcare to administrative tasks, more accessible, more responsive and more transparent, and digitalisation is central to the government's public sector improvement plans. To realise the potential of digital technologies, Greece also needs to raise its population's digital skills to the levels in other OECD countries (Figure 2.30).

Skills for digital technologies are built on a sound foundation of literacy, numeracy and problem solving, rather than particular technical training. Digitisation gives greater weight to 'soft' skills, such as communication and adaptation to new circumstances and situations. These foundation skills are usually laid in the early years of school. Schools can provide students with greater confidence in digital environments by integrating digital education and access to technologies into curriculum, although fewer school students in Greece have access to these technologies than in other OECD countries.

New and changing technologies underline the importance of life-long learning. For adults, digital skills can be built by ensuring that learning programmes include use of digital tools. Training, especially in digital technology-related fields, can help overcome weak foundation skills, particularly among low skill or less educated adults. Digital skills are best built as an integrated part of course content, rather than through specific courses. They are strengthened through use, especially problem solving in technology-rich environments.

To raise digital skills, Greece's government prepared a National Digital Strategy 2016-21, which builds on skills assessment and anticipation exercises. It revised this strategy in 2019, drawing on the EU's Digital Economy and Society Index, and may benefit from further engaging with Europe-wide initiatives, such as the Grand Coalition for Digital Jobs, which supports collaboration among businesses, education providers, and public and private actors to increase the number of training programmes and making the most of the job opportunities offered by digitisation.

Sources: (OECD, 2019[116]) (OECD, 2019[117]) (OECD, 2019[118]) (Andrews, Nicoletti and Timiliotis, 2018[119]) (Sorbe et al., 2019[120]) (Gal et al., 2019[121])

Policy recommendations for a more inclusive and better performing labour market

MAIN POLICY FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Social protection	
The COVID-19 pandemic presents an exceptional exogenous shock that sets back Greece's recovery. The government has responded swiftly with temporary measures to support households' incomes and firms' liquidity. The COVID-19 crisis adds to the need of improving the efficient reallocation of resources to boost productivity and ensure a durable recovery.	**Extend exceptional fiscal support measures as needed based on epidemiological and economic developments while ensuring they do not hinder the reallocation of resources towards firms and sectors with better growth prospects.** Depending on epidemiological developments, extend the new short-time work scheme to provide temporary support for incomes and employment in sectors suffering drops in demand.
The Guaranteed Minimum Income and other social protection reforms are reducing the depth of poverty but poverty rates remain high, including for those in work.	**Increase Guaranteed Minimum Income transfers, taper them more gradually and introduce in-work benefits for low-wage workers.** Align equivalence scales across social transfer programmes by raising the Guaranteed Minimum Income equivalence factor applied to children. Ensure that Guaranteed Minimum Income programme participants are required to actively engage in active labour market programmes and to accept jobs.
Caregivers and families receive little support as family policies are underdeveloped, and facilities for child and elderly care do not cover current needs. Caregiving obligations impede many from working, contributing to low fertility rates.	**Boost policies to support families, prioritising expanded access to quality care for children and the elderly.** Develop in-home support for elderly care. Reallocate the EUR 2 000 birth grant to ongoing family and care support policies.
Active labour market policies	
The COVID-19 shock has abruptly halted hiring and employment growth, which had been rising since 2016, while the number of discouraged job-seekers has soared. Job-search and training programmes provide little support for re-skilling and matching jobseekers with jobs. The public employment service suffers from long-standing under-resourcing and high demands. Skill mismatches are pervasive and employers often cannot find workers with the skills they need.	**Employ more specialised counsellors and profiling tools in public employment services to significantly improve job-search and training support, linking them better with private job-search agencies.** Develop a voucher system that allows jobseekers to select their preferred intermediary for active labour market policies, including private-sector employment services.
Tax and social contribution system	
High taxes and social insurance contributions stifle employment and discourage formalization, especially for low-income workers and vulnerable groups. Some recent policy changes may widen differences in effective tax rates between employment types.	**Reduce social insurance contribution rates, especially at low incomes, while aligning taxation across employment types.**
Wage-setting processes	
Sectoral collective agreements are regaining importance in Greece's wage-setting system. Late 2019s reforms aim to make the system less rigid and centralised but they remain untested. Support for social partners to negotiate workplace agreements is limited, especially in small workplaces.	Strengthen the capacity of wage negotiation mediators to support workplaces in adopting sectoral collective agreements. Strengthen the integrity and access to detailed labour force data, to inform wage negotiations and sectoral collective agreement extensions. Ensure firms in financial distress can apply the opt-out clauses from sectoral collective agreement in a timely manner.
In 2019 Greece increased the minimum wage by 11%, the first increase since the cut in 2012. It ended the sub-minimum wage for under-25 year olds, despite continued very high youth unemployment. These changes went beyond the recommendations of an experts committee.	Appoint the minimum wage experts committee members through an apolitical process for fixed, staggered terms, and require the government to explain differences between its decisions and the committee's recommendations. Consider introducing a sub-minimum wage linked to experience rather than to age.
Education, training and skill development	
Education is highly valued in Greece, but many secondary school students lack basic skills. Schools need to provide students with solid literacy and numeracy skills and competences aligned with labour market needs. Reforms are moving towards developing schools' autonomy and quality assurance but teachers still lack opportunities to raise their skills or recognition for their performance.	**Progressively move the teacher workforce onto longer-term contracts that support and reward performance and avoid the rigidity of the existing permanent contracts.**
Participation in early childhood education in Greece lags other countries. The government is extending compulsory pre-school education, but inadequate facilities is delaying the roll-out.	Roll-out compulsory pre-school for 4 year olds and expand access for younger children.
Greece has merged technical institutes and universities, but the new institutions have limited autonomy over their budget, structure and operations, curtailing their ability to improve teaching outcomes.	Provide broader management autonomy to tertiary education institutions.
Demographic changes will reduce the number of students, while many adults, especially groups traditionally excluded from the labour force, need to upgrade their skills to meet the changing labour market. Participation in lifelong learning is low and the quality of private providers is patchy.	Encourage tertiary education institutions to develop courses adapted to mature-age students' professional needs and practical circumstances. Improve quality assessment and certification of adult learning courses.

References

Akgun, O., B. Cournède and J. Fournier (2017), "The effects of the tax mix on inequality and growth", *OECD Economics Department Working Papers*, No. 1447, OECD Publishing, Paris, https://dx.doi.org/10.1787/c57eaa14-en. [64]

Alm, J., J. Deskins and M. McKee (2008), "Do Individuals Comply on Income Not Reported by Their Employer?", *Public Finance Review*, Vol. 37/2, pp. 120-141, http://dx.doi.org/10.1177/1091142108322878. [69]

Andrews, D., G. Nicoletti and C. Timiliotis (2018), "Digital technology diffusion: A matter of capabilities, incentives or both?", *OECD Economics Department Working Papers*, No. 1476, OECD Publishing, Paris, https://dx.doi.org/10.1787/7c542c16-en. [119]

Andriopoulou, E., A. Karakitsios and P. Tsakloglou (2017), "Inequality and Poverty in Greece: Changes in Times of Crisis", *Discussion Paper Series*, No. 11006, IZA Institute of Labor Economics, http://ftp.iza.org/dp11006.pdf (accessed on 26 November 2019). [123]

Artavanis, N., A. Morse and M. Tsoutsoura (2016), "Measuring Income Tax Evasion Using Bank Credit: Evidence from Greece *", *The Quarterly Journal of Economics*, Vol. 131/2, pp. 739-798, http://dx.doi.org/10.1093/qje/qjw009. [72]

Azar, J. et al. (2019), "Minimum Wage Employment Effects and Labor Market Concentration", https://ssrn.com/abstract=3416016 (accessed on 16 September 2019). [92]

Bank of Greece (2018), *Αξιολόγηση του ισχύοντος νομοθετημένου κατώτατου (Assessment of the current statutory minimum wage)*. [88]

Bartels, C. and C. Shupe (2018), "Drivers of participation elasticities across Europe: gender or earner role within the household? Drivers of participation elasticities across Europe: gender or earner role within the household?", *EUROMOD Working Paper*, No. 7/18, https://www.euromod.ac.uk/sites/default/files/working-papers/em7-18.pdf (accessed on 13 November 2019). [18]

Belgium Federal Public Employment, Labour and Social Dialogue Service (2018), *Belgium's organised system of collective bargaining*, https://ec.europa.eu/social/BlobServlet?docId=20410&langId=en. [86]

Beliziotis, M. et al. (2018), *Consultation Draft: Adjusting the statutory minimum wage and salary*. [89]

Berbec, S. et al. (2019), *Human trafficking and the economic/business sectors susceptible to be involved in the demand and supply chain of products and services resulting from victims' exploitation*, European Union, http://net-combat-thb-chain.prorefugiu.eu/wp-content/uploads/2019/03/Study-Report.pdf (accessed on 19 September 2019). [34]

Bodewig, C. et al. (2016), "GREECE SOCIAL WELFARE REVIEW Weathering the Crisis: Reducing the Gaps in Social Protection in Greece". [11]

Boeri, T. and P. Garibaldi (2019), "A Tale of Comprehensive Labor Market Reforms: Evidence from the Italian Jobs Act", *CEP Discussion Paper*, No. 1613, Centre for Economic Performance, London, http://cep.lse.ac.uk/pubs/download/dp1613.pdf (accessed on 18 September 2019). [94]

Bredgaard, T. (2015), “Evaluating What Works for Whom in Active Labour Market Policies”, *European Journal of Social Security*, Vol. 17/4, pp. 436-452, http://dx.doi.org/10.1177/138826271501700403. [27]

Card, D., J. Kluve and A. Weber (2017), “What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations”, *Journal of the European Economic Association*, Vol. 16/3, pp. 894-931, http://dx.doi.org/10.1093/jeea/jvx028. [28]

Causa, O., M. Hermansen and N. Ruiz (2016), “The Distributional Impact of Structural Reforms”, *OECD Economics Department Working Papers*, No. 1342, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jln041nkpwc-en. [10]

Cerqua, A. (2018), “What happens when the income tax increases?”, *Munich Personal RePEc Archive*, No. MPRA Paper No. 89857, University of Westminster, http://dx.doi.org/10.13140/RG.2.2.22018.53447. [71]

Crivellaro, E., A. Hijzen and C. Schwellnus (2019), “Going national: Implementing the OECD jobs strategy”, *OECD Economics Department Working Papers*, No. 1546, OECD Publishing, Paris, https://dx.doi.org/10.1787/b598f530-en. [5]

Daouli, J. et al. (2016), “The 2011 Industrial Relations Reform and Nominal Wage Adjustments in Greece”, *Journal of Labor Research*, Vol. 37/4, pp. 460-483, http://dx.doi.org/10.1007/s12122-016-9232-5. [83]

De Koning, J. (2012), *How to best structure services for employers?*, European Commission, http://ec.europa.eu/social/BlobServlet?docId=7349&langId=en. [50]

Desiere, S., K. Langenbucher and L. Struyven (2019), “Statistical profiling in public employment services: An international comparison”, *OECD Social, Employment and Migration Working Papers*, No. 224, OECD Publishing, Paris, https://dx.doi.org/10.1787/b5e5f16e-en. [44]

DG Employment, S. (2014), *Peer Review: Blended service delivery for jobseekers*, European Constitution, http://ec.europa.eu/social/BlobServlet?docId=11833&langId=en. [46]

Dube, A. (2019), *Impacts of minimum wages: review of the international evidence*, HM Treasury, London, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844350/impacts_of_minimum_wages_review_of_the_international_evidence_Arindrajit_Dube_web.pdf (accessed on 4 November 2019). [91]

EC (2019), *Energy Poverty Observatory in Greece*, https://www.energypoverty.eu/sites/default/files/downloads/observatory-documents/19-07/case_study_-_epov_greece.pdf (accessed on September 2019). [17]

Education and Employment References Committee (2018), *Jobactive: Failing those it is intended to serve*, The Senate, Commonwealth of Australia, https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/024217/toc_pdf/Jobactivefailingthoseitisintendedtoserve.pdf;fileType=application%2Fpdf (accessed on 27 February 2020). [54]

Elstat (2020), “Intergenerational Transmission of Disadvantages, Household Composition and Evolution of Income: Statistics on income and living conditions 2019”, *Press Release*, https://www.statistics.gr/calendar#62020 (accessed on 19 June 2020). [97]

European Commission (2019), *Case-study- Greece: Report from the Commission to the Council on the evaluation of the Council Recommendation on the integration of the long-term unemployed into the labour market*, European Commission, Brussels, https://ec.europa.eu/social/BlobServlet?docId=21019&langId=en. [48]

European Commission (2019), *Enhanced Surveillance Report: Greece, June 2019*, European Commission Directorate-General for Economic and Financial Affairs, Brussels, http://dx.doi.org/10.2765/93517. [14]

European Commission (2016), *Work-life balance measures for persons of working age with dependent relatives- A study of national policies 2016*, European Commission, http://dx.doi.org/10.2767/80471. [19]

European Commission (2015), *Acquisition of work experience for new entrants to the labour market*, European Commission, Brussels, https://ec.europa.eu/social/BlobServlet?docId=15265&langId=en. [53]

European Commission (2014), *EEPO Review- Stimulating job demand: The design of effective hiring subsidies in Europe*, European Commission, Brussels, http://dx.doi.org/10.2767/22824. [52]

European Commission (2013), *Public works: how can PES contribute to increasing their value as an activation tool?*, European Commission, Brussels, https://ec.europa.eu/social/BlobServlet?docId=13384&langId=en. [58]

European Commission (2012), *Effective services for employers: forging partnerships for the future*, European Commission, Brussels, https://ec.europa.eu/social/BlobServlet?docId=7637&langId=en. [49]

European Trade Union Institute (ETUI) (2019), *Benchmarking Working Europe 2019*, European Trade Union Institute (ETUI), Brussels, http://file:///C:/Users/bulman_t/Downloads/BENCHMARKING+2019+Web+version+-+Copy.pdf. [77]

European Union (2019), *Annual Report European Network of Public Employment Services (PES)*, European Union, http://dx.doi.org/10.2767/157066. [47]

Fajnzylber, P., W. Maloney and G. Montes-Rojas (2009), “Releasing Constraints to Growth or Pushing on a String? Policies and Performance of Mexican Micro-Firms”, *The Journal of Development Studies*, Vol. 45/7, pp. 1027-1047, http://dx.doi.org/10.1080/00220380802264911. [1]

Feiler, L., G. Schulz and T. Anderson (2015), *The role of employment service providers guide to anticipating and matching skills and jobs.*, European Union, http://dx.doi.org/10.2816/816485 (accessed on 3 September 2019). [45]

Fialho, P., G. Quintini and M. Vandeweyer (2019), “Returns to different forms of job related training: Factoring in informal learning”, *OECD Social, Employment and Migration Working Papers*, No. 231, OECD Publishing, Paris, https://dx.doi.org/10.1787/b21807e9-en. [108]

Gal, P. et al. (2019), “Digitalisation and productivity: In search of the holy grail – Firm-level empirical evidence from EU countries”, *OECD Economics Department Working Papers*, No. 1533, OECD Publishing, Paris, https://dx.doi.org/10.1787/5080f4b6-en. [121]

GHK (2011), *Country Report on the Action Plan on Adult Learning: Greece*, European Commission, https://epale.ec.europa.eu/sites/default/files/1534_action_plan_on_adult_education_greece_1.pdf (accessed on 5 September 2019). [107]

Giannakopoulos, N. and I. Laliotis (2018), "Industrial relations reform, firm-level bargaining and nominal wage floors", *GLO Discussion Paper*, No. 275, Global Labor Organization (GLO), Maastricht, http://hdl.handle.net/10419/184755 (accessed on 29 October 2019). [78]

Giannakopoulos, N. and I. Laliotis (2017), "Decentralized Bargaining and the Greek Labour Relations Reform (Law 4024/2011)", *MPRA Paper*, No. 76502, Munich Personal RePEc Archive, https://mpra.ub.uni-muenchen.de/76502/1/MPRA_paper_76502.pdf (accessed on 23 September 2019). [79]

Gray, B., D. Sarnak and J. Burgers (2015), *Home Care by Self-governing Nursing Teams: The Netherlands' Buurtzorg Model*, The Commonwealth Fund, https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_case_study_2015_may_1818_gray_home_care_nursing_teams_buurtzorg_model_case_study.pdf. [24]

Hampf, F., S. Wiederhold and L. Woessmann (2017), "Skills, earnings, and employment: exploring causality in the estimation of returns to skills", *Large-scale Assessments in Education*, Vol. 5/1, http://dx.doi.org/10.1186/s40536-017-0045-7. [76]

Hanushek, E. et al. (2017), "Coping with change: International differences in the returns to skills", *Economics Letters*, Vol. 153, pp. 15-19, http://dx.doi.org/10.1016/j.econlet.2017.01.007. [75]

Hellenic Republic (2018), *Greece: A Growth Strategy for the Future*, http://www.mindev.gov.gr/wp-content/uploads/2018/09/Growth-Strategy.pdf (accessed on 10 September 2019). [112]

Ibsen, C. (2015), "The Role of Mediation Institutions in Sweden and Denmark after Centralized Bargaining", *British Journal of Industrial Relations*, Vol. 54/2, pp. 285-310, http://dx.doi.org/10.1111/bjir.12142. [84]

Ibsen, C. (2015), "The Role of Mediation Institutions in Sweden and Denmark after Centralized Bargaining", *British Journal of Industrial Relations*, Vol. 54/2, pp. 285-310, http://dx.doi.org/10.1111/bjir.12142. [85]

Ibsen, C. and M. Keune (2018), "Organised Decentralisation of Collective Bargaining : Case studies of Germany, Netherlands and Denmark", *OECD Social, Employment and Migration Working Papers*, No. 217, OECD Publishing, Paris, https://dx.doi.org/10.1787/f0394ef5-en. [81]

ICON-INSTITUT Public Sector (2018), *European Network of Public Employment Services Ad Hoc Module to the 2018 PES Capacity Questionnaire Survey report*, European Commission, Brussels, https://ec.europa.eu/social/BlobServlet?docId=20575&langId=en. [51]

ILO (2018), *Assessment Report on Necessary Amendments of the Legal Framework Regarding Inspections in Agriculture and Recommendations for Reforms in line with ILO Convention No 129*, International Labor Organization, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_686992.pdf (accessed on 19 September 2019). [35]

ILO (2018), *Getting Back to Work: A study of the social impacts of Kinofelis*, International Labour Office, Geneva, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_623960.pdf (accessed on 4 September 2019). [60]

ILO (2018), *Towards a stronger Kinofelis: Recommendations for the strengthening of future phases Development and Investment Branch Employment Policy Department*, European Commission, Geneva, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_623959.pdf (accessed on 6 September 2019). [62]

International Labour Office (2016), *Diagnostic report on undeclared work in Greece*, International Labour Office, Employment Department, Informal Economy Unit, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/projectdocumentation/wcms_531548.pdf (accessed on 18 November 2019). [67]

International Labour Office (2011), *A Skilled Workforce for Strong, Sustainable and Balanced Growth: A G20 Training Strategy*, International Labour Office, Geneva, https://www.oecd.org/g20/summits/toronto/G20-Skills-Strategy.pdf (accessed on 6 November 2019). [109]

Jeon, S. (2019), *Unlocking the Potential of Migrants: Cross-country Analysis*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, https://dx.doi.org/10.1787/045be9b0-en. [33]

Joshi, A., W. Prichard and C. Heady (2014), "Taxing the Informal Economy: The Current State of Knowledge and Agendas for Future Research", *The Journal of Development Studies*, Vol. 50/10, pp. 1325-1347, http://dx.doi.org/10.1080/00220388.2014.940910. [65]

Joshi, A., W. Prichard and C. Heady (2013), "Taxing the Informal Economy: Challenges, Possibilities and Remaining Questions*", *IDS Working Papers*, Vol. 2013/429, pp. 1-37, http://dx.doi.org/10.1111/j.2040-0209.2013.00429.x. [2]

Karakitsios, A. (2016), "The Effect of Subminimum Wage Introduction on Employment in Greece", *19th IZA European Summer School in Labor Economics*, IZA, http://conference.iza.org/conference_files/SUMS_2016/karakitsios_a23986.pdf (accessed on 18 September 2019). [93]

Kersh, N. and H. Toiviainen (eds.) (2017), *Broad Research on Adult Education in the EU*, European Union, Brussels, http://www.uta.fi/edu/en/transit/index/D2.1.Report.30.6.2017.pdf (accessed on 6 September 2019). [106]

Kleven, H. et al. (2011), "Unwilling or Unable to Cheat? Evidence From a Tax Audit Experiment in Denmark", *Econometrica*, Vol. 79/3, pp. 651-692, http://dx.doi.org/10.3982/ecta9113. [70]

Kluve, J. et al. (2019), "Do youth employment programs improve labor market outcomes? A quantitative review", *World Development*, Vol. 114, pp. 237-253, http://dx.doi.org/10.1016/j.worlddev.2018.10.004. [63]

Kuczera, M. and S. Jeon (2019), *Vocational Education and Training in Sweden*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, https://dx.doi.org/10.1787/g2g9fac5-en. [37]

Labartino, G., F. Mazzolari and G. Morleo (2019), "Politiche di remunerazione e organizzazione del lavoro sempre più disegnate in funzione delle esigenze di lavoratori e aziende", *Nota del Centro Studi CONFINDUSTRIA* 14/19, https://www.confindustria.it/wcm/connect/d200c323-95a5-4108-8848-25089a237e0f/Nota+CSC_Indagine_lavoro_291119_Confindustria.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d200c323-95a5-4108-8848-25089a237e0f-mWTlhwx. [82]

Leventi, C. et al. (2018), *EUROMOD Country Report Greece (EL) 2015-2018*, EUROMOD, Essex, https://www.euromod.ac.uk/sites/default/files/country-reports/year9/Y9_CR_EL_Final.pdf (accessed on 25 October 2019). [12]

Levine, R. and Y. Rubinstein (2016), "Smart and Illicit: Who Becomes an Entrepreneur and Do They Earn More?*", *The Quarterly Journal of Economics*, Vol. 132/2, pp. 963-1018, http://dx.doi.org/10.1093/qje/qjw044. [73]

Levy Yeyati, E., M. Montané and L. Sartorio (2019), "What Works for Active Labor Market Policies? Working Papers What works for Active Labor Market Policies?", *CID Faculty Working Paper*, No. 358, Center for International Development, Harvard University, https://growthlab.cid.harvard.edu/files/growthlab/files/2019-07-cid-wp-358-labor-market-policies.pdf (accessed on 6 September 2019). [40]

Luci, A. and O. Thevenon (2011), "The impact of family policy packages on fertility trends in developed countries", *Documents de travail*, No. 174, £ INED - Institut National d'Etudes Démographiques, https://hal.archives-ouvertes.fr/hal-00657603 (accessed on 13 November 2019). [22]

Marcolin, L., S. Miroudot and M. Squicciarini (2018), "To be (routine) or not to be (routine), that is the question: a cross-country task-based answer†", *Industrial and Corporate Change*, Vol. 28/3, pp. 477-501, http://dx.doi.org/10.1093/icc/dty020. [110]

Marini, A. et al. (2019), *A Quantitative Evaluation of the Greek Social Solidarity Income*, World Bank, http://documents.worldbank.org/curated/en/882751548273358885/pdf/133962-WP-P160622-Evaluation-of-the-SSI-Program-Jan-2019.pdf (accessed on 11 February 2019). [9]

Martin, J. (2015), "Activation and active labour market policies in OECD countries: stylised facts and evidence on their effectiveness", *IZA Journal of Labor Policy*, http://dx.doi.org/10.1186/s40173-015-0032-y. [41]

Matsangouras, E. (ed.) (2019), *2019 Annual Report*, ADIPPDE , Athens, http://www.adippde.gr/images/data/ektheseis/ekth2019.pdf. [98]

Milanez, A. and B. Bratta (2019), "Taxation and the future of work: How tax systems influence choice of employment form", *OECD Taxation Working Papers*, No. 41, OECD Publishing, Paris, https://dx.doi.org/10.1787/20f7164a-en. [74]

Millán, N. et al. (2017), *Portraits of Labor Market Exclusion 2.0: Country Policy Paper (CPP) for Greece*, The World Bank Group Social Protection and Labor Global Practice, Washington, DC, http://documents.worldbank.org/curated/en/118191522094488076/pdf/Final-Greece-CPP-forPublication-website.pdf (accessed on 2 October 2019). [43]

Ntaintasis, E., S. Mirasgedis and C. Tourkolias (2019), "Comparing different methodological approaches for measuring energy poverty: Evidence from a survey in the region of Attika, Greece", *Energy Policy*, Vol. 15, pp. 160-169, http://dx.doi.org/10.1016/j.enpol.2018.10.048. [16]

OECD (2019), *Adult Learning in Italy: What Role for Training Funds ?*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264311978-en. [114]

OECD (2019), “Affordable housing”, in *Society at a Glance 2019: OECD Social Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/e885d313-en. [15]

OECD (2019), *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/f8d7880d-en. [95]

OECD (2019), *Financial Incentives to Promote Adult Learning in Australia*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/c79badcc-en. [115]

OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264311756-en. [105]

OECD (2019), *Going Digital: Shaping Policies, Improving Lives*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264312012-en. [117]

OECD (2019), *How’s Life in the Digital Age?: Opportunities and Risks of the Digital Transformation for People’s Well-being*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264311800-en. [116]

OECD (2019), *Negotiating Our Way Up: Collective Bargaining in a Changing World of Work*, OECD Publishing, Paris, https://dx.doi.org/10.1787/1fd2da34-en. [87]

OECD (2019), *OECD Economic Surveys: Italy 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/369ec0f2-en. [39]

OECD (2019), *OECD Economic Surveys: Switzerland 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/7e6fd372-en. [25]

OECD (2019), *OECD Skills Outlook 2019 : Thriving in a Digital World*, OECD Publishing, Paris, https://dx.doi.org/10.1787/df80bc12-en. [118]

OECD (2019), “Preparing for the Changing Nature of Work in the Digital Era”*, OECD Going Digital Policy Note*, OECD, Paris, http://dx.doi.org/10.1787/888933930573. [111]

OECD (2019), *Strengthening Active Labour Market Policies in Italy*, Connecting People with Jobs, OECD Publishing, Paris, https://dx.doi.org/10.1787/160a3c28-en. [55]

OECD (2018), *Education for a Bright Future in Greece*, Reviews of National Policies for Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264298750-en. [99]

OECD (2018), *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264308817-en. [3]

OECD (2018), *OECD Economic Surveys: Greece 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-grc-2018-en. [6]

OECD (2018), *Skills Strategy Implementation Guidance for Portugal: Strengthening the Adult-Learning System*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264298705-en. [113]

OECD (2018), *The new OECD Jobs Strategy: How does Greece compare?*, OECD, Paris, https://www.oecd.org/greece/jobs-strategy-GREECE-EN.pdf (accessed on 20 November 2019). [4]

OECD (2018), "The role of collective bargaining systems for good labour market performance", in *OECD Employment Outlook 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2018-7-en. [80]

OECD (2017), *Connecting People with Jobs: Key Issues for Raising Labour Market Participation in Australia*, Connecting People with Jobs, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264269637-en. [56]

OECD (2017), *Education Policy in Greece: A preliminary assessment*, OECD, Paris, https://www.oecd.org/education/Education-Policy-in-Greece-Preliminary-Assessment-2017.pdf. [100]

OECD (2017), *Preventing Ageing Unequally*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264279087-en. [23]

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264266490-en. [96]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [102]

OECD (2016), *Working Together: Skills and Labour Market Integration of Immigrants and their Children in Sweden*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264257382-en. [36]

OECD (2015), "Activation policies for more inclusive labour markets", in *OECD Employment Outlook 2015*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2015-7-en. [42]

OECD (2015), *OECD Employment Outlook 2015*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2015-en. [38]

OECD (2015), *Policy Framework for Investment, 2015 Edition*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264208667-en. [68]

OECD (2015), "Recent labour market developments with a focus on minimum wages", in *OECD Employment Outlook 2015*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2015-5-en. [90]

OECD (2013), *Greece: Reform of Social Welfare Programmes*, OECD Public Governance Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264196490-en. [7]

OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264190658-en. [101]

OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264087460-en. [103]

OECD/European Union (2013), *A Good Life in Old Age?: Monitoring and Improving Quality in Long-term Care*, OECD Health Policy Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264194564-en. [26]

Olivetti, C. and B. Petrongolo (2017), “The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries”, *Journal of Economic Perspectives*, http://dx.doi.org/10.1257/jep.31.1.205. [20]

Olivetti, C. and B. Petrongolo (2016), “The Evolution of Gender Gaps in Industrialized Countries”, *SSRN*, http://dx.doi.org/10.1146/annurev-economics-080614-115329. [21]

Pastore, F. (2019), “The quasi-market of employment services in Italy”, *Journal of Policy Modeling*, http://dx.doi.org/10.1016/j.jpolmod.2019.06.008. [57]

Radinger, T. et al. (2018), *OECD Reviews of School Resources: Colombia 2018*, OECD Reviews of School Resources, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264303751-en. [104]

Simopoulos, G. and A. Alexandridis (2019), “Refugee education in Greece: integration or segregation?”, *Forced Migration Review* 60, pp. 27-29, https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/education-displacement/simopoulos-alexandridis.pdf (accessed on 26 September 2019). [30]

Sorbe, S. et al. (2019), “Digital Dividend: Policies to Harness the Productivity Potential of Digital Technologies”, *OECD Economic Policy Papers*, No. 26, OECD Publishing, Paris, https://dx.doi.org/10.1787/273176bc-en. [120]

Tcherneva, P. (2012), “Beyond Full Employment: The Employer of Last Resort as an Institution for Change”, *Working Paper*, No. 732, Levy Economics Institute of Bard College, http://www.levyinstitute.org/pubs/wp_732.pdf (accessed on 1 October 2019). [61]

Torgler, B. and F. Schneider (2007), “Shadow Economy, Tax Morale, Governance and Institutional Quality: A Panel Analysis”, *Discussion Paper*, No. 2563, IZA, Bonn, http://ftp.iza.org/dp2563.pdf (accessed on 19 November 2019). [66]

UNHCR (2019), *Fact Sheet: Greece*, UNHCR, https://data2.unhcr.org/en/documents/download/68627 (accessed on 27 September 2019). [32]

UNICEF, U. (2020), *Latest statistics and graphics on refugee and migrant children*, https://www.unicef.org/eca/emergencies/latest-statistics-and-graphics-refugee-and-migrant-children (accessed on 8 January 2020). [31]

United Nations (2019), *International Migration Stock, 2019*, United Nations, https://www.un.org/en/development/desa/population/migration/data/estimates2/docs/MigrationStockDocumentation_2019.pdf (accessed on 8 January 2020). [29]

World Bank (2019), *World Development Report 2019: The Changing Nature of Work*, The World Bank, http://dx.doi.org/10.1596/978-1-4648-1328-3. [59]

Ziomas, D. et al. (2018), “Reforming the social welfare system in Greece”, No. ESPN Flash Report 2018/59, European Social Policy Network, https://ec.europa.eu/social/BlobServlet?docId=19997&langId=en. [8]

Ziomas, D. et al. (2018), “New reform of the family benefits scheme in Greece”, *ESPN Flash Report*, No. 2018/28, European Commission, https://ec.europa.eu/social/BlobServlet?docId=19709&langId=en (accessed on 13 November 2019). [13]

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