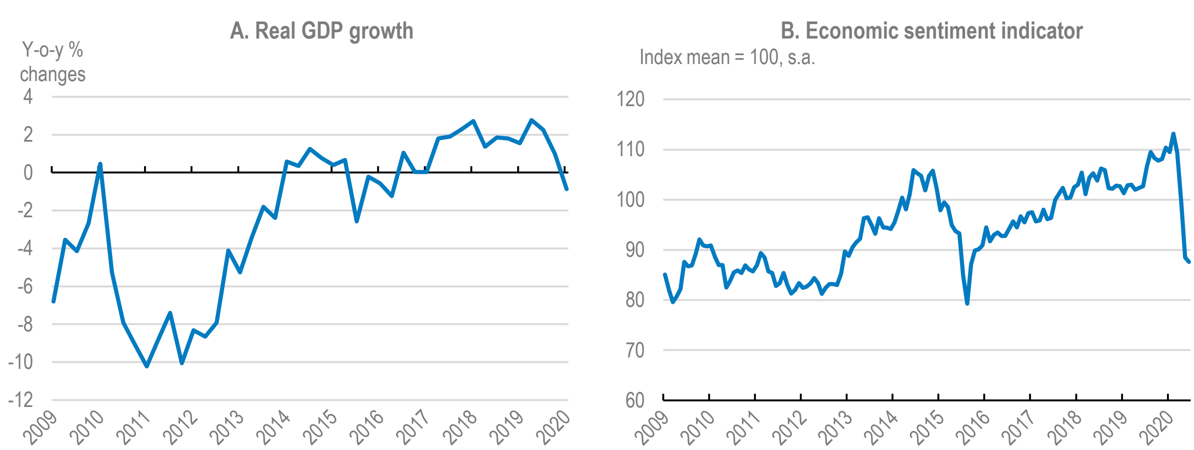
1 Key Policy Insights

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.

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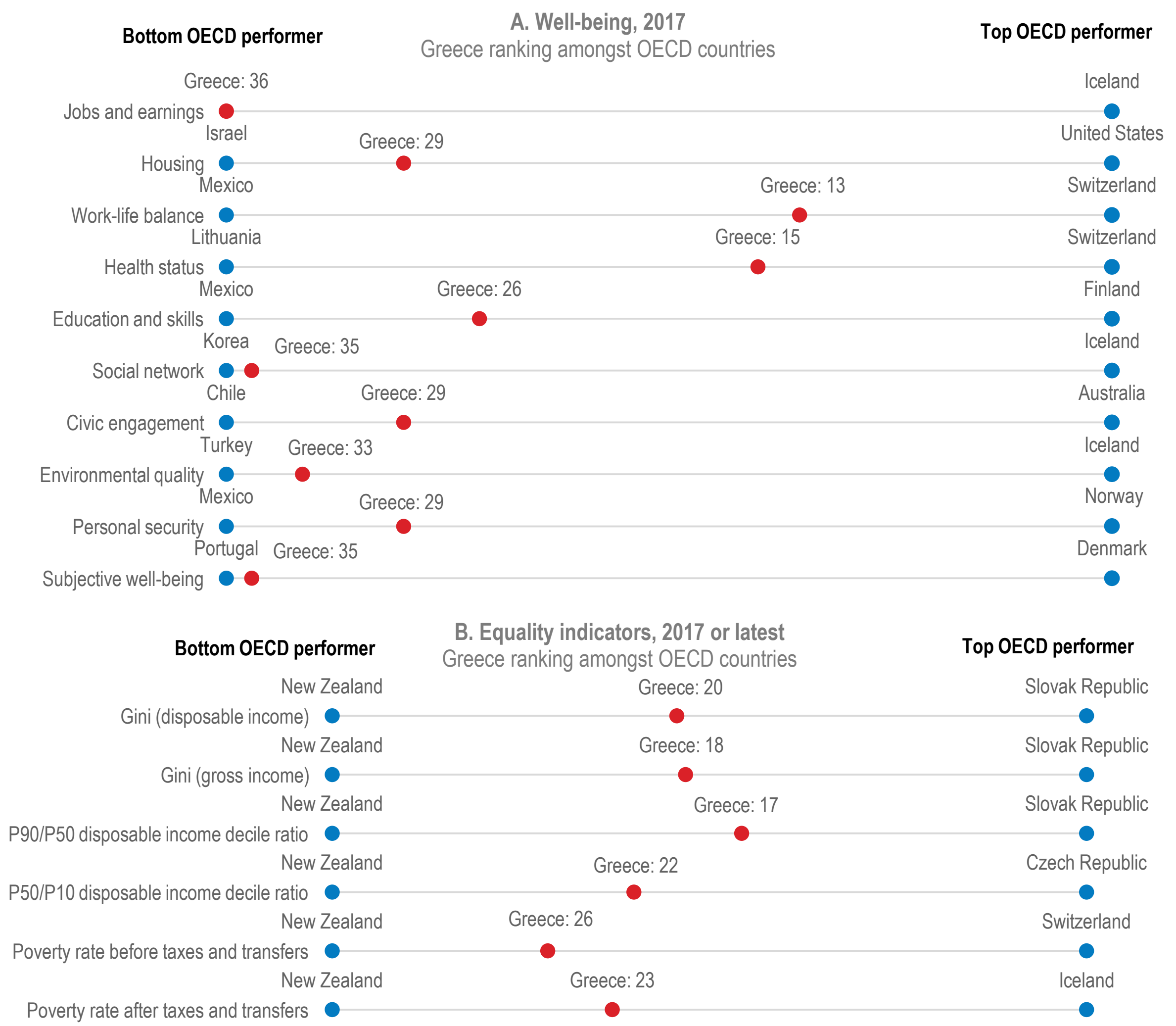
The COVID-19 shock comes as Greece continues to heal the economic and social scars left by the global financial crisis, and adds to its long-standing challenges. Just prior to the COVID-19 shock, real GDP was more than 20% below its pre-crisis peak. OECD models suggest long-term growth prospects remain 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.

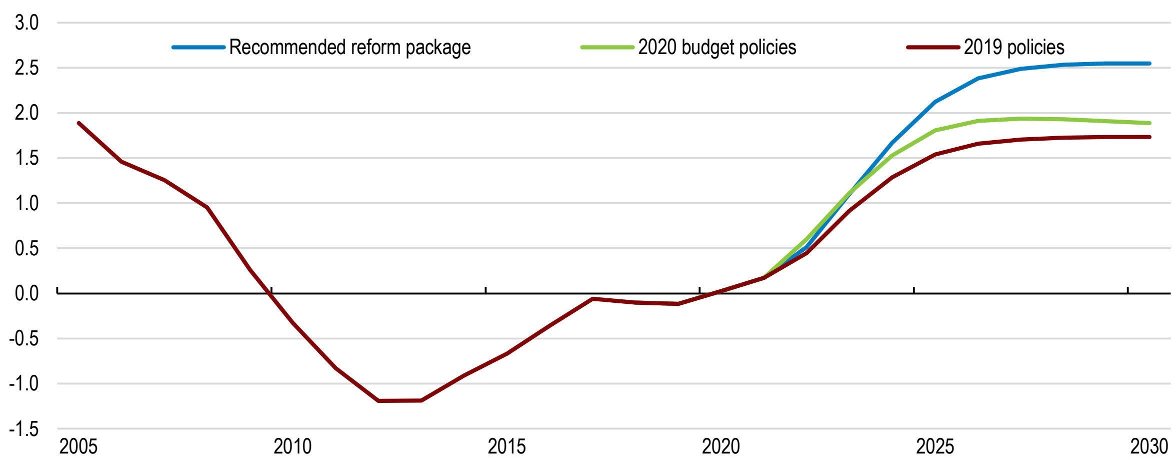
The COVID-19 crisis renews the urgency for Greece to undertake ambitious structural reforms to resume and reinvigorate the country's recovery, raise economic growth and well-being, and ensure current and future generations enjoy a high-quality environment. The great financial crisis jolted Greece's politics 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.

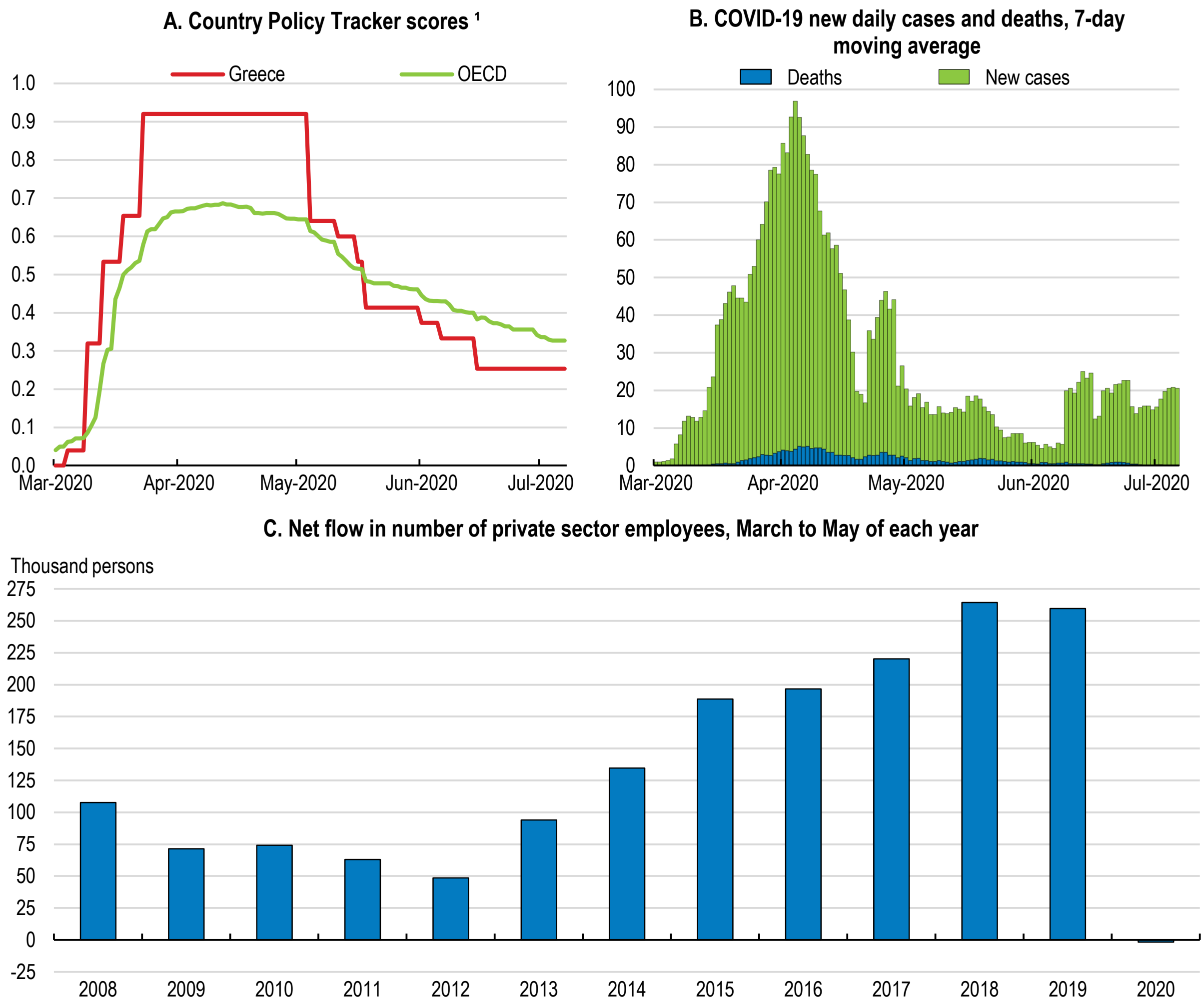
Strong broad-based export growth and, to a lesser extent, domestic demand drove the recovery. The tourism sector was a main contributor to export growth while improved price competitiveness was supporting goods exports. Rising business and consumer confidence (Figure 1.6), improving financial conditions 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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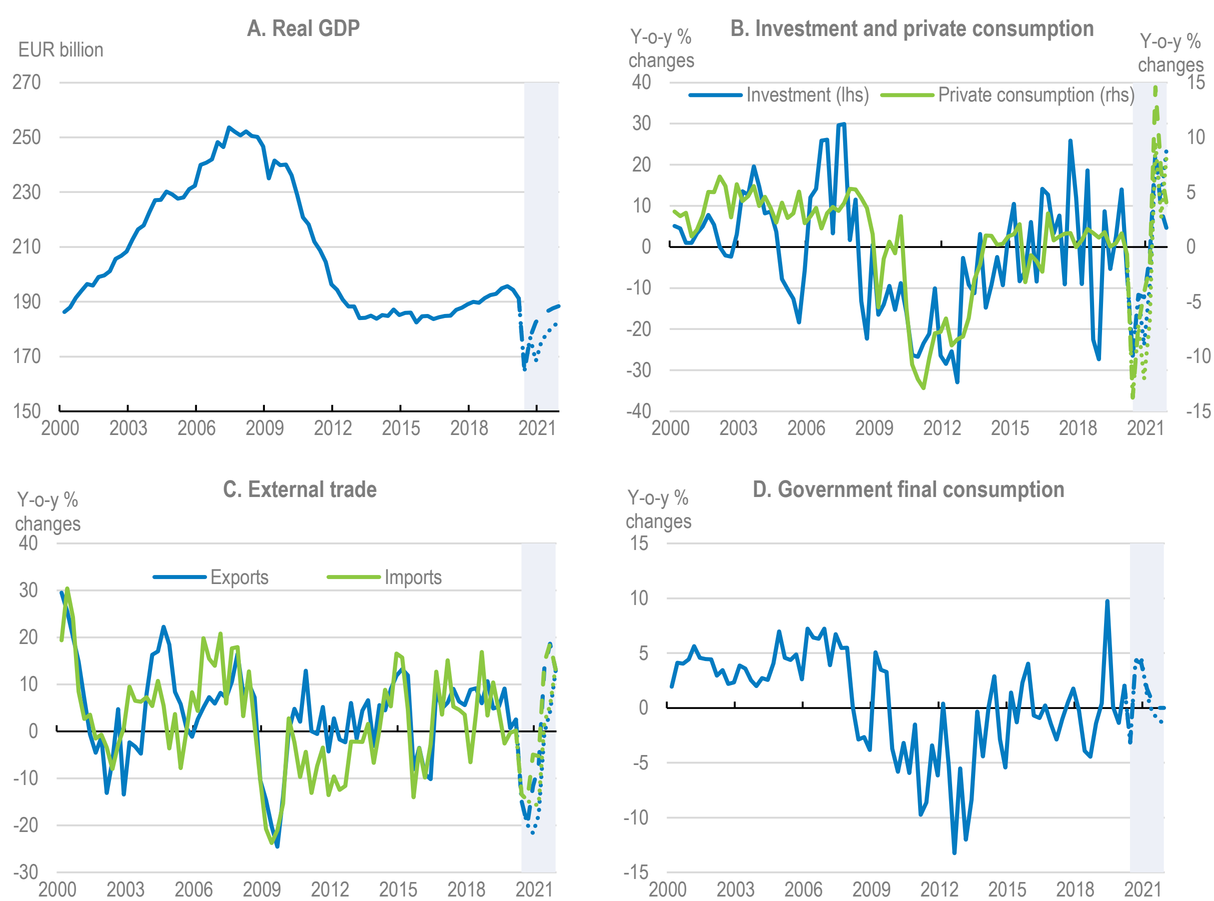
The drop in international trade following the COVID-19 shock has interrupted Greece’s growing participation in global trade and associated structural transformation initiated by the broad reforms of the past decade. Between 2009 and 2019, real exports of goods and services rose by more than 43% (to nearly 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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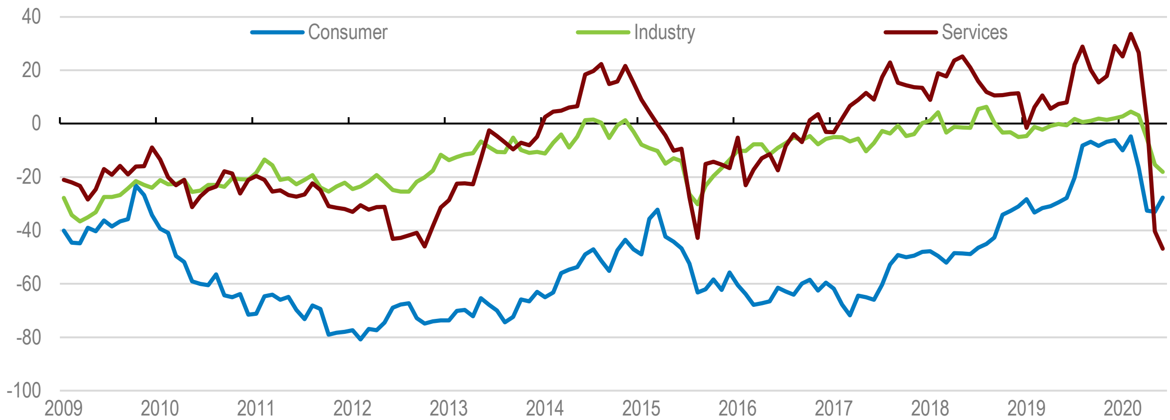
For Greece to resume a path of sustained recovery following the COVID-19 shock, boosting investment and innovation is key to raising product quality and non-price competitiveness, thus lifting export performance and wages at the same time (Bournakis, 2013[2]; Khandelwal, 2010[3]; Hummels and Klenow, 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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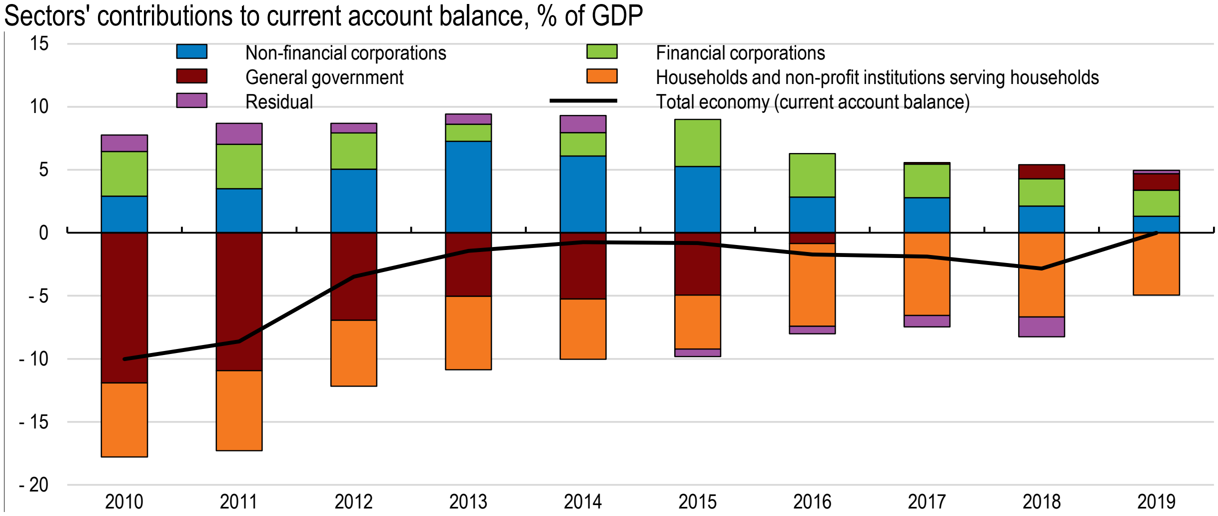
Figure 1.7. The current account deficit has narrowed, helped by the government budget shifting to surplus

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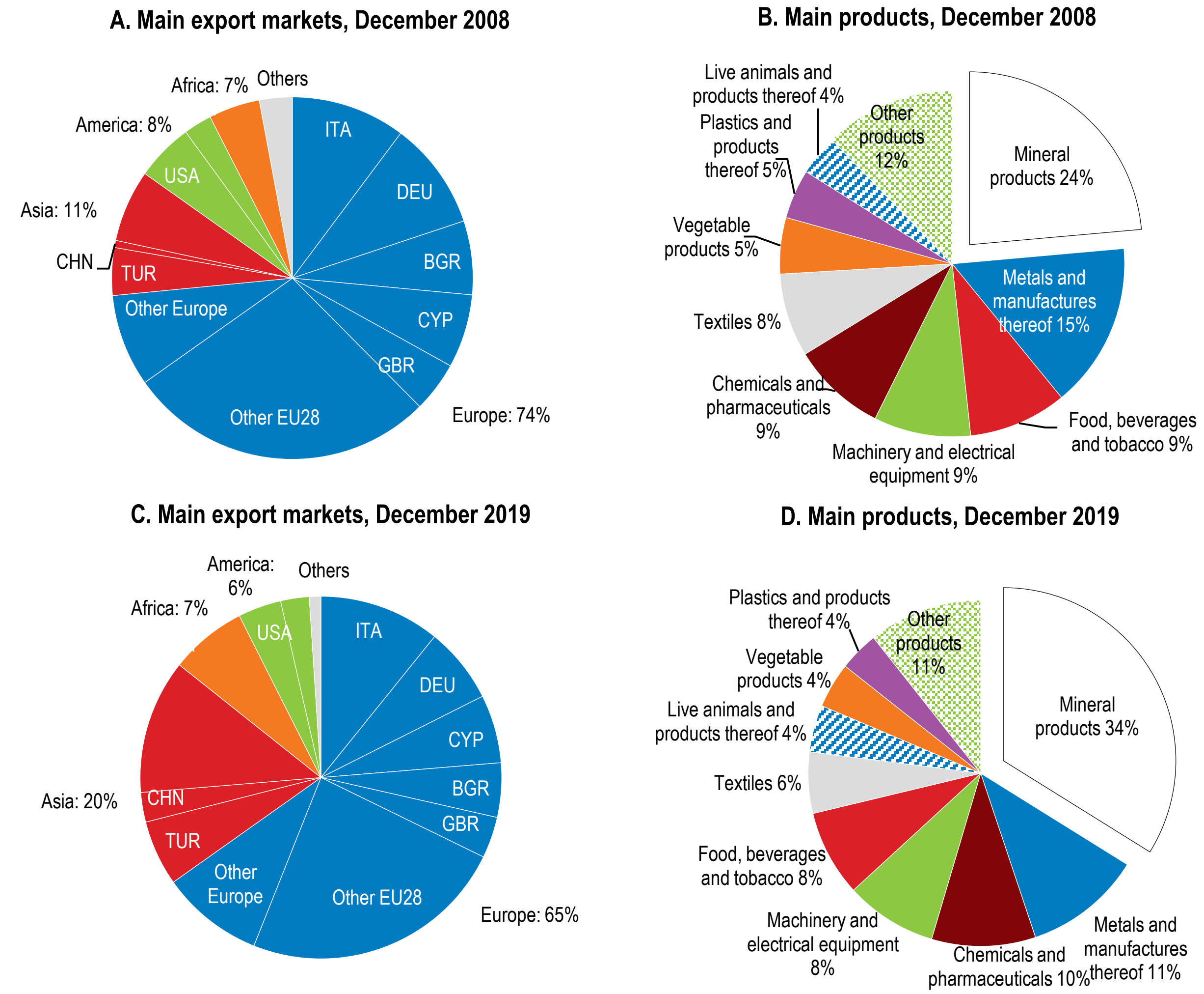
Figure 1.8. Around 65% of goods exports are bound for other European countries

12-month cumulated export flows (values)



Source: Eurostat, Comext Database.

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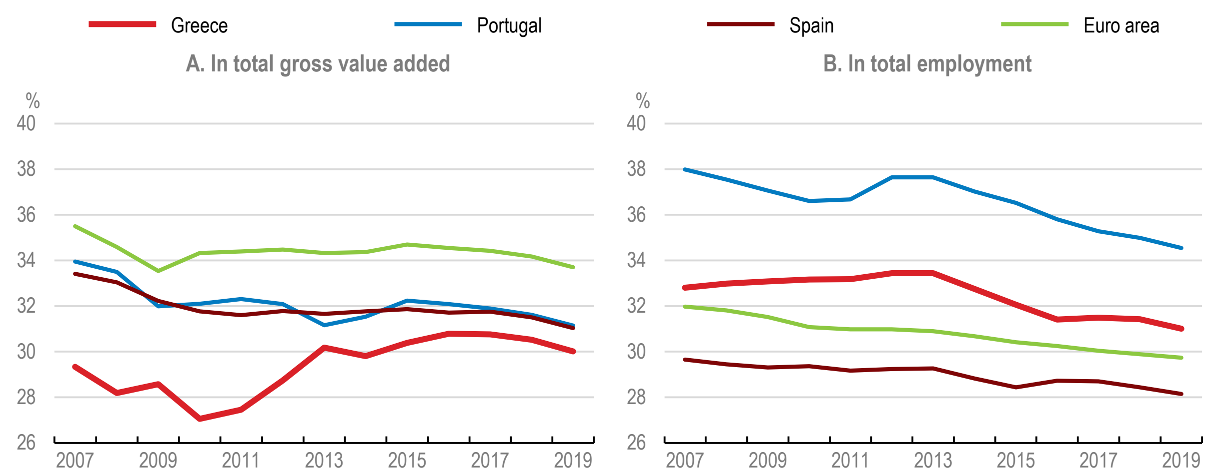
Production but not employment is gradually shifting towards tradeable sectors. Since 2010, the share of gross value added of tradable sectors has narrowed the gap with peer countries, increasing to 30% (Figure 1.9, Panel A). Classifying accommodation and food services as part of the tradable sector (as 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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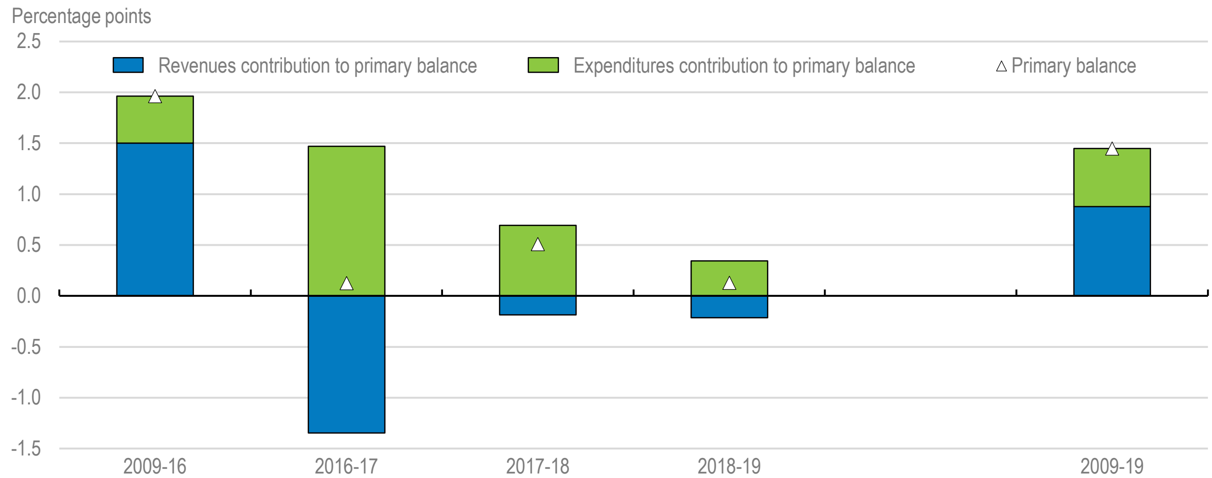
Fiscal policy credibility has improved, lowering government bond yields

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.

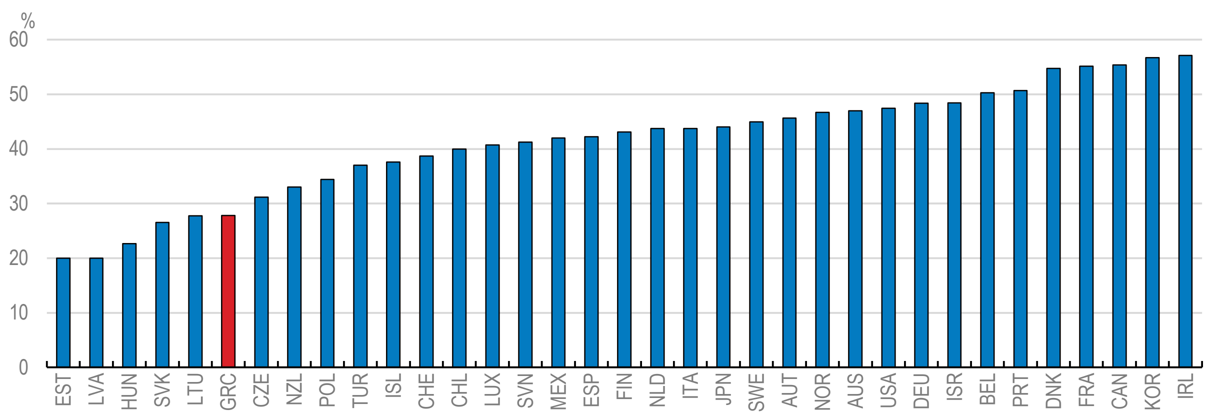
Source: Ministry of Finance

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

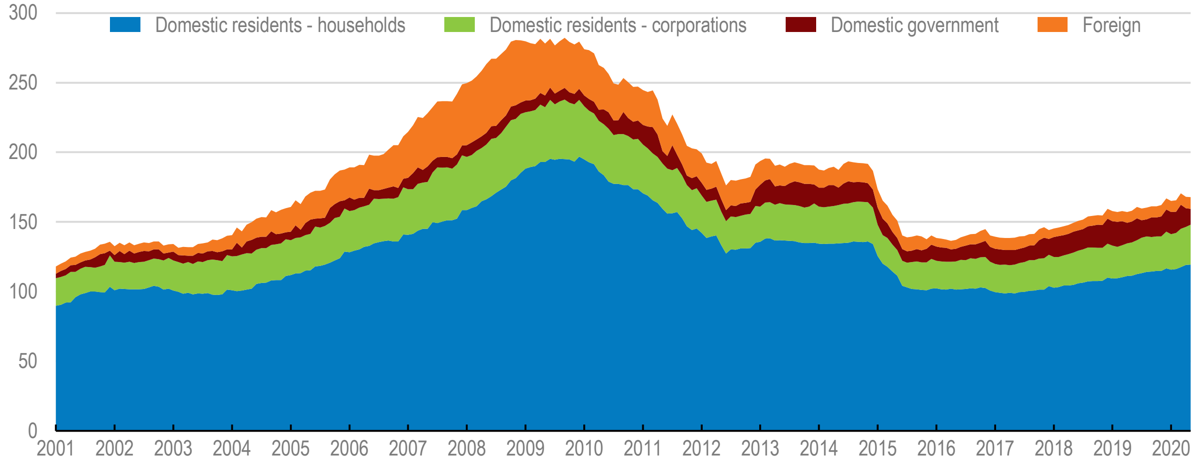
B. Single-hit scenario

	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[1,2]	-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

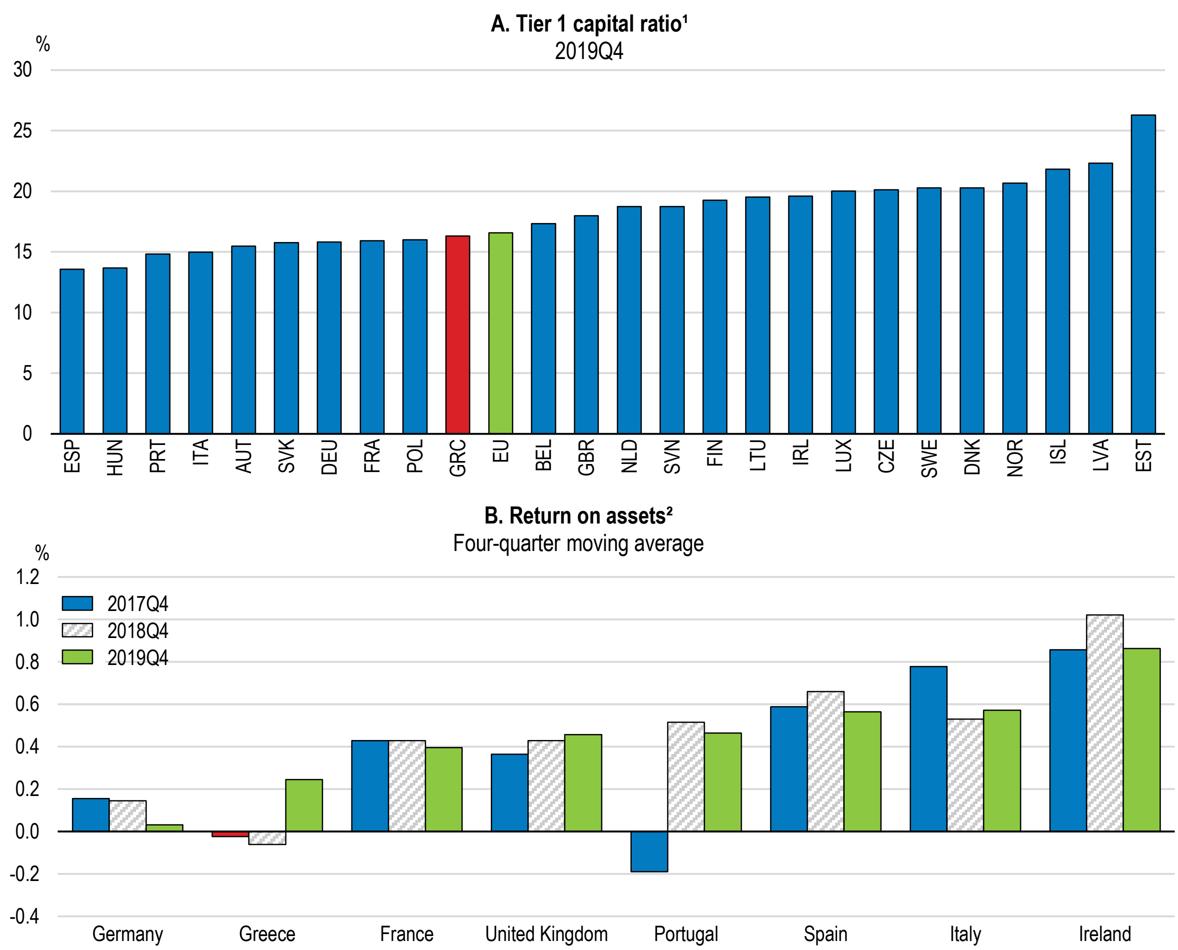
EUR billions



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



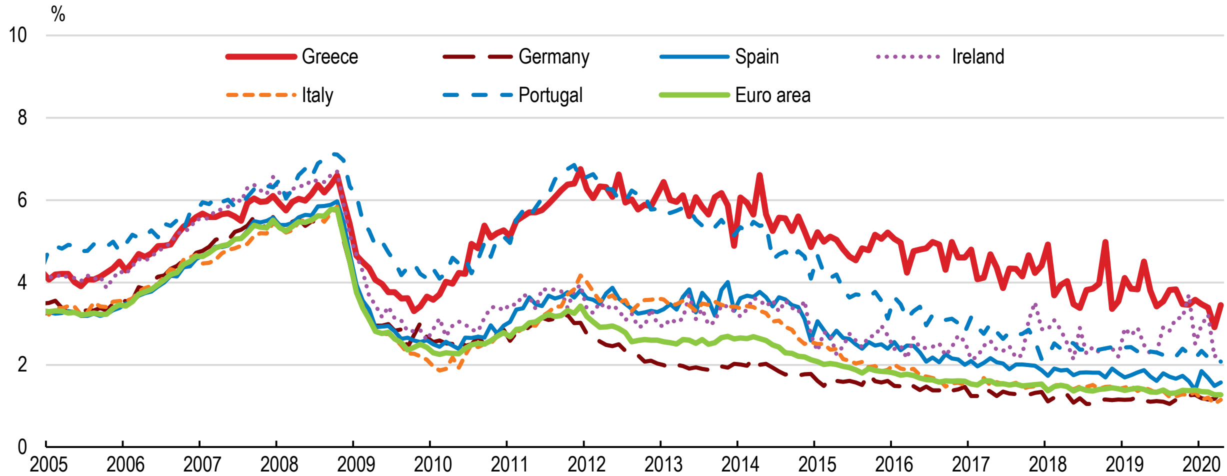
1. % of the total risk exposure

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.

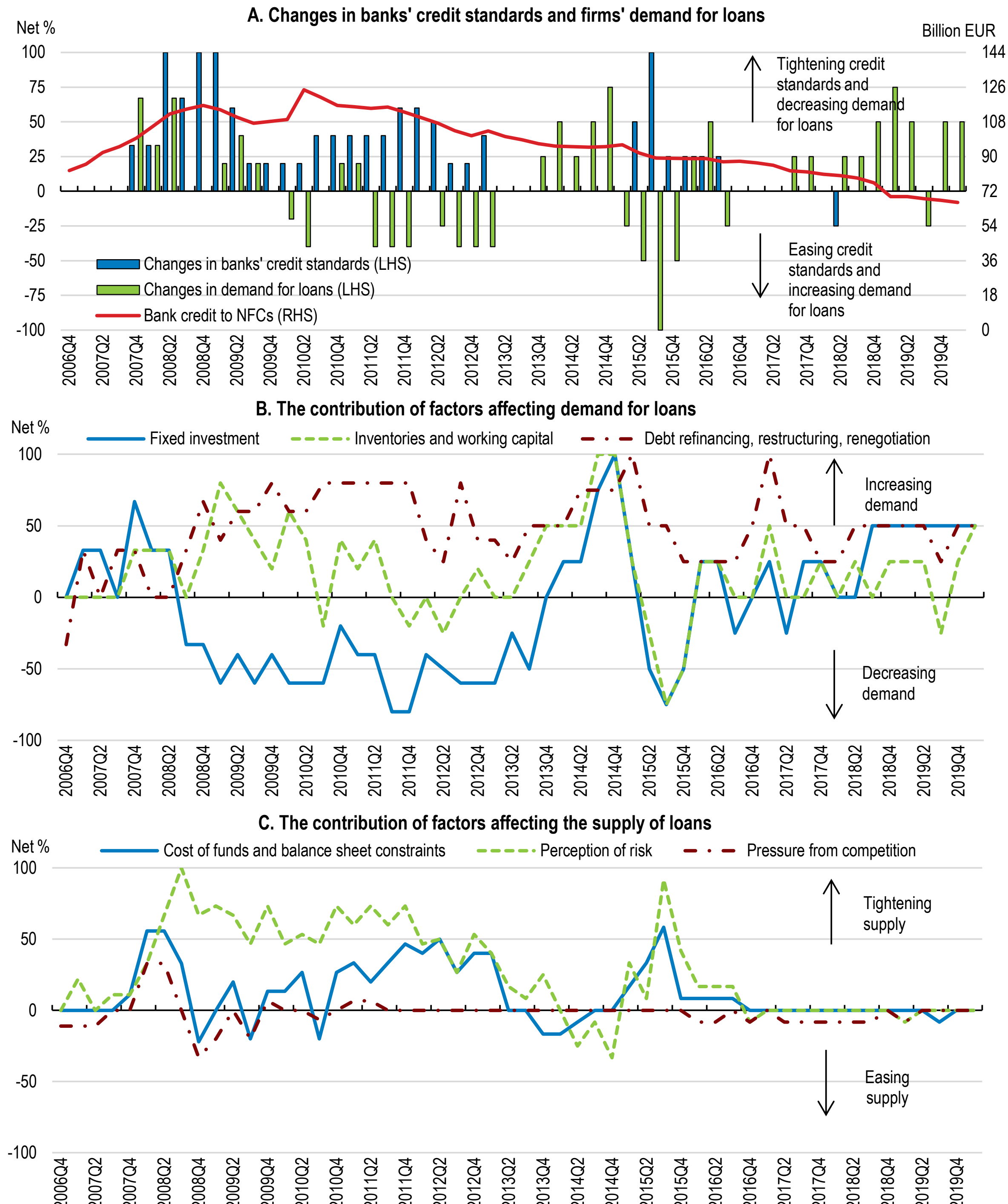
StatLink https://doi.org/10.1787/888934154148

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.

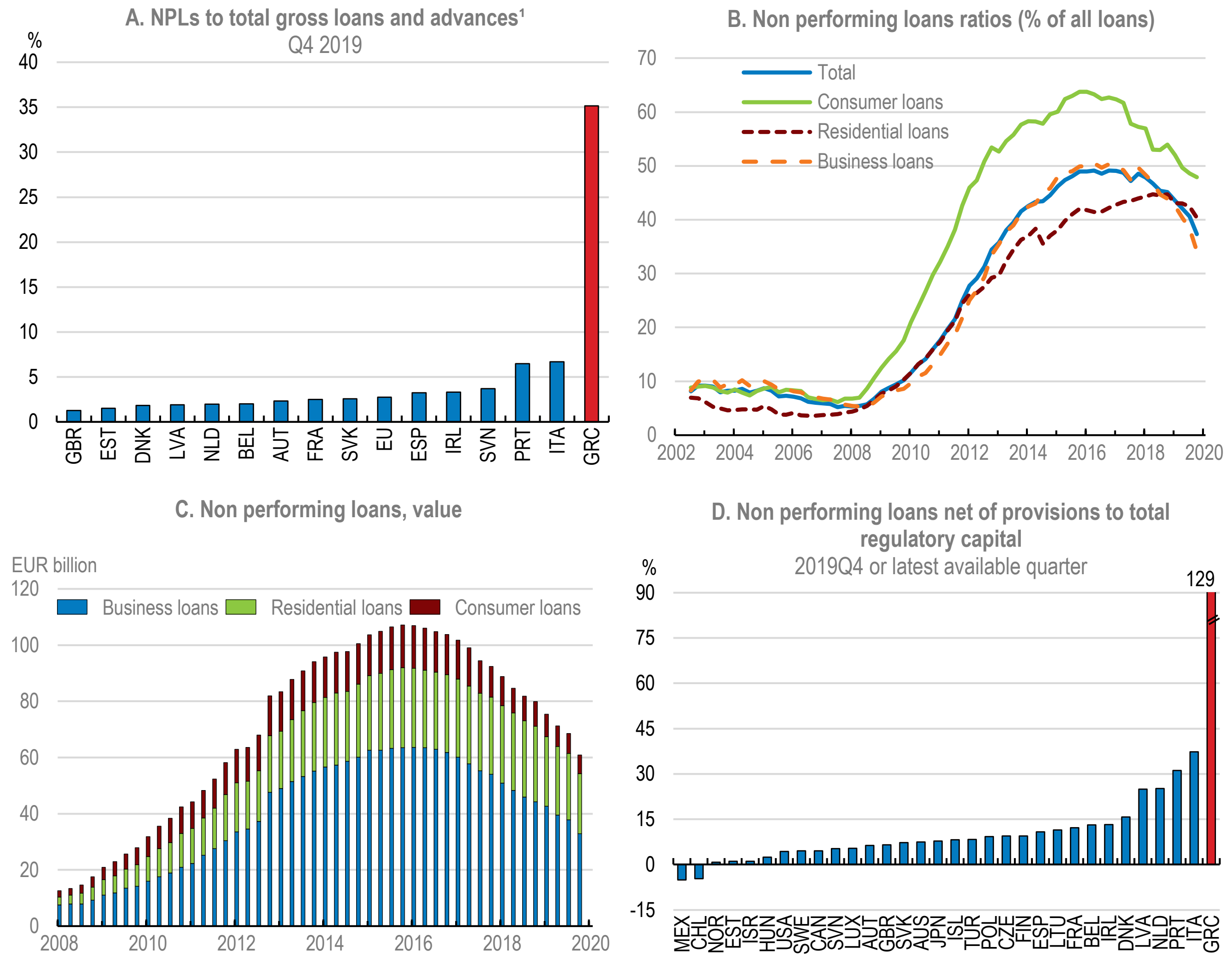
Figure 1.15. The demand for loans has increased but credit standards have yet to ease



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*.

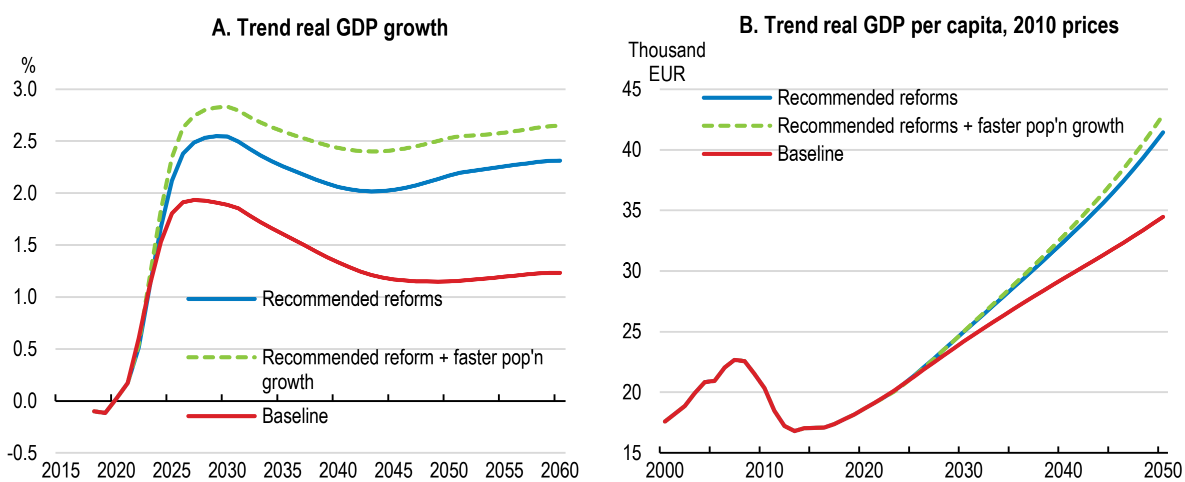
Improving the investment climate by raising the performance of the public sector and of the justice system would have a large positive impact on growth by lifting productivity and investment. This will be essential for resuming Greece's recovery following the COVID-19 shock. Ensuring that appointments 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.

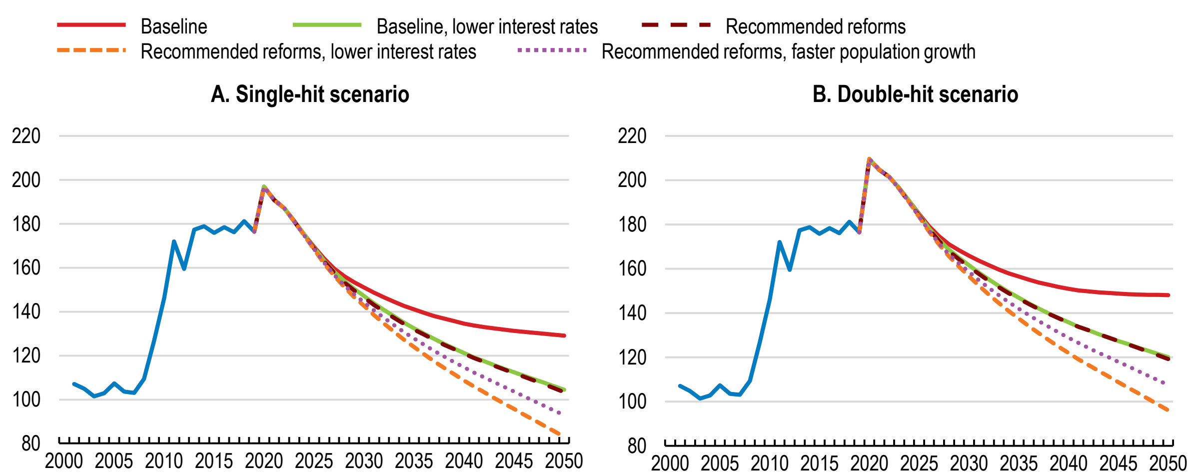
By lifting growth, with limited overall impact on net expenditure (Box 1.5) the proposed reform package would contribute to maintaining high primary surpluses for many years and safeguarding fiscal credibility.

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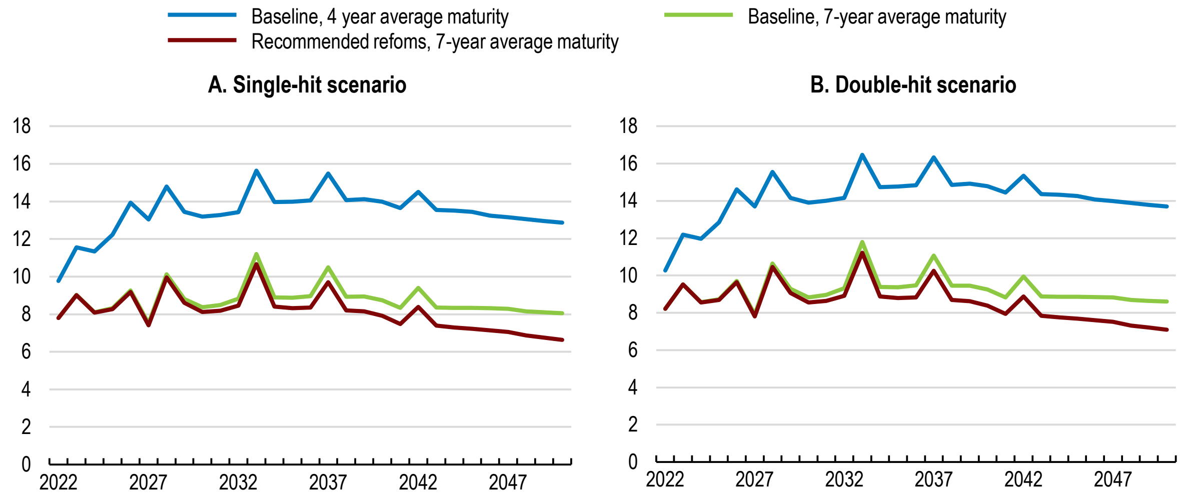
Figure 1.19. Gross financing needs are projected to remain modest under most scenarios

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]).

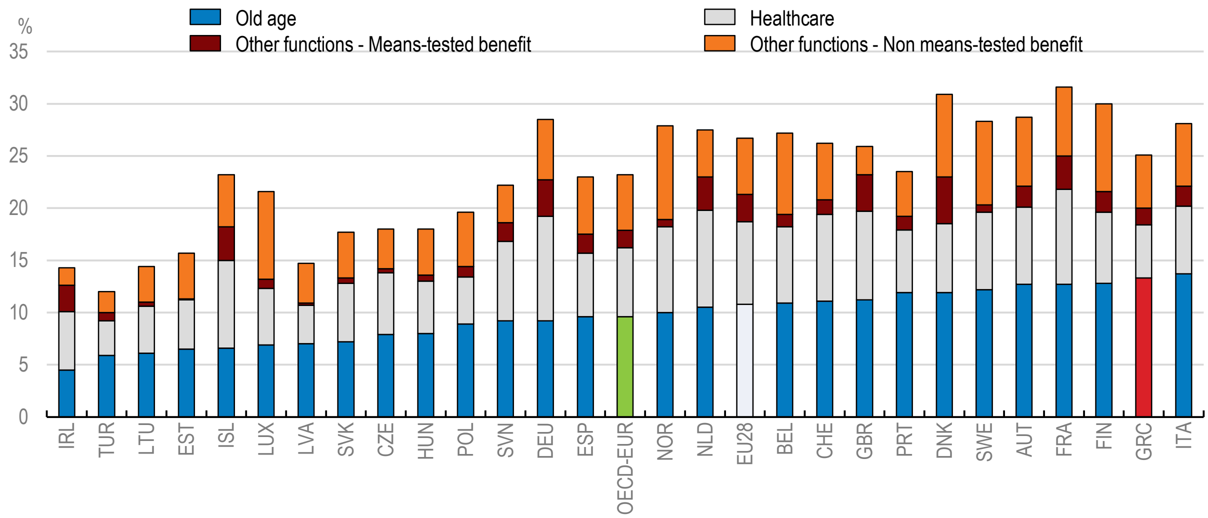
Following these reforms, Greece's pension spending remains among the highest across the OECD (Figure 1.20), but will decline from 17.3% of GDP in 2016 to 14.7% in 2020 and 13.2% in 2030 (Figure 1.21) (European Commission, 2018[30]; OECD, 2019[31]). During the reform period, severe material deprivation 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

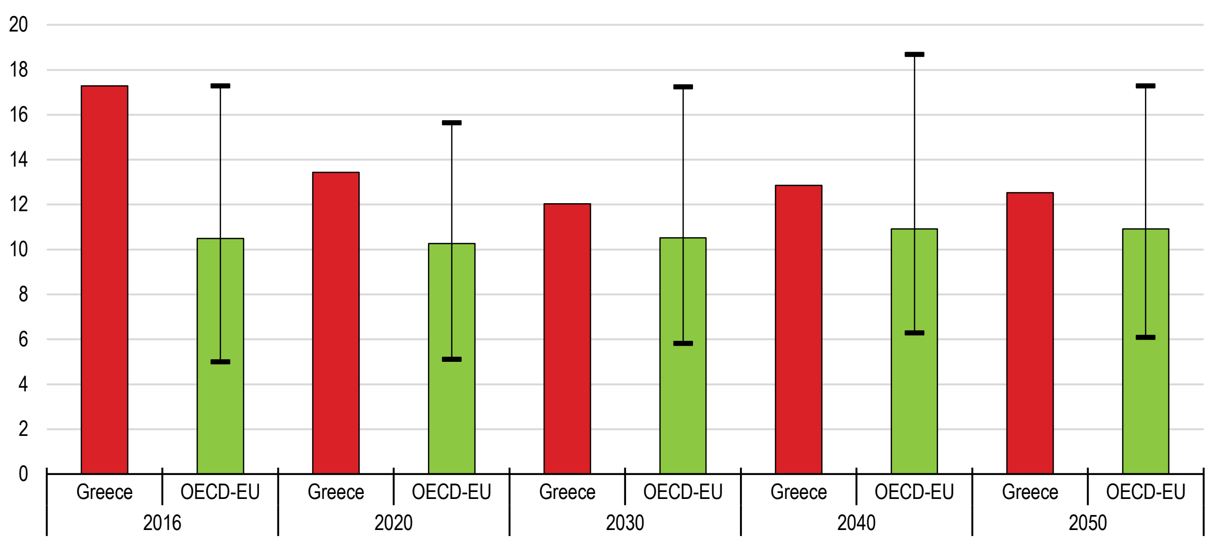


Note: OECD-EUR is the unweighted average of European OECD countries plus Turkey.
Source: Eurostat

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.

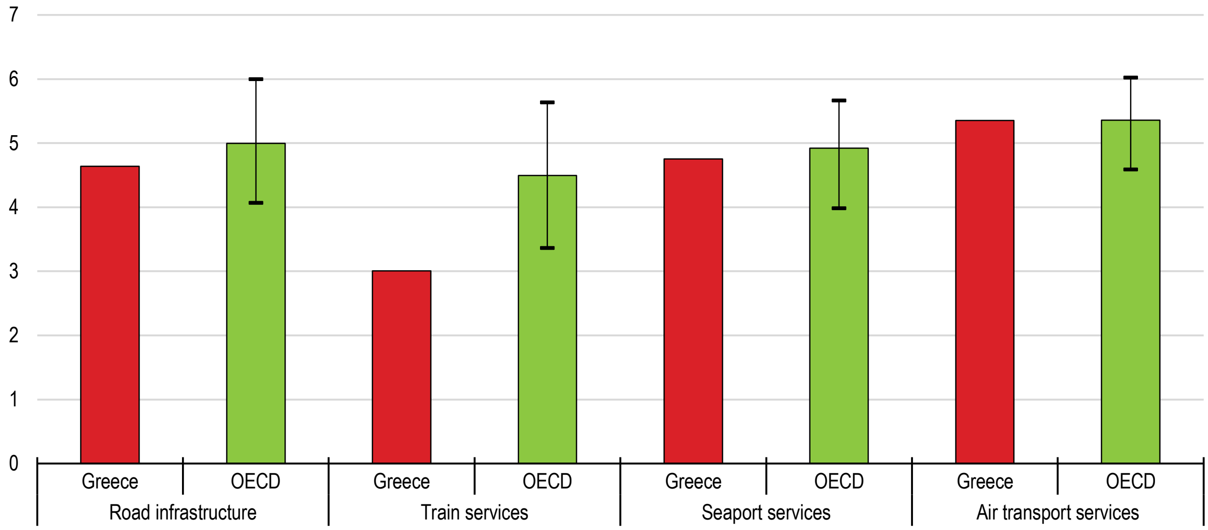
Improving the quality of public spending

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

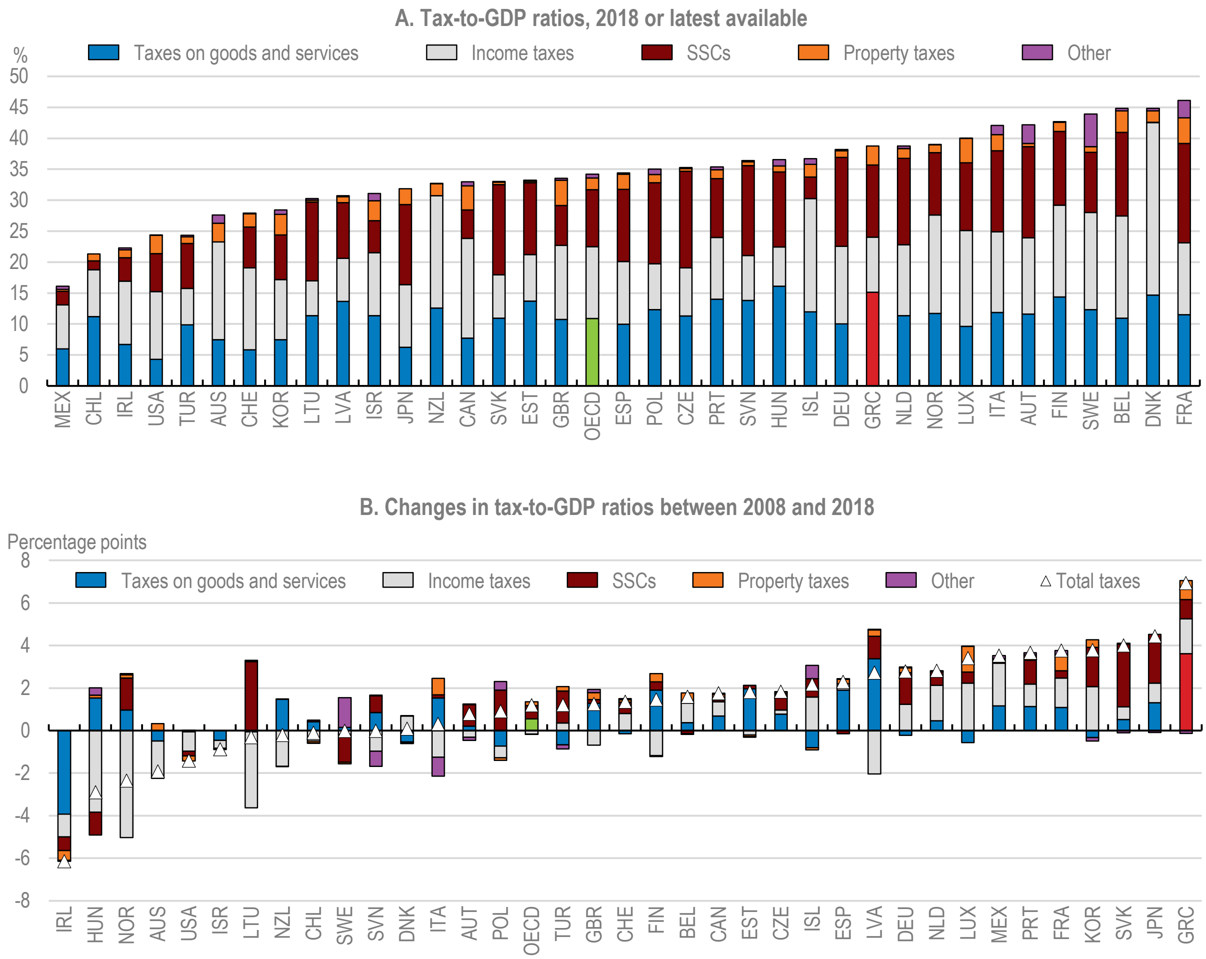
Past recommendations	Actions taken
Maintain the reform momentum focusing on implementation, enhancing public administration efficiency and continuing to fight corruption.	Reform implementation has progressed, though at an uneven pace. An inter-ministerial manual was published in June 2018, and the General 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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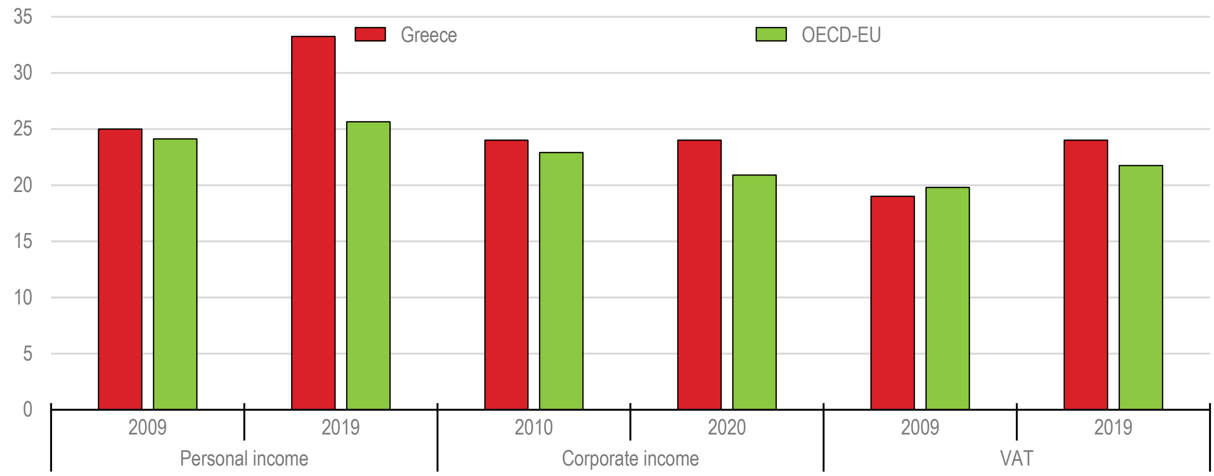
Greece's tax system is characterised by high statutory tax rates – especially for personal income taxes, social insurance contributions (discussed in Chapter 2), and for indirect taxes – a narrow base and patchy compliance (Figure 1.24). For instance, the tax-free threshold of the personal income tax (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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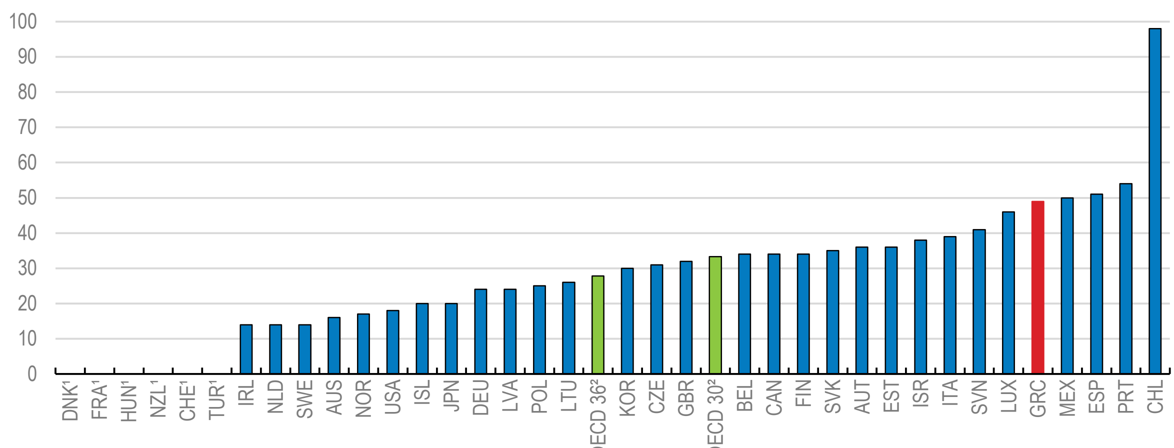
Figure 1.25. Greece's tax-free threshold is high

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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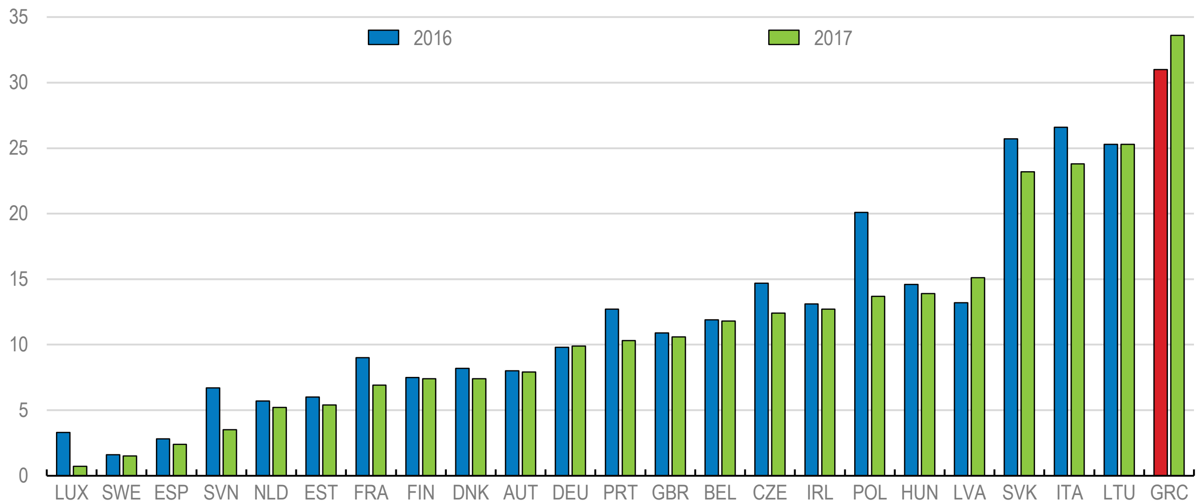
Figure 1.26. The VAT gap remains high

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.

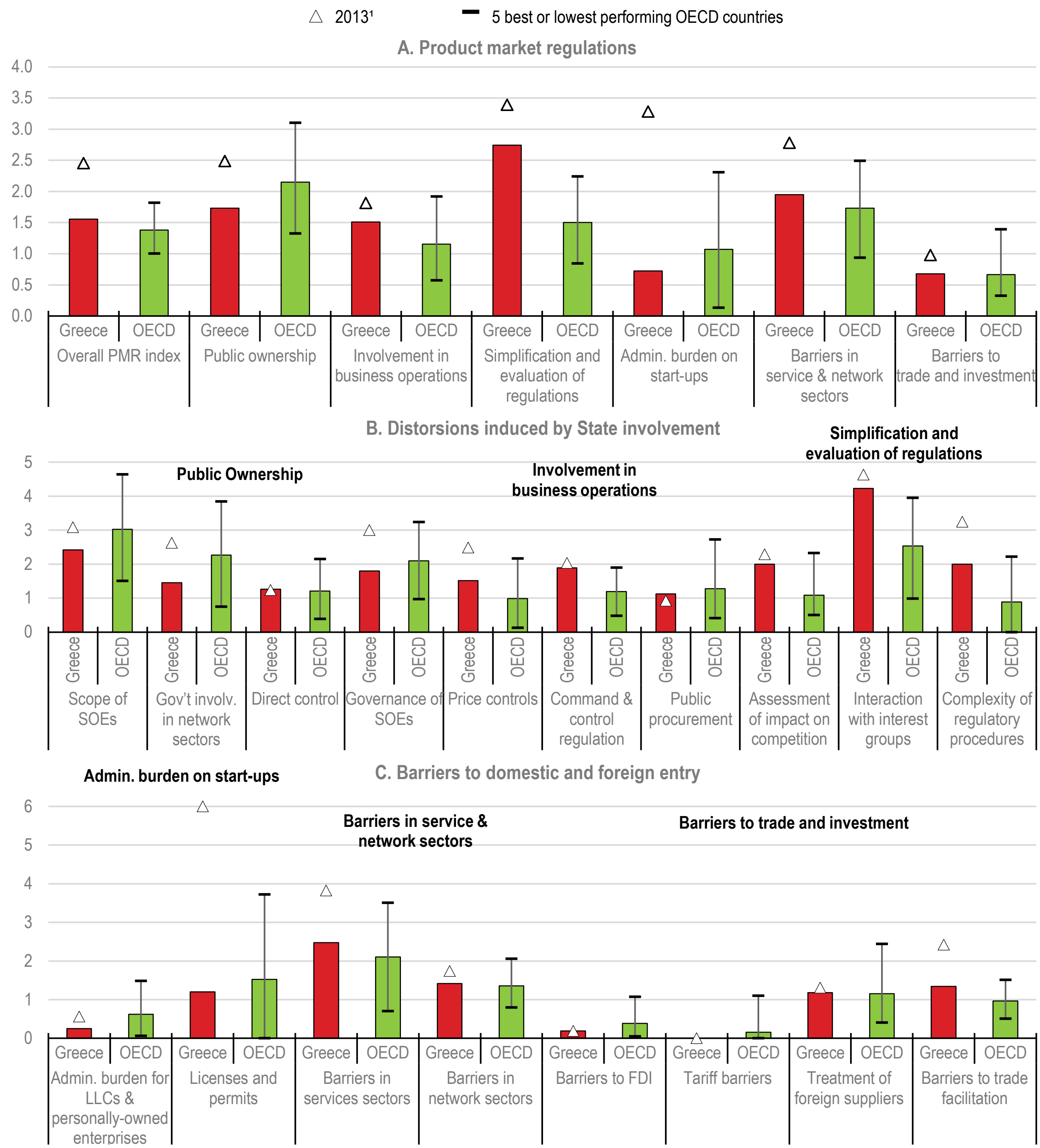
The 2018 OECD Product Market Regulation (PMR) indicators show substantial improvement in Greece's product-market regulatory environment since 2013 (Figure 1.27). Improvement has been particularly notable in reducing licence and permit burdens, easing the administrative burdens for start-ups, improving 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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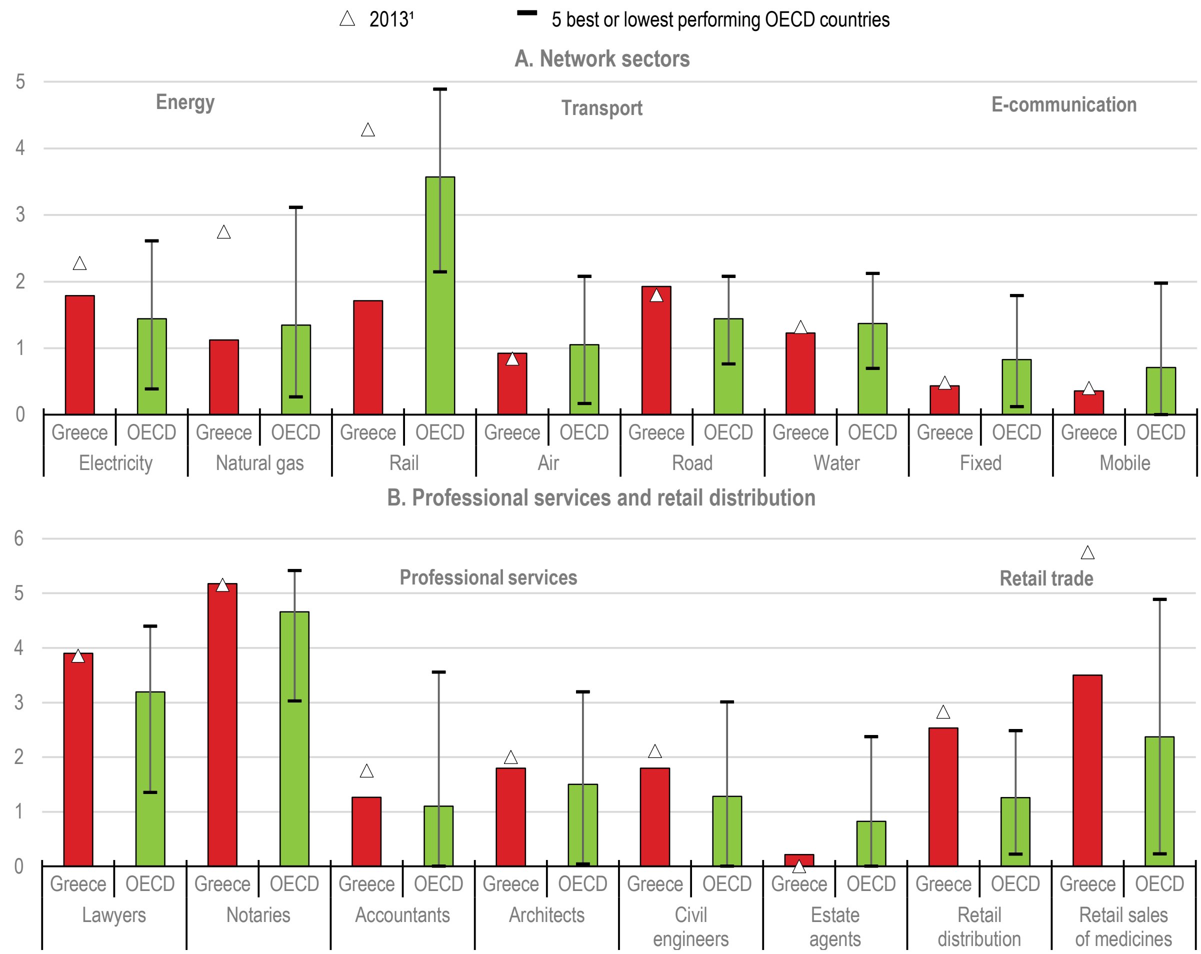
Figure 1.28. There is scope to lower restrictions to product-market competition in many sectors

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.

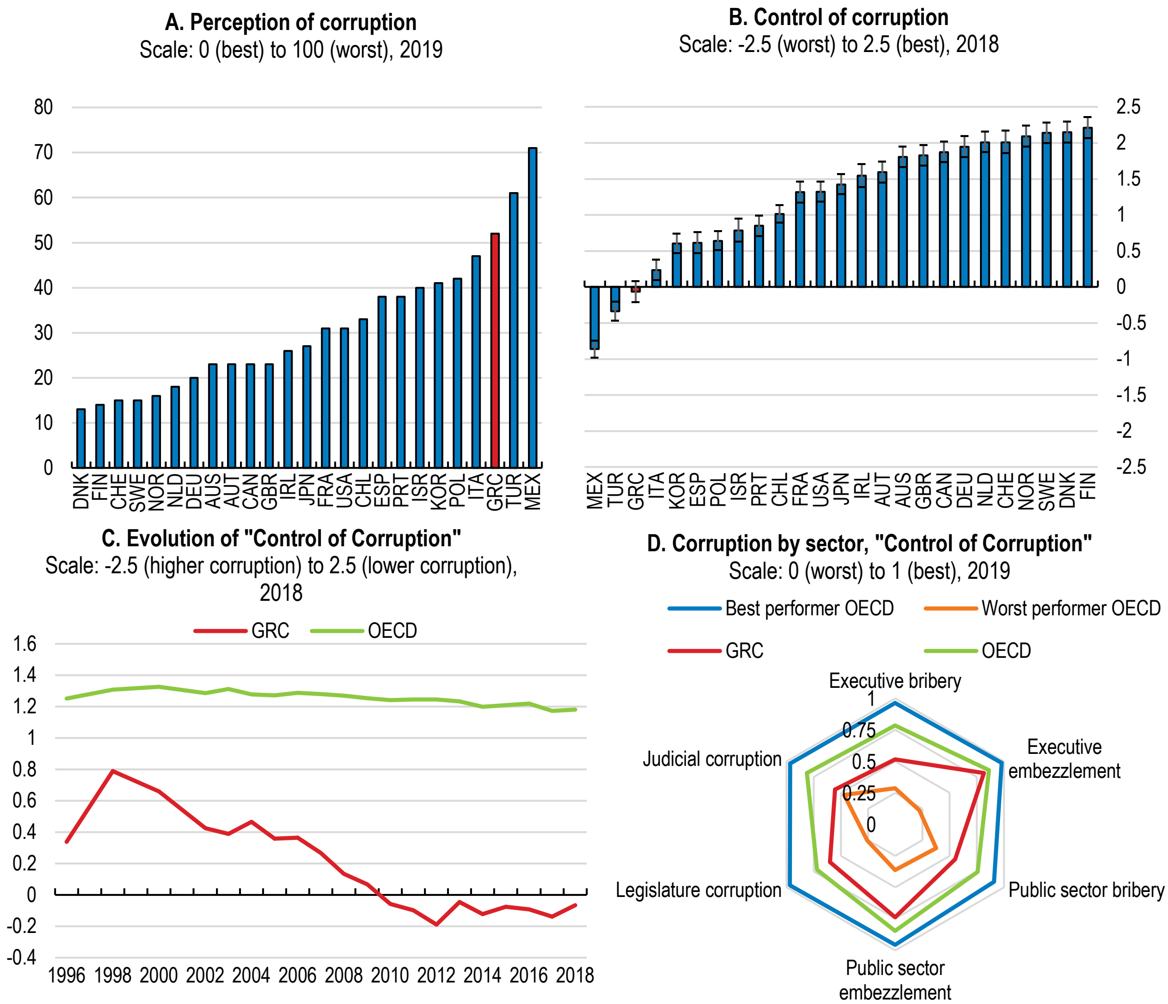
The newly established NTA currently builds on the existing technical support on anti-corruption that was provided by the OECD and the European Union from 2016 to 2018. The project aimed at increasing integrity and reducing corruption. It focused, among others, on high-risk policy areas such as health, 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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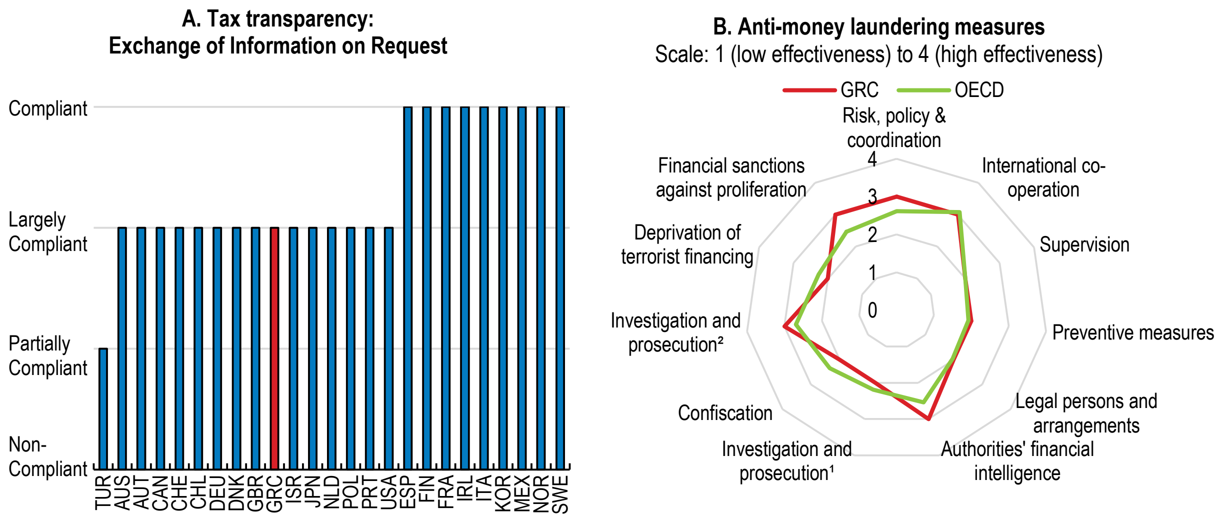
Figure 1.30. There is still scope to improve the framework to fight economic crimes



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 prosecution¹" refers to money laundering. "Investigation and prosecution²" 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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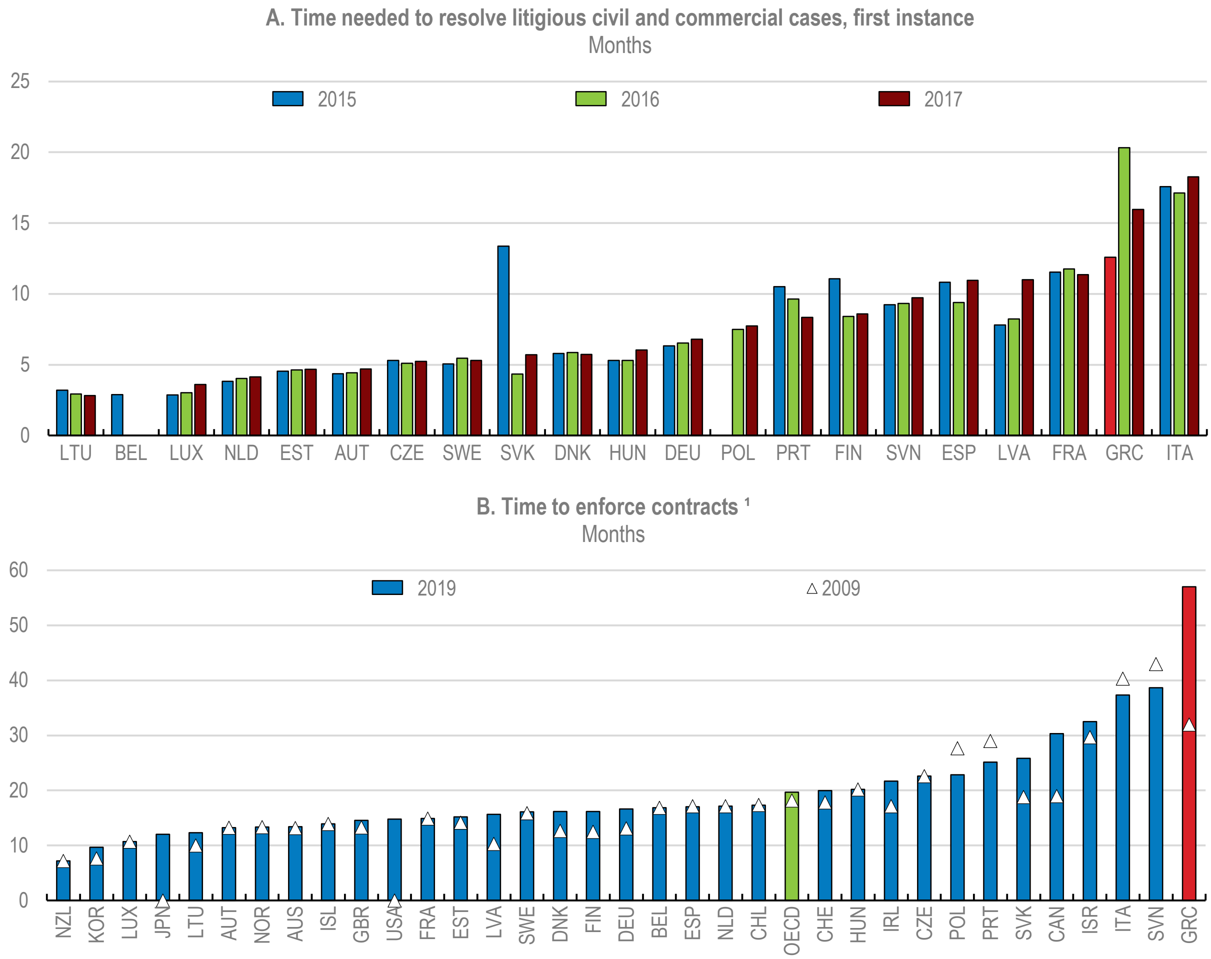
While trust in the judiciary is rising, it remains below the EU average. Eurobarometer data reveals that the share of people reporting to trust the Greek's justice system increased from 45% in 2014 to 49% 2018. The low trust in Greece's civil justice system is due to a confluence of factors, including 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

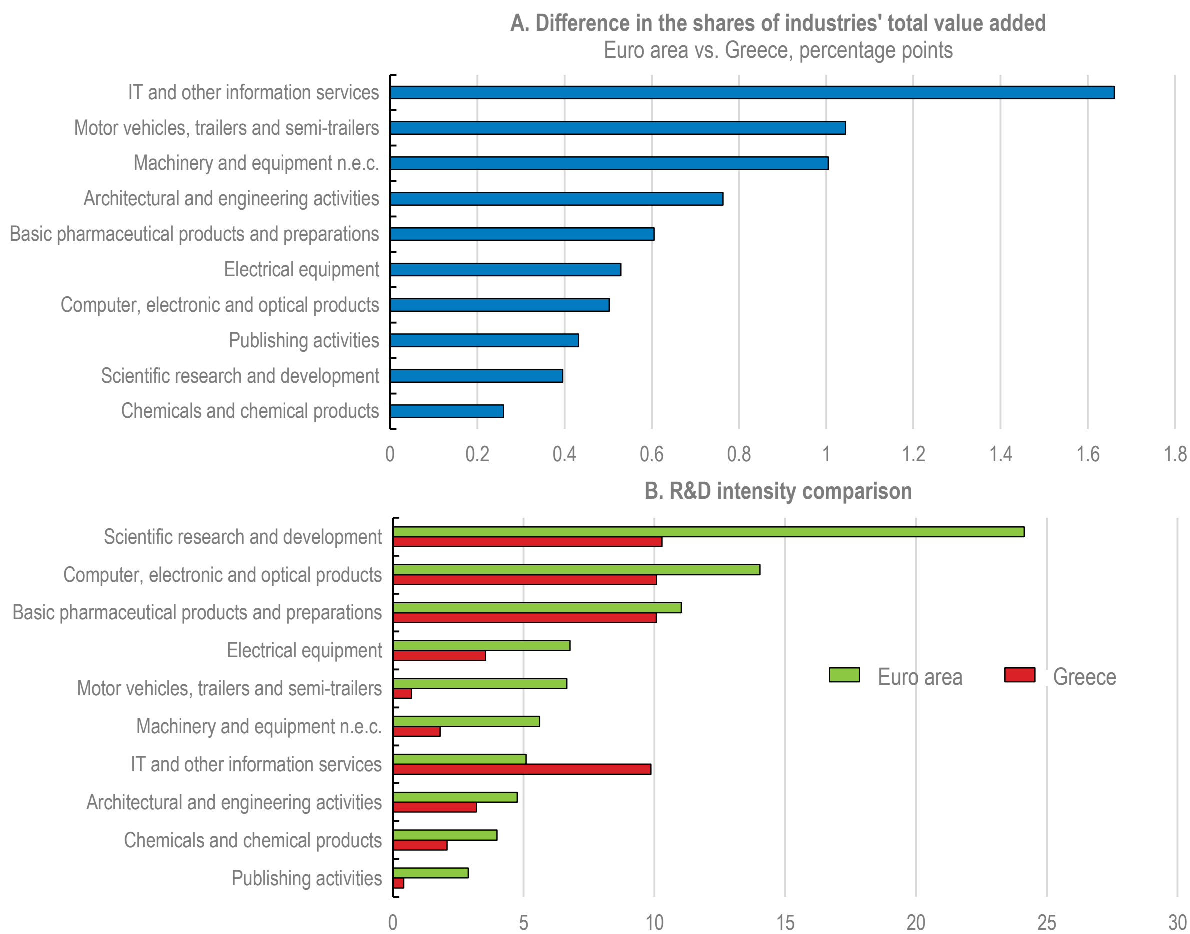
Efforts to increase awareness of and trust in alternative dispute resolution need to be pursued. Increasing the availability of online information about the judicial system and ADR would go in this direction, as Greece ranks low in this dimension compared with other EU countries (European Commission, 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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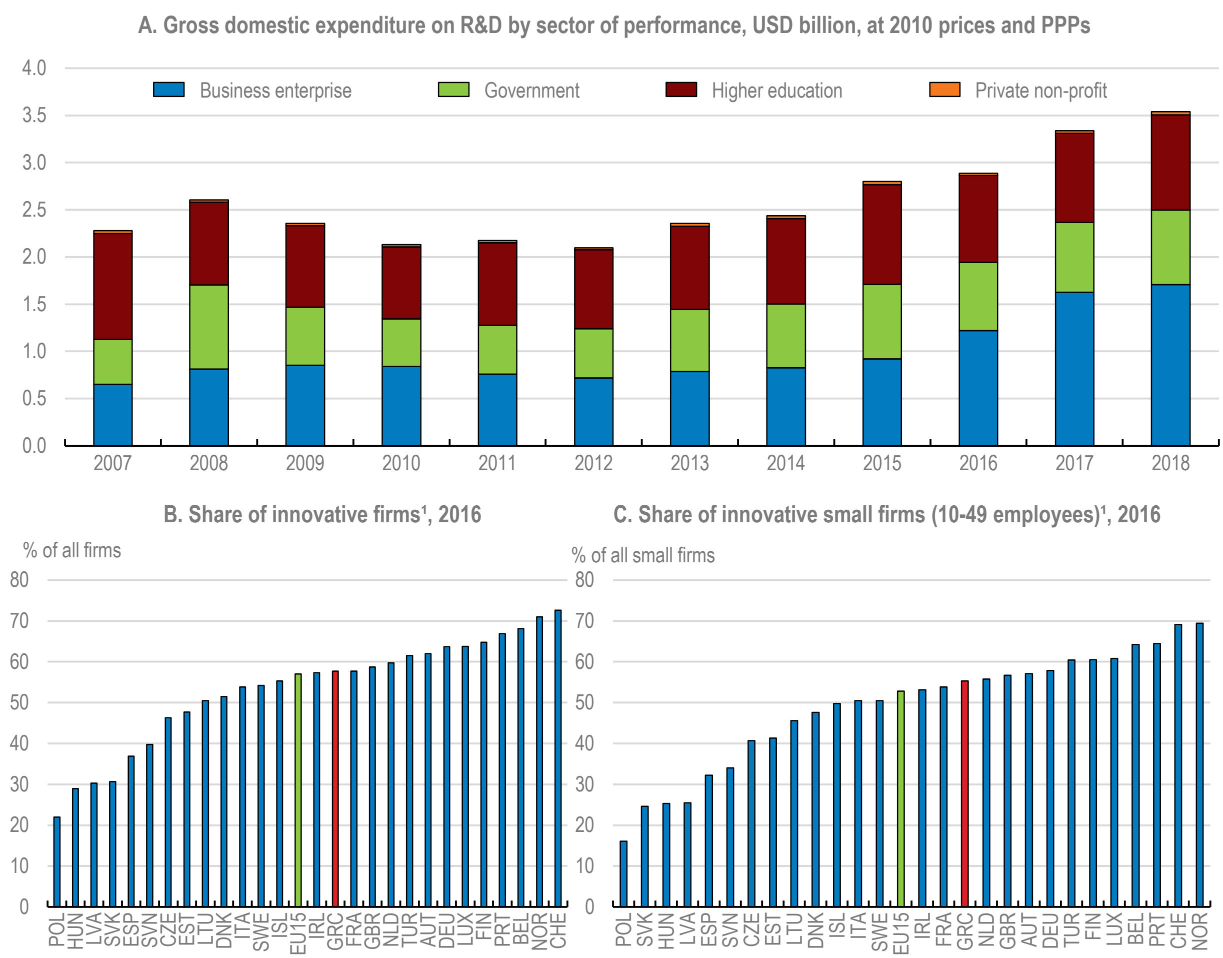
In 2018, gross expenditure on R&D was 1.18% of GDP, not far from the 2020 target of 1.2% of GDP set in the National Growth Strategy. Between 2012 and 2018, support from EU funds and policy changes have allowed gross expenditure on R&D to increase by more than 50% (Figure 1.33, Panel A), Business R&D

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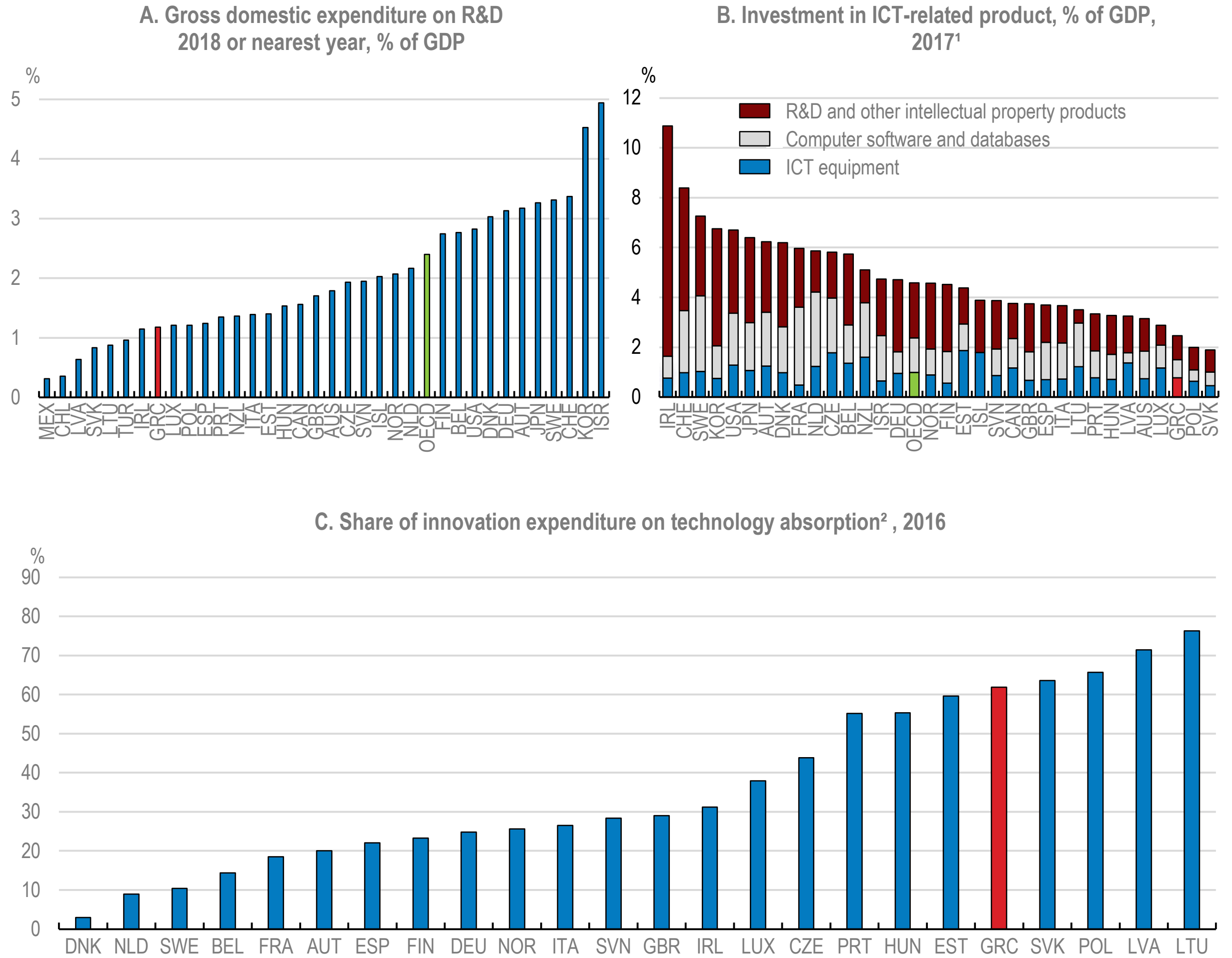
Figure 1.34. Spending for innovation is low and concentrated mostly on existing technology



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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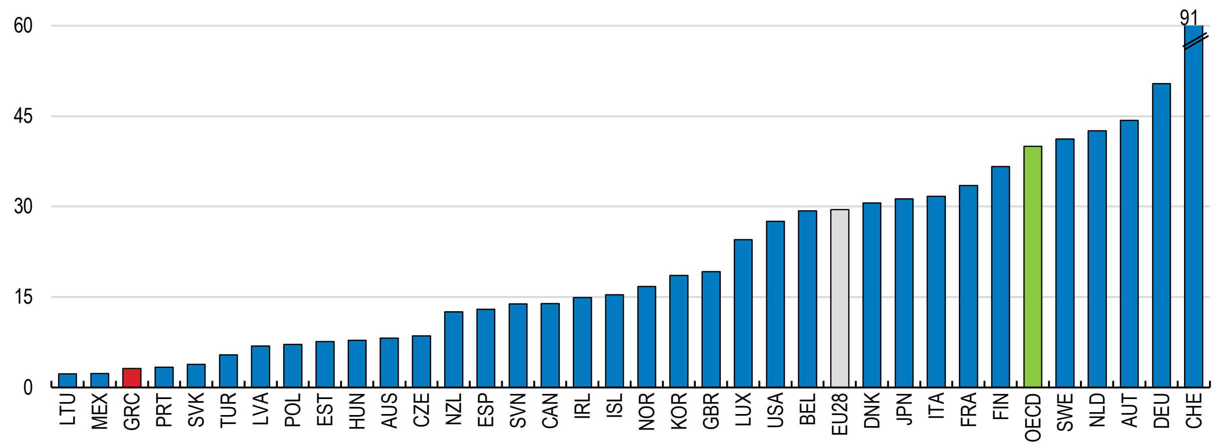
Streamlining the complex institutional framework of Greece's research and innovation policies will contribute to boosting R&D. The National Strategic Plan for Research and Development 2014-2020 and the National Research and Innovation Strategy for Smart Specialization 2014-2020 recognise the fragmentation 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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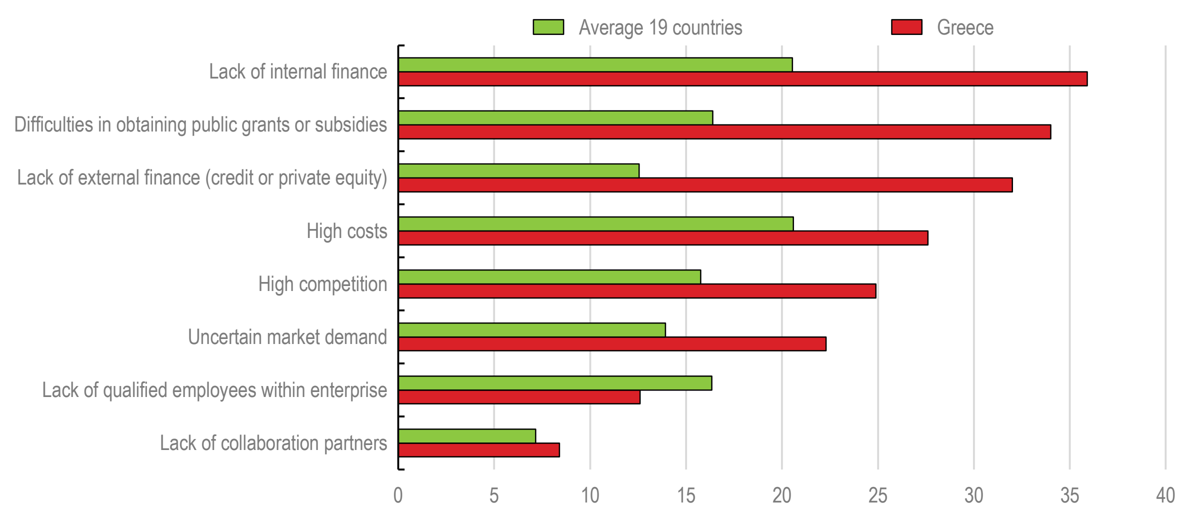
Figure 1.36. Accessing finance is the chief barrier preventing businesses' innovative activities in Greece

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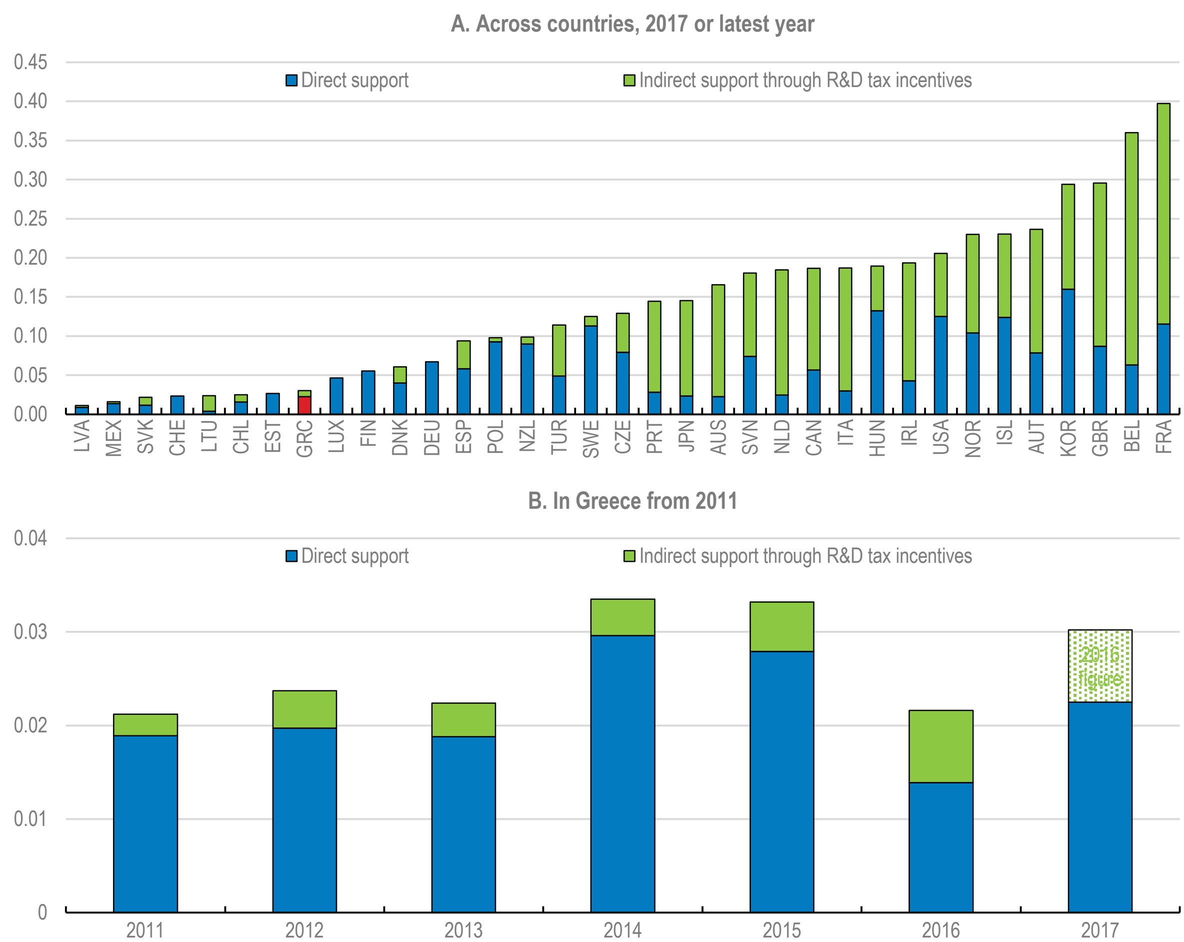
Ensuring support measures for business R&D are effective and easy to access

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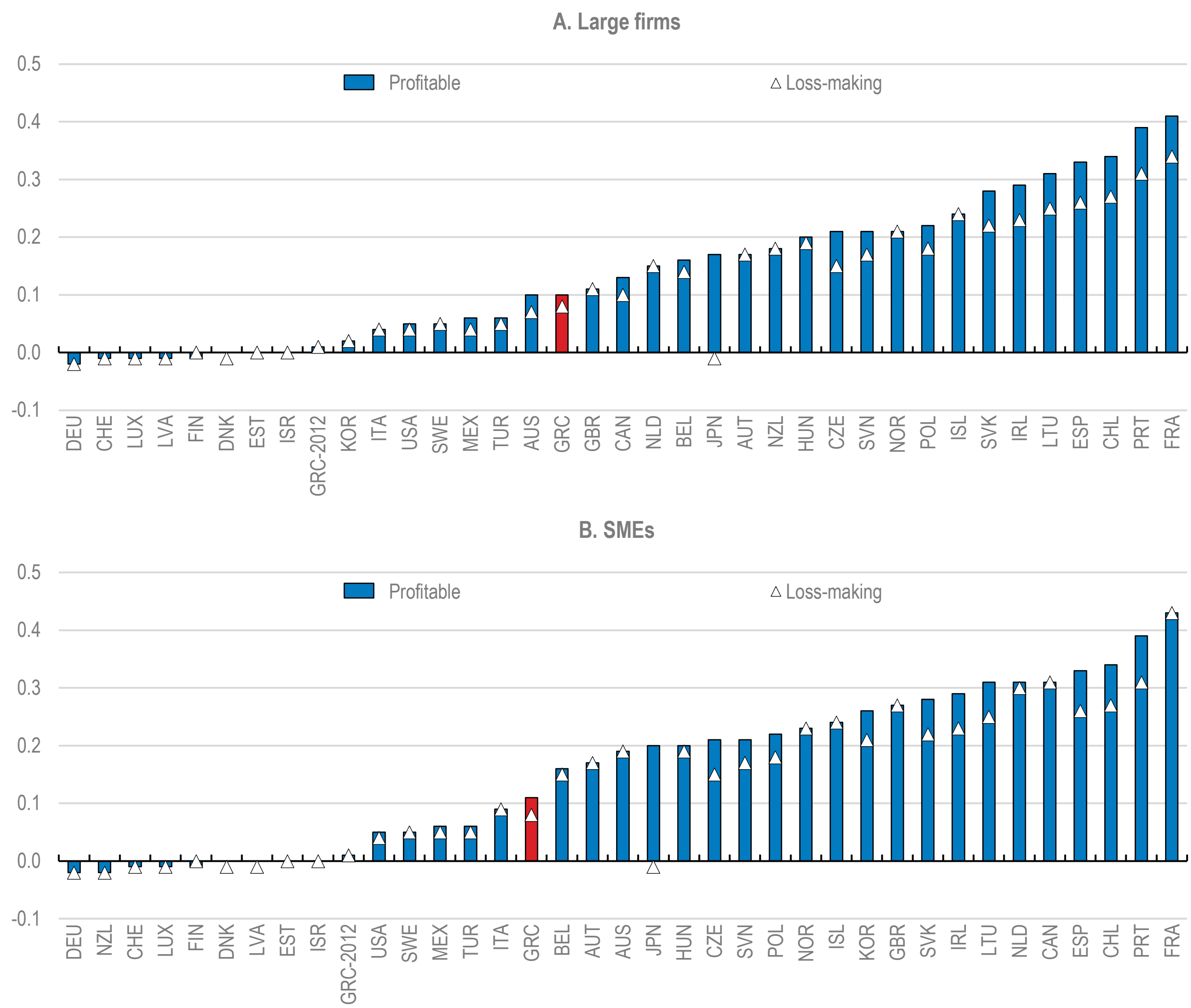
Figure 1.38. The generosity of Greece R&D tax incentives has increased

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.

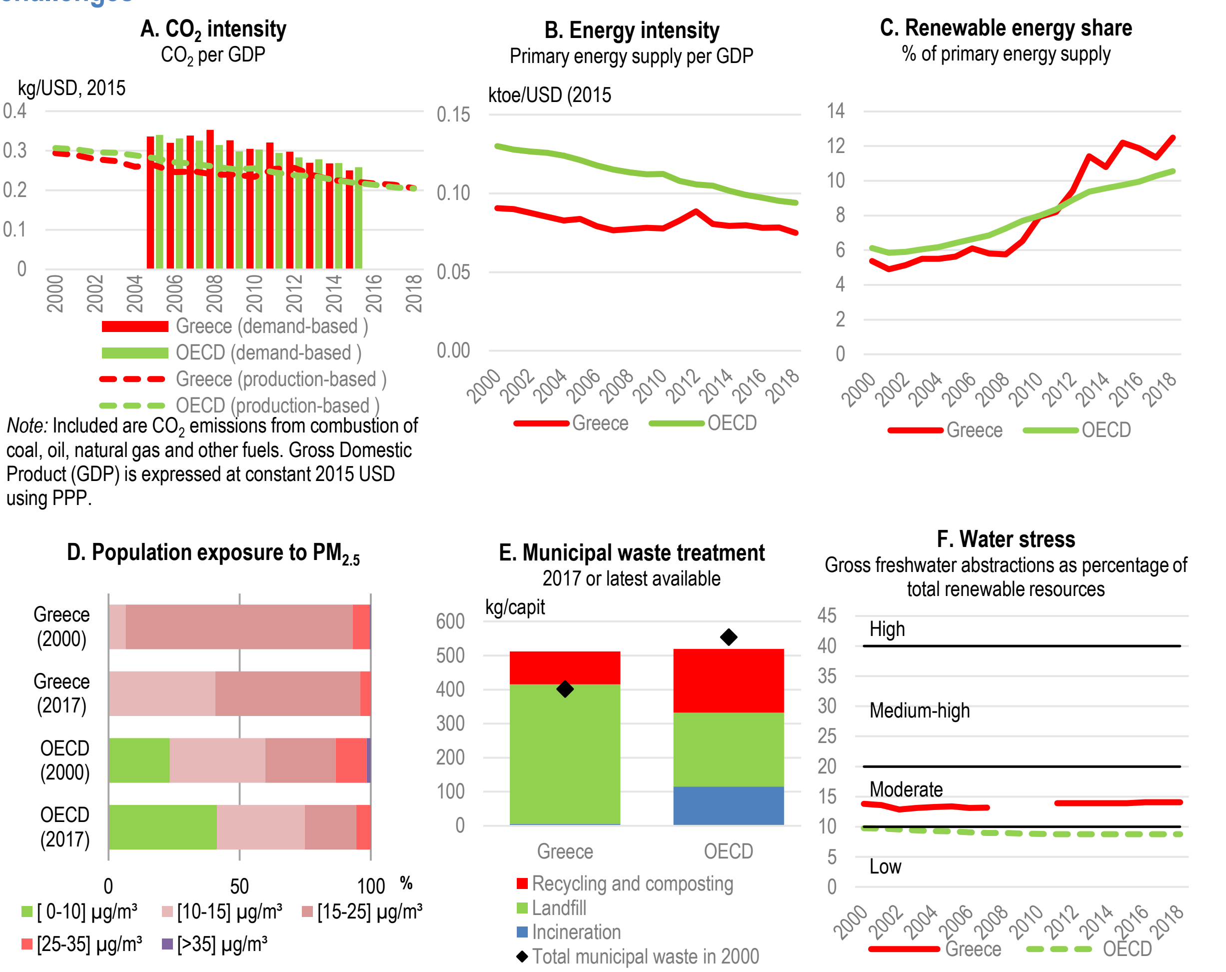
The State of the Environment report identifies waste management as the most challenging environmental issue (NCESD, 2018[52]). Lack of infrastructure and poor data along with weak enforcement beset the waste management sector. In 2017, 80% of municipal waste generated was sent to landfill, nearly twice 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



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.

StatLink https://doi.org/10.1787/888934154623

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 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 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.

MAIN POLICY FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
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.** 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.**

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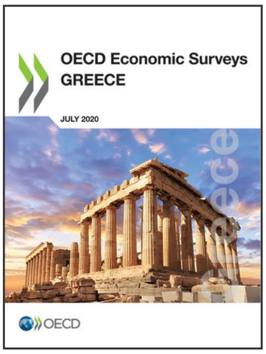

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