GREEK NATIONAL PRODUCTIVITY BOARD

Annual Report 2025

Enhancing Productivity through Effective Governance, Industrial Policy and Reforms

Greek National Productivity Board Annual Report 2025

_____

Enhancing Productivity
through Effective Governance,
Industrial Policy and Reforms

Contributions

This report was prepared by the Centre of Planning and Economic Research, which acts as the National Productivity Board (NPB) of Greece, under the coordination and scientific editing of its Steering Committee.

Panagiotis Liargovas, Scientific Director of KEPE and the Greek NPB (until October 25, 2025)
Panagiotis Petrakis, Scientific Director of KEPE and the Greek NPB (from October 26, 2025)

Steering Committee of the Greek National Productivity Board:

Theodore Tsekeris, Senior Research Fellow, KEPE (Head of the Committee)

Nikolaos Rodousakis, Senior Research Fellow, KEPE

Georgia Skintzi, Senior Research Fellow, KEPE

Artemis Stratopoulou, Research Fellow, KEPE

The Research Staff of KEPE has contributed to the production of this Annual Report as follows:

1. Introduction **(Theodore Tsekeris),** 2.1. Macroeconomic environment **(Vlassis Missos, Nikolaos Rodousakis, Artemis Stratopoulou),** 2.2. Own economic projections for 2025-2026 **(KEPE)**, 2.3. Aggregate productivity growth **(Vlassis Missos, Nikolaos Rodousakis, Artemis Stratopoulou),** 2.4. Regional productivity growth **(Vlassis Missos, Nikolaos Rodousakis, Artemis Stratopoulou),** 2.5. Sectoral productivity growth **(Vlassis Missos, Nikolaos Rodousakis, Artemis Stratopoulou),** 2.6. Public spending efficiency **(Christos Chrysanthakopoulos),** 2.7. R&D efficiency **(Georgia Skintzi),** 3.1. Public finance and macroprudential policies **(Artemis Stratopoulou),** 3.2. Developments in external trade **(Georgios Bertsatos),** 3.3. Cost/price competitiveness indices **(Georgia Skintzi),** 3.4. Economic complexity **(Vlassis Missos),** 3.5. Global non-cost competitiveness indicators **(Athanasios Chymis),** 3.6. Structural reforms for industrial development **(Ersi Athanassiou, Ioannis Cholezas),** 4. Conclusions and policy implications **(all authors).**

Contents

List of Figures

List of Maps

List of Tables

List of Boxes

Foreword

Panagiotis Petrakis

Following the previous six annual reports, the content of the 2025 Annual Report of the Greek National Productivity Board is supported by the findings of the researchers of the Centre of Planning and Economic Research (KEPE) concerning long-term and recent developments, challenges and policy recommendations in the fields of productivity and competitiveness.

During 2023–2024, the report confirms, Greece achieved real GDP growth of 2.3%, therefore significantly surpassing the euro area (0.85%) and EU27 (1.02%) averages. This growth marks a shift in aggregate demand composition, with gross capital formation replacing household consumption as the primary driver of output expansion. Fiscal consolidation has been a defining feature: Greece recorded its largest budget surplus in three decades (1.3% of GDP) and a primary surplus of 4.8%, contributing thus to a sharp decline in the debt-to-GDP ratio to 153.6% and prompting international credit rating upgrades. The improvement in productivity is primarily efficiency-driven, with Total Factor Productivity (TFP) rising by 1.1% in 2024, while capital intensity contributes only marginally.

The report identifies several structural constraints that impede sustainable productivity growth and convergence. There are institutional and governance weaknesses. In other words, despite fiscal consolidation and the reduced debt-to-GDP ratio, there are persistent inefficiencies in public administration, government AI readiness, public spending, and coordination of policies, which constrain competitiveness. In order to address these gaps, the country needs several multi-level governance reforms focused on outcome-based budgeting, transparency, and accountability to enhance spending efficiency and institutional effectiveness. Furthermore, although national R&D expenditure more than doubled between 2014 and 2023 (reaching 1.49% of GDP), Greece's innovation system remains predominantly public-sector and academically oriented. This means that the R&D and innovation ecosystem underperforms, as Greece lags behind in private-sector participation, patent generation, and high-tech exports. These problems require reinforced business–research linkages, incentives for technology adoption, and improved conditions for intellectual property and venture financing. Finally, there are digital and AI competitiveness deficits, as well as structural economic imbalances, since the economy's dependence on imports sustains a current account deficit and

constrains long-term growth. The manufacturing sector's share of GDP (8.7%) remains below the EU average (14%) but approaches the national 2030 target (15%).

In order to achieve sustainable convergence with the EU, an integrated policy agenda focused on enhancing public-sector efficiency, strengthening innovation ecosystems, expanding high-technology and manufacturing capacity, and promoting the digital transformation is required. The adoption of outcome-based budgeting, investment in human capital, and deeper private-sector participation in R&D are identified as essential levers for achieving resilience, competitiveness, and long-term productivity growth within a rapidly evolving European economic landscape.

Professor Emeritus Panagiotis Petrakis
Scientific Director, National Productivity Board
Chairman of the Board and Scientific Director,
Centre of Planning and Economic Research (KEPE)

Preface

Theodore Tsekeris

The Greek economy continues to present mild and stable increases in output and productivity growth, in terms of GDP per person employed, GDP per working hour, capital productivity, and total factor productivity. Although these positive rates are larger than the corresponding euro area and EU averages, the country still lags behind in following a path that can lead to substantial convergence in the next few decades. Given both the EU's and Greece's increased dependence on (energy) raw materials, especially from the East, and on technology adoption from the United States, any development strategy should be closely associated with upgrading its industrial activity, technology, innovation, and economic complexity.

Despite the improved position of Greece in cost competitiveness compared to other European countries, its non-cost competitiveness in crucial sectors remains weak for the sustainable development and attraction of investment, such as the digital society and AI readiness, and government effectiveness. In particular, the institutional weaknesses found in public spending efficiency, regulatory quality, control of corruption, rule of law, transparency, and accountability should be promptly and adequately addressed. In this way, Greece and the EU would enhance competitiveness, attract more greenfield investments, and ensure the more efficient and equitable coordination of resource allocation. These actions would also address structural problems related to the adjustment to a carbon-neutral economy, demographic ageing, and left-behind areas, which are notably present in the peripheral parts of Southern Europe.

Last but not least, the proposed policies are expected to reinforce the resilience of both the EU and the Greek regions to a range of exogenous shocks which frequently appear in today's multipolar and complexly interrelated world. In this respect, EU-wide plans are required to build preparedness and enhance cohesion and adaptability against geopolitical conflicts, supply chain disruptions, natural disasters, cyberattacks, the weakening democratic institutions, and social turmoil.

Theodore Tsekeris
Head of the Steering Committee,
National Productivity Board of Greece

Executive Summary

Greece is among those EU countries where the real GDP grew faster (2.3%) than the euro area (EA) and the European Union (EU27) averages (0.85% and 1.02%, respectively) during 2023-2024. In addition to lower unemployment and a higher labor force participation rate, the economic activity in the country has been considerably boosted by gains in efficiency, higher-quality investment, and increased capital productivity compared to previous years. Specifically, in 2024, compared to 2023, slight improvements are observed in all productivity metrics reported here, including labour productivity in terms of GDP per worker (1%) and GDP per hour worked (0.77%). To the contrary, the EA19 and the EU27 presented zero or negative productivity growth, and very small productivity growth, respectively, between 2023-2024. The rates for labour productivity in terms of GDP per worker were 0% and 0.29% (Figure 1.1), and in terms of GDP per hour worked -0.16% and 0.34%, respectively.

Regarding the coming years, the productivity of the Greek economy is expected to grow, with a total increase of 2.3% in terms of GDP per worker and 2.0% in terms of GDP per hour worked in 2026, compared to 2024. The corresponding productivity growth in the EA19 and EU27 is expected to be slower than in Greece during the same period (2024-2026), namely, 1.6% and 1.2% in terms of GDP per worker and 1.3% and 0.6% in terms of GDP per hour worked, respectively. However, these improvements cannot lead to a substantial convergence with Europe. In particular, in 2024, the Greek GDP per worker remained at about 52% of the EA average and 57% of the EU average, while the Greek GDP per hour worked was even lower, namely, 46% of the EA average and 40% of the EU average. These productivity gaps are expected to remain basically the same during 2025 and 2026.

The total factor productivity (TFP) in 2024 grew by 1.1% compared to 2023, and its upward trend also remains modest and stabilised. From 2022 to 2024, capital intensity contributed only marginally to labour productivity growth, showing stagnation or underutilisation of new capital and the need to improve the quality of investments to translate them into tangible productivity improvements. Moreover, capital productivity shows signs of normalisation, with a growth of 1.5% in 2024, signifying the more efficient use of physical capital in the production process, which can lead to higher overall economic growth and help mitigate the effects of labour shortages.

These productivity trends underscore the need to expedite the implementation of broad-based reforms that strengthen domestic productive capacity and correct the structural imbalances that have long constrained sustainable growth and the country's resilience to external economic shocks. The ongoing fiscal consolidation, the reduced debt-to-GDP ratio and the sizable surplus, which is attributed to both the public expenditure reduction (by 1.5 pp of GDP from the previous year) and the public revenue increase (up by 1.1 pp of GDP), would facilitate investment in technology and innovation in strategic sectors (e.g., raw materials and agriculture, defense, clean energy, and bio-economy) to reduce dependence on imported capital goods. This would also enhance education and vocational training systems to equip the workforce with the skills needed in high-tech manufacturing and other advanced sectors.

Greece exhibits a pronounced decline in government effectiveness and remains below both its pre-crisis levels and the EA average. During 2007-2023, it is positioned among the countries with the highest levels of public expenditure (as % of GDP) and notably low levels of public sector performance. This persistent gap suggests structural weaknesses in public administration service delivery, policy implementation, and the inefficient management of public expenditure. Policy efforts should emphasise strengthening public financial management by adopting outcome-based budgeting, enhancing transparency, and reinforcing accountability in the allocation and use of public resources.

Regarding R&D efficiency, Greece demonstrated an upward trend during the last decade, strengthening its national R&D ecosystem, which is underpinned by significant public sector funding and an expanding R&D workforce. However, it continues to lag behind the EU27 and EA20 averages in terms of the R&D intensity and GERD per inhabitant, while the business sector remains under-engaged. This is reflected in lower levels of business R&D intensity and a comparatively smaller share of R&D personnel and researchers. While scientific output relative to R&D expenditure – measured via publications and citations – is comparatively strong, the conversion of knowledge into patents and high-tech exports remains notably weak, with Greece ranking near the bottom among EU member states on these indicators. The relatively high share of R&D personnel in higher education institutions, coupled with the low engagement of the business sector in R&D activities, points to an innovation ecosystem that is heavily academic and public sector-driven but less integrated with private sector innovation and commercialisation.

As far as digitisation is concerned, despite the significant efforts of the Greek economy during the last few years, and, particularly, after the COVID-19 outbreak, Greece lags considerably behind most EU partners in digital competitiveness. According to the IMD World Competitiveness Ranking (2025 edition), Greece's digital competitiveness improved by 3 ranks (compared to the 2024 edition), to the 49th position among 67 economies and 23rd among the EU26 (except Malta). Furthermore, according to the Digital Economy and Society Index (DESI), while the digitisation of the public sector has moved forward, Greece ranks 21st and 22nd in the digital public services for citizens and business, respectively.

Greece has also lost ground in overall competitiveness and ranks 50th among 69 economies globally, and 22nd among the EU26 member states that are included in the IMD World Competitiveness Ranking (Malta is not included). The most ground was lost in business efficiency, where Greece dropped 9 places (to 53rd, down from the 44th place in 2024 edition) and three places compared to the EU26 (now ranking 20th, down from 17th in the 2024 edition). It has also lost ground in economic performance (at the 22nd position, losing one rank), while it remained at the same rank in government efficiency (22nd) and infrastructure (40th) compared to the EU26. Greece's weakness in government and business efficiency, coupled with weak institutions and heavy regulation, hampers its ability to attract both domestic and foreign direct investment, resulting in low business productivity, low overall production and exports, and low digital competitiveness.

According to the Government AI Readiness Index, although Greece ranks 16th in the technology sector in the EU27 and 22nd in the data and infrastructure pillar, its weak performance (26th) in the government pillar (including vision, governance and ethics, digital capacity, and adaptability)

pulls the overall rank down to that same rank (26th). Greece not only falls back in the ranking of the government pillar, but its score, which improved between 2020-2023, worsened in 2024. Based on the OECD, Greece performs very well in AI publications, as it is ranked 5th in terms of AI publication percentage (12.7%) and 12th in the number of AI publications.

Emphasis should be given to digital technological skills in employee training and attracting foreign highly skilled personnel, along with the reversal of the 'brain drain'. Scientific research legislation should also be improved to encourage innovation and to reform the legal environment to better support development and technology application. Greek companies need to become more agile and improve their ability to use big data and analytics to support decision making and to adequately address cybersecurity issues. Finally, Greece participates with "Pharos", one of the first thirteen AI "factories" in Europe and aims to create synergies with related EU initiatives supporting the digital transformation, including the European Digital Innovation Hubs (EDIHs), Data Spaces, and National Competence Centers (NCCs).

In Greece, significant rates of value added growth in manufacturing in recent years have generated a small improvement in the share of manufacturing in the Greek GDP. Based on the most recent relevant data, the share of manufacturing value added in GDP stands at 8.7% in Greece versus 14% on average in the EU. This fact means that there is still much ground to cover to achieve convergence, as envisaged in the corresponding National Industrial Strategy target for year 2030 (share of up to 15%). The National Industrial Strategy and Action Plan for Greece aims to facilitate the digital transformation of industrial enterprises, supporting the green transition, developing human resources and skills, enhancing the business environment, and improving the resilience of the Greek industrial sector.

The implementation of the Strategy receives significant support from funds committed through the RRF. More particularly, key reforms pursued in the framework of the RRF concern the digitalisation of procedures, the spatial planning of industrial parks and other sectoral activities, and a new investment-friendly regulatory framework for carbon capture, utilisation and storage to balance the CO2 emissions of heavy industrial facilities. Furthermore, flagship structural investment programmes for industry funded through the RRF include the "New Industrial Parks", the "Smart Manufacturing", and the "Produc-e Green" programmes. In the framework of the EU's new defence strategy, reforms in the domestic defence industry encompass the Hellenic Center for Defence Innovation and the revision of Greece's National Defence Industrial Strategy to promote the country's defence industry capabilities and to encourage international synergies.

1. Introduction

1.1. Overview of productivity developments

The productivity of the EU continues to lag behind that of its major global competitors/partners. This trend can be attributed to several factors. Among them, we can highlight the relatively limited innovation and market competition, the relatively low industrial and digital share in key enabling technologies and key raw materials, the relatively high cost of the green transition, the relatively poor business environment to attract greenfield investments, and the inadequate development and utilization of skills and talents to create innovative products and services.

Therefore, there is an urgent need for a proper diagnosis of the problems common to the EU member states and particular to each of them. A comprehensive plan of targeted R&D investment in economic sectors and geographical areas of increased productivity and spillover effects would arguably create a more friendly high-tech business environment, helping to attract more productive investments and reduce non-EU dependencies.

In this direction, national and regional partnership plans aimed to boost European competitiveness are considered, including those for strengthening the European single market, e.g., the Single Market Programme (SMP) and the Connecting Europe Facility (CEF); the Global Europe instrument; the framework of "Education, Democracy, and European Values", including Erasmus+, AgoraEU, and Justice Programme-JustP; the revised Economic Governance Framework and the modern European public administration; and the EU Civil Protection Mechanism to protect people and build preparedness to enhance resilience.

Moreover, the new European Competitiveness Fund, synergistically with the Horizon Europe programme, aims to provide seamless support to European innovators, accelerating the transformation of ideas and research to start-up, scale-up, and real-world deployment. The implementation of the Competitiveness Compass is expected to help the EU to develop its competitiveness and create high-quality jobs in strategic sectors, and to facilitate multi-country and cross-border projects with high value added. Furthermore, the Draghi Report and other major EU initiatives (e.g., Open Strategic Autonomy, Single Market Package/Action Plan) emphasise on the high impact of flexible budgets in key sectors, like semiconductors, raw materials and agriculture, defense and space, clean energy, health, and bio-economy. Such investments are expected to address concerns about EU strategic autonomy, geopolitical security, and climate and cybersecurity risks, having a significant although heterogeneous territorial impact.

Therefore, investment and reforms should be carefully and jointly designed and evaluated, through effective, tailored, place-based policies, including those for insular/island areas to address issues of territorial cohesion and left-behindness. These policies should promote, where possible, agglomeration-related productivity gains and clustering effects, away from the traditional concepts of regional and sectoral analyses. The forthcoming multi-annual 2028-2032 programming period is expected to foster the multilevel governance of investments for integrated spatial development plans. National and Regional Plans for productivity and competitiveness could also be developed

Figure 1.1 Labour productivity in GDP (thousand euro, constant prices) per worker in Greece, the EA19 and the EU27 during 2010-2024 and 2025-2026 forecasts
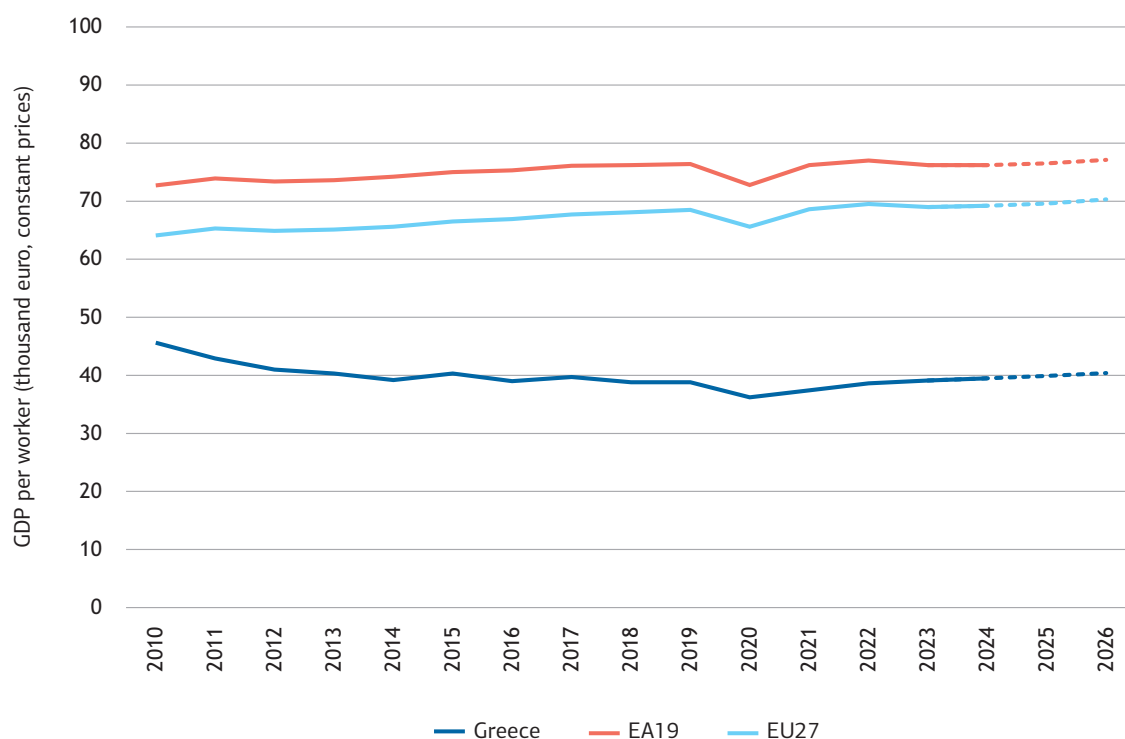
Source: AMECO and own processing.

Figure 1.2 Labour productivity in GDP (euro, constant prices) per hour worked in Greece, the EA19 and the EU27 during 2010-2024 and 2025-2026 forecasts
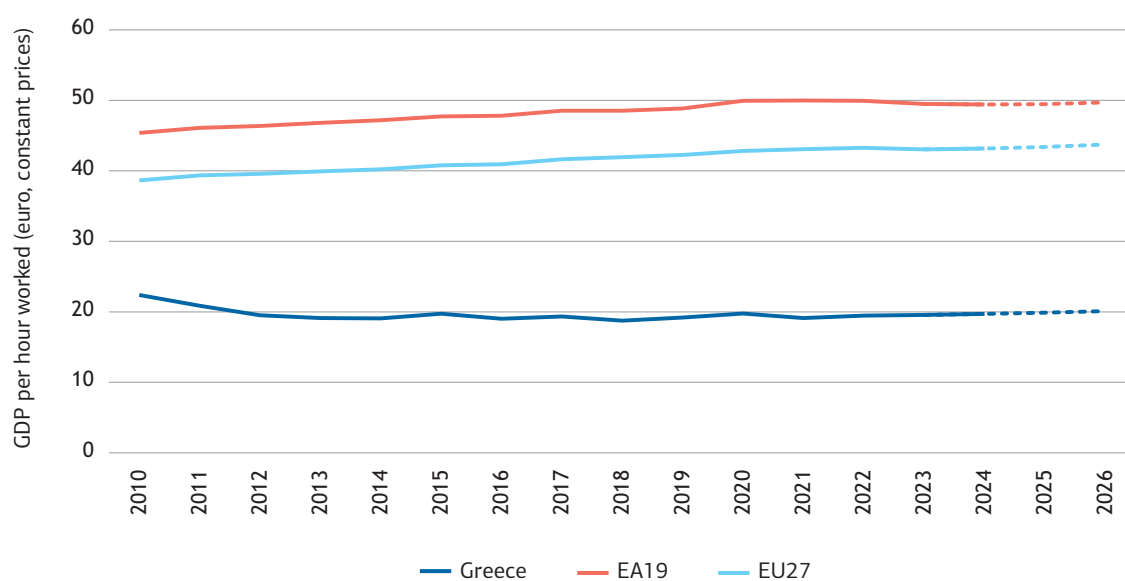
Source: AMECO and own processing.

in more detail to coordinate these actions, creating synergies and strategic complementarities while avoiding policy overlapping and conflicting objectives.

Greece is among those EU countries where the real GDP grew faster (2.3%) than the euro area (EA) and the European Union (EU27) averages (0.85% and 1.02%, respectively) during 2023-2024. In addition to lower unemployment and a higher labor force participation rate, the economic activity in the country has been considerably boosted by gains in efficiency, higher-quality investment, and increased capital productivity, compared to previous years (see Chapter 2). Specifically, in 2024, compared to 2023, slight improvements are observed in all productivity metrics reported here, including labour productivity in terms of GDP per worker (1%) (Figure 1.1) and in terms of GDP per hour worked (0.77%). In contrast, the EA19 and the EU27 presented zero or negative productivity growth, and very small productivity growth, respectively, between 2023-2024, which are, for labour productivity in terms of GDP per worker, 0% and 0.29% (Figure 1.1), and, for labour productivity in terms of GDP per hour worked, -0.16% and 0.34% (Figure 1.2), respectively.

Regarding the coming years, the productivity of the Greek economy is expected to grow, with a total increase of 2.3% in terms of GDP per worker and 2.0% in terms of GDP per hour worked in 2026, compared to 2024. The corresponding productivity growth in the EA19 and EU27 is expected to be slower than in Greece during the same period (2024-2026), namely, 1.6% and 1.2% in terms of GDP per worker, and 1.3% and 0.6% in terms of GDP per hour worked, respectively.

Nonetheless, it is stressed that despite the strong post-pandemic recovery of Greece's economic activity and the recent productivity developments, its labour productivity gap with the EU average has not substantially changed, following a trajectory that is far from reaching a substantial convergence with Europe. In particular, in 2024, the Greek GDP per worker remained about 52% of the EA average and 57% of the EU average, while the Greek GDP per hour worked was even lower, namely, 46% of the EA average and 40% of the EU average. These productivity gaps are expected to remain basically the same during 2025 and 2026.

1.2. The scope of the annual report for 2025

This annual report is composed of two main parts. The first one (Chapter 2) analyses the progress of the Greek economy in major macroeconomic aggregates and emphasises the main productivity indicators, through the output per capita, labour productivity, and labour utilisation decompositions. Additionally, both the sectoral and regional dimensions of labour productivity are examined. Furthermore, special consideration is given to problems and challenges pertaining to the efficiency performance of public spending and the R&D system in Greece, compared to other European countries.

The second part (Chapter 3) reports the main developments in public finance, together with recent macroprudential policies, current accounts, considering relations with trade partners of increased geopolitical importance and risk, and cost/price competitiveness indices. Several international competitiveness indicators are discussed that show the score and ranking of Greece in overall

terms and key thematic areas for the sustainable development and attraction of investment, such as the digital society and AI readiness, and government and institutional effectiveness, based on the World Governance Indicators and the Economic Freedom Index. Additionally, recent structural reforms are presented to promote smart, resilient, and sustainable industrial development. Chapter 4 summarises and concludes, encompassing a range of policy implications for boosting productivity and competitiveness at various levels, including foreign trade and investment, industry and new technologies, R&D and innovation, and government institutions.

2. Macroeconomic Conditions and Developments in Productivity and Efficiency

2.1. Macroeconomic environment

In 2024, the Greek economy grew by 2.3%, outpacing the euro area (EA) average (0.9%). Among the EA countries, Malta (6.0%), Croatia (3.9%), Cyprus (3.4%), Spain (3.2%), and Lithuania (2.8%) experienced faster growth, most of them located in the Mediterranean basin. Meanwhile, for the third consecutive year, the macroeconomic repercussions of the war in Ukraine and the subsequent trade bottlenecks remained significant, affecting most European economies. Countries such as Austria (-1.2%), Latvia (-0.4%), Germany (-0.2%), and Finland (-0.1%) experienced negative growth rates in 2024, reflecting the wider impact of international instability and uncertainty. Despite these challenges, the short-term outlook for the Eurozone remains positive (European Commission, 2025).

A major factor that threatens future growth is the disruption caused by abrupt shifts in US trade policy, particularly its implications for Europe (Felbermayr et al., 2024). In 2024, stronger-than-expected growth in China and a robust performance in the US economy drove global expansion to 3.6% (excluding the EU) and to 3.3% (including the EU).[1] Yet, this momentum is expected to weaken (Gopinath et al., 2025). The ultimate impact of additional US tariffs on European trade will depend on where these rates stabilise as well as on the outcome of the ongoing intense negotiations.[2] Although the World Trade Organization (WTO) foresaw the continued expansion of world trade in 2025 and 2026, new tariff measures announced and implemented since January 2025, together with increasing trade policy uncertainty, have resulted in the re-examination of the trade landscape, estimating a significant downgrade for the outlook of both merchandise and services trade (WTO, 2025).

Headline inflation in both the EA and Greece has dropped significantly in 2024 compared to 2023. More precisely, inflation in the EA declined to 2.4% in 2024, i.e., 3 percentage points (pp) lower than 2023. This outcome was driven mainly by lower energy and food prices, strict monetary policies, and negative growth rates in specific economies (e.g., Germany) that constrained aggregate demand (Bank of Greece, 2025b). Headline inflation as measured by the Harmonised Consumer Price Index (HCPI) stood at 3% in Greece for 2024, according to the latest data provided by the Hellenic Statistical Authority (ELSTAT), exceeding the Eurozone average of 2.4%, a trend expected to continue in the near future (European Commission, 2025). On the labour market front, unemployment declined slightly by one pp to 10.1% in 2024 (compared to 6.4% in the

---

1. World Economic Outlook database April 2025: https://www.imf.org/en/Publications/WEO.

2. In late May 2025, negotiations were held between the US and the EU concerning the level of imposed tariff rates (see Cohen, 2025).

Eurozone). However, youth unemployment (ages 15-29) remains notably high at 19.1% (11.6% in the Eurozone), while unemployment among older age groups (ages 55-74) remained relatively stable at 7.1% (4.4% in the Eurozone).[3] Addressing unemployment continues to be a top policy priority.

The evolution of aggregate demand from 2008 to 2024 reflects both the cyclical pressures of past crises and the emerging signs of structural transformation (see Figure 2.1.1). Over much of this period, household consumption has served as the most stable and consistent driver of GDP growth, acting as the main pillar of domestic demand. Following the sovereign debt crisis and the COVID-19 shock, consumer spending played a critical role in economic recovery, supported by employment gains and fiscal support.

However, a notable shift occurs in 2024, as gross capital formation emerges as the leading contributor to economic growth, outpacing household consumption. This marks a potential turning point in the composition of aggregate demand. The surge in investment likely reflects the impact of EU Recovery and Resilience Facility inflows and policy initiatives aimed at infrastructure

Figure 2.1.1 Contributions to GDP growth, Greece, 2009q1-2024q4

■ Gross capital formation
■ Final consumption expenditure of general government
■ Household and NPISH final consumption expenditure
■ External balance of goods and services
— Gross domestic product at market prices
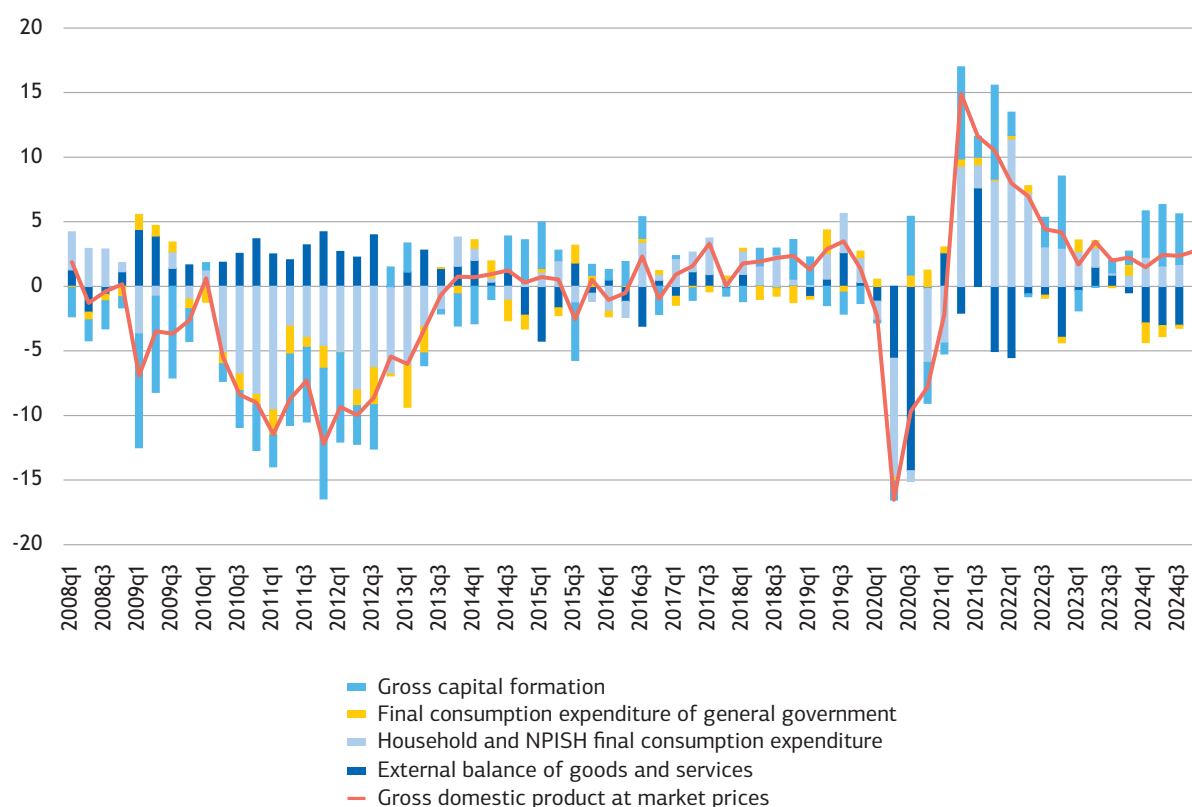
Source: Eurostat.

---

3. See Eurostat: https://doi.org/10.2908/UNE_RT_A.

development and technological upgrading. While investment has historically been the most volatile component – collapsing during the 2009–2015 recession and again in 2020 – its strong performance in 2024 indicates renewed momentum and the potential for a more productive economy.

Despite this progress, the external balance of goods and services continues to exert a negative influence on GDP growth. The persistent trade deficit (see Section 3.2 for details) is driven mainly by the goods balance, excluding oil and ships, reflecting the high import content of Greek exports and the export specialisation of Greek production (Konstantakopoulou, 2024). This structural imbalance is most pronounced during periods of rising investment and consumption, when imports need to expand. While the balance of services (mainly driven by travel services) contributes positively to the trade balance, it remains insufficient to offset the overall deficit. Government consumption has played a modest but stabilizing role throughout the period. Its contribution increased temporarily during the pandemic due to emergency fiscal measures, but it has since moderated as fiscal discipline returned and the focus shifted to investment-led growth.

Taken together, the 2024 data suggest that a rebalancing of the Greek economy may be underway, with investment playing a more central role in driving growth. If sustained, this shift could enhance resilience, reduce dependency on consumption-led growth, and support structural convergence within the EA. However, realising this potential will require targeted policies that focus on continued reforms, support domestic production capacity, reinforce industrial and technological development, and address long-standing external imbalances.

In the Greek context of economic growth, increases in investment and household consumption are closely linked to higher import demand (Papadimitriou et al., 2024). However, Klemm (2013) finds that current account deficit reversals that follow investment booms are marked by better growth performance than those following consumption booms. In general, investment has been increasing since 2019, and the most important aspect is its qualitative improvement in its composition. This means that, today, about four-fifths of private investment is directed toward productive capital (Bank of Greece, 2025c). Altogether, this trend can be catalytic in retaining sustainable growth rates in the future. However, due to the structural characteristics of the economy, periods of economic expansion tend to intensify trade imbalances, with rising imports offsetting gains from growth. This dynamic places a recurring strain on the current account and hinders long-term macroeconomic stability. The continued dependence on imports during upturns not only constrains the sustainability of growth but also contributes to the persistence of twin deficits, affecting both external and fiscal balances.

According to data provided by ELSTAT, in 2024, the current account deficit shrank to -6.4% of GDP, compared to -10.2% in 2022, though it remains significant. The persistent current account deficits reflect deeper structural issues in the Greek economy, such as a limited export base and heavy reliance on imported goods and energy. As a result, addressing external imbalances remains a critical policy challenge for ensuring sustainable long-term growth.

Persistent current account deficits contribute to higher borrowing costs and the buildup of external debt, gradually undermining fiscal credibility. Addressing these structural vulnerabilities requires a comprehensive policy response. Strengthening domestic production – especially in the

manufacturing sector – is essential. Key measures include incentivising investment in technology and innovation, expanding technical education, upgrading infrastructure, and creating a more business-friendly environment to attract both domestic and foreign investment in productive activities.

Moreover, it is essential to implement policies that progressively reduce dependence on imported capital goods by fostering the growth of domestic industries. Enhancing education and vocational training systems to equip the workforce with the skills needed in high-tech manufacturing and other advanced sectors would further support this transition. The complex interplay between investment, consumption, and imports in Greece underscores the urgent need for broad-based reforms that strengthen domestic productive capacity and correct the structural imbalances that have long constrained sustainable growth and the country's resilience to external economic shocks.

Finally, one of the most significant developments in 2024 has been the sizeable surplus recorded in the public budget balance. According to the latest data published by ELSTAT, general government net lending reached 1.3% of GDP in 2024, an impressive improvement over the previous year and well above the euro area average of -3.1% (a deficit). This represents the highest surplus recorded by the Greek economy in the past three decades.[4] The surplus is attributed to both a reduction in public expenditures as a % of GDP (down by 1.5 pp of GDP from the previous year) and an increase in public revenues (up by 1.1 pp of GDP). Overall, this fiscal consolidation has led to a substantial reduction in the debt-to-GDP ratio, by 10.3 percentage points over the past two years, bringing it down to 153.6% in 2024. Since 2020, the ratio has declined by over 55.8 pp, underscoring the scale of the fiscal adjustment.

2.2. Own economic projections for 2025-2026

To project the model variables over the 2025-26 period, we assume that government consumption expenditure will expand by 2.6% in 2025 and by 1.1% in 2026, reflecting a gradual normalisation of fiscal policy and the winding down of extraordinary support measures introduced in the aftermath of the pandemic and the energy crisis. This slowdown in government spending growth is consistent with the broader fiscal consolidation strategy, which aims to maintain debt sustainability, while still allowing for targeted social and developmental outlays.

Investment dynamics are expected to remain robust, with gross fixed capital formation rising by 7.8% in 2025 and 7.3% in 2026. The strong momentum in investment is driven primarily by the continued disbursement and absorption of funds from the Recovery and Resilience Plan (RRP). Public investment projects in infrastructure, renewable energy, and the digital transformation are projected to proceed at a steady pace. Private sector investment is expected to accelerate in response to improved credit conditions, higher business confidence, and ongoing structural

---

4. See Eurostat: https://doi.org/10.2908/GOV_10A_MAIN.

reforms that enhance the investment climate. Importantly, investment growth is also supported by foreign direct investment inflows, as Greece consolidates its role as a regional hub for logistics, tourism, and clean energy.

Exports of goods and services are forecast to grow by 3.1% in 2025 and 3.5% in 2026. Tourism, which has been one of the central drivers of the post-pandemic recovery, is expected to consolidate at historically high levels, with revenues stabilising and gradually increasing due to higher value-added services and extended tourist seasons. Moreover, improvements in transport and digital infrastructure are anticipated to further strengthen Greece's capacity to attract international visitors and diversify its export base.

On the basis of these assumptions, the model projects real GDP growth of 2.3% in 2025 and 2.0% in 2026. Employment and imports are expected to evolve in line with GDP growth, maintaining the overall trajectory of the economy. This projection suggests that Greece will continue along a path of stable, though somewhat moderate, expansion relative to the rapid rebound observed in the immediate post-pandemic years. The return to more sustainable rates of growth implies a maturing recovery phase, where the emphasis shifts from short-term stimulus to long-term structural improvements in productivity, competitiveness, and resilience.

Nonetheless, several downside and upside risks could undermine this baseline trajectory, as briefly explained below.

Pessimistic scenario: If government consumption expenditure grows by only 1.6% in 2025, and gross fixed capital formation expands by less than 7% – owing to potential delays in project implementation or weaker private sector participation – GDP growth could slow to 1.8% in 2025 and 1.9% in 2026. Such an outcome would indicate insufficient fiscal support and weaker investment momentum, exposing the economy to vulnerabilities, such as tighter global financial conditions, energy price volatility, or a slowdown in external demand.

Table 2.2.1 GDP, employment and imports estimates

	2025	2026
Baseline scenario		
GDP	2.3%	2.0%
Employment	3.1%	2.7%
Imports	2.8%	2.4%
Optimistic scenario		
GDP	2.3%	2.3%
Employment	3.1%	3.3%
Imports	2.8%	2.9%
Pessimistic scenario		
GDP	1.8%	1.9%
Employment	2.6%	2.6%
Imports	1.6%	1.7%

Source: Authors' own calculations.

Optimistic scenario: Conversely, if fiscal policy remains more supportive, with government consumption expenditure rising by 2.6% in 2026, and if investment and exports maintain their baseline growth trajectories, GDP growth could reach around 2.3% in 2026. In this case, Greece would sustain its positive momentum, benefiting from stronger domestic demand, continued inflows of EU funds, and robust external performance. This scenario underscores the potential for upside growth, if policy implementation remains efficient and external conditions remain favourable.

2.3. Aggregate productivity growth

The evolution of output per capita growth in Greece from 1996 to 2024 (Figure 2.3.1) reflects the broader macroeconomic fluctuations of the country, shaped by both labour productivity (Y/L) and labour utilisation, i.e., the ratio of employees to the population (L/N). During the pre-crisis period (1996-2007), growth was robust and broadly supported by positive contributions from both components, indicating a period of economic expansion. However, the global financial crisis and the subsequent sovereign debt crisis triggered a sharp contraction from 2008 to 2013, with output per capita declining significantly due to steep drops in labour utilisation and, to a lesser extent, productivity. A gradual recovery followed between 2014 and 2019, although gains remained modest and uneven.

The COVID-19 pandemic in 2020 caused another severe disruption, with a collapse in labour utilisation, although labour productivity rose – possibly due to severe employment reduction. The years 2021-2024 show a partial recovery, with both utilisation and productivity contributing moderately to output growth. Overall, the data underline the vulnerability of output per capita to labour market shocks and structural inefficiencies, highlighting the importance of sustained investment in productivity-enhancing sectors and measures to increase labour force participation in Greece.

Figure 2.3.2 shows the decomposition of labour productivity growth in Greece from 1996 to 2024. It reveals notable trends in the contribution of total factor productivity (TFP) and capital intensity, particularly in more recent years. From 2020 to 2024, labour productivity growth remains modest, showing a stabilizing trend following the disruptions of the COVID-19 pandemic. During this period:

- TFP plays the dominant role in driving productivity improvements. In 2021, following the sharp contraction in economic activity during 2020, TFP rebounds strongly, indicating a more efficient use of resources. This rebound reflects the shift to new technologies, the reorganisation of production, and temporary gains in efficiency following the initial pandemic shock.

- In 2021, there is a significant positive contribution from capital intensity, suggesting that investment in physical capital (possibly bolstered by the government support measures and low interest rates) complemented productivity gains. However, this was not sustained in the subsequent years.

Figure 2.3.1 Output per capita decomposition, Greece, 1996-2024
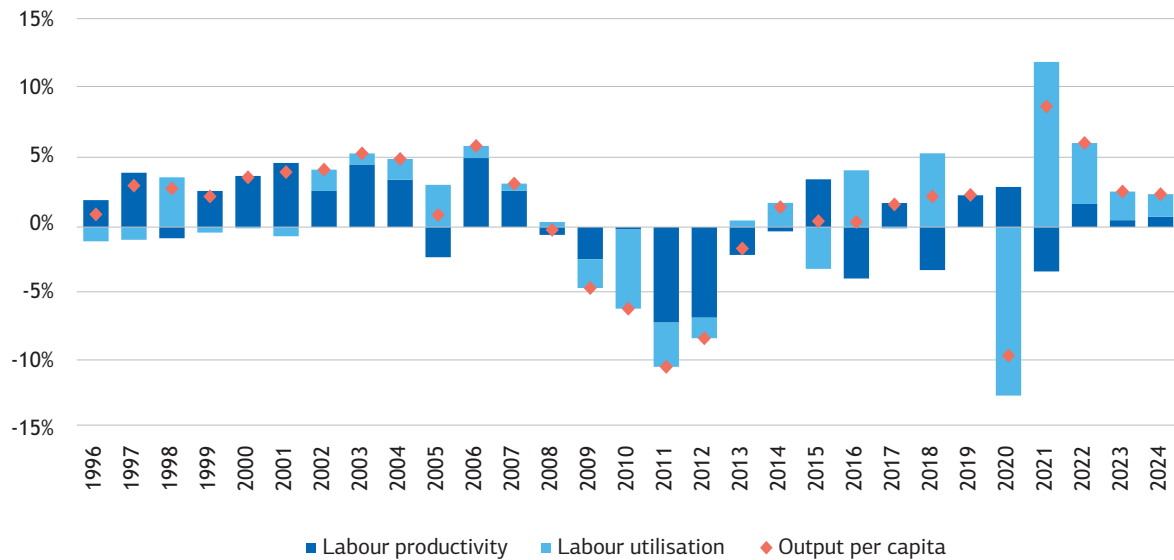
Source: Eurostat, authors' own calculations.

Figure 2.3.2 Labour productivity decomposition, Greece, 1996-2024
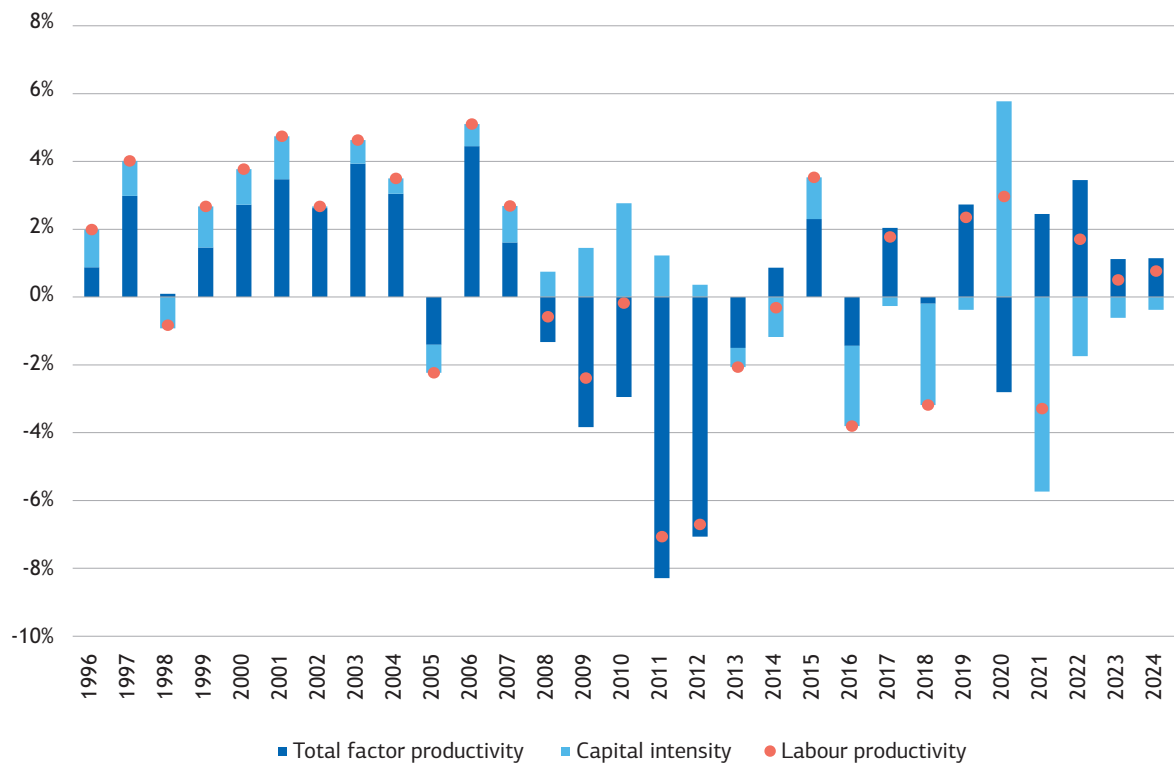
Source: Eurostat, authors' own calculations.

- From 2022 to 2024, capital intensity contributes only marginally – or even negatively – to labour productivity growth. This reflects stagnation or the underutilisation of new capital, and highlights challenges in translating investment into efficient production.

- TFP, although not reaching the highs of the early 2000s, continues to contribute positively and more consistently, indicating that gains in productivity are increasingly tied to the better use of inputs (labour and capital), innovation, or institutional improvements rather than sheer capital accumulation.

This pattern suggests that recent productivity gains are largely efficiency-driven, rather than investment-led. It points to the importance of continuing reforms that enhance innovation, education, knowledge-based activities, and business efficiency. While capital formation is necessary for long-term growth, the limited and volatile contribution of capital intensity since 2021 underscores the need to improve the quality of investments to ensure they translate into tangible productivity improvements.

Figure 2.3.3 presents a decomposition of annual changes in labour utilisation for Greece over the period from 1996 to 2024. Labour utilisation is broken down into four contributing components: average hours worked, the opposite of the unemployment rate (1 - unemployment rate), the participation rate, and the ratio of the working-age population (aged 20–64 years) to the total population (see Box 2.3.1). The diamond points shown in the figure represent the overall labour

Figure 2.3.3 Labour utilisation decomposition, 1996-2024
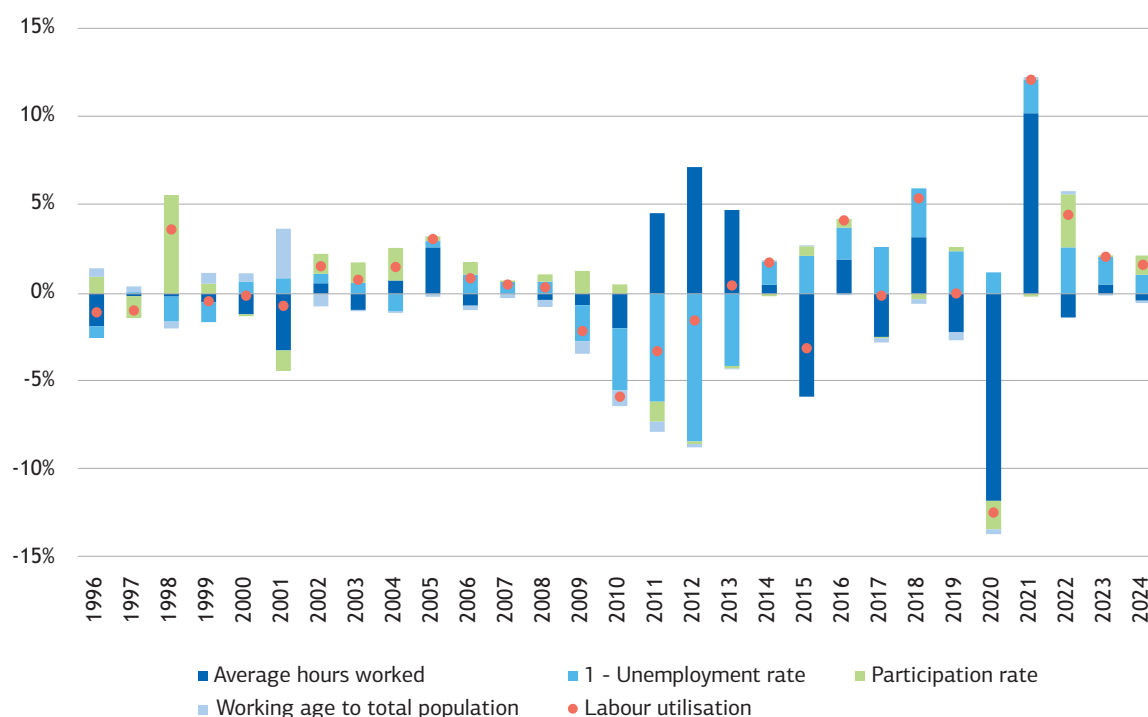
Source: Eurostat, authors' own calculations.

utilisation, which is the combined result of these four components. Over the long term, labour utilisation in Greece has experienced notable fluctuations, reflecting broader macroeconomic developments. Among the four components, average hours worked and the unemployment rate have been the most volatile, while the participation rate and the working-age population share have shown more stability. The overall trend in labour utilisation closely mirrors the economic cycle, with sharp declines during periods of recession and substantial rebounds during recoveries.

During the pre-crisis period from 1996 to 2007, labour utilisation generally showed steady positive growth, with annual increases in the range of one to three percent. This growth was supported by positive contributions from all components, particularly reductions in unemployment and increases in both participation and average hours worked. In 1997 and 1999, labour utilisation peaked at approximately four to five percent, reflecting particularly favourable developments in employment and working time. The period of the global financial crisis and the subsequent Eurozone debt crisis, spanning roughly from 2008 to 2013, marked a dramatic deterioration in labour utilisation. Between 2010 and 2012, labour utilisation declined by approximately 5%-10%. These steep drops were primarily driven by rising unemployment, which had a major negative impact on the (1 - unemployment rate) component, and significant reductions in average hours worked. For example, in 2012 alone, the contribution from rising unemployment was approximately minus six percent, while average hours worked contributed an additional negative three percent.

Box 2.3.1 Output decomposition

Given that labour productivity can be decomposed into total factor productivity and capital intensity (see, e.g., Gomez-Salvador et al., 2006): $\frac{Y}{L} = TFP \times \left(\frac{K}{L_h}\right)^{1-a}$ and that labour utilisation can be decomposed into effects for average hours worked, the unemployment rate, the participation rate, and ageing, respectively: $\frac{L_h}{N} = \left(\frac{L_h}{L}\right) \times \left(1 - \frac{U}{LF}\right) \times \left(\frac{LF}{POP}\right) \times \left(\frac{POP}{N}\right)$, then, output per capita can be decomposed into the effects of labour productivity and labour utilisation: $\frac{Y}{N} = \frac{Y}{L} \times \frac{L}{N}$.

Where Y is output, L employment, L_h hours worked, K capital, a the labour share of income, TFP total factor productivity, N total population, U unemployment, LF labour force, POP population of working age.

From 2014 to 2019, labour utilisation began a gradual recovery, growing at a rate of about two to three percent annually. This improvement was largely driven by falling unemployment and a moderate increase in the participation rate. However, demographic changes began to exert downward pressure, as the working-age share of the population declined slightly, introducing

a mild but persistent negative contribution to labour utilisation. The impact of the COVID-19 pandemic in 2020 was immediate and severe. Labour utilisation fell by approximately ten percent that year, driven overwhelmingly by a sharp drop in average hours worked, estimated at around twelve percent. The unemployment and participation rate components also contributed negatively, although to a lesser extent. In 2021, labour utilisation rebounded strongly, rising by approximately twelve percent as hours worked recovered sharply and the labour market regained momentum.

In the years following the pandemic, from 2022 through the projected values for 2024, labour utilisation appears to stabilise with a more moderate annual growth of around 1.5%. The main drivers of this growth are continued improvements in participation and employment levels, while average hours worked return to pre-pandemic norms. Meanwhile, the contribution of the working-age population continues to be slightly negative, reflecting ongoing demographic headwinds such as population ageing.

In conclusion, crisis periods are characterised by steep declines driven mainly by rising unemployment and falling hours worked, while recoveries are powered by the reversal of these trends. In the longer term, structural demographic challenges pose a persistent constraint on labour utilisation, underscoring the importance of labour market policies aimed at enhancing participation, reducing unemployment, and boosting productivity to sustain economic growth.

Figure 2.3.4 illustrates the annual percentage change in capital productivity for Greece from 1996 to 2024. Capital productivity, defined as output per unit of physical capital, is a key indicator of how efficiently capital is used in the production process. Physical capital encompasses infrastructure, machinery (including ICT), and intellectual assets. An increase in capital productivity signifies more efficient use of these assets in the production process, whereas a decrease suggests progressively less efficient utilisation. Hence, its dynamics are critical for understanding long-term economic growth and improvements in living standards.

The data reveal considerable volatility in capital productivity over the nearly three-decade period, marked by distinct phases of growth, i.e., boom, bust, and recovery. Three major episodes stand out: the pre-crisis expansion (1996-2007), the crisis and austerity period (2008-2013), and the post-crisis and pandemic years (2014-2024). During the first period, capital productivity generally trended upward. Annual growth rates were mostly positive, particularly from 1999 to 2004, when capital productivity increased consistently by approximately 2% to 4% per year. A peak occurred around 2006, when growth exceeded 3.8%, indicating a relatively efficient use of capital resources during the economic expansion. This phase corresponds with strong GDP growth and capital investment related to Greece's entry into the Eurozone and the 2004 Summer Olympics.

The period between 2008-2013 presented a sharp deterioration in capital productivity, coinciding with the global financial crisis and sovereign debt crisis in Greece. Annual growth in capital productivity turned deeply negative, particularly in 2010 (-5.7%), 2011 (-9.1%), and 2012 (-7.1%). This collapse reflects both a sharp decline in output and the rigidity in capital stock adjustment, i.e., capital did not shrink as quickly as output, leading to a drop in productivity. During this period, Greece faced severe economic contraction and declining investment. Negative capital

Figure 2.3.4 Capital productivity, Greece, 1996-2024
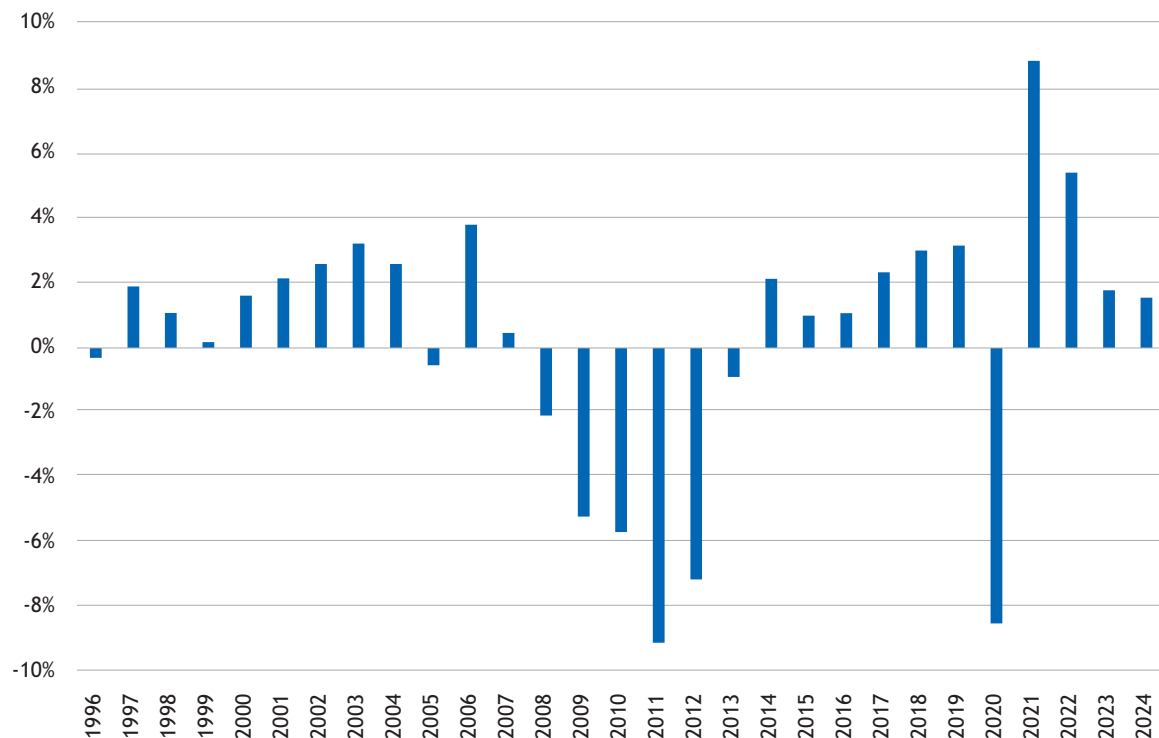
Source: Eurostat, authors' own calculations.

productivity growth indicates that the country was using its capital stock less efficiently during the height of economic turmoil.

From 2014 onwards, capital productivity began to recover, although at a slower and more uneven pace. The years 2014 to 2019 saw moderate positive growth, with annual increases between 1% and 3.2%, reflecting gradual stabilisation and improvements in capital efficiency as the economy adjusted to post-crisis conditions. In 2020, capital productivity again dropped sharply, by nearly -8.5%, reflecting the impact of the COVID-19 pandemic and the related economic shutdowns. However, this was followed by a remarkable rebound in 2021, with capital productivity surging by over 8.8%, the highest increase in the entire time series. Finally, the years 2022 to 2024 show signs of normalisation, with capital productivity growth returning to a modest positive range, suggesting a return to more stable economic conditions.

This increase in capital productivity has significant implications for the economy. It indicates that businesses are becoming more efficient in their use of resources, which can lead to higher overall economic growth. Additionally, it helps mitigate the effects of labour shortages by ensuring that available physical capital is used to its fullest potential. Over the long term, sustained improvements in capital productivity can enhance competitiveness, promote sustainable development, and improve the standard of living for the population.

2.4. Regional productivity growth

Map 2.4.1 depicts the level of real labour productivity, measured as GVA per worker, in 2019 (the year before the outbreak of the COVID-19 pandemic), across the EU27 NUTS-2 regions, and Map 2.4.2 shows the percentage change of real productivity in the same regions between 2019 and 2023 (the year with the most recent data available). This period was marked by extraordinary economic disruptions caused by the COVID-19 pandemic and significant price increases stemming from global supply chain bottlenecks. In this context, the most pronounced increases in productivity are concentrated in Romania, Bulgaria, and parts of Hungary, where several regions report changes between 25% and 50%. These results underline rapid catch-up processes, driven by structural transformation, foreign direct investment, and the reallocation of resources towards more productive activities. Similar patterns can be observed in Poland, Slovakia, and the Baltic states, where productivity growth falls within the 15%-25% range, reinforcing the convergence trend of newer EU member states.

In Germany, Austria, Belgium, and France, regional economies display moderate productivity growth, ranging from 7.5% to 15%. This reflects the dynamics of technologically advanced economies, where productivity levels are already high and further gains are incremental, rather than transformative. Notably, some regions in Spain and northern Italy also fall into this range, highlighting the stabilizing effect of structural reforms and gradual technological adoption. Moreover, the Nordic regions reveal mixed productivity outcomes. While some regions in Sweden and Finland record strong growth, others show only modest or even negligible increases. This divergence reflects variations in industrial specialisation, innovation intensity, and exposure to global shocks.

The weakest performances appear in Southern Europe, particularly in Greece, parts of Portugal, and southern Italy. In these regions, real productivity either stagnated or declined, with some areas in Greece experiencing reductions of up to -15%. This reflects structural weaknesses such as an overreliance on low-productivity sectors (agriculture and tourism), limited technological adoption, and persistent investment gaps. Despite gains in specific urban areas, the broader regional picture in Southern Europe suggests divergence from the EU average. A few regions outside the general East–West divide stand out with unusually high or low changes. For example, certain regions in Spain and France report significant productivity increases above 25%, while specific areas in Greece and Cyprus show some of the steepest declines. These outliers highlight the role of regional economic structures, policy effectiveness, and exposure to sector-specific shocks.

Furthermore, Map 2.4.1 underscores the uneven geography of productivity change across the EU. While Eastern and Southeastern Europe benefit from strong convergence dynamics and rapid transformation, much of Southern Europe remains constrained by structural inefficiencies and sectoral vulnerabilities. Greece represents one of the most striking cases of divergence. Central Greece (+1.9%), Crete (+1.3%), Attica (+0.8%), and the Peloponnese (+0.5%) recorded slight gains, suggesting localised resilience in industry and services. By contrast, the majority of Greek regions suffered losses, with particularly sharp declines in Western Macedonia (-10.5%), in the Ionian Islands (-3.8%), and Epirus (-3.5%), where the lack of productive differentiation

Map 2.4.1 Real labour productivity (thousand euro per worker) in 2019, EU27 regions (NUTS-2)

125 to 160
100 to 125
75 to 100
50 to 75
25 to 50
10 to 25
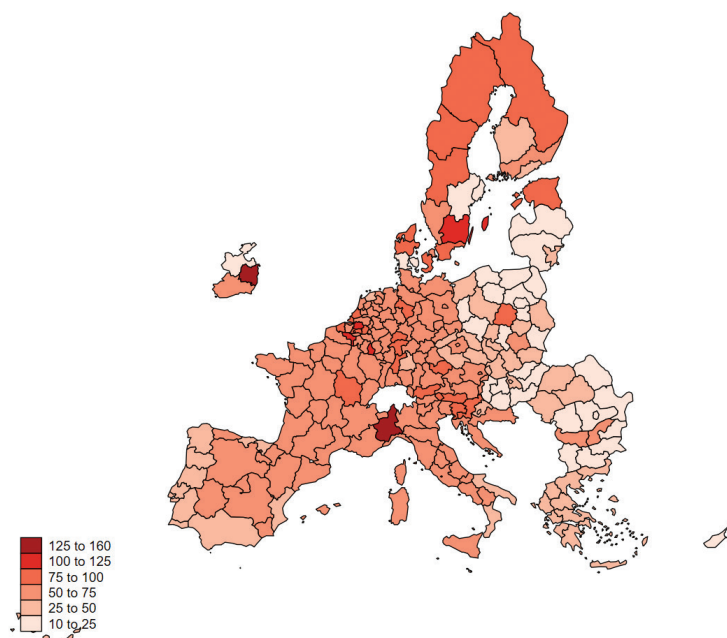
Source: Eurostat and own calculations.

Map 2.4.2 Real productivity percentage change (%) between 2019-2023, EU27 regions (NUTS-2)

40% to 50%
25% to 40%
15% to 25%
7.5% to 15%
0% to 7.5%
-7.5% to 0%
-15% to -7.5%
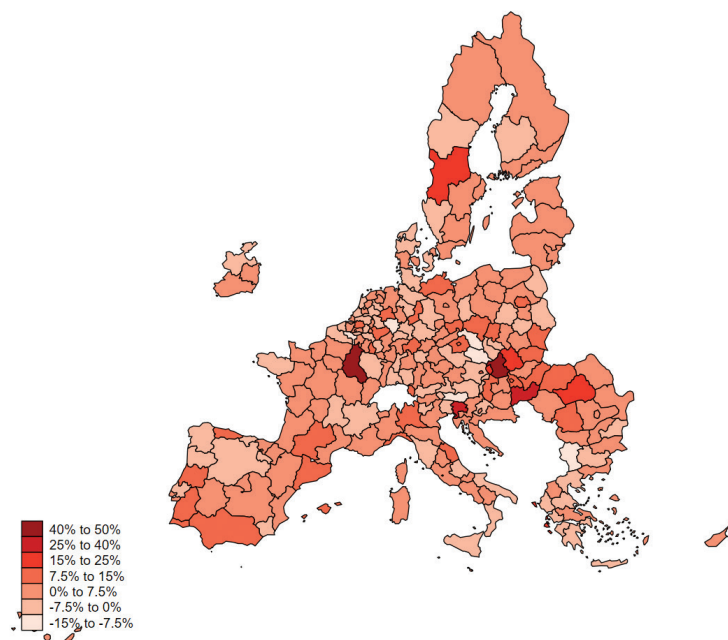
Source: Eurostat and own calculations.

constrained growth. The North and South Aegean also registered negative changes, underlining the vulnerability of island economies. Overall, the map of productivity change highlights persistent structural weaknesses and regional disparities. As explained in Benos and Karagiannis (2016) and Tsekeris and Papaioannou (2018), human capital and market access have also affected regional disparities in labour productivity.

2.5. Sectoral productivity growth

Turning to the sectoral dimension of productivity in the Greek economy, significant variation is evident across economic sectors. Table 2.5.1 presents data on labour productivity growth in Greece for 2024, compared to 2023, across major economic sectors, with labour productivity defined as the percentage change in Gross Value Added (GVA) minus the percentage change in hours worked. This decomposition allows us to assess whether output growth is driven by the more efficient use of labour or simply by an increase in labour input.

- In Agriculture, forestry and fishing (Sector A), labour productivity surged by 16.8%, with GVA rising by 16.1% and hours worked slightly decreasing by 0.7%. This suggests a strong

Table 2.5.1 Contributions to labour productivity growth per sector, 2024

		Labour productivity	GVA	Hours worked
A	Agriculture, forestry and fishing	16.8%	16.1%	-0.7%
B–E	Industry (except construction)	-1.6%	1.8%	3.4%
C	Manufacturing	1.2%	3.9%	2.7%
F	Construction	-5.6%	2.8%	8.4%
G–I	Wholesale and retail trade, transport, accommodation and food service activities	2.1%	9.3%	7.2%
J	Information and communication	4.2%	7.4%	3.2%
K	Financial and insurance activities	-3.2%	4.9%	8.1%
L	Real estate activities	2.7%	2.2%	-0.5%
M–N	Professional, scientific and technical activities; administrative and support service activities	9.1%	10.8%	1.7%
O–Q	Public administration, defence, education, human health and social work activities	1.6%	1.4%	-0.2%
R–U	Arts, entertainment and recreation; other service activities; activities of households and extra-territorial organisations and bodies	-0.2%	8.8%	9.0%

Source: Eurostat, authors' own calculations.

and likely technology- or efficiency-driven improvement, as output rose sharply without an increase in labour input.

- In Industry (except construction, Sectors B–E), labour productivity declined by 1.6%, despite a 1.8% increase in GVA. The negative result is due to a 3.4% increase in hours worked, outpacing output gains. This indicates declining efficiency, potentially due to capacity constraints or increased reliance on lower-productivity labour.

- Manufacturing (Sector C) showed positive productivity growth of 1.2%, with GVA rising by 3.9% and hours worked by 2.7%. This reflects a moderate gain in efficiency, although labour input remains a significant contributor to output growth. Thus, Industry's productivity decline can be attributed to industrial sectors beyond manufacturing.

- Construction (Sector F) reported a notable decline in productivity of 5.6%, with hours worked increasing sharply by 8.4% while GVA rose by only 2.8%. This suggests the extensive use of labour with comparatively little growth in output, possibly indicating inefficiencies or a lag in capital utilisation.

- Wholesale and retail trade, transport, accommodation and food services (G–I) posted a 2.1% productivity increase, as GVA rose by a strong 9.3% and hours worked by 7.2%. Although labour input grew significantly, productivity still improved, indicating some efficiency gains likely driven by economies of scale or digitalisation.

- Information and communication (Sector J) stand out with a 4.2% productivity increase, driven by a 7.4% rise in GVA and a 3.2% increase in hours worked. This reflects the high-tech nature of the sector, where productivity gains are often driven by innovation and intangible capital utilisation.

- Financial and insurance activities (Sector K) recorded a 3.2% decline in productivity, with hours worked increasing by 8.1% against a 4.9% increase in output. This might suggest a less efficient use of labour or a shift toward more labour-intensive service provision.

- Real estate activities (Sector L) posted a 2.7% increase in productivity, with a moderate 2.2% GVA increase and a 0.5% decline in hours worked. This modest gain reflects improved efficiency, possibly due to digital tools or increased rents, without a proportional rise in staffing.

- Professional, scientific, and administrative activities (Sectors M–N) experienced a strong productivity increase of 9.1%, thanks to a 10.8% rise in GVA and only a 1.7% increase in hours worked. This sector clearly benefited from efficiency improvements and perhaps a shift toward higher-value-added services.

- Public administration, education, and health (Sectors O–Q) experienced a modest productivity gain of 1.6%, with stable GVA growth (1.4%) and a slight decline in hours worked (-0.2%). This suggests mild efficiency improvements, which are significant in the context of traditionally less flexible public services.

- Arts, entertainment and other services (Sectors R–U) experienced a slight productivity decline of 0.2%, with GVA up 8.8% but hours worked increasing even more at 9.0%. This

outcome implies that the sector's growth was driven more by labour volume than by efficiency gains.

In conclusion, 2024 data show mixed results across sectors. High productivity gains were observed in Agriculture, Information and communication, and Professional services, namely, sectors that likely benefited from technology, innovation, or organisational efficiency. Productivity losses occurred in Non-Manufacturing Industry, Construction, Financial services, and some service sectors, where labour growth outpaced output gains. Public sector productivity improved slightly, while Real estate and trade-related sectors also posted moderate gains. Overall, these trends highlight the need to deepen structural reforms and digitalisation in low-productivity sectors, while continuing to support innovation in high-performing industries.

2.6. Public spending efficiency

The efficient use of public resources and the implementation of sound fiscal policies are essential for sustainable growth, fiscal stabilisation and sustainability, and social well-being. In recent decades, rising macroeconomic constraints and the increased global mobility of capital and labour have intensified the pressure on government budgets (Tanzi and Schuknecht, 2000). Simultaneously, heightened transparency and public accountability have raised expectations for more effective and responsible service delivery (Heller, 2003; Joumard et al., 2004).

Measuring public sector efficiency remains a challenging task, particularly in cross-country analysis. It requires clearly defined policy objectives and robust methods that link public spending to measurable outcomes. Recent approaches emphasise not how much is spent, but how effectively resources translate into results (Afonso et al., 2005, 2024; Chrysanthakopoulos et al., 2025). Improving spending efficiency is thus a strategic priority for policymakers aiming to align fiscal discipline with rising social and economic demands.

The starting point of this analysis is the Government Effectiveness Index from the World Bank, examined across the EA countries. The choice of the EA countries as the focus of the study ensures a high degree of comparability, as these countries share a common currency, operate within harmonised monetary and fiscal frameworks, and are subject to broadly consistent institutional and regulatory environments. This relative homogeneity strengthens the analytical value of the comparisons and enhances the robustness of the findings.

The Government Effectiveness Index captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. It is constructed from a compilation of survey-based data derived from multiple sources, reflecting expert and public opinion, and provides a composite measure of institutional and administrative performance within the public sector. Hence, it serves as a meaningful proxy for assessing cross-country differences in governance capacity and administrative efficiency (Afonso et al., 2005).

Figure 2.6.1 shows the evolution of the Government Effectiveness Index for the EA countries from 2005 to 2023, with a specific focus on Greece (blue line) and the EA average (red line). The grey lines represent the other EU member states. The graph reveals a consistent gap between Greece and the EA average throughout the entire period. While the euro area average remains relatively stable (with a mild downward trend after 2015), Greece exhibits a pronounced decline in government effectiveness, especially during the years of the sovereign debt crisis (2010–2015). Although there is a modest improvement after 2017, it remains below both its pre-crisis levels and the EA average. This persistent gap suggests structural weaknesses in the quality of public administration, service delivery, policy implementation, and the inefficient management of public expenditure in Greece, highlighting the relevance of further analysis on public sector efficiency and institutional capacity.

In order to empirically assess public sector efficiency, it is essential to move beyond qualitative governance indicators and apply structured analytical methods. Building on Afonso et al. (2005; 2024) and Chrysanthakopoulos et al. (2025), this analysis adopts composite performance and efficiency measures to evaluate the relationship between public spending and socio-economic outcomes. These methods enable a distinction between public sector performance (defined as

Figure 2.6.1 The evolution of the Government Effectiveness Index

Government Effectiveness Index
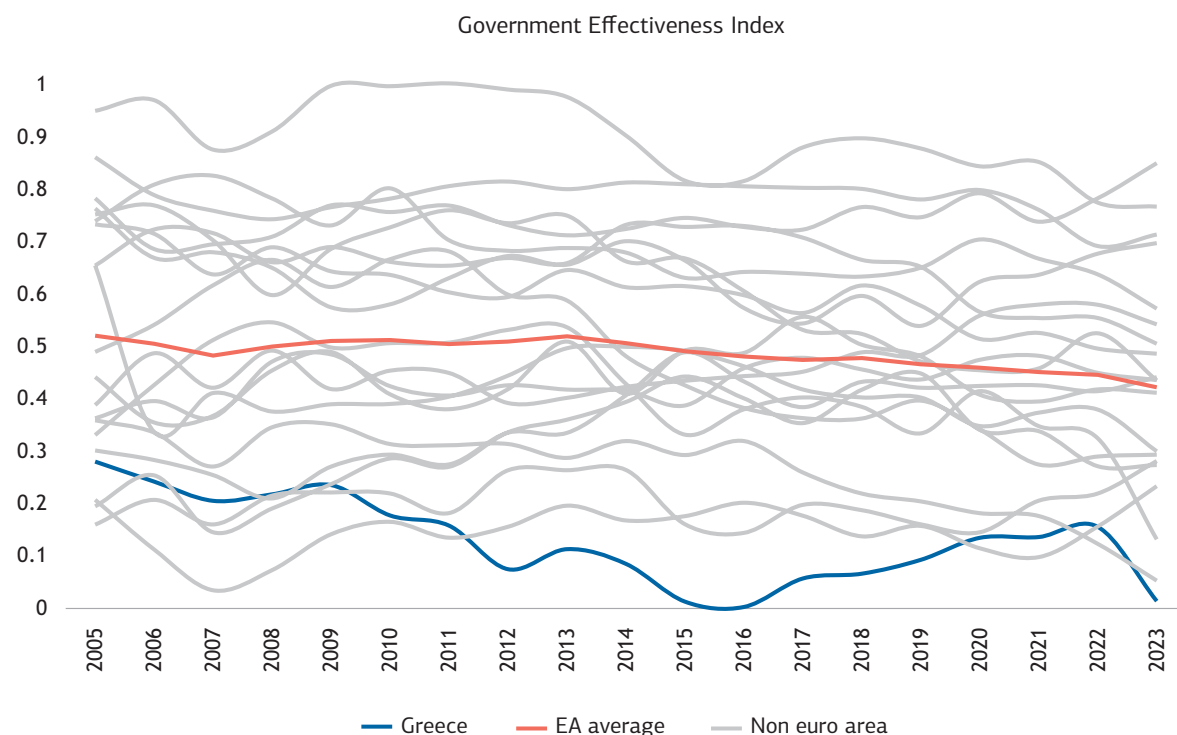
Notes: The Government Effectiveness Index ranges from -2.5 (poor), to +2.5 (strong). For visualization purposes, the index normalized so that it ranges between 0 and 1.

Figure 2.6.2 Production possibility frontier for years (a) 2007 and (b) 2023

(a)

2007

(b)

2023
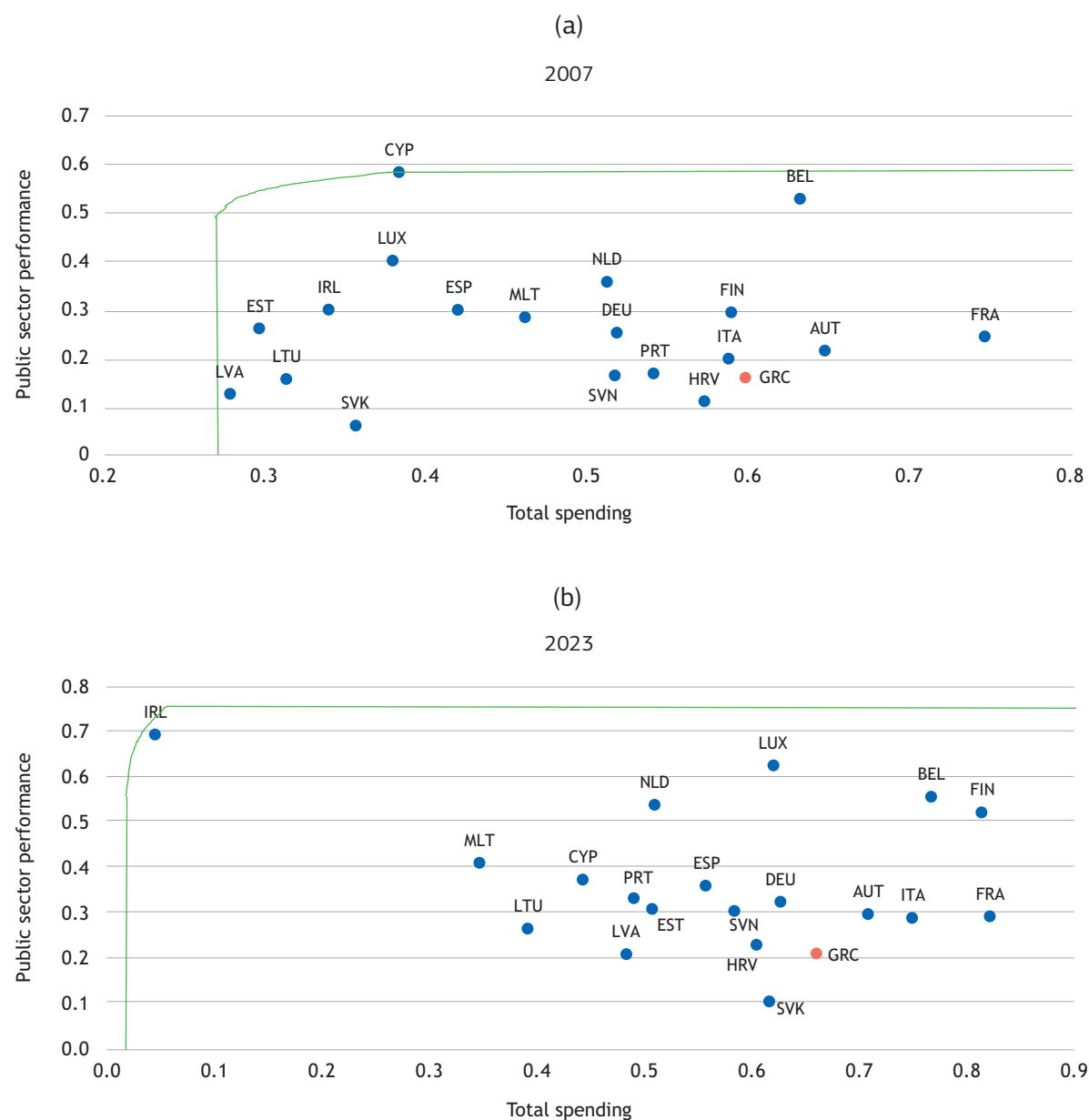
Notes: In the vertical axis is the total public sector performance, i.e., the output composite indicator, which consists of two primary parts: Opportunity and Musgravian indicators (see Chrysanthakopoulos et al., 2025, Table 1). In the horizontal axis is the normalised total government spending to GDP ratio.

the outcomes of government policies) and public sector efficiency, which considers the extent to which these outcomes are achieved relative to the resources employed.

Figure 2.6.2 presents the production efficiency frontier for 2007 and 2023. It shows that in 2007, Cyprus and Latvia were operating on the production possibility frontier, while Luxembourg and Belgium were near the frontier. However, by 2023, Ireland was the only country positioned at

the frontier, suggesting that the other countries, now located below the frontier, have potential for efficiency gains. As regards the case of Greece (red bullet), both before the global financial crisis in 2007 and in 2023, it is positioned among the countries with the highest levels of public expenditure (as % of GDP) and notably low levels of public sector performance.

Box 2.6.1 Technical note

For each country i, equation (1) is estimated using Data Envelopment Analysis (DEA), where Y_i represents a composite output performance index and X denotes the input, measured as public expenditure (% of GDP). The output measure combines two components: Opportunity indicators (covering infrastructure, education, health, and administration) and Musgravian indicators (capturing distribution, stability, and economic performance). Y_i is calculated as the average of these two components (see Chrysanthakopoulos et al., 2025).

$$Y_i = f(X)_i, \, i = 1, \, ..., \, 20 \tag{1}$$

Assuming variable returns to scale to reflect the possibility that a country may not operate at an optimal scale, an input-oriented approach is applied, i.e., examining how much inputs can be proportionally reduced while maintaining the same level of output. Efficiency scores are derived by solving the following linear programming problem:

$$\min\theta_{\theta,\lambda}$$
$$s.t. -y_i + Y\lambda \geq 0$$
$$\theta x_i - X\lambda \geq 0 \tag{2}$$
$$I1'\lambda = 1$$
$$\lambda \geq 0$$

where y_i is a vector of outputs, x_i is a vector of inputs, λ is a vector of constants, $I1'$ is a vector of ones, X is the input matrix and Y is the output matrix. The efficiency scores θ range from 0 to 1. A country is below the production frontier (i.e., inefficient) if $\theta < 1$, and at the frontier (i.e., efficient) if $\theta = 1$.

Using non-parametric techniques (see Box 2.6.1) to evaluate public spending efficiency, Greece ranked 3rd from the bottom among EA countries in 2007 and showed only marginal improvement, rising to 6th from the bottom, by 2023. Four other countries that also implemented substantial fiscal consolidation programs, i.e., Spain, Cyprus, Portugal, and Ireland, are of particular interest. Before the global financial crisis, Cyprus ranked 3rd, Ireland 5th, Spain 8th, and Portugal 14th. By 2023, Ireland ranked 1st, Cyprus 4th, Portugal 6th, and Spain 9th. In general, empirical studies suggest that fiscal consolidations can contribute to improvements in public sector efficiency (see e.g., Afonso and Alves, 2023).

This is evident in the case of Ireland and Portugal, and to a lesser extent for Greece. In contrast, Cyprus and Spain remained at relatively similar levels of efficiency over time, despite undergoing fiscal adjustment. Overall, this persistent inefficiency in public spending highlights the need for more effective management of public finances. To address this challenge, policy efforts should prioritise strengthening public financial management by adopting outcome-based budgeting, enhancing transparency, and reinforcing accountability in the allocation and use of public resources.

2.7. R&D efficiency

The interconnectedness between research and development (R&D), innovation, and productivity is extensively documented in the international literature. Substantial evidence highlights that R&D investments expand a firm's knowledge base, catalysing innovation, which, in turn, drives productivity, competitiveness, and long-term sustainable growth (Baumann and Kritikos, 2016; Ciocanel and Pavelescu, 2015; Coccia, 2012; Raymond et al., 2015; Huergo and Moreno, 2011; Ganotakis and Love, 2011; Harris and Li, 2009).

In Greece, gross expenditure in R&D (GERD) has shown a remarkable increase over the past decade. Between 2014 and 2023, GERD more than doubled, rising by 126%, from approximately €1.49 billion to €3.36 billion. This growth outpaced the EU27 and EA20, whose GERD increased by 55% and 53%, respectively, during the same period. Correspondingly, Greece's R&D intensity (measured as GERD relative to GDP) increased by 0.64 pp from 2014 to 2023, reaching 1.49% of GDP, compared to more modest increases of 0.15 pp and 0.16 pp for the EU27 and EA20, respectively (Figure 2.7.1).

In terms of GERD per inhabitant, Greece recorded the sixth highest increase, by 137%, between 2014 and 2023, while the EU27 and EA20 averages showed increases of 53% and 49%, respectively (Figure 2.7.2). Despite this impressive growth trajectory, Greece remains below the EU27 and the EA20 averages in R&D intensity and GERD per inhabitant, ranking 17th and 19th, respectively, in 2023. These trends underscore both the progress made and the continuing challenge for Greece to close the gap with leading European economies.

In 2021, the main source of R&D funding in both the EU27 and the EA20 was the business sector, which accounted for approximately 58% of total R&D expenditure. In contrast, in Greece, the government sector was the largest contributor to R&D funding, accounting for 44.5% of the total (Figure 2.7.3). Nevertheless, when expressed as a percentage of GDP, R&D funding in Greece remained below the corresponding levels for the EU27 and EA20. Specifically, government sector funding in Greece amounted to 0.64% of GDP and business sector funding to 0.55% of GDP, compared to 0.68% and 0.69% from the government sector, and 1.29% and 1.32% from the business sector, in the EU27 and EA20, respectively.

With respect to the sectors of R&D performance, data for 2023 indicate that Greece exhibited lower R&D intensity than the EU27 and EA20 aggregates in both the business sector and the higher education sector. By contrast, R&D intensity in the government sector in Greece exceeded the corresponding levels observed for the EU27 and EA20 (Figure 2.7.4).

Figure 2.7.1 GERD (% of GDP)
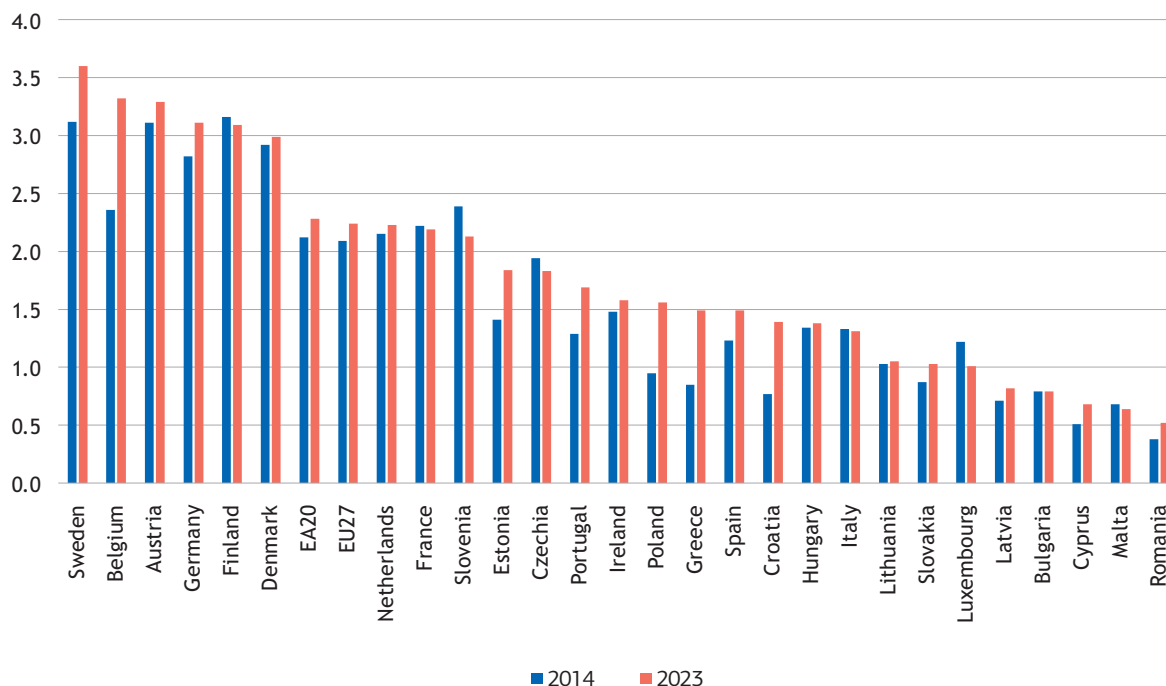
Source: Eurostat.

Figure 2.7.2 GERD per inhabitant, in euros
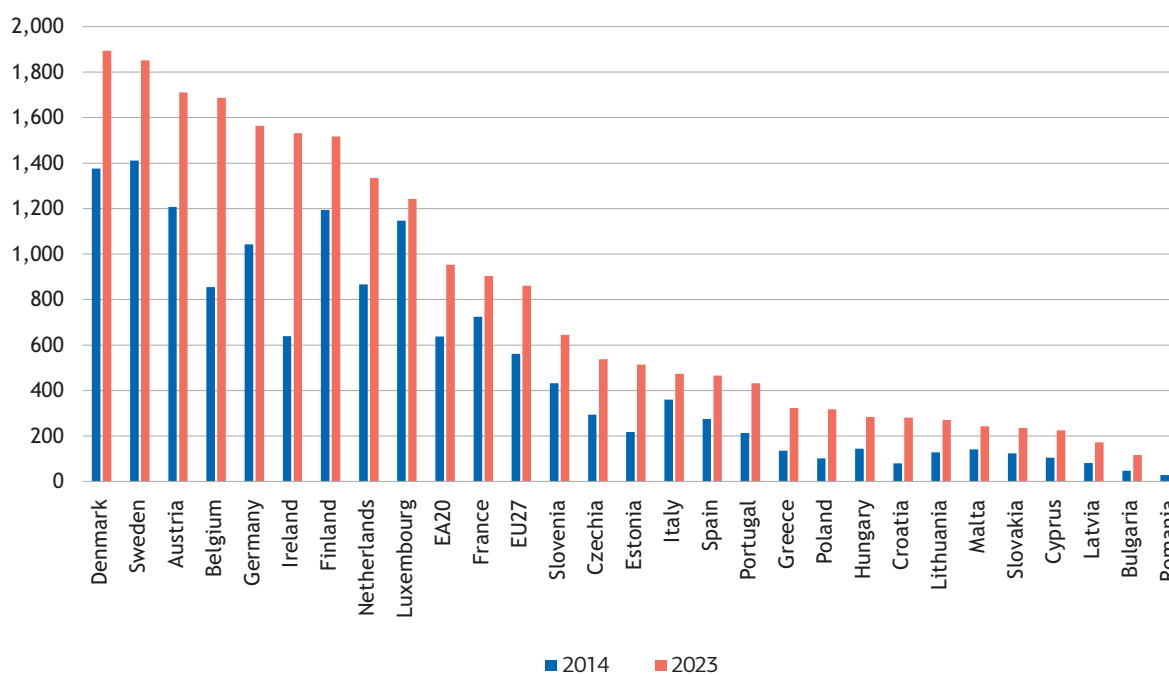
Source: Eurostat.

Figure 2.7.3 GERD by source of funding (% of total funding), 2021

Legend:
- ■ Business enterprise sector
- ■ Government sector
- ■ Higher education sector
- ■ Private non-profit sector
- ■ Rest of the world (Foreign funds)
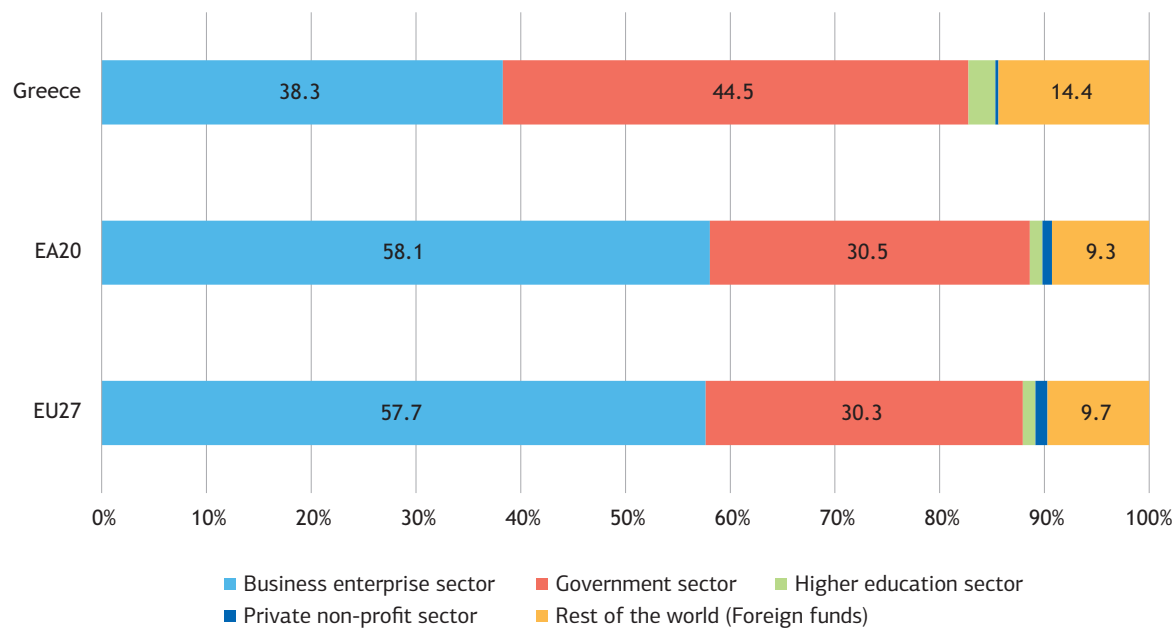
Source: Eurostat.

Figure 2.7.4 GERD (% of GDP) by sectors of performance, 2023

Legend:
- ■ EU27
- ■ EA20
- ■ Greece
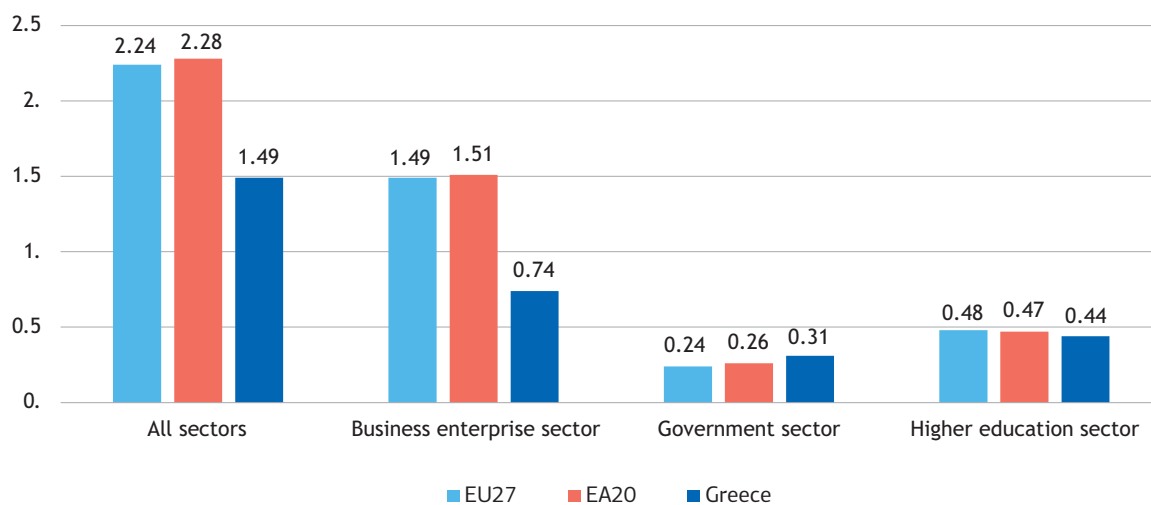
Source: Eurostat.

In 2022, within the framework of business expenditure on R&D (BERD) in Greece, the manufacturing sector accounted for the largest share, representing 36.1% of total BERD. Notably, the pharmaceutical industry emerged as the leading contributor within manufacturing, with a share of 10.7%. The manufacturing sector was followed by the information and communication sector, which accounted for 21.6% of total BERD, and the professional, scientific and technical activities sector, with 12.9%. All three sectors have recorded consistent annual growth in R&D investment since 2019, underscoring their growing role in the national innovation ecosystem (Figure 2.7.5).

Human capital is a fundamental driver of knowledge generation and a key determinant of the effectiveness of R&D systems. As illustrated in Figure 2.7.6, Greece ranked 10th among EU member states in 2023 in terms of the share of R&D personnel and researchers (expressed as a percentage of total employment, in full-time equivalent – FTE). A distinctive feature of the Greek R&D workforce is its distribution across sectors. In 2023, 45% of R&D personnel and researchers in Greece were employed in the higher education sector, 31% in the business sector, and 23% in the government sector. This sectoral pattern – characterised by the predominance of higher education institutions in R&D employment – is observed in only three other member states: Cyprus, Latvia, and Lithuania.

Figure 2.7.5 BERD by sector (NACE Level 1), Greece
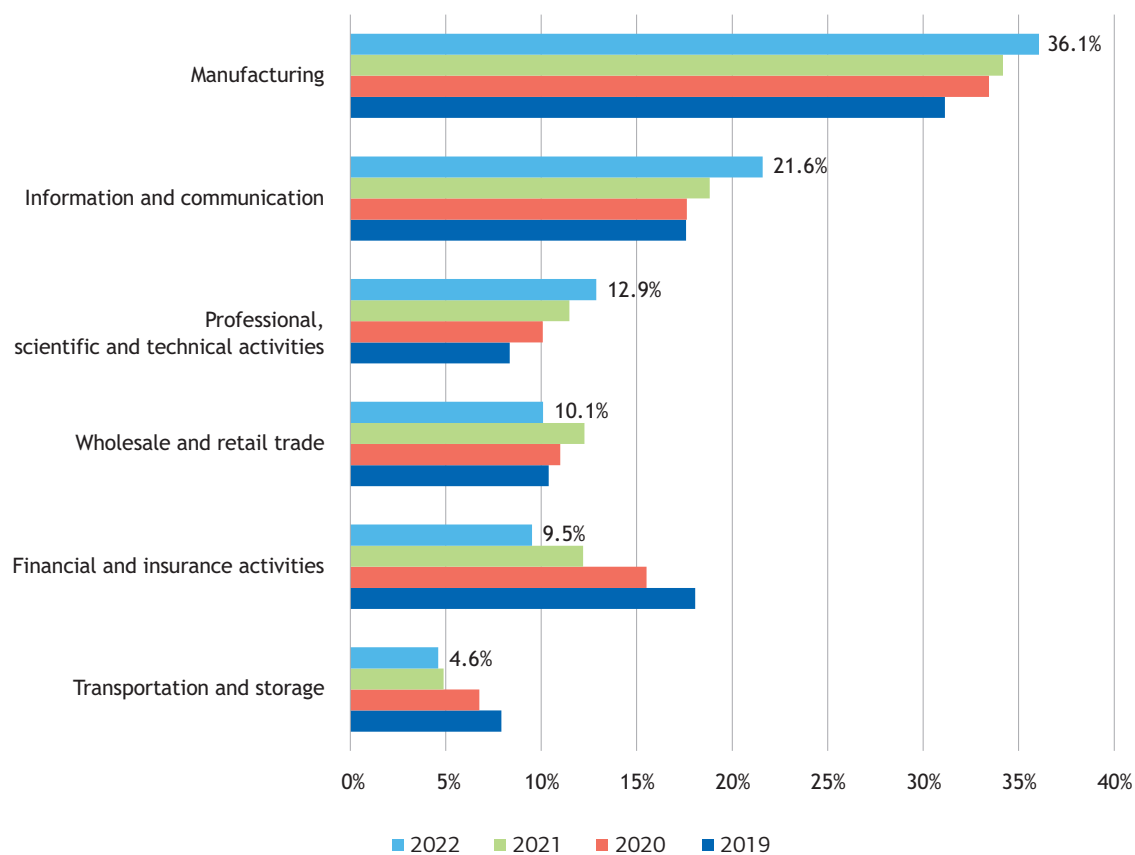
Source: Eurostat.

Figure 2.7.6 Share of R&D personnel and researchers in total employment (%), numerator in FTE, 2023
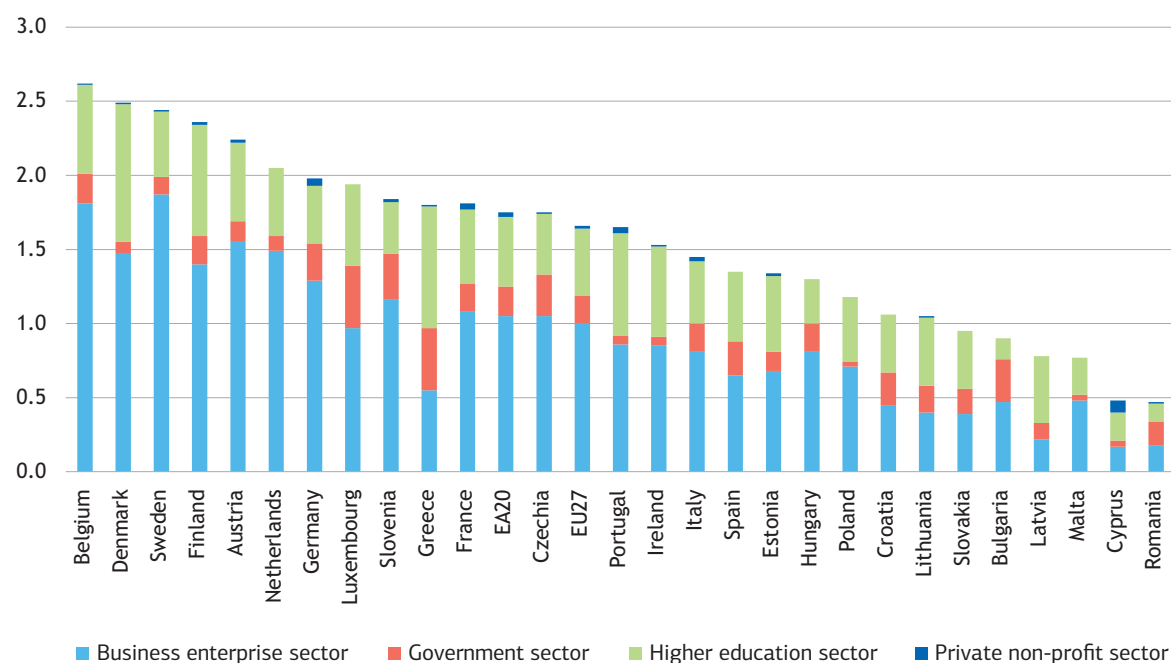
Source: Eurostat.

In contrast, in 21 member states, more than half of R&D personnel and researchers are employed in the business sector, indicating a stronger integration of research activity within the private sector. Greece records the second lowest share of R&D personnel and researchers employed in the business sector (just above Latvia), the third highest share in the government sector (following Bulgaria and Romania), and the second highest share in the higher education sector, after Latvia. These figures reflect the structural characteristics and institutional orientation of Greece's R&D ecosystem, which remains heavily reliant on public and academic institutions.

Given that R&D expenditure is considered as an important constituent of economic growth and competitiveness, it is important to measure the effectiveness of such investment. For the purposes of the current analysis, R&D effectiveness is measured as the ratio of an R&D output to the basic R&D input, that is, GERD. To this end, based on the relevant literature (Carrillo, 2019; Thomas, Sharma and Jain, 2011; Wang, 2007), four indicators regarding R&D outputs are considered: (a) scientific publications, (b) citations, (c) patent applications, and (d) high-tech exports.[5] Scientific publications and citations serve to capture knowledge production and its impact

5. Since a certain length of time (usually two or three years) is required between the provision of inputs and the outcomes (Kontolaimou, Giotopoulos and Tsakanikas, 2016; Thomas, Sharma and Jain, 2011; Carrillo, 2019), the data on publications and citations have been taken for the year 2024, data on patents for year 2023, and data on high-tech exports for year 2022 (the most recent year with available data), while the data on GERD have been taken for the years 2021, 2020, and 2019, respectively.

Figure 2.7.7 Publications and citations (2024) per million euro of GERD (2021)
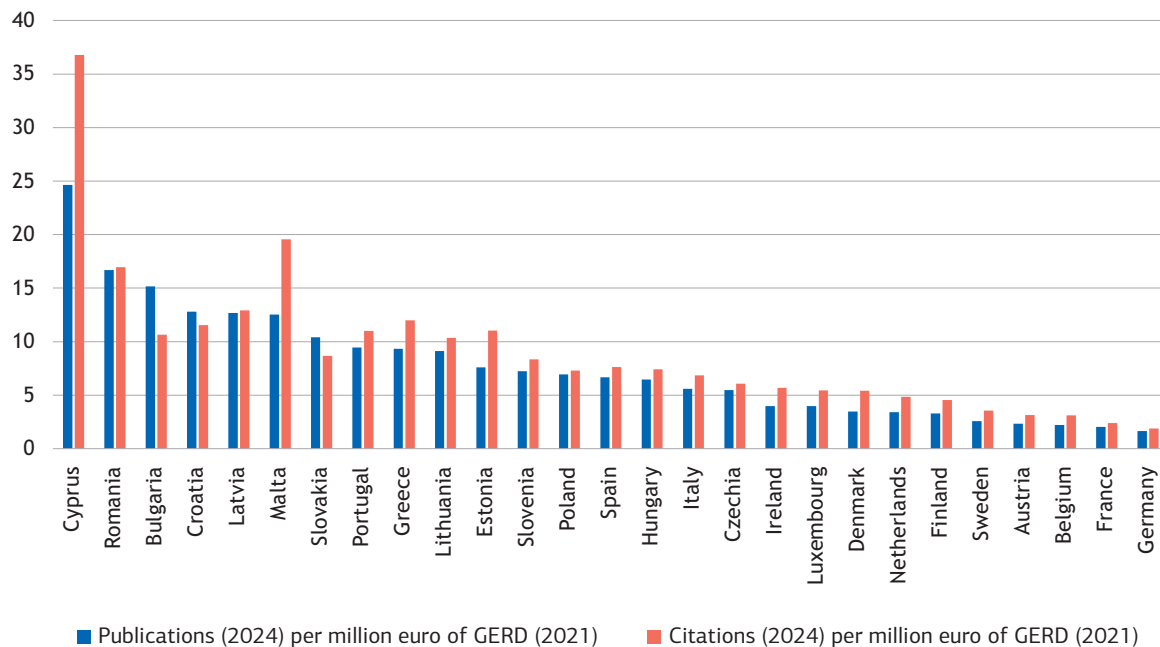
Source: Scimago Journal & Country Rank, Eurostat, own calculations.

within the research community, while patent applications indicate technological advancements and intellectual property generation. High-tech exports reflect the commercial and economic translation of R&D activities into competitive products on the global stage.

As illustrated in Figure 2.7.7, Greece demonstrates a relatively strong performance in terms of scientific publications and citations per million euro of GERD, ranking 9th and 5th among member states, respectively. These results indicate a comparatively high scientific output relative to R&D investment. However, Greece lags significantly in terms of technological and commercial outcomes. Specifically, in patent applications (2023) per million euro of GERD (2020), Greece ranks 22nd (Figure 2.7.8), with the ratio remaining unchanged, at 0.26, compared to 2020 (measured as patent applications in 2020 per million euro of GERD in 2017). A similar pattern is observed for the ratio of high-tech exports to GERD, with Greece again ranking 26th, just ahead of Finland, though the ratio improved from 0.89 in the previous year to 1.16 (Figure 2.7.9).

Figure 2.7.9 further highlights that each euro invested in R&D corresponds to €1.16 in high-tech exports for Greece. This output ratio is considerably lower than that of several member states, including Ireland, Malta, Latvia, Czechia, and the Netherlands, where the return exceeds €10 per euro invested. Conversely, only Finland records a ratio below one euro. These differences underscore significant variation in the efficiency with which R&D investments translate into high-tech export performance across the EU, highlighting potential areas for policy focus and improvement in Greece.

Figure 2.7.8 Patent applications per million euro of GERD

■ Patent applications (2023) per million euro of GERD (2020) ■ Patent applications (2020) per million euro of GERD (2017)
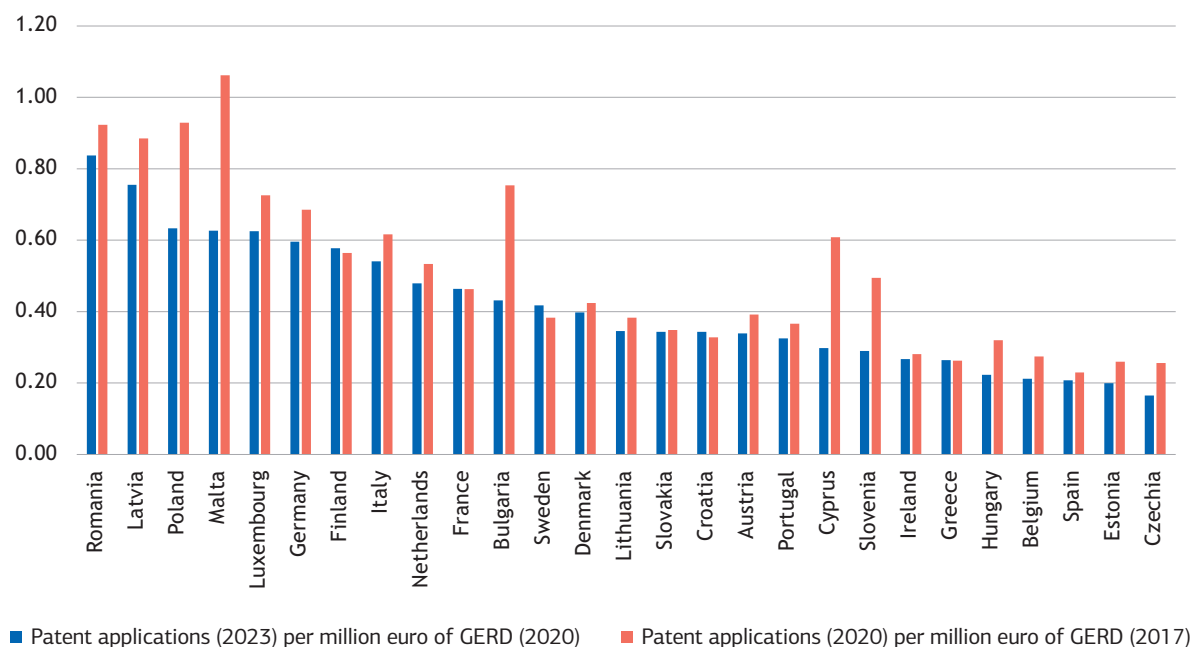
Source: WIPO, Eurostat, own calculations.

Notes: Total patent applications (direct and Patent Cooperation Treaty national phase entries).

Figure 2.7.9 High-tech products exports/GERD

■ High-tech exports (2022)/GERD(2019) ■ High-tech exports (2021)/GERD(2018)
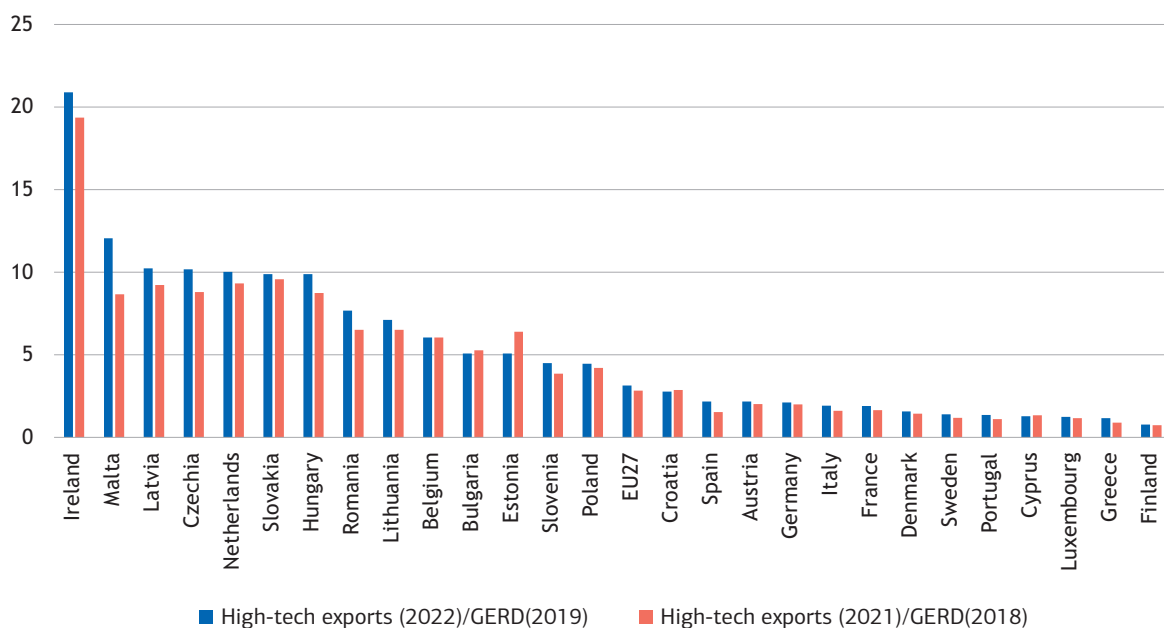
Source: Eurostat, own calculations.

3. Trends in Competitiveness and Influencing Factors

3.1. Public finance and macroprudential policies

3.1.1. Public budgetary trends

The Greek primary balance stood at 2% of GDP in 2023, turning positive for the first time since the outbreak of the Covid-19 pandemic. According to the European Commission Autumn 2024 Forecast, the primary balance was expected to improve further, to 2.9% of GDP, in both 2024 and 2025. However, according to the latest data published by the Hellenic Statistical Authority (ELSTAT), the Greek primary balance recorded a surplus of 4.8% of GDP in 2024, outperforming past estimates.

The overperformance of the general government revenue in recent years marks a positive fiscal outlook for Greece, largely attributed to the considerable increase of tax revenue. According to the latest data published by ELSTAT, in 2023, the general government revenue stood at 48.2% of GDP, while primary expenditure remained lower at 46.1%. In 2024, government revenue increased by 1.1% of GDP, standing at 49.3%, higher than the 48.1% estimation provided in the European Commission Autumn 2024 Forecast. Past estimates for primary expenditure foresaw a further reduction to 45.2% in 2024 from 46.2% in 2023 (European Commission Autumn 2024 Forecast). However, expenditure remained even lower in 2024, at 44.5% of GDP, mainly due to a higher GDP growth rate in current prices rather than a reduction in government expenditure in absolute terms. According to the latest data published by the European Commission (Spring 2025), in 2023, primary government expenditure decreased by 0.7% on an annual basis (€103.9 billion in 2023 compared to €104.6 billion in 2022), while revenue increased by 3.5% (€108.4 billion in 2023 compared to €104.7 billion in 2022). Estimates for 2024 suggested a further acceleration of government revenue and expenditure, at €114.6 billion and €107.6 billion, respectively (European Commission Autumn 2024 Forecast). However, the latest figures published by ELSTAT show an even higher increase of government revenue recorded in 2024 compared to estimates, standing at €117.2 billion, constituting 49.3% of GDP, while primary government expenditure remained at €105.8 billion in 2024, €1.8 billion lower than the previous estimate, constituting 44.5% of GDP (see Figure 3.1.1).

Tax revenue from direct and indirect taxation in 2023 amounted to €61.7 billion, representing 27.4% of GDP, while, in 2024, tax revenue reached €66.4 billion, 4.7 billion higher than the 2023 figure, representing 28% of GDP. The tax revenue overperformance recorded in recent years is highly attributable to the crackdown on tax evasion. Significant policy reforms, including the interconnection of cash registers with POS systems and the development of various digital services and applications by the Independent Authority of Public Revenue (IAPR), have facilitated the recording and monitoring of financial transactions, resulting in improved tax compliance and a significant increase in tax revenue (Bank of Greece Governor's Annual Report 2024).

Following this considerable improved fiscal outlook, the Greek government announced €1.1 billion in financial benefits for lower-income households renting a house (i.e., return of the cost of one month's rent, return of €250 euro per year to older, retired, disabled and uninsured people) and the public investment programme (i.e., €500 million per year will be paid to accelerate public infrastructure and social projects). Furthermore, the prime minister announced a wide package of supporting measures for Greek households during the Thessaloniki International Fair (September 2025), including, among others, a reduction in the tax rates on incomes between €10,000 and €40,000 by two percentage points; an introduction of an additional middle tax bracket covering incomes from €40,000 to €60,000 taxed at 39% instead of 44%; tax relief for households with children (a reduction in the tax rates for families with one child to 18% and with two children to 16% on income between €10,000 and €20,000, while, for families with three children, the reduction will reach 9%, and for those with four or more, the income tax rate will be zero for the same income bracket); tax relief to young Greeks (below 25 years old); increases to pensions from 2026; public employee wage increases in 2026 linked to a minimum wage increase; and a reduction in ENFIA property tax on primary residences in rural towns under 1,500 residents.

Figure 3.1.1 Total government revenue, primary expenditure and primary balance

Total government revenue, % of GDP
Total primary government expenditure, % of GDP
Primary balance, % of GDP (rhs)
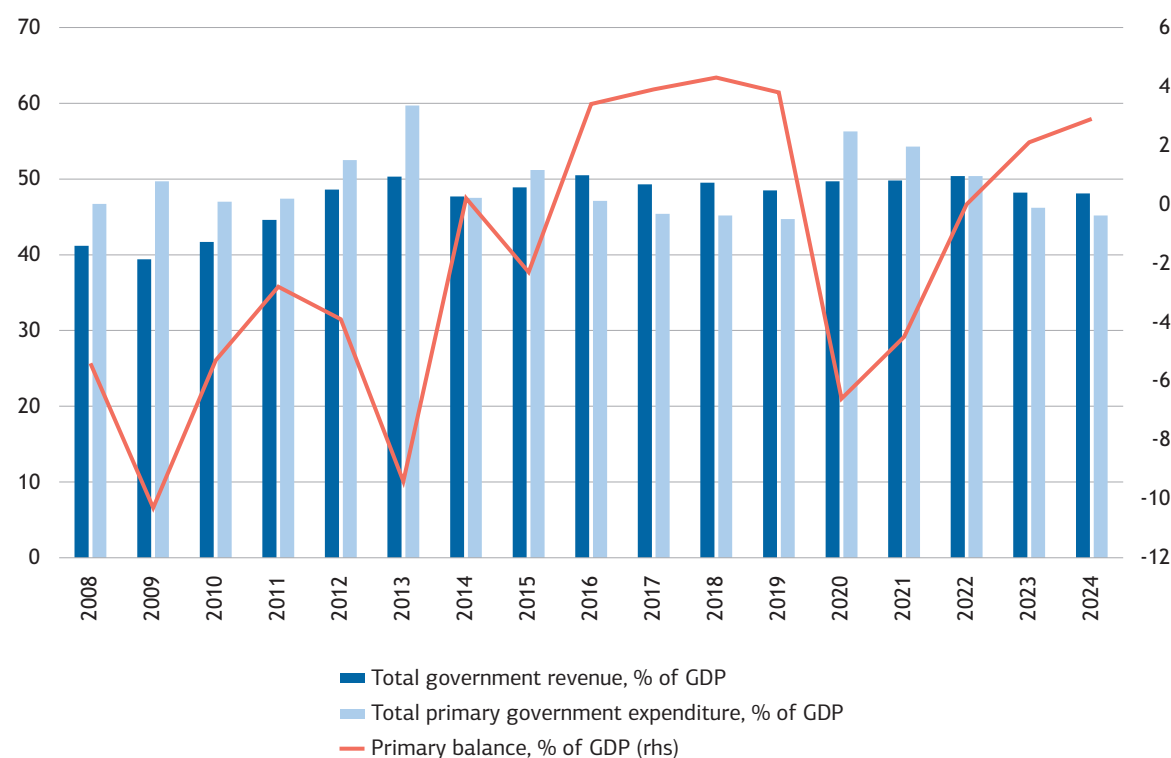
Source: European Commission AMECO database. European Commission Spring 2025 Forecast.

3.1.2. Public debt profile

General government debt stood at 163.9% of GDP at the end of 2023. According to the European Commission Autumn 2024 Forecast, the debt ratio was expected to decline to 153.1% of GDP at the end of 2024. The latest data provided by ELSTAT show that the public debt indeed decreased considerably, by 10.3 percentage points of GDP, standing at 153.6% of GDP in 2024 compared to 2023 and recording the largest reduction of public debt among EU countries (Figure 3.1.2). This deceleration is attributed not only to GDP growth, but also to the debt reduction of €4.2 billion in nominal terms. Public debt is projected to decrease further to 146.6% of GDP by the end of 2025 according to the European Commission Spring 2025 Forecast; however, according to the annual progress report for the year 2025, submitted in the context of the European Semester, Greece foresees a further reduction in the public debt ratio, reaching 145.7%.

It should also be highlighted that, in March 2025, Moody's upgraded Greece's credit rating from Ba1 (positive outlook) to Baa3 with a stable outlook. Moody's attributes this upgrade to the following factors: Greece's credit profile is now more resilient to external shocks, the country's public finances have improved faster than expected, and the recovery of the banking sector has

Figure 3.1.2 Public debt to GDP ratio

■ Public debt to GDP, difference 2024-2023 ● Public debt to GDP, % level 2024, rhs
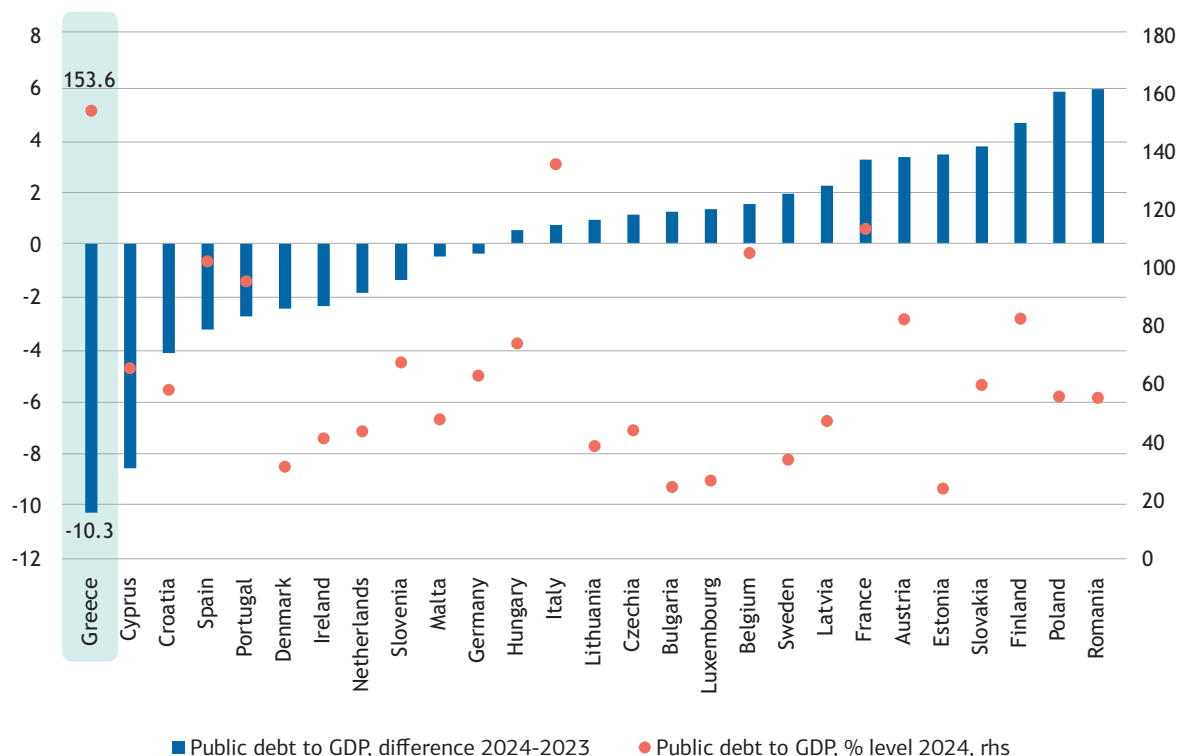
Source: European Commission AMECO database. European Commission Spring 2025 Forecast.

been enhanced. The latter is reflected, on the one hand, in the deceleration of Non-Performing Loans (NPLs), which, according to the latest available data by the Bank of Greece (cut-off date 3.9.2025), stood at €6.5 billion in 2024 (with the share of NPLs to total loans standing at 3.6%), 35.8% or €3.7 billion lower than the respective amount in 2023 (€10.2 billion or 6.2% of total loans). The total reduction in NPLs, compared to its peak level in March 2016, reached 94.54% or €112.7 billion.

On the other hand, the acceleration of Deferred Tax Credit (DTC) depreciation has significantly enhanced banks' capital. Furthermore, in April 2025, Standard & Poor's credit rating agency upgraded Greece's sovereign credit rating to BBB from BBB-, with a stable outlook from a positive one. According to the credit rating agency, this upgrade is due to the considerable fiscal performance of the country, a result of tax compliance improvements combined with resilient economic growth rates. Finally, in May 2025, Fitch Ratings revised the outlook on Greece's long-term foreign-currency issuer default rating (IDR) to positive from stable and affirmed the IDR at BBB-.

3.1.3. Macroprudential policy framework

The onset of the 2008 Global Financial Crisis (GFC) has enforced the extensive adoption of macroprudential measures. Macroprudential policies (MAPs) were used by many emerging and developing economies before the GFC (Cerutti et al., 2017a). However, the GFC gave prominence to severe deficiencies of the financial system, highlighting the need for developed countries to adopt MAPs more extensively as well (Akinci and Olmstead-Rumsey, 2018).

Safeguarding the individual financial institutions from idiosyncratic risks, through microprudential regulation, seemed insufficient to ensure the stability of the system as a whole. Systemic risk played a key role in the outbreak of the 2008 financial crisis, making banking authorities and regulators expand their toolkit with macroprudential measures. In response, the Basel III regulatory framework was introduced, bringing substantial reforms to prudential regulation (Boissay and Cappiello, 2014).

The design and implementation of macroprudential policies in Greece are performed by the Bank of Greece. One of the most widely used macroprudential tools is the **Capital Conservation Buffer (CCoB)**. *CCoB* is a capital reserve that should be held in addition to the minimum Common Equity Tier 1 (CET1) capital requirement, which is set at 4.5% of total risk weighted assets (RWA). Its purpose is to ensure that banks hold enough capital to absorb losses during periods of distress to avoid using the minimum CET1 capital reserves. *CCoB* is fixed at the same level for all European Union (EU) member states, at 2.5% of a credit institution's total risk exposure amount.

The **Systemic Risk Buffer** is another macroprudential tool designed to prevent or reduce the accumulation of systemic risks that are not effectively managed by other capital buffers or macroprudential measures. The Bank of Greece (BoG) is responsible for determining the systemic risk buffer rate and identifying specific sectoral exposures to which it may apply, such as real estate-secured exposures. However, at the time of the GFC, the Bank of Greece had set neither a sectoral nor a broader systemic risk buffer rate.

The aim of the **Countercyclical Capital Buffer** (CCyB) is to prevent or mitigate the build-up of cyclical systemic risks and enhance the banking sector's resilience. CCyB operates in the opposite direction of the overall economic cycle, i.e., in times of upturns, it is increased to protect against potential future risks. Conversely, in times of economic distress or downturns, the buffer is released to support the flow of credit. In line with Executive Committee Act 235/1/07.10.2024, the Bank of Greece evaluates the severity of cyclical systemic risks and reviews the suitability of the countercyclical capital buffer (CCyB) rate for Greece every quarter, making adjustments as needed (Bank of Greece Financial Stability Review Report, 2024). The CCyB rate ranges from 0% to 2.5%, expressed as a percentage of the total risk exposure amount for institutions exposed to credit risk. When the CCyB rate rises, institutions have up to 12 months from the announcement to implement the higher capital requirements (Article 127(5) of Law 4261/2014). Conversely, a reduction in CCyB rates takes effect immediately.

The assessment of cyclical systemic risk by the BoG is performed by monitoring specific indicators, primarily the standardized credit-to-GDP gap. However, additional indicators, grouped into the following categories, are also examined by the Bank: credit developments (e.g., household loan growth), private sector indebtedness (e.g., Debt-to-Income ratio), the potential overvaluation of property prices, the strength of bank balance sheets, external imbalances, and the potential mispricing of risk. According to BoG data, the standardised credit-to-GDP gap has been negative since 2012, standing at -30.8% in the third quarter of 2024 compared to -31.6% in the second quarter, attributed mainly to a nominal GDP increase (Bank of Greece Financial Stability Review Report, 2025). The examination of additional indicators by the Bank of Greece highlights the emergence of cyclical systemic risks in specific areas, including credit to non-financial corporations, residential real estate prices, and the current account. However, the overall analysis confirms that credit growth remains within reasonable limits (Bank of Greece Financial Stability Review Report, 2024). The Bank of Greece decided to set the CCyB rate for Greece at 0.25%, applicable from 1 October 2025, due to the favourable existing economic conditions, which allow the buildup of buffers now in order to safeguard financial stability in the future.

The **Other Systemically Important Institutions buffer** (O-SIIs) is a capital requirement imposed on important financial institutions, i.e., banks, whose failure could significantly impact the financial system. It is set at up to 3% of the total risk exposure amount and can be applied on a solo, sub-consolidated or consolidated basis. O-SII buffers are reviewed at least once a year. The systemically important institutions are identified by the Bank of Greece on an annual basis, and for 2024, the identified O-SIIs were: Alpha Services and Holdings S.A., Eurobank Ergasias Services and Holdings S.A., National Bank of Greece S.A. and Piraeus Financial Holdings S.A. (on a consolidated basis) and Alpha Bank S.A., Eurobank S.A., National Bank of Greece S.A., and Piraeus Bank S.A. (at the solo level). The buffers for these specific O-SIIs were set as follows for 2024 and 2025: at 1.25% for Eurobank Ergasias Services and Holdings S.A. at the consolidated level, and at 1.00% for Alpha Services and Holdings S.A. at the consolidated level and Alpha Bank S.A. at the solo level, Eurobank S.A. at the solo level, National Bank of Greece S.A. at the solo and consolidated levels, and Piraeus Financial Holdings S.A. at the consolidated level and Piraeus Bank S.A. at the solo level (Bank of Greece Financial Stability Review Report, 2024).

Loan-to-Value (LTV) and *Debt-Service-to-Income* (DSTI) ratios are considered *Borrower-Based Measures* (BBMs), and they are designed to mitigate systemic risks arising from the property market and associated private sector financing. As found in Cerutti et al. (2017b), higher LTV ratios can result in excessively rapid house-price and credit growth during booms. The Bank of Greece, by identifying rapid increases in residential prices, recognises emerging imbalances in the real estate market that could pose a potential systemic risk. For this reason, the BoG recently introduced the necessary legal framework to activate BBMs, setting the following caps effective from January 1, 2025: 90% for the loan-to-value ratio at origination (LTV-O ratio) for first-time buyers and 80% for second and subsequent buyers, while the cap on the debt service-to-income ratio at origination (DSTI-O ratio) is set at 50% for first-time buyers and 40% for second and subsequent buyers. Gross et al. (2024) conducted a macroprudential policy calibration for Greece, examining the effectiveness of BBMs. They found that BBMs enhance household resilience, with stronger effects when DSTI and LTV caps are implemented together, while also positively impacting bank capital.

3.2. Developments in external trade

3.2.1. External trade indicators

The current account balance (CAB) of Greece maintained its negative sign and stood at -6.4% in 2024, exhibiting a decrease of 0.2 percentage points (pp) relative to 2023 (-6.2%). Focusing on the components of CAB, goods decreased further to -15.0%. They experienced a 0.3 pp decrease (in 2023, -14.7%), and services fell by 0.2 pp to 9.5% (in 2023, 9.7%). The primary income remained constant at -1.8%, and the secondary income improved by 0.3 pp to 0.9%. Finally, the net international investment position (NIIP) of Greece, i.e. the difference in the value of foreign assets owned by Greece with that of Greek assets owned by foreign nations, increased by 8.2 pp to -131.6% in 2024 (in 2023, -139.8%). It is stressed that NIIP has increased by 40 pp since 2020. Figure 3.2.1 presents CAB and its components, as well as NIIP for Greece.

Greece may face negative values in CAB, but it is not alone in the EU27. Specifically, there are 9 countries from the EU27 in 2024 with negative values in CAB. Romania (-8.3%) and Cyprus (-6.8%) exhibited higher deficits in CAB, with Greece following at -6.4%. At the upper end of the ranking, Ireland faces the greatest surplus in CAB (17.2%), followed by Luxembourg (13.8%), Denmark (13.0%), and the Netherlands (9.9%). The average CAB of the 27 EU countries is about 2.29% in 2024. Regarding the NIIP amongst the EU27 countries in 2024: Malta (82.1%), Germany (81.3%), and Denmark (78.3%) are the "top 3" performing member states, Cyprus (-80.6%), Ireland (-80.7%), and Greece (-131.6%) constitute the "bottom 3" performers, and the average of the EU27 countries is around -3.91%.

Next, Figure 3.2.2 depicts the Greek current account ratio (CAR) defined as credits over debits, as well as the average CAR of the EA19 member states. A negative CAB value denotes a deficit in the current account and a positive CAB indicates a surplus in the current account. Similarly, when CAR exceeds 1, there is a surplus (credit > debit) in the current account, and when CAR is

Figure 3.2.1 Current account balance, components, and NIIP (Greece)
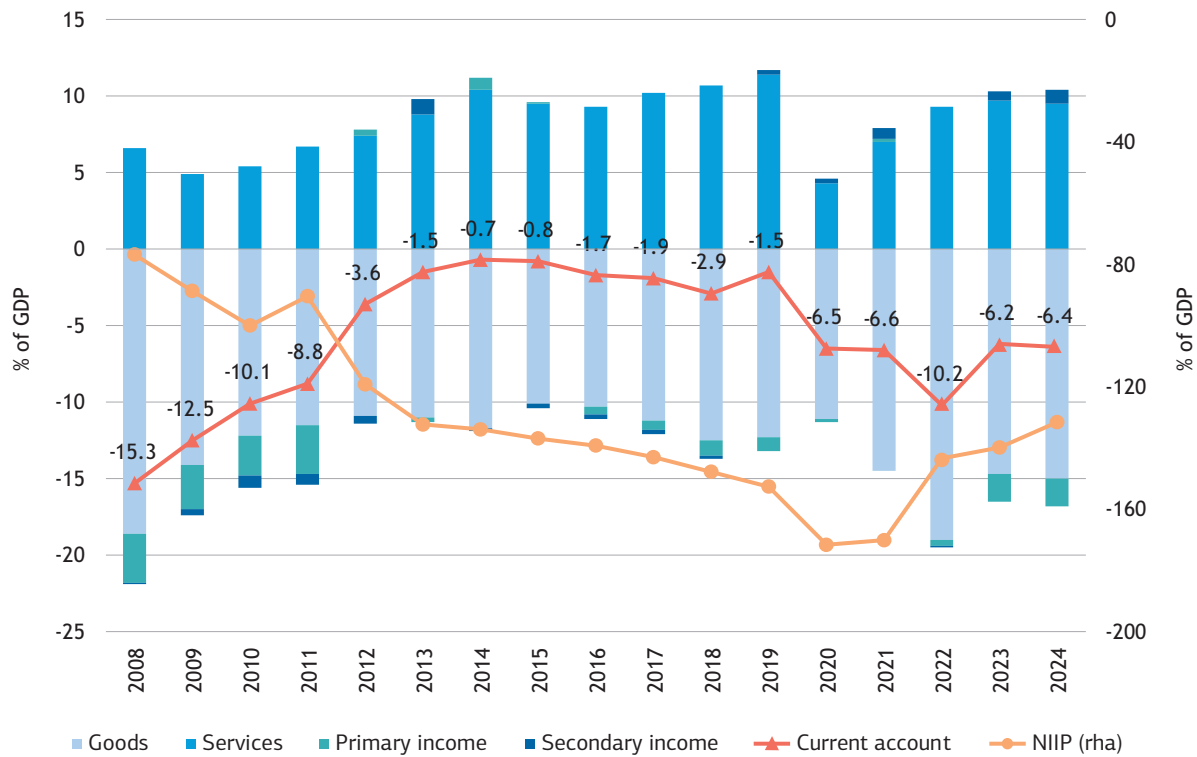
Source: Eurostat.

Figure 3.2.2 Current account ratio (CAR)
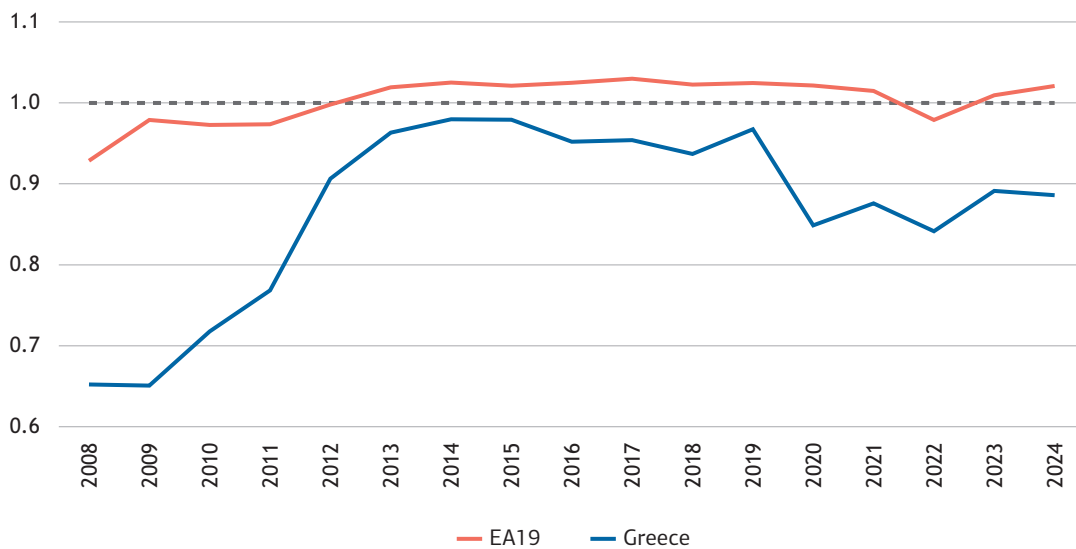
Source: Eurostat. Author's calculations.

below 1, there is a deficit in the current account. One could say that CAR and CAB are two sides of the same coin. In fact, the correlation coefficient between CAR and CAB surpasses 95%.

CAR was about 0.65 in 2008 and 2009 for Greece and peaked at 0.98 in 2014-2015. Thereafter, CAR remained at around 0.95 for the next 4 years. In 2020, with the outbreak of Covid-19, CAR dropped to 0.85 and has since hovered close to 0.87. Namely, CAR was always below 1 for the examined period for Greece. However, it is not a "Greek novelty" amongst the EU27 countries, as Cyprus and Romania also never experienced CAR values greater than 1 in the examined period (2008-2024). In 2024, Romania had the lowest CAR, at 0.829, followed by Greece (0.886) and Cyprus (0.965), whilst Sweden (1.113), Germany (1.116), and Denmark (1.188) enjoyed the highest values amongst the EU27 member states. Moreover, the average CAR value in the 27 EU countries, in 2024, amounted to 1.020. Finally, it is impressive that Denmark, Germany, Luxembourg, the Netherlands, and Sweden exhibited CAR > 1 for the whole examined period 2008-2024, i.e., surpluses in the current account balance. Finally, the average CAR of the EA19 members equals 1 over the examined period, and 1.021 in 2024, experiencing a slight increase from 1.009 in 2023.

In terms of CAB as a percentage share of GDP for the covered 17-year period, Cyprus has the lowest annual average of -5.82%. Greece (-5.72%) and Romania (-4.95%) follow. At the upper end of the ranking, Luxembourg enjoys an annual average CAB of 6.96%, the Netherlands 7.37%, and Denmark 7.51%.

Next, we present exports and imports for Greece and the EA19, as a share of GDP, for goods (Figure 3.2.3) and services (Figure 3.2.4). Greek exports of goods amounted to 20.4% of GDP and Greek imports to 35.4% in 2024, facing, respectively, a decrease of 1.6 pp and 1.1 pp. In the EA19, imports of goods were 30.2% of GDP and exports 33.0% in 2024, exhibiting a decrease of -2.2 pp and -1.7 pp, correspondingly. Moreover, in 2024, the goods imports gap between the EA19 and Greece improved by 1.1 pp, to 5.2 pp from 4.1 in 2023, and that of exports marginally increased by 0.1 pp from -12.7 pp to -12.6 pp. We notice that imports of services in Greece remained constant at 11.9% of GDP and that exports of services deteriorated by 0.2 pp, from 21.7% to 21.5%. Figures 3.2.5 and 3.2.6, respectively, present the trade balance (TB) ratio defined as the exports of goods over the imports of goods,[6] and the services balance (SB) ratio defined as the exports of services over the imports of services.

The TB ratio of Greece in 2024 decreased to 0.58 from 0.60 in 2023, but, generally, we see that from 2012 to the present, it ranges between 0.55 and 0.61. This implies, on average, that exports of goods capture almost 58% of imports per year, resulting to deficits in the balance of goods. On the other hand, the EA19 faces a TB ratio equal to 1.09 in 2024, up from 1.07 in 2023, with the 2012-2024 average being 1.09. Namely, the exports of goods in the EA19 are approximately 9% higher than the imports of goods, denoting surpluses in the goods balance. Furthermore, since 2022, the TB ratio in the EA19 has increased by 8 pp, from 1.01 to 1.09, whilst that in Greece has remained unchanged at 0.58. When it comes to the SB ratio, Greece surpasses the EA19 over

---

6. More details can be found in Bahmani-Oskooee et al. (2018), Bertsatos et al. (2025, 2024), and the Greek NPB (2024).

Figure 3.2.3 Exports and imports of goods (% GDP)
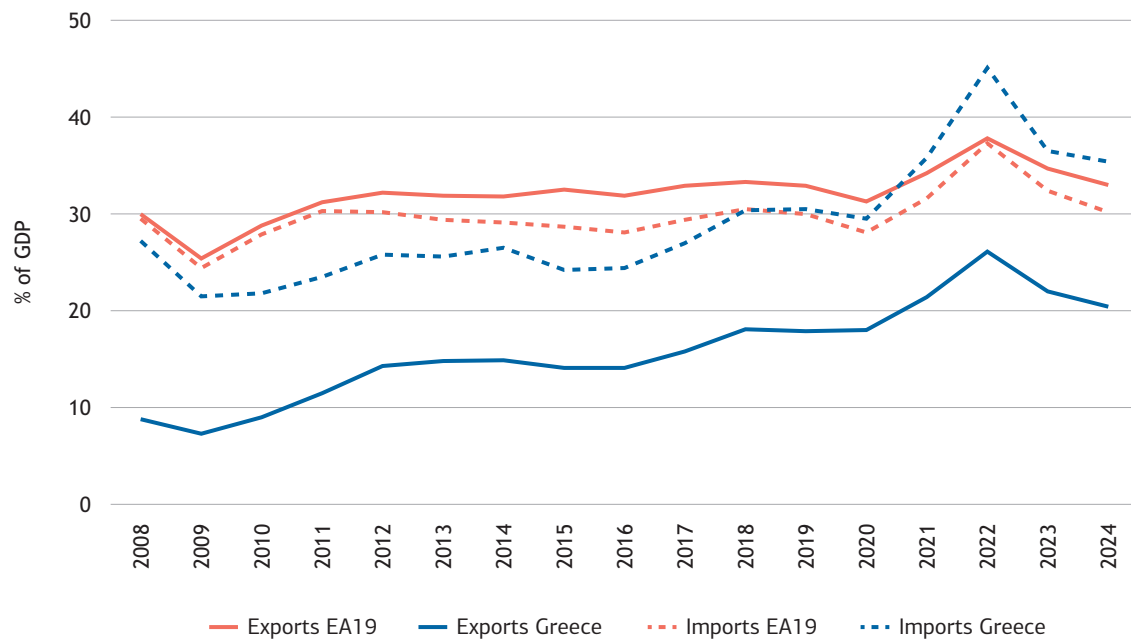
Source: Eurostat.

Figure 3.2.4 Exports and imports of services (% GDP)
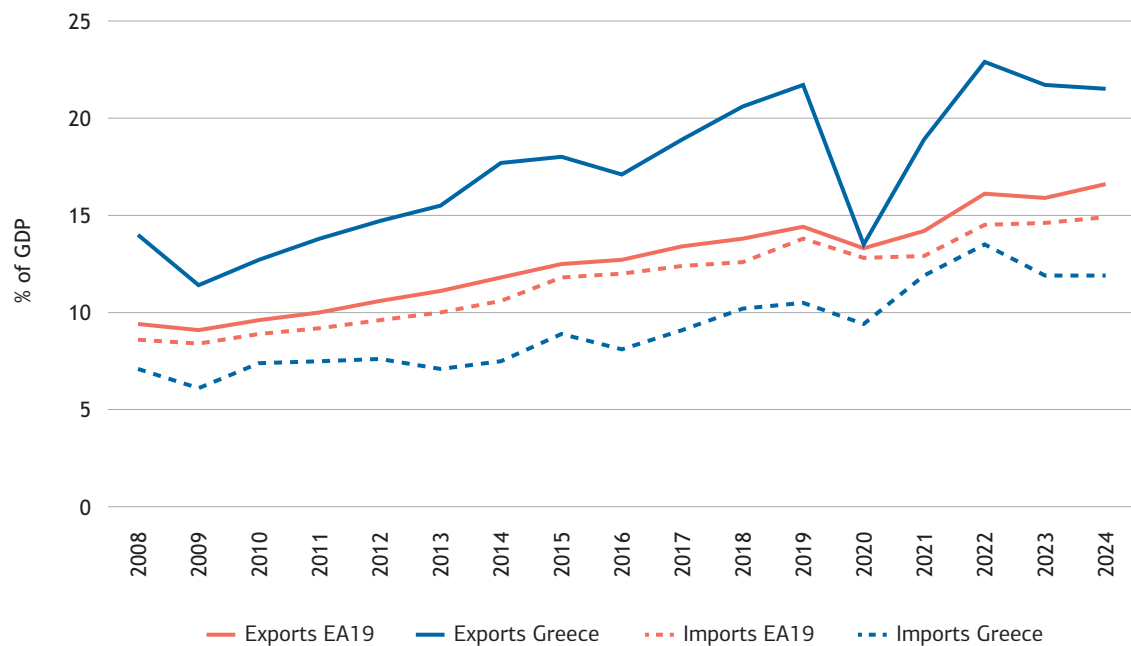
Source: Eurostat.

Figure 3.2.5 Trade balance (TB) ratio
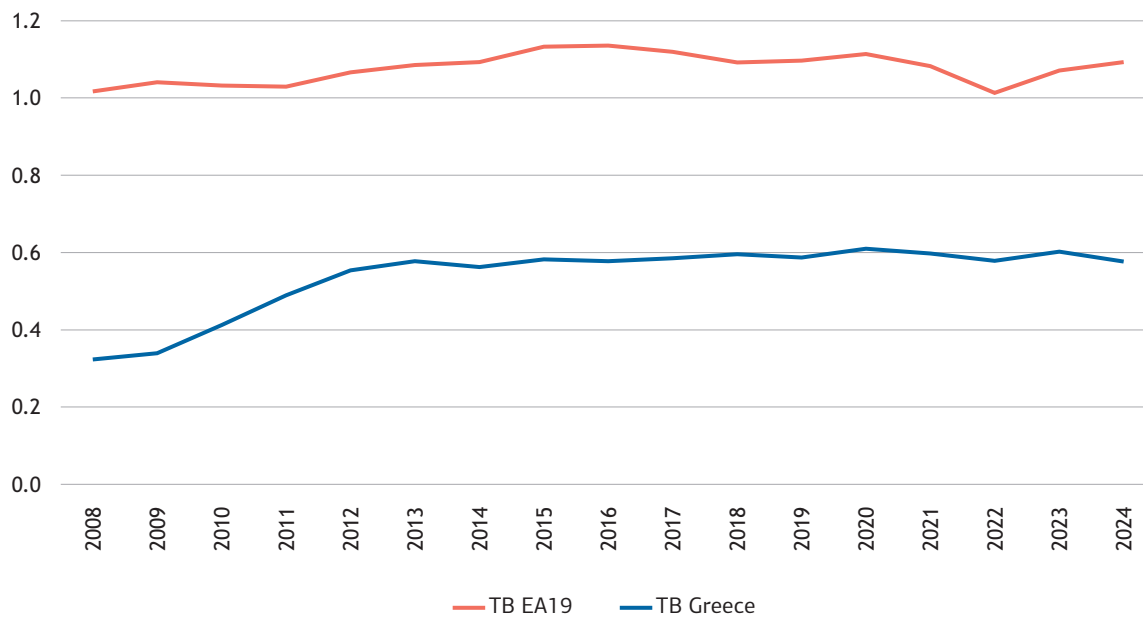
Source: Eurostat.

Figure 3.2.6 Services balance (SB) ratio
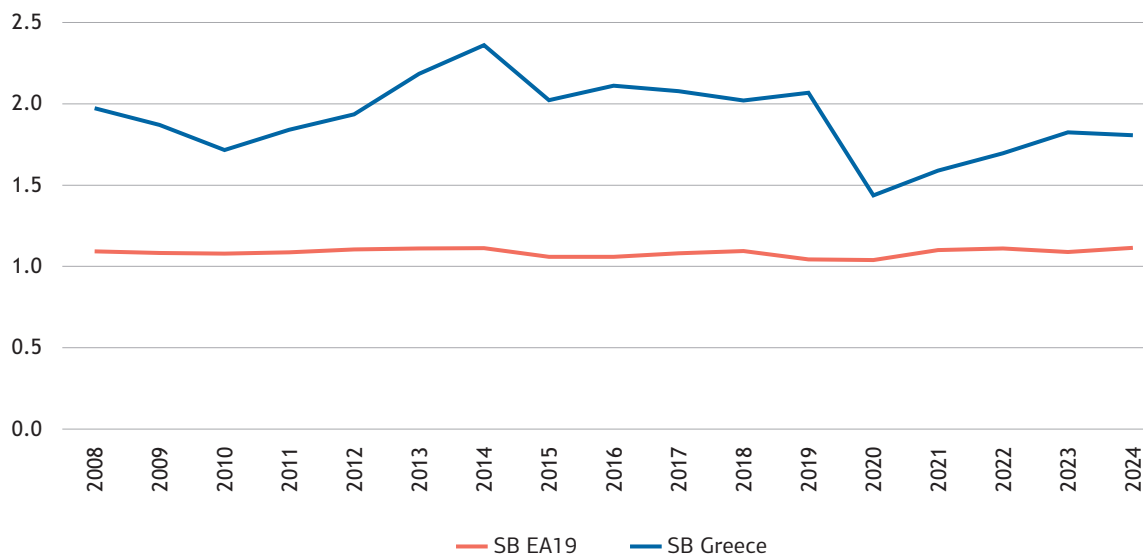
Source: Eurostat.

time. In 2024, the Greek SB ratio was 1.81 (marginally decreased from 1.82 in 2023), while the EA19 SB ratio increased slightly from 1.09 to 1.11. In other words, overtime, the Greek exports of services cover roughly 191% of imports of services, while the exports of services in the EA19 are almost 9% higher than the imports of services.

3.2.2. External trade in the presence of geopolitical turbulence

We utilize data by Eurostat – according to the Standard International Trade Classification (SITC) – and present the goods trade of Greece relative to selected countries with increased involvement in terms of geopolitical risk and tensions. Figure 3.2.7 shows the Greek imports and exports of goods (2020-2024 average) relative to China, Iran, Israel, Russia, Ukraine and the USA, as a share of total imports and exports of goods.

Greece imports about 50% from EU27 and 50% from non-EU27 countries, while its exports are about 56% to EU27 and almost 44% to non-EU27 countries in the 2020-2024 period. Greece imports about 8.09% of total goods from China, 5.51% from Russia, 2.53% from the USA, 0.52% from Israel, 0.36% from Ukraine, and 0.02% from Iran. On the other hand, the goods exports of Greece are almost 4.2% to the USA, followed by 1.5% to Israel, 1.3% to Ukraine, 1.22% to China, 0.31% to Russia, and 0.042% to Iran.

Figure 3.2.7 Share of imports and exports of Greece, 2020-2024, SITC

	China	Iran	Israel	Russia	Ukraine	USA
Imports	8.093%	0.020%	0.523%	5.510%	0.362%	2.529%
Exports	1.221%	0.042%	1.500%	0.311%	1.295%	4.177%

Extra EU27
Imports 49.90%
Exports 44.18%

Intra EU27
Imports 50.10%
Exports 55.82%
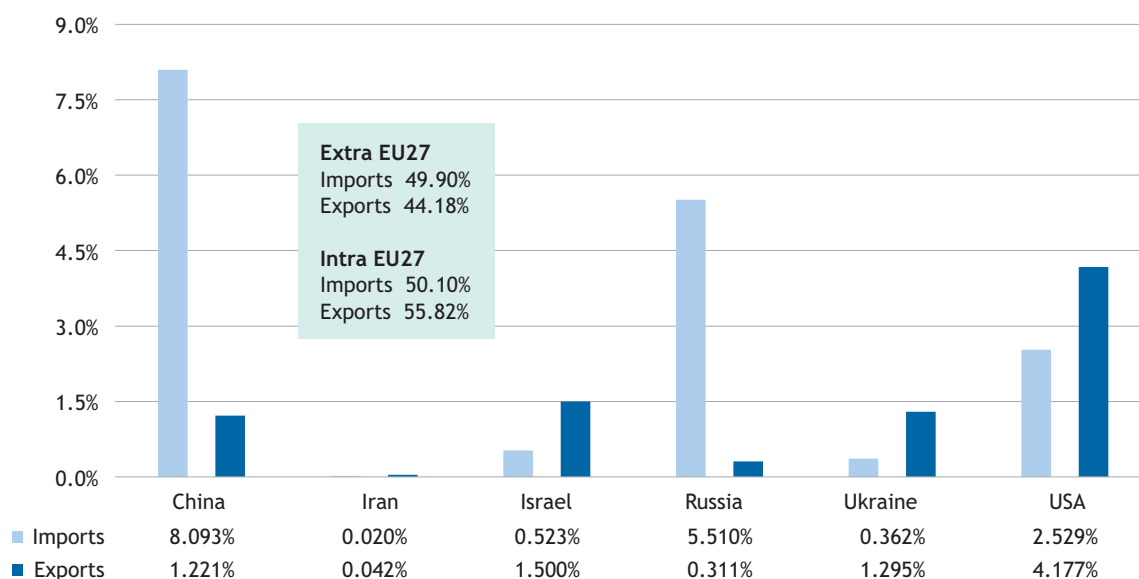
Source: Eurostat. Author's calculations.

Table 3.2.1 Top 10 goods imports and exports of Greece, 2020-2024, SITC

Panel A: Imports			
Code		TOTAL (bn €)	Share (%)
		75.38	100
33	Petroleum, petroleum products and related materials	15.67	20.78
34	Gas, natural and manufactured	4.24	5.63
54	Medicinal and pharmaceutical products	3.89	5.16
78	Road vehicles (including air-cushion vehicles)	3.39	4.50
77	Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)	3.19	4.23
51	Organic chemicals	2.40	3.18
84	Articles of apparel and clothing accessories	2.15	2.86
89	Miscellaneous manufactured articles, n.e.s.	2.14	2.84
68	Non-ferrous metals	2.04	2.71
74	General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	1.98	2.63
Panel B: Exports			
Code		TOTAL (bn €)	Share (%)
		45.50	100
33	Petroleum, petroleum products and related materials	12.34	27.12
68	Non-ferrous metals	3.06	6.73
05	Vegetables and fruit	2.93	6.45
54	Medicinal and pharmaceutical products	2.80	6.14
77	Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)	1.42	3.12
89	Miscellaneous manufactured articles, n.e.s.	1.20	2.64
02	Dairy products and birds' eggs	1.13	2.48
34	Gas, natural and manufactured	1.02	2.23
67	Iron and steel	1.02	2.23
42	Fixed vegetable fats and oils, crude, refined or fractionated	0.94	2.06

Source: Eurostat. Author's calculations.

Next, we present the top 10 goods imports and exports of Greece (Table 3.2.1), as well as the greatest surpluses and deficits, on average, in the 2020-2024 period. More than 20% of goods imports in Greece involve petroleum and more than 5.6% natural gas. On the other hand, petroleum accounts for more than 27% of Greek goods exports, followed by non-ferrous metals and medical/pharmaceutical products (more than 6% for each of these). On an annual basis in the 2020-2024 period, Greece imported about €75.38 billion and exported almost €45.50 billion per annum, resulting in a goods deficit of nearly €30 billion per year.

Regarding the goods categories exhibiting the largest surpluses and deficits, Greece faced surpluses in 14 SITC categories and deficits in the remaining 62 SITC basic categories in the last 5 years (2020-2024). It appears that Greece performs well with vegetables and fruits (€1.874 billion), non-ferrous metals (€1.017 billion), fixed vegetable fats and oils (€612 million), textile fibers (€467 million), tobacco (€381 million), and fish (€263 million), and crude fertilizers and crude minerals (€213 million). On the other hand, the worst performing categories with deficits for the Greek economy are petroleum (€3.325 billion), natural gas (€3.225 billion), road vehicles (€3.158 billion), organic chemicals (€2.337 billion), electrical machinery and apparatus (€1.767 billion), articles of apparel and clothing accessories (€1.307 billion), industrial machinery (€1.267 billion), meat and meat preparations (€1.252 billion), telecommunications equipment (€1.228 billion), and pharmaceutical products (€1.092 billion).

3.2.3. Goods and services, based on the balance of payments

The balance of goods and services of Greece, relative to a group of selected countries/partners, is presented, based on balance of payments statistics. Specifically, those partners are the G-7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom, the United States), and Brazil, China except Hong Kong, Hong Kong, India, and Russia. Namely, they are large and significant countries both economically and geopolitically, and their interconnections with Greece are worth exploring, especially if we consider the heightened geopolitical tensions and the complex trade interdependencies at the global level.

In 2024, Greece faces deficits in goods and surpluses in services with most of the covered countries (Figure 3.2.8). The deficits in goods are -2.74% with China, -2.19% with Germany, -1.03% with France, -0.84% with Italy, -0.70% with Russia, -0.42% with India, -0.019% with Brazil, -0.04% with Japan and the USA, and the surpluses are 0.03% with Hong Kong, 0.05% with Canada, and 0.41% with the UK. On the other hand, there is a deficit in services with Hong Kong (-0.03%), and surpluses with the rest of the examined countries: Japan (0.01%), Russia (0.22%), Canada (0.25%), India (0.26%), China (0.36%), Italy (0.41%), France (0.45%), Brazil (0.56%), Germany (1.23%), the UK (1.25%), and the USA (1.29%). The same patterns for goods and services also hold should we consider the 2020-2024 averages instead of the 2024 values (Figure 3.2.9).

Figure 3.2.8 **Goods and Services Balance of Greece (2024), % GDP**
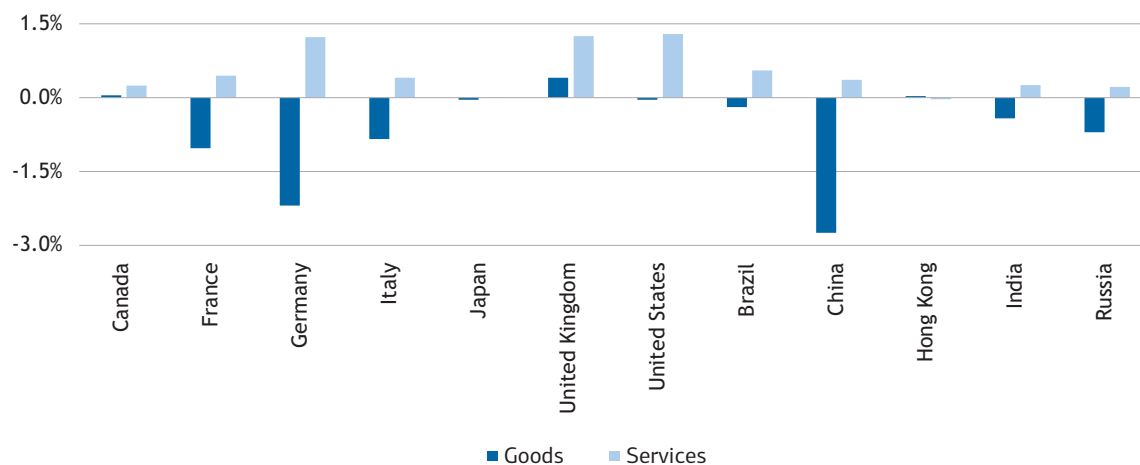
Source: Eurostat. Author's calculations.

Figure 3.2.9 **Goods and Services Balance of Greece (2020-2024 average), % GDP**
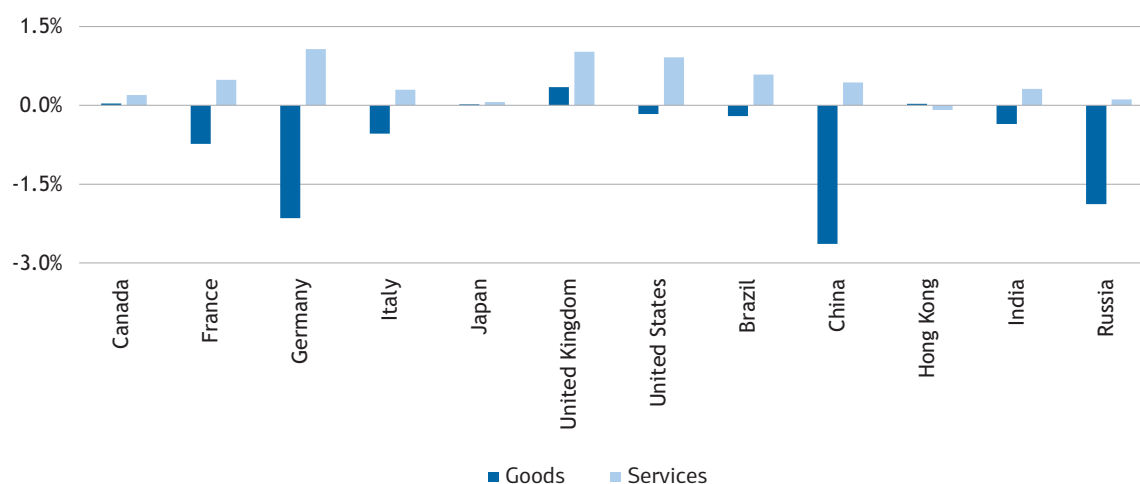
Source: Eurostat. Author's calculations.

When it comes to credit (positive item in the balance of payments) of goods in Greece with respect to the aforementioned partners, there are both minor and major shares in terms of the Greek GDP in 2024. Specifically, Italy has the greatest share (2.16%), followed by Germany (1.46%), and the USA (0.90%). On the other hand, India (0.05%), Russia (0.04%), and Brazil (0.03%) exhibit the lowest shares in the Greek GDP.

In terms of debit (negative item in the balance of payments) of goods in Greece, the following results are obtained as a share of the Greek GDP in 2024: Germany (3.65%), Italy (3.00%) and China (2.91%) present the greatest values, whilst Japan (0.13%), Canada (0.07%) and Hong

Figure 3.2.10 Openness of the Greek economy in 2024
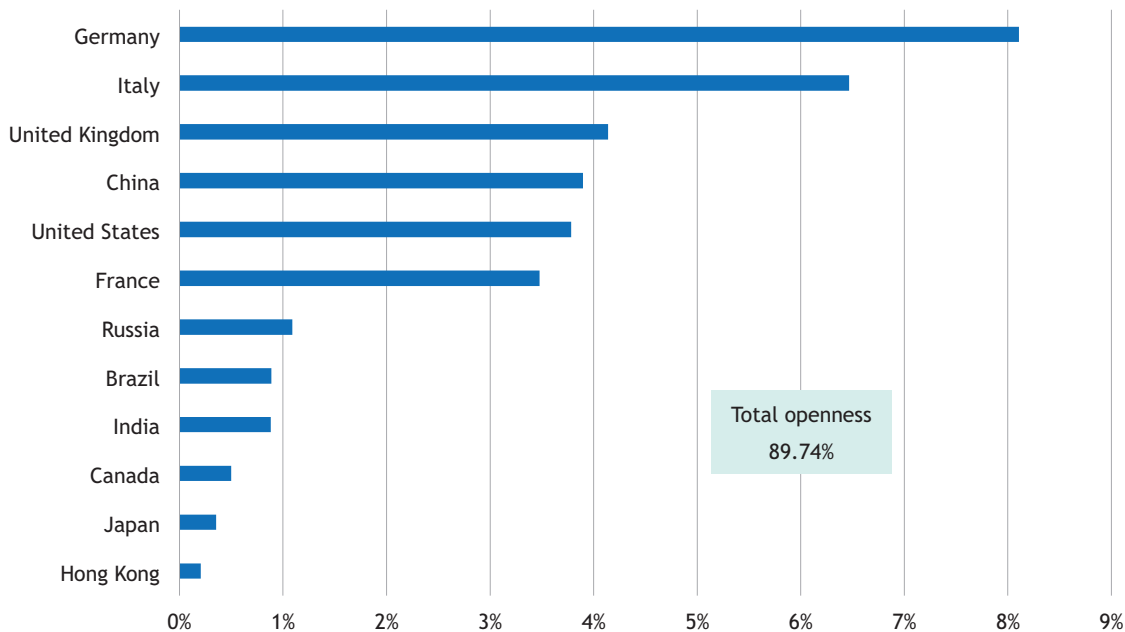
Source: Eurostat. Author's calculations.

Kong (0.02%) have the lowest values. Regarding credits of services in Greece, Germany has the largest share of Greek GDP with a value of 2.12%, followed by the UK (2.11%) and the USA (1.62%). At the lower end, Canada (0.28%), Japan (0.07%) and Hong Kong (0.05%) exhibit the smallest values.

Next, in terms of debits of services in Greece, Germany presents the highest share of Greek GDP (0.89%), and the UK (0.86%), and Italy (0.45%) follow. On the other hand, Russia (0.05%), Brazil (0.04%), and Canada (0.03%) have the smallest shares. Alternatively in 2024, combining both goods and services credits and debits, the Greek economy experiences the largest openness relative to Germany (8.11%), Italy (6.47%), and the UK (4.14%), followed by China (3.90%), the USA (3.78%), France (3.48%), Russia (1.09%), Brazil (0.89%), India (0.88%), Canada (0.50%), Japan (0.35%), and Hong Kong (0.21%) (Figure 3.2.10). All these sum to 33.79%, i.e., almost 38% of the total openness (89.74%) of Greece. The openness values are calculated as the sum of credits and debits of Greece, as a percentage share of the Greek GDP, for both goods and services.

Finally, based on the examined group of countries and the balance of payments statistics by Eurostat in 2024, the top 3 importers for Greek goods are Italy (10.57%), Germany (7.12%) and the USA (4.39%), and the top 3 importers for Greek services are Germany (9.76%), the UK (9.74%), and the USA (7.47%).[7] On the other hand, the top 3 imports of goods in Greece are 10.29% from

7. These are the credits of a country-partner as a share of the total credits in Greece. Credits could be seen like cash inflows.

Germany, 8.47% from Italy, and 8.21% from China, and the top 3 imports of services in Greece are 7.29% from Germany, 7.08% from the UK, and 3.69% from Italy.[8]

3.3. Cost/price competitiveness indices

Real Effective Exchange Rates (REERs) serve as widely used indicators of a country's cost and price competitiveness, reflecting its relative position vis-à-vis key trading partners. REERs are typically calculated using either the Consumer Price Index (CPI) or Unit Labor Costs (ULC) as deflators. In the case of Greece, the CPI-based REER (Figure 3.3.1) declined slightly in 2024, marking the sixth consecutive year of reduction. Similarly, the ULC-based REER (Figure 3.3.2) also fell in 2024, for the fourth consecutive year. Both indices reached their lowest levels over the 2010-2024 period, signalling a sustained improvement in the country's external cost competitiveness. At the broader level, both the euro area (EA20) and the European Union (EU27) experienced modest declines in their CPI- and ULC-based REERs in 2024 compared to the previous year, indicating a slight improvement in their overall competitiveness as well. However, developments among EU member states were heterogeneous. Ten countries recorded an increase in the CPI-based REER, with the Czech Republic and Poland registering the largest decrease and increase, respectively. Similarly,

Figure 3.3.1 Real Effective Exchange Rates, deflator CPI (37 trading partners, 2015=100)
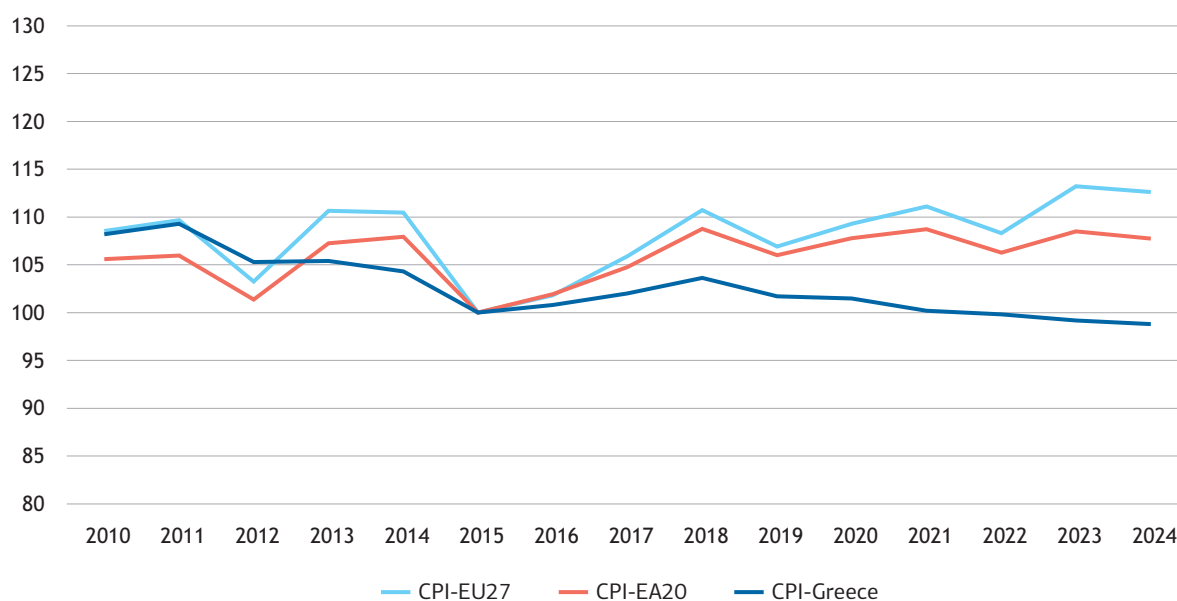
Source: Eurostat.

---

8. These are the debits of a country-partner as a share of the total debits in Greece. Debits may be considered as cash outflows.

Figure 3.3.2 **Real Effective Exchange Rates, deflator ULC (37 trading partners, 2015=100**
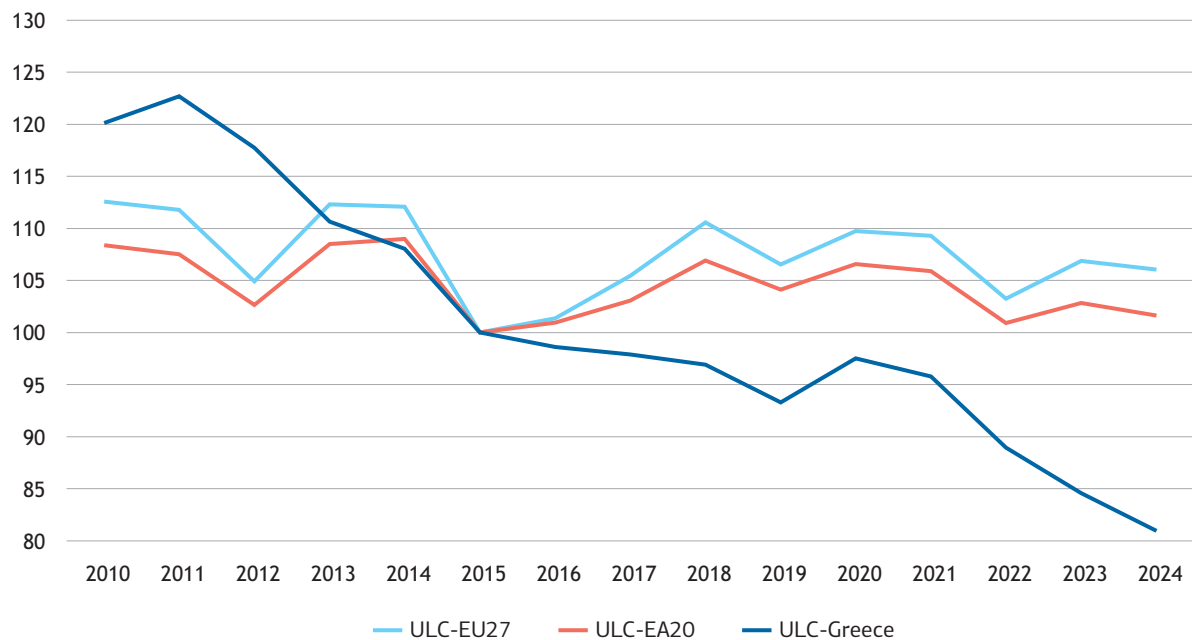
Source: Eurostat.

Figure 3.3.3 **Nominal unit labour costs based on hours worked (2015=100)**
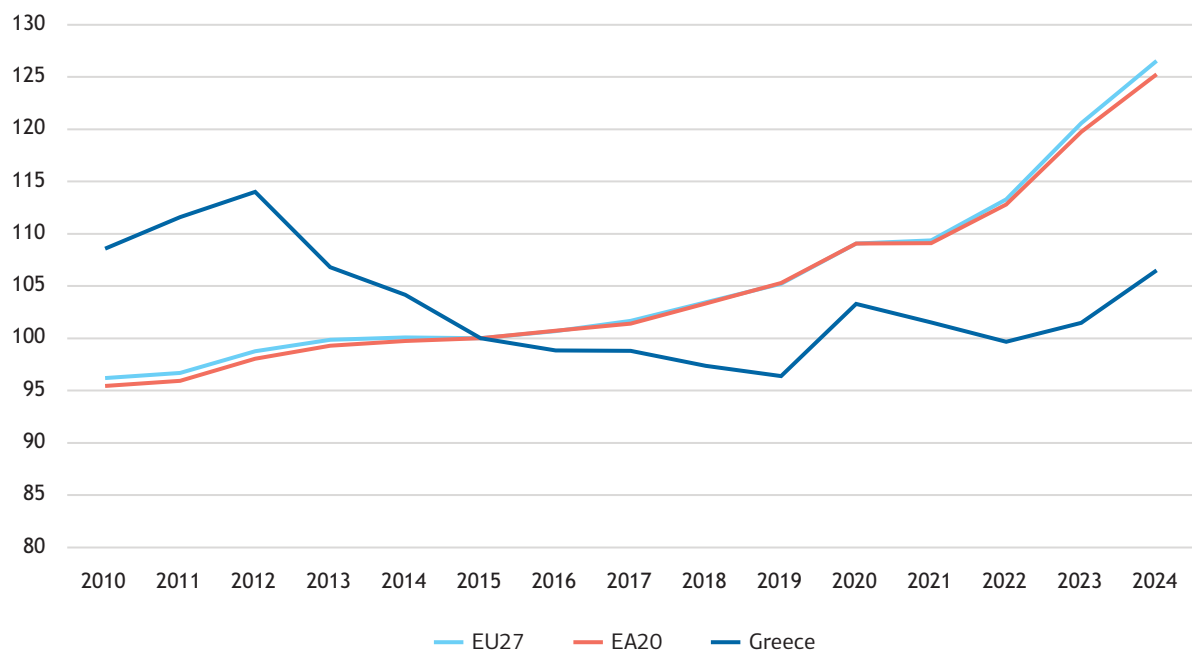
Source: Eurostat.

Note: Data for 2022-2024 are provisional.

thirteen countries registered increases in the ULC-based REER, with the Czech Republic again recording the largest decline and Poland the sharpest increase.

Furthermore, in 2024, Greece experienced a notable increase in the nominal unit labour cost[9] (ULC) compared to the previous year, marking the second consecutive year of upward movement (Figure 3.3.3). Among EU member states, Greece recorded the tenth lowest ULC increase. It is noteworthy that, in 2024, no member state experienced a decline in ULC, and the magnitude of increases varied considerably across countries. The increases ranged from 0.91 in Finland to 33.42 in Romania, highlighting significant divergence in labour cost dynamics across the EU. At the aggregate level, both the EA20 and the EU27 continued to exhibit upward trends in nominal ULC, reflecting ongoing pressures on labour costs throughout the EU.

Over the last five years, the European Union has confronted a multifaceted set of challenges arising from persistent inflationary pressures, increasing labour costs, and heightened geopolitical uncertainty. The global economic environment remains volatile, with growing concerns about the future direction of EU–US relations – particularly in areas such as trade policy, industrial subsidies, and strategic autonomy – adding further unpredictability to the external outlook. Within the EU, the rise in nominal unit labour costs across all member states and the heterogeneity in REER trends reflect mounting pressures on competitiveness and structural disparities across economies.

For Greece, while declining REER indicators suggest an improvement in price and cost competitiveness, the continued increase in labour costs highlights ongoing challenges related to productivity growth and labour market flexibility. Furthermore, the need to sustain convergence and resilience is compounded by long-standing structural constraints, such as skill shortages, limited innovation diffusion, and high energy dependence. In this context, safeguarding competitiveness – both at the national and at the EU level – requires coordinated policy efforts to strengthen productivity, accelerate the green and digital transitions, and enhance the EU's strategic capacity to respond to shifting global alliances and emerging economic fragmentation.

3.4. Economic complexity

Among the most crucial factors influencing the country's competitiveness and economic growth is the ability to export advanced, high-technology, and knowledge-intensive goods. Products that require advanced skills and specialised capabilities – those that are difficult to replicate – are considered highly complex. Similarly, the more diversified and the more sophisticated the products of a county's export basket are, the higher its economic complexity. These features are captured by two key indicators: the Product Complexity Index (PCI) and the Economic Complexity Index (ECI) (see Box 3.4.1). The greater the complexity of the products a country produces and the more intricate its production networks, the stronger its prospects for sustained economic growth (Hausmann et al., 2007; Diodato et al., 2024).

---

9. Nominal unit labour cost on hours worked.

> **Box 3.4.1 Output decomposition**
>
> *Economic Complexity* refers to the amount of productive knowledge embedded within its economy, as reflected in the diversity and sophistication of the products it exports. Measured by the Economic Complexity Index (ECI), it captures how many different products a country can export competitively (diversity) and how unique or rare those products are globally (ubiquity). Countries with high complexity tend to produce a wide range of advanced, specialised goods that few other nations can make, indicating a well-developed base of knowledge and capabilities.
>
> *Product Complexity* refers to the level of knowledge and capabilities required to produce it, as measured by the Product Complexity Index (PCI). Products are considered complex if they are exported by few countries, especially those with highly diversified and complex structures. In contrast, simple products – such as raw materials or basic textiles – are widely produced and exported by many countries. High-complexity products typically require advanced skills, technologies, and infrastructure to manufacture (Hidalgo and Hausmann, 2009; Felipe et al., 2012).

Based on data covering more than 5,000 categories of finished goods and raw materials traded internationally, Greece was ranked 43rd out of 145 countries in 2023. Its network structure has become more complex, rising four positions over the past decade, due to increasing diversification in its export portfolio. Over the long term, Greece has made notable progress, improving by 18 positions since 1998, when it ranked 63rd. As a result, the country's growth outlook for the next decade is positive, with an estimated average annual growth rate of 0.7%.[10]

However, this approach focuses solely on exports and does not account for the imported goods and raw materials required for production. More sophisticated goods rely on skilled labour, knowledge-intensive activities, and advanced capabilities. At the same time, their production often depends on inputs that are not produced domestically and must be imported. To illustrate this, Figure 3.4.1 presents the trade balance for Greece, broken down into ten complexity categories ranging from Category 1 (most complex goods) to Category 10 (least complex). When imports within the same categories are considered, it becomes clear that Greece experiences a persistent trade deficit in most complexity levels. The only exception is Category 3, which shows a surplus over a period of time and includes products such as petroleum and refinery outputs. In all other classifications, Greece records a deficit, some of which are particularly significant (see Categories 1 and 9).

The persistent and chronic current account deficit, driven largely by a sustained trade imbalance (see Section 3.2), reflects deep-rooted structural weaknesses in the national economy (Missos et al., 2024). Despite moderate improvements in export diversification and product complexity, the Greek production base remains relatively narrow and heavily dependent on imports, especially

---

10. See the Harvard Growth Lab Atlas for economic complexity. All data used in these projections come from Comtrade UN and the IMF: https://atlas.hks.harvard.edu/countries/300.

Figure 3.4.1 Trade balance as a percent of GDP, per complexity category: 1 (more complex tradeable goods) to 10 (less complex tradeable goods), Greece, 1995-2023
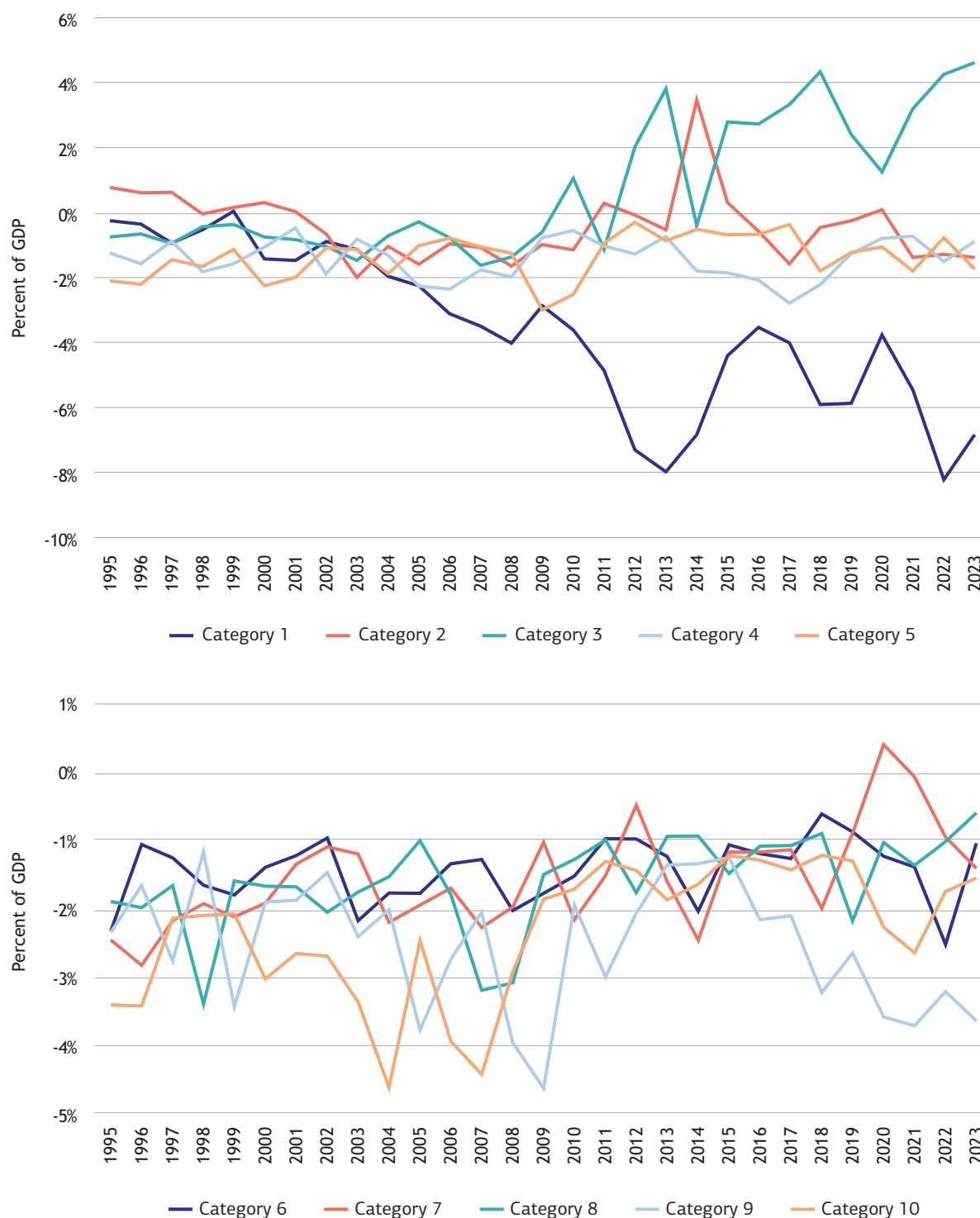
Source: The Growth Lab at Harvard University, 2025, "International Trade Data (HS92)", https://doi.org/10.7910/DVN/T4CHWJ, Harvard Dataverse.

for intermediate goods and technology-intensive inputs. This dependence underscores a broader issue, i.e., the limited capacity of domestic industries to meet internal demand and compete effectively in global markets.

3.5. Global non-cost competitiveness indicators

Despite the reforms the Greek economy has undertaken over the last few years, it does not capture significant competitiveness gains, according to the IMD World Competitiveness ranking. According to the last IMD edition, 2025, Greece has lost ground and ranks 50th among 69 economies globally, and 22nd among the EU26 member states that are included in the index (Malta is not included). Table 3.5.1 shows the rankings of the EU26 in the whole index as well as in each of the four pillars of the index (i.e., economic performance, government efficiency, business efficiency, and infrastructure). The table also illustrates the rankings of digital competitiveness (latest 2024 edition), where Greece improved by 3 ranks. Consequently, it ranks 49th among 67 economies and 23rd among the EU26.

Overall, the EU26 has an average rank of 33 (the same as last year's edition), while regarding digital competitiveness, the average EU26 rank is 30th, one rank up relative to the previous year's edition. Regarding the four pillars, the EU26 performs better in infrastructure (average rank: 28), followed by government efficiency (average rank: 34) and economic performance (average rank: 35), while business efficiency seems to be the EU's weakest pillar (average rank: 37).

Compared to the 2024 edition of the IMD, Greece has lost competitiveness in all pillars except infrastructure, where it remains at 40th place. The most ground was lost in business efficiency, where Greece receded by 9 places (ranking 53rd, down from the 44th place in 2024 edition) and by three places compared to the EU26 (now ranking 20th, down from 17th in the 2024 edition). Regarding economic performance, Greece lost one rank (22nd), while regarding government efficiency, it remained at the same rank (22nd) compared to the EU26.

According to the IMD (2025), literature has long established the relationship between government efficiency/effective institutions and productivity/competitiveness. Greece's weakness in government efficiency/effectiveness, coupled with weak institutions and heavy regulation, hampers its ability to attract both domestic and foreign direct investment, resulting in low business productivity, low overall production, and, ultimately, low exports, which is the main reason behind the large current accounts deficit.

Equally affected is digital competitiveness, where, despite the rather significant efforts of the Greek economy in the last few years (European Commission, 2025) and, particularly, after the COVID-19 outbreak, Greece lags considerably behind most EU partners. According to the Digital Economy and Society Index–DESI (European Commission, 2025), while the digitisation of the public sector has moved forward, Greece ranks 21st and 22nd in digital public services for citizens and businesses, respectively.

An important part of digitisation is Artificial Intelligence (AI). According to the Government AI Readiness index, produced annually by Oxford Insights, Greece's weakest pillar is government

Table 3.5.1 IMD World Competitiveness rankings, its four pillars,
and the World Digital Competitiveness rankings of the EU countries (except Malta)
(out of 69 economies)

	Rank/ change	Economic performance	Government efficiency	Business efficiency	Infrastructure	Digital competitiveness*
Denmark	4/-1	15	6	1	2	3/+1
Ireland	7/-3	9	5	11	17	17/+4
Sweden	8/-2	20	9	9	3	5/+2
Netherlands	10/-1	19	12	7	9	8/-6
Finland	14/+1	46	15	16	4	12/-4
Germany	19/+5	12	27	29	13	23/
Luxembourg	20/+3	35	14	23	24	29/-3
Lithuania	21/+9	38	23	17	26	22/+6
Belgium	24/-6	29	42	22	16	21/-6
Czech Rep.	25/+4	28	21	30	29	32/-8
Austria	26/	40	40	27	14	25/-3
France	32/-1	21	47	40	18	20/+7
Estonia	33/	57	24	28	32	24/-6
Portugal	37/-1	42	35	42	25	35/+1
Latvia	38/+7	59	29	34	33	38/+2
Spain	39/+1	22	56	41	27	28/+3
Italy	43/-1	31	54	45	34	40/+3
Cyprus	44/-1	36	26	52	46	48/+3
Slovenia	46/	37	48	55	39	41/-4
Hungary	48/+6	41	46	61	37	53/-6
Romania	49/+1	56	44	50	45	47/+1
Greece	50/-3 (22st)	53 (22nd)	53 (22nd)	53 (20th)	40 (20th)	49/+3(23rd)
Poland	52/-11	25	58	64	41	39/
Croatia	53/-2	34	52	66	49	46/-2
Bulgaria	57/+1	50	50	67	53	56/-1
Slovak Rep.	63/-4	60	64	68	50	52/-6

Source: IMD, 2025; 2024. In parentheses: Rank among EU26 (Malta is not included in IMD rankings). Red countries ranked below Greece. Data for Digital competitiveness is from the 2024 edition. Numbers with +/- show rise or fall in the ranking compared with previous edition.

* The index includes 67 economies.

(see Table 3.5.2a). Specifically, the Government AI Readiness index is composed of three pillars, namely, government, the technology sector, and data and infrastructure. The government pillar is divided into four dimensions: a) vision (does the government have a vision for implementing AI); b) governance and ethics (are there the right regulations and ethical frameworks in place to implement AI in a way that builds trust and legitimacy); c) digital capacity (what is the existing digital capacity within government); and, d) adaptability (can the government change and innovate effectively) (Oxford Insights, 2025).

The above dimensions are measured using specific variables (Table 3.5.2a)[11]. Specifically, the government pillar is the weakest pillar of Greece's AI readiness index. Although Greece ranks 16th in the technology sector and 22nd in the data & infrastructure pillar, the weak performance in the government pillar (26th) pulls the overall rank down to that same rank (26th). For comparison reasons, the table also includes the USA, which holds the first rank, significantly above all EU27 member states.

Table 3.5.2b illustrates the evolution of Greece's rank in the Government AI Readiness Index over the last five years (i.e., the last five editions of the index). While there is some significant improvement between 2020 and 2022, this positive trend has not continued, since Greece not only falls back in the ranking, but its score also worsens. In particular, the score of the government pillar, which had been improving until 2023, declines in 2024.

Moving from the role of government in AI readiness to its more general role, the World Governance Indicators (WGI) capture all aspects of government and governance. These are six indicators, namely, voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. The indicators have been produced since 1996 and are calculated based on a large variety of data and variables originating from think tanks, international organisations, non-governmental organisations, and private firms. Data sources include original primary data as well as respondents' perceptions (World Bank, 2025).

Voice and accountability measures the extent to which a country's citizens can participate in selecting their government and enjoy freedom of expression, freedom of association and a free media. Political stability and absence of violence/terrorism capture the likelihood of political instability as well as politically motivated violence, terrorism included. Particular attention is given to protests and riots that cause damage to assets or injure people, as well as if these disrupt normal movement, business operations, and economic activity (World Bank, 2025).

Government effectiveness measures the quality of a) public services, b) the civil service as well as the degree of its independence from political pressures, c) policy formulation and the degree of the government's commitment to such policies, and d) infrastructure such as transportation, education, and health. Regulatory quality captures the government's ability to formulate and implement sound policies and regulations that permit and promote private sector development (World Bank, 2025).

---

11. More information can be found at https://oxfordinsights.com/ai-readiness/ai-readiness-index/#down-loadForm

Table 3.5.2a Government AI Readiness Index 2024 of the EU countries and the USA

	Total	Government	Technology sector	Data & infrastructure
USA	87.03	89.26	80.94	90.90
France	79.36	85.29	63.53	89.25
Netherlands	77.23	84.58	60.12	87.00
Germany	76.90	79.24	64.91	86.55
Finland	76.48	84.86	60.86	83.73
Sweden	75.40	80.60	63.45	82.16
Denmark	74.71	84.07	57.17	82.89
Ireland	73.18	75.47	58.13	85.95
Austria	72.84	78.37	56.56	83.57
Belgium	72.69	81.26	56.23	80.57
Estonia	72.62	86.71	48.97	82.19
Italy	71.22	78.64	53.12	81.88
Portugal	70.93	79.47	52.49	80.83
Luxembourg	70.63	84.67	43.81	83.40
Czechia	70.23	76.45	49.50	84.74
Spain	69.25	74.58	50.75	82.43
Lithuania	67.80	77.63	43.02	82.75
Poland	67.51	76.53	45.41	80.59
Slovenia	65.85	77.48	43.32	76.76
Slovakia	63.69	68.76	41.40	80.91
Malta	63.64	75.86	39.89	75.18
Hungary	63.63	74.09	41.81	75.00
Latvia	61.87	74.46	35.72	75.43
Cyprus	61.50	68.53	36.18	79.80
Bulgaria	60.64	65.19	37.88	78.85
Romania	58.08	69.25	40.41	64.58
Greece	57.70	50.66	46.55	75.88
Croatia	51.52	40.86	39.72	74.28

Source: Oxford Insights, 2024. Red: countries ranked below Greece.

Table 3.5.2b Evolution of Government AI Readiness Index over the last 5 years

	Rank Global/EU27	Total score	Government pillar	Technology sector pillar	Data & infrastructure pillar
2024	59/26	57.70	50.66	46.55	75.88
2023	52/25	57.95	55.92	48.37	69.56
2022	50/24	58.56	54.37	44.71	76.61
2021	50/25	56.22	52.54	43.34	72.79
2020*	61/27	47.93	-	-	-

Source: Oxford Insights, 2025.

Note: * The 2020 edition of the index does not provide scores for the three pillars.

Rule of law measures the extent to which citizens have confidence in and abide by the rules of society. Particularly, the indicator captures the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Finally, control of corruption refers to the extent to which public power is exercised for private gain, as well as the degree to which the elites and private interests have control over the state (World Bank, 2025).

Tables 3.5.3a illustrates the evolution of Greece's score and rank for each of the indicators over the last five years. Note that the most recent year of WGI is 2023. From the table, it is evident that there is some improvement to some indicators, but the improvement is neither stable nor continuous. The only indicator that either improves or remains stable is voice and accountability. Government effectiveness has a remarkable decline in 2023, while regulatory quality demonstrates a slight improvement in the same year (World Bank, 2025).

Overall, the year-to-year changes in the indicator's scores do not show a clear improvement, which would be necessary for Greece to catch up with the high-income OECD countries' average, as illustrated in Table 3.5.3b. The sample includes 36 OECD countries, 22 of which are European. Comparing the two tables, it becomes evident that the largest difference between Greece and the high-income OECD countries' average is, for 2023, in the following indicators: rule of law, government effectiveness and control of corruption, followed by regulatory quality and political stability.

The last index presented is the Economic Freedom Index constructed by the Fraser institute. The index is composed of five dimensions: size of government, legal system and property rights, sound money, freedom to trade internationally, and regulation. Given the (traditionally) relatively large size of government in most European countries, the EU27 does not perform well in this sector. However, Greece ranks 23rd among the EU27, having one of the largest governments. It is interesting that the USA ranks last in the freedom to trade internationally, although the index holds for 2022, long before Donald Trump was elected as the US president. Greece ranks 23rd in the same dimension despite the significant improvement that has taken place during the last few years (Fraser Institute, 2025).

It is positive that the Greek economy ranks 17th with respect to sound money, which reflects the improvements in fiscal policy and fiscal conditions. However, the real weakness of the Greek

Table 3.5.3a Greece's score and ranking among the EU27
on World Governance Indicators

	2019		2020		2021		2022		2023	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Voice and accountability	72.46	22	77.78	18	77.78	21	77.78	21	79.41	18
Political stability	54.25	27	51.42	27	50.94	27	50.00	27	54.03	27
Government effectiveness	64.76	25	67.14	23	66.67	23	66.98	23	57.55	25
Regulatory quality	70.00	26	71.43	22	66.19	26	67.45	24	70.75	24
Rule of law	57.62	26	60.00	24	60.48	24	59.43	25	57.08	25
Control of corruption	56.67	26	57.14	25	59.52	23	56.60	24	58.02	24

Source: World Bank, 2025.

Table 3.5.3b High-income OECD average score in WGI

	2019	2020	2021	2022	2023
Voice and accountability	85.79	85.96	86.41	86.66	87.49
Political stability	72.51	72.24	72.53	69.60	69.80
Government effectiveness	86.55	85.87	85.79	85.75	85.16
Regulatory quality	88.48	87.20	87.26	87.28	87.35
Rule of law	86.45	86.41	86.48	86.09	86.39
Control of corruption	84.17	84.56	84.83	84.49	84.49

Source: World Bank, 2025.

economy remains the legal system as well as regulation. In both, Greece ranks 26th and, in combination with the previous three dimensions, the overall ranking of Greece in the Economic Freedom Index is 27th, that is, last among the EU27. Table 3.5.4 illustrates the scores and rankings of the EU27, including the USA for comparison.

As mentioned before, the role of the government and institutional effectiveness, as measured through the present indicators, is key for an economy to attract investment. The literature provides evidence that foreign direct investment positively affects productivity in the host country (The Productivity Institute, 2024). Moreover, government efficiency and institutional effectiveness positively affect FDI inflows, as Sandriu and Balaj (2024) have demonstrated using WGI data,

Table 3.5.4 Economic Freedom Index for the EU27 countries and the USA, 2022

	Total	Size of government	Legal sys & prop. rights	Sound money	Freedom to trade internationally	Regulation
USA	8.09/5	7.35	7.78/18	8.53	8.11	8.66/4
France	7.49/36	4.97	7.49/22	8.78	8.94	7.29/35
Netherlands	7.74/18	4.92	8.66/7	8.34	9.15	7.61/23
Germany	7.80/16	5.78	8.15/14	8.60	8.73	7.75/17
Finland	7.87/13	5.06	8.86/5	8.52	8.67	8.22/7
Sweden	7.61/25	4.87	8.33/12	8.70	8.71	7.45/28
Denmark	8.02/6	5.34	9.10/1	8.78	8.94	7.94/11
Ireland	8.02/6	6.33	7.88/17	8.63	8.98	8.29/5
Austria	7.62/23	5.24	8.55/10	8.44	8.67	7.20/40
Belgium	7.42/42	4.64	7.69/20	8.28	8.85	7.64/20
Estonia	7.67/20	6.60	7.98/16	6.91	8.95	7.93/13
Italy	7.22/51	5.30	6.60/41	8.44	8.97	6.79/62
Portugal	7.59/27	6.20	7.38/25	8.50	8.92	6.97/51
Luxembourg	7.98/9	5.39	8.64/8	8.70	8.97	8.19/8
Czechia	7.65/22	6.46	7.40/23	8.00	8.86	7.53/26
Spain	7.54/30	6.05	7.35/27	8.42	8.67	7.19/41
Lithuania	7.51/34	7.13	7.39/24	6.93	8.76	7.33/31
Poland	6.85/70	5.92	6.45/42	6.62	8.44	6.84/59
Slovenia	7.14/54	5.14	6.94/32	8.40	8.45	6.78/64
Slovakia	7.39/45	6.53	6.76/36	7.97	8.60	7.09/46
Malta	7.82/15	6.61	6.77/35	8.79	9.02	7.90/15
Hungary	7.12/55	6.23	6.38/43	7.61	8.70	6.66/74
Latvia	7.52/32	6.46	7.16/28	7.26	8.78	7.93/12
Cyprus	7.53/31	6.85	6.70/38	7.83	8.90	7.39/29
Bulgaria	7.16/52	7.05	5.94/51	7.56	8.41	6.83/60
Romania	7.41/43	6.99	6.76/37	7.88	8.54	6.90/54
Greece	**6.85/70**	4.98	6.04/50	8.07	8.49	6.66/75
Croatia	7.07/56	5.90	6.17/47	8.18	8.45	6.63/79

Source: Fraser Institute, 2025. Red: countries ranked below Greece.

Table 3.5.5 FDI, productivity and government and institutional effectiveness

Countries	FDI (% GDP) (2023)	Productivity 2023 US $ per hour, ppp.	Legal sys & prop. rights	Regulation	Rule of law	Regulatory quality	Government effectiveness	Control of corruption
Luxembourg	1260.6	126.45	8.64	8.19	97.64	99.06	98.11	96.70
Ireland	260.5	149.31	7.88	8.29	93.87	96.23	94.34	92.92
Netherlands	240.6	94.39	8.66	7.61	94.34	97.17	95.75	96.23
Estonia	95.4	53.38	7.98	8.95	89.62	91.04	88.68	91.51
Belgium	91.4	100.33	7.69	7.64	88.21	85.85	80.66	89.15
Sweden	74.1	89.22	8.33	7.45	93.40	95.28	94.81	97.64
Portugal	71.0	59.25	7.38	6.97	83.49	75.47	80.19	74.06
Czechia	64.7	60.48	7.40	7.53	84.43	87.74	82.55	76.89
Latvia	63.4	55.88	7.16	7.93	83.02	86.32	74.06	74.53
Spain	56.4	73.42	7.35	7.19	78.30	74.53	76.89	71.70
Hungary	55.9	54.74	6.38	6.66	63.21	62.74	62.74	54.72
Lithuania	49.2	60.37	7.39	7.33	86.79	88.21	81.60	77.83
Slovakia	46.8	60.13	6.76	7.09	68.87	71.23	58.96	61.32
Austria	45.1	94.96	8.55	7.20	97.17	90.09	89.62	83.49

Table 3.5.5 (continued)

Poland	43.0	54.28	6.45	6.84	65.09	76.42	66.51	68.87
Slovenia	35.3	65.50	6.94	6.78	82.55	75.00	81.13	77.36
France	33.3	88.15	7.49	7.29	84.91	85.38	83.02	83.96
Denmark	32.3	99.23	9.10	7.94	99.53	98.11	98.58	100.00
Finland	30.6	82.96	8.86	8.67	100.00	96.70	97.17	99.53
Germany	28.4	93.81	8.15	7.75	92.92	91.98	85.38	94.34
Greece	26.9	**44.78**	**6.04**	**6.66**	**57.08**	**70.75**	**57.55**	58.02
Italy	21.7	77.09	6.60	6.79	60.85	72.64	70.28	67.92

Notes: Rows are arranged in a descending order with respect to the countries' FDI (% GDP). Red: countries ranked last.

while economic freedom, as measured by the Fraser institute, has been found to enhance FDI (Ghazalian and Amponsem, 2019; Tag and Degirmen, 2022).

Table 3.5.5 above presents foreign direct investment as measured by the OECD and the productivity in dollars per hour worked (data as of 2023), in terms of purchasing power parity (ppp) as measured by the OECD. To better illustrate the positive relationship between FDI, productivity, and government and institutional effectiveness, Table 3.5.5 also includes two dimensions of the Economic Freedom Index – namely, legal system and property rights, and regulation – as well as four pillars of the World Governance Indicators: rule of law, regulatory quality, government effectiveness, and control of corruption.

In the last few years, Greece's FDI has grown a lot. This is because investors are becoming more confident and the economy is slowly moving toward activities that add more value. The most recent OECD FDI in Figures report says that inward FDI flows reached €7.6 billion in 2024, the second-highest level seen in the past 15 years. The total FDI stock also went up, from €66 billion in 2023 to about €72 billion. In the first half of 2025, inward FDI flows reached €3.1 billion, up from €2.5 billion in the same time period in 2024. Most of the new investments are going into greenfield projects, especially in manufacturing, digital technologies, AI, and data infrastructure. This shows that the productive base is shifting its focus to sectors with more potential for exports and innovation.

According to OECD data, the average FDI stock (expressed as a percentage of the GDP of the host country) for the European Union was 69.8% in 2023, significantly higher than the 58.5% in 2019. Greece's FDI stock was at 26.9%, which is greater than only that of Italy. However, it is expected that large economies such as Germany, France, and Italy have a relatively low FDI stock, expressed in per cent of GDP, given their large GDPs (large denominator). FDI, particularly greenfield investments, directly relates to productivity, as expressed in dollars per hour worked, since the parent companies that invest in foreign countries have high productivity and create new, highly productive jobs (Harms and Méon, 2018; The Productivity Institute, 2024).

In 2019, the FDI stock in Greece was 22%. This indicates an improvement, which is the result of the relatively high FDI Greece has received during the last few years. However, a significant portion of this FDI has been directed to less productive economic activities, such as real estate, financial and insurance activities (Bank of Greece, 2025c). Greece's relatively good performance in attracting FDI in the last few years (2021 and 2022 saw record high investments) is not enough to a) close the investment gap at a rapid pace and b) to significantly improve productivity so as to close the gap with the EU27 average. The main reason is that the Greek economy lags behind in highly productive FDI, i.e., greenfield investments, which could make the difference in improving the economy by creating highly productive new jobs (Gholipour et al., 2014; Canton and Solera, 2016).

3.6. Structural reforms for industrial development

The well documented role of the manufacturing industry in generating economies of scale, creating positive linkages, and promoting technological spillovers has led industrial development to be widely regarded as a catalyst for enhanced productivity and sustainable economic expansion

(UNIDO, 2024a). Traditionally, the manufacturing sector is recognised as a fundamental engine for output growth, while it also represents a major source for the creation of new jobs and a key driver for the expansion of exports. In more recent years, the increased need for the rapid integration of new technologies and the stronger interest in issues related to economic sustainability and environmental protection have drawn more attention to the role of manufacturing as a force for encouraging innovation, embracing technological advancements, promoting the green transition, and securing economic resilience against shocks (UNIDO, 2024b).
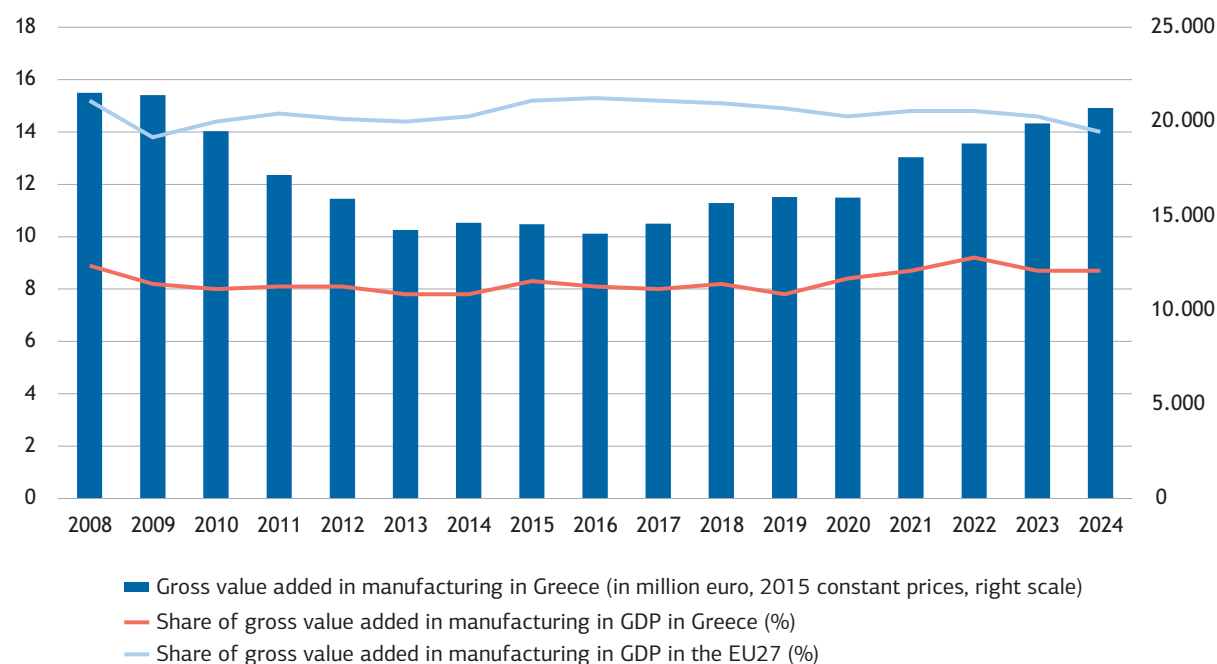
In the case of the Greek economy, along with benefits in all the above areas, industrial development is often considered as a vehicle for a deeper, structural transformation of the country's productive base. The vision for a more efficient and sustainable production model for Greece includes a stronger contribution of the manufacturing industry to output, employment, and exports. Accordingly, Greece's "National Industrial Strategy and Action Plan" aspires to significantly improve these key performance indicators by the end of the decade. Structural reforms and adaptiveness to new opportunities can play a key role in meeting these objectives, particularly in the face of the increasing challenges related to factors such as volatile costs, rapid technological advancements, labour and skills shortages, geopolitical tensions, and global trade disputes.

3.6.1. Manufacturing sector performance according to key indicators

The considerable losses in manufacturing output incurred during the Greek economic crisis have been progressively recovered, and significant rates of manufacturing value added growth in recent years have generated a small improvement in the share of manufacturing in the Greek GDP. These positive indications regarding the performance of Greek manufacturing, particularly in the face of the evolving challenges experienced by European industry, do not detract from the still wide margin between the current contribution of manufacturing to Greek economic activity and its respective potential according to European standards. Based on the most recent relevant data, the share of manufacturing value added in GDP stands at 8.7% in Greece versus 14% on average in the EU (Figure 3.6.1), which means there is still much ground to be covered to achieve convergence, as envisaged in the corresponding National Industrial Strategy target for year 2030 (share of up to 15%).

The recovery of Greece's manufacturing production in recent years has come hand in hand with a significant increase in manufacturing export value and its share in GDP, while also being reflected in a marked rise in the number of persons employed in manufacturing (from 348 thousand in 2016 to 418 thousand in 2024).[12] Notably, job growth in manufacturing in a period of generally increasing total employment in Greece was translated into a small, but visible, strengthening in the share of the manufacturing sector in total employment (Figure 3.6.2). This strengthening comes in contrast with the gradual erosion of the contribution of manufacturing in total employment in the EU, a trend that is widely observed among developed countries and is mostly attributed to labour-saving technological progress (Acemoglu and Restrepo, 2020; Kindberg-Hanlon, 2021).

---

12. Data come from the Greek Labour Force Survey conducted by ELSTAT.

Figure 3.6.1 Gross value added in manufacturing

- Gross value added in manufacturing in Greece (in million euro, 2015 constant prices, right scale)
- Share of gross value added in manufacturing in GDP in Greece (%)
- Share of gross value added in manufacturing in GDP in the EU27 (%)

Source: Eurostat.

Note: Data from 2022 onwards are provisional.

Figure 3.6.2 Employment and export performance indicators of the Greek manufacturing sector

(a) Manufacturing employment as % of total employment

(b) Manufacturing exports as a% of GDP
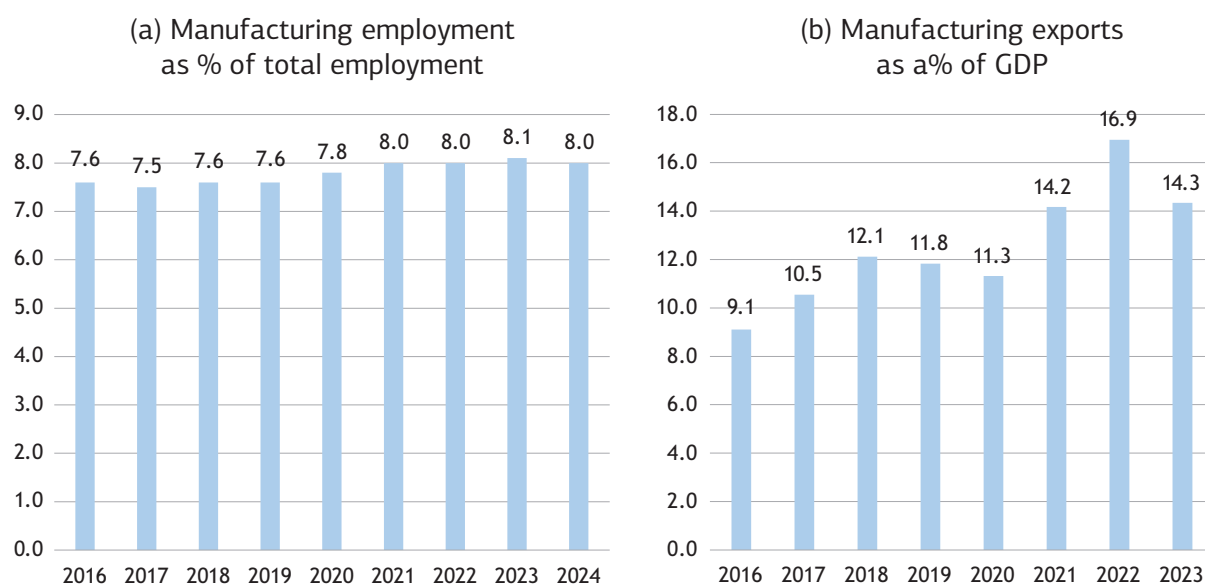
Source: Eurostat.

Note: Data from 2022 onwards are provisional.

3.6.2. National Industrial Strategy components and key reforms and initiatives

The National Industrial Strategy and Action Plan for Greece, initiated in year 2022, brings together a wide range of reforms, initiatives, flagship investments, and financial support programmes, aimed at transforming the performance and economic contribution of Greek manufacturing. The Strategy represents the main framework for industrial policy in Greece until year 2030 and is structured around a set of 7 strategic axes and 24 main objectives (Table 3.6.1). It aims at increasing industrial competitiveness, promoting innovation and the integration of new processes and technologies into production, facilitating the digital transformation of industrial enterprises, supporting the green transition, developing human resources and skills, enhancing the business environment, and improving the resilience of the Greek industrial sector. The Action Plan of the Strategy specifies 43 interventions with a total estimated budget of €2.1 billion in public funding, with these funds expected to leverage at least €2.4 billion in private investment until the end of the decade.

Table 3.6.1 **Main components of Greece's National Industrial Strategy**

Strategic axes	Objectives
Improving competitiveness	Development of synergies/clusters Improvement of exports Investment attraction Development of niche markets
Innovation	Support of start-ups Development of industrial innovation clusters and enterprises Deployment of high-value-added products
Digital transformation	Digital transformation of SMEs Adoption of cutting-edge technologies Development of digital technologies and applications
Green transformation	Support of renewable energy sources & energy efficiency Application of circular economy models Development of sustainable products
Human resources and skills	Bridging of the gap between education and the labour market Upskilling & reskilling of human resources Establishment of connections with expatriates
Business Environment	Reduction of bureaucracy & simplification of procedures Upgrading and expansion of business parks Improvement of the standardisation and industrial property framework
Resilience	Energy crisis management Development of alternative supply chains Emergency management Adaptation to climate change

Source: PWC (2022).

The implementation of the Strategy receives significant support from funds committed through the RRF. More particularly, key reforms pursued in the framework of the RRF include:

- The simplification and digitalisation of licensing and supervision procedures for economic activities and the product market, which have been applied to 2,800 Activity Code Numbers (KADs) corresponding to more than 350,000 businesses.

- The completed reform of the regulatory framework for Industrial Parks, involving the introduction and enactment of primary (L. 4982/2022) and secondary legislation to combat red tape, address legal uncertainties, resolve governance issues, and provide effective incentives for the regularisation of informal industrial concentrations.

- The implementation and funding of Industrial PhDs, helping to promote applied academic research and its ties to the transformation of industrial production processes.

- The ongoing reform for the establishment of new spatial planning for renewable energy sources, industry, tourism, and aquaculture, aimed to promote climate mitigation and adaptation, the protection of biodiversity and sustainable development.

- The processing of a new investment-friendly regulatory framework for carbon capture, utilisation, and storage, to balance the CO_2 emissions of heavy industrial facilities (refineries, cement, etc.).

Furthermore, flagship structural investment programmes for industry funded through the RRF include:

- The "New Industrial Parks" programme, for the establishment of new facilities for next-generation industrial parks, the upgrade and expansion of existing industrial parks, and the transformation of high industrial concentration areas into smart, environmentally sustainable, and innovative industrial parks.

- The "Smart Manufacturing" programme, providing financial support to very small, small, and medium manufacturing enterprises for adapting to the needs of the digital and green transitions.

- The "Produc-e Green" programme, involving two sub-projects, one for the provision of grants to industrial production units aimed at strengthening production in the green economy sector and the other for developing the first CO_2 storage facility in Greece.

Finally, a distinct set of reforms, gaining particular importance in the framework of the EU's new defence strategy and the planned investment surge in this sector, relate to the strengthening of Greece's domestic defence industry. As part of the reforms, the Hellenic Center for Defence Innovation was established in 2024, with the aim to promote dual-use technology and defence innovation in Greece, in cooperation with organisations, universities, research institutions, private sector companies and international partners. Furthermore, relevant initiatives foresee the revision of Greece's National Defence Industrial Strategy, the promotion of the country's defence industry capabilities, and the encouragement of international synergies for the production and support of modern weapon systems.

4. Conclusions and Policy Implications

Macroeconomic policies

In 2024, the Greek economy showed signs of resilience, growing faster than the euro area average and supported by strong investment activity. A key turning point was the shift in aggregate demand composition, with gross capital formation surpassing household consumption as the primary growth driver. This development, largely fueled by EU RRF inflows, suggests a potential move toward a more investment-led and productive growth model. However, persistent structural challenges remain evident. The current account deficit, although narrowed, continues to constrain sustainability due to the heavy dependence on imports. Inflation fell significantly, but unemployment, particularly among the young, remains a pressing concern. Fiscal consolidation improved markedly, with the government achieving the largest budget surplus in three decades, reducing debt-to-GDP levels substantially.

At the same time, the productivity analysis underscores that the growth trajectory of Greece is still fragile. Labour productivity improvements have been largely efficiency-driven, with TFP playing a greater role than capital intensity, pointing to the need for higher-quality investments. Capital productivity showed strong rebounds after the COVID-19 shock, but it still remains volatile. Sectoral data for 2024 reveal a mixed performance, with significant gains in agriculture, information and communication, and professional services contrasted by losses in construction, financial services, and parts of industry. At the regional level, sharp disparities persist across the EU. While Eastern and Southeastern Europe enjoy strong catch-up growth, Greek regions – especially Western Macedonia – recorded some of the steepest declines in real productivity, reflecting the cost of the green transition and structural weaknesses in important sectors. Overall, the findings stress that without deeper reforms, diversification into higher-value-added activities, and enhanced technological adoption, Greece risks continued divergence from the EU average, despite recent signs of stabilisation.

Fiscal performance and macroprudential policy

Greece's fiscal performance showed a strong momentum, remaining on an improving trend in recent years and recording a significantly higher-than-expected primary surplus of 4.8% of GDP in 2024, well above previous estimations and forecasts. This was mainly attributed to the overperformance of tax revenues, underpinned by policy initiatives to crack down on tax evasion and the significant progress recorded in the digitalisation of tax collection systems.

Specifically, government revenues increased to 49.3% of GDP in 2024, while primary expenditure dropped to 44.5%, reflecting the achievement of higher nominal GDP rather than spending cuts. The creation of fiscal space enabled the government to adopt additional fiscal measures to support households and enhance public investment. On the debt sustainability front, general government debt to GDP de-escalated further in 2024, falling sharply to 153.6% in 2024 from

163.9% of GDP in 2023. This drop was the largest among EU countries, supported by the solid GDP growth as well as the nominal debt decline.

Regarding the macroprudential policy, the Bank of Greece has adopted several tools aiming to strengthen banks' resilience, prevent excessive credit growth, and safeguard financial stability. The key measures adopted include the Countercyclical Capital Buffer (set at 0.25% from October 2025), capital requirements for systemically important banks, and new caps on loan-to-value (LTV) and debt-service-to-income (DSTI) ratios from January 2025 to address real estate market risks.

Trade and pro-competitiveness policies

In the global context of persistent inflationary pressures, heightened geopolitical uncertainty, and increased economic volatility, the EU member states face rising nominal unit labour costs and heterogeneous REER trends, reflecting pressures on competitiveness and structural disparities across economies. For this reason, the EU needs well-coordinated policy efforts to increase productivity and boost the green and digital transitions, thereby enhancing its strategic capacity to respond to shifting global alliances and emerging economic fragmentation.

Regarding the country's trade competitiveness, 2024 has been a crucial year for Greece in terms of output, as the Greek GDP (€237.6 billion), in nominal terms, is almost at its highest value since 2008 (€238.8 billion). Moreover, in 2025 it is expected to considerably surpass the 2008 value and hit a new historical record, probably greater than €245 billion.[13] However, despite such good news, the Greek economy continues to suffer persistent deficits in the balance of goods and, as a result, faces consistently negative current account balances. It is imperative for the Greek economy to change its productive model and tackle the large trade deficits, aiming – in terms of goods – to achieve greater self-sufficiency and become more export-oriented. Specifically, it is essential to increase the production of domestic goods, substitute imports of goods, and/or increase goods exports. All this must be done while maintaining the valuable surpluses in services, which come predominantly from the Greek tourism industry, or expanding those surpluses by introducing new attractive forms of tourism (such as conference and graduation, religious and pilgrimage, and spa and wellness tourism).

Greece's international trade network structure has become more complex over the past decade, improving its position due to increasing diversification in its export portfolio and retaining a positive growth outlook for the next decade. Nevertheless, imports create a persistent trade deficit in most complexity levels, reflecting the structural weaknesses and the limited capacity of the domestic economy to meet internal demand and effectively compete in global markets. The deficit signals an urgent need for measures of industrial policy aimed at rebuilding productive

---

13. One could say that the first "GDP" milestone is almost accomplished. However, in terms of chain linked volumes, GDP (per capita) in 2024 equals about 85% (89%) of its peak in 2008 (2007) and there is still a real gap of almost 15% (11%) or approximately €36 billion (€2,360 per capita).

capacity. This includes fostering innovation, upgrading technological infrastructure, and investing in technical and vocational education to strengthen the skills base. Enhancing these foundations is essential not only for improving the trade balance but also for ensuring long-term economic resilience and sustainable growth.

Greece also needs to significantly improve its competitiveness, both in governance and in digital terms. Studying the six world governance indicators as well as the five pillars of the Economic Freedom Index, it becomes clear that Greece's weakest points are the rule of law, the regulatory environment, and government effectiveness and efficiency. It is interesting that, while Greece has moved forward on the path of digitisation, this is not reflected in the relevant competitiveness indicators. One reason is that other countries also move forward on the same path. However, there seems to be another equally important reason: low levels of government effectiveness, rule of law, and low regulatory quality continue to undermine any effort to boost digitisation and AI readiness as well as overall competitiveness.

R&D and innovation-enhancing policies

Investing in R&D is a critical driver of sustainability, competitiveness, and resilience. Over the past decade, Greece has significantly increased R&D expenditure, outpacing the EU27 and EA20 averages in several key dimensions, such as the growth in gross expenditure in R&D, R&D intensity, and GERD per inhabitant. This upward trend reflects a strengthening national R&D ecosystem, underpinned by significant public sector funding and an expanding R&D workforce. However, Greece continues to lag behind the EU27 and the EA20 in terms of R&D intensity and GERD per inhabitant. Furthermore, the business sector in Greece remains underengaged in the national R&D effort, contributing less to R&D funding than the business sectors in the EU27 and EA20. This is reflected in lower levels of business R&D intensity and a comparatively smaller share of R&D personnel and researchers.

Greece's R&D ecosystem exhibits structural challenges that constrain the full translation of R&D investments into technological advancement and commercial success. While scientific output relative to R&D expenditure – measured via publications and citations – is comparatively strong, the conversion of knowledge into patents and high-tech exports remains notably weak, with Greece ranking near the bottom among EU member states on these indicators. The relatively high share of R&D personnel in higher education institutions, coupled with a low engagement of the business sector in R&D activities, points to an innovation ecosystem that is heavily academic and public sector-driven but less integrated with private sector innovation and commercialisation. Possible directions for policy design and action to promote R&D efficiency include:

- Enhancing private sector participation in R&D: develop targeted incentives (tax credits, co-funding schemes) to encourage increased business investment in R&D activities; support start-ups and SMEs in innovative sectors; facilitate public-private partnerships to foster collaborative R&D projects and knowledge exchange between academia, government research institutions, and industry.

- Strengthening the commercialisation of research: create mechanisms and institutional support to facilitate patenting, licensing, and spin-off creation from universities and public research bodies; promote innovation clusters and industry hubs to enhance ecosystem connectivity and foster market-ready innovation.

- Building human capital with an industry orientation: encourage the mobility of researchers and R&D personnel between academia and industry to enhance practical skills, market awareness, and innovation culture; invest in education and training programs that align with industry needs.

- Measuring and monitoring R&D efficiency: develop a comprehensive framework of R&D output and efficiency indicators to accurately capture both economic and technological impacts; employ benchmarking and international comparisons to continuously monitor progress, identify gaps, and best practices for enhancing R&D performance.

Industrial policy and reforms

As far as the industrial policy and related reforms are concerned, even though the contribution of manufacturing to Greek GDP and employment has improved since the economic crisis, there is still a long way to go to converge with the European average. Recognising the importance of the manufacturing industry in strengthening economic growth, boosting high value-added exports, and creating sustainable and well-paid jobs, while, at the same time, addressing green transition requirements, makes the design of a suitable industrial policy a challenging task.

The National Industrial Strategy and Action Plan for Greece seems to be on the right track. In addition to the reforms and flagship structural investment programmes for industry funded through the RRF, the country should exploit current EU initiatives, such as the ReArm Europe Plan/ Readiness 2030, to revise its National Defence Industrial Strategy and reinforce its domestic defence industry, in cooperation with universities, research institutes, private sector companies, and international partners in related key industrial sectors and technologies.

However, the final outcome will depend on the effective implementation of the prescribed measures. A more comprehensive plan is therefore required at the national and the EU levels for (i) the joint programming and implementation of structural reforms and industrial investments to enhance policy impact (Vogel, 2025) and (ii) the ongoing monitoring and evaluation of industrial policy effectiveness. These actions could help to prevent unintended fiscal costs and cross-industry and cross-country spillovers, which, as stressed by Baquie et al. (2025), can exacerbate the current trend toward economic fragmentation.

References

Acemoglu, D., and Restrepo, P. (2020). Robots and jobs: Evidence from US labor markets. *Journal of Political Economy*, 128(6), 2188–2244.

Afonso, A. and Alves, J. (2023). Are fiscal consolidation episodes helpful for public sector efficiency? *Applied Economics*, 55(31), 3547–3560.

Afonso, A., Jalles, J. T., and Venâncio, A. (2024). A tale of government spending efficiency and trust in the state, *Public Choice*, 200(1), 89–118.

Afonso, A., Schuknecht, L., and Tanzi, V. (2005). Public sector efficiency: an international comparison. *Public Choice*, 123(3), 321–347.

Akinci, O. and Olmstead-Rumsey, J. (2018). How effective are macroprudential policies? An empirical investigation. *Journal of Financial Intermediation*, Vol. 33, pp. 33–57.

Bahmani-Oskooee, M., Harvey, H., and Hegerty, S. W. (2018). The real peso-dollar rate and US-Mexico industry trade: an asymmetric analysis. *Scottish Journal of Political Economy*, 65 (4), pp. 350–389.

Bank of Greece (2024). *Financial Stability Review Report*. October 2024, Bank of Greece, Athens, Greece. Available online: https://www.bankofgreece.gr/Publications/FINANCIAL_STABILITY_REVIEW_OCTOBER_2024_EN.pdf

Bank of Greece (2025a). *Financial Stability Review Report* (in Greek), Bank of Greece, Athens, Greece. Available online: https://www.bankofgreece.gr/Publications/FINANCIAL_STABILITY_REVIEW_MAY_2025_EL.pdf

Bank of Greece (2025b). *Governor's Annual Report 2024* (in Greek). Bank of Greece, Athens, Greece. Available online: https://www.bankofgreece.gr/Publications/ekthdkth2024.pdf

Bank of Greece (2025c). Net foreign direct investment flows in Greece by industry classification. Bank of Greece. Athens, Greece. Available online: https://www.bankofgreece.gr/en/statistics/external-sector/direct-investment

Baquie, S., Huang, Y., Jaumotte, F., Kim, J., Machado Parente, R., and Pienknagura, S. (2025). *Industrial Policies: Handle with Care*. IMF Discussion Notes SDN/2025/002, International Monetary Fund, Washington, DC.

Baumann, J. and Kritikos, A. S. (2016). The link between R&D, innovation and productivity: Are micro firms different? *Research Policy*, 45(6), 1263–1274.

Benos, N. and Karagiannis, S. (2016). Do education quality and spillovers matter? Evidence on human capital and productivity in Greece. *Economic Modelling*, 54, 563–573.

Bertsatos, G., Tsounis, N., and Agiomirgianakis, G. (2024). Handling asymmetries in the trade balance. *Research in Economics*, 78(1), 1–13.

Bertsatos, G., Tsounis, N., and Agiomirgianakis, G. (2025). Exchange rate policies and USA-China Trade Balance. *International Journal of Finance and Economics*. Available online: https://doi.org/10.1002/ijfe.3102

Boissay, F. and Cappiello, L. (2014). Micro-versus macro-prudential supervision: potential differences, tensions and complementarities. *Financial Stability Review*, 1.

Canton, E. and Solera, I. (2016). Greenfield Foreign Investment and Structural Reforms in Europe: What Factors Determine Investments? European Economy - Discussion Papers 033, Directorate General Economic and Financial Affairs (DG ECFIN), Publications Office of the European Union, Luxembourg.

Carrillo, M. (2019). Measuring and ranking R&D performance at the country level. *Economics and Sociology*, 12(1), 100–114.

Cerutti, E., Claessens, S., and Laeven, L. (2017a). The use and effectiveness of macroprudential policies: New evidence. *Journal of Financial Stability*, 28, 203–224.

Cerutti, E., Dagher, J., and Dell'Ariccia, G. (2017b). Housing finance and real-estate booms: A cross-country perspective. *Journal of Housing Economics*, 38, 1–13.

Chrysanthakopoulos, C., Bouloumpasis, P., Skotoris, M., and Tagkalakis, A. (2025). The macroeconomic effects of public sector efficiency in advanced economies, *International Economics*. 182, 100600.

Ciocanel, A.B. and Pavelescu, F. M. (2015). Innovation and competitiveness in European context. *Procedia Economics and Finance*, 32, 728–737.

Coccia M. (2012). Political economy of R&D to support the modern competitiveness of nations and determinants of economic optimization and inertia. *Technovation*, 32(6), 370–379.

Cohen, P. (2025). Trump's E.U. tariff threat could cause economic damage beyond Europe. *The New York Times*, 24 May. Available online: https://www.nytimes.com/2025/05/24/business/trump-tariffs-european-union.html

Diodato, D., Napolitano, L., Pugliese, E., and Tacchella, A. (eds.), (2024). *Handbook of Economic Complexity for Policy*. Publications Office of the European Union, Luxembourg. Available online: https://data.europa.eu/doi/10.2760/9006857

European Commission (2025). DESI *Dashboard for the Digital Decade*. European Commission, Brussels, Belgium. Available online: https://digital-decade-desi.digital-strategy.ec.europa.eu/datasets/desi/charts

Felbermayr, G., Hinz, J., and Langhammer, R.J. (2024). US trade policy after 2024: What is at stake for Europe? Kiel Policy Brief No. 178, Kiel Institute for the World Economy, Kiel, Germany. Available at: https://hdl.handle.net/10419/305305

Felipe, J., Kumar, U., Abdon, A., and Bacate, M. (2012). Product complexity and economic development. *Structural Change and Economic Dynamics*, 23(1), 36–68.

Fraser Institute (2025). *Economic Freedom.* Fraser Institute, Vancouver, British Columbia, Canada. Available online: https://www.efotw.org/?geozone=world&page=map&year=2022&countries=GRC#ranking

Ganotakis, P. and Love, J. H. (2011). R&D, product innovation, and exporting: evidence from UK new technology based firms. *Oxford Economic Papers*, 63(2), 279–306.

Ghazalian, P.L. and Amponsem, F. (2019). The effects of economic freedom on FDI inflows: an empirical analysis, *Applied Economics*, 51(11), 1111–1132.

Gholipour, H.F., Al-Mulali, U., and Mohammed, A.H. (2014). Foreign investments in real estate, economic growth and property prices: Evidence from OECD countries. *Journal of Economic Policy Reform,* 17(1), 33–45.

Gill, I. S., and Raiser, M. (2012). *Golden growth: Restoring the lustre of the European economic model.* World Bank, Washington, D.C. Available online: https://openknowledge.worldbank.org/handle/10986/11858

Gomez-Salvador, R., Musso, A., Stocker, M., and Turunen, J. (2006). *Labour productivity developments in the euro area.* ECB Occasional Paper No. 53. European Central Bank, Frankfurt, Germany.

Gopinath, G., Gourinchas, P.-O., Presbitero, A.F., and Topalova, P. (2025). Changing global linkages: A new Cold War? *Journal of International Economics, 153,* 104042. Available online: https://doi.org/10.1016/j.jinteco.2024.104042

Greek NPB (2024). *Greek National Productivity Board 2024 Annual Report.* KEPE Publising, Athens, Greece, p. 82.

Gross, M.M., Hua, S., Jarmuzek, M., and Shi, W. (2024). Macroprudential Policy Calibration for Greece: Simulations for Borrower-Based Measures. *International Monetary Fund, SIP/2024/008.*

Harms, P., and Méon, P.G. (2018). Good and useless FDI: The growth effects of greenfield investment and mergers and acquisitions. *Review of International Economics*, 26(1), 37–59.

Harris, R., Li, Q.C. (2009). Exporting, R&D, and absorptive capacity in UK establishments. *Oxford Economic Papers*, 61(1), 74–103.

Hausmann, R., Hwang, J., and Rodrik, D. (2007). What you export matters. *Journal of Economic Growth*, 12(1), 1–25.

Hellenic Statistical Authority (2025). *The Greek Economy.* ELSTAT, Athens, Greece. Available online: https://www.statistics.gr/documents/20181/18508449/greek+economy_16-05-2025.pdf/5f1fb28d-b974-daa7-a1f0-ca4c37065a2f

Heller, M.P.S. (2003). *Who Will Pay? Coping with Aging Societies, Climate Change, and Other Long-Term Fiscal Challenges.* International Monetary Fund, Washington, DC.

Hidalgo, C.A. and Hausmann, R. (2009). The building blocks of economic complexity. *Proceedings of the National Academy of Science*s, 106(26), 10570–10575.

Huergo, E. and Moreno, L. (2011). Does history matter for the relationship between R&D, innovation, and productivity? *Industrial and Corporate Change.* 20(5), 1335–1368.

IMD (2024). *World Digital Ranking Results*. IMD, Lausanne, Switzerland. Available online: https://www.imd.org/centers/world-digital-ranking/

IMD (2025). *World Competitiveness Ranking*. IMD, Lausanne, Switzerland. Available online: https://www.imd.org/centers/wcc/world-competitiveness-center/rankings/world-competitiveness-ranking/

Joumard, I., Kongsrud, P., Nam, Y.-S., and Price, R. (2004). *Enhancing the effectiveness of public spending: Experience in OECD countries.* OECD Economics Department Working Paper 380, OECD, Paris, France.

Kindberg-Hanlon, G. (2021). *The technology-employment trade-off: Automation, industry, and income effects.* Policy Research Working Paper No. 9529, World Bank, Washington, D.C.

Klemm, A. (2013). *Growth following investment and consumption-driven current account crises.* IMF Working Paper 217, International Monetary Fund, Washington, D.C.

Konstantakopoulou, I. (2024). *Is the export-led-growth hypothesis asymmetric in the euro area countries?* Discussion Paper No. 159, KEPE, Athens, Greece.

Kontolaimou, A., Giotopoulos, I., and Tsakanikas, A. (2016). A typology of European countries based on innovation efficiency and technology gaps: The role of early-stage entrepreneurship. *Economic Modelling*, 52, 477–484.

Missos V., Domenikos, C., and Pontis N. (2024). *Production Structure, Export Activity and Income Polarisation in the EU27: Industrial Policy, Technological Complexity and Inequality*. INE GSEE, Athens, Greece (in Greek).

Oxford Insights (2025). *Government AI Readiness Index, 2024*. Oxford Insights, Great Malvern, Herefordshire. Available online: https://oxfordinsights.com/ai-readiness/ai-readiness-index/#downloadForm

Papadimitriou, D.B., Rodousakis, N., Yajima G.T., and Zezza, G. (2024). *Greece: Time to reduce the dependency on imports. Strategic Analysis.* Levy Economics Institute of Bard College. Available online: https://www.levyinstitute.org/wp-content/uploads/2024/02/sa_greece_24.pdf

PWC (2022). *National Industrial Strategy and Action Plan for Greece*. PWC, Athens, Greece.

Raymond, W., Mairesse, J., Mohnen, P., and Palm, F. (2015). Dynamic models of R & D, innovation and productivity: Panel data evidence for Dutch and French manufacturing. *European Economic Review*, 78, 285–306.

Sandriu, M.M. and Balaj, D. (2024). Assessing the role of governance indicators on foreign direct investment: insights from southeastern European countries. *Journal of Governance & Regulation*, 13(4), 316–321.

Tag, M.N. and Degirmen, S. (2022). Economic freedom and foreign direct investment: Are they related? *Economic Analysis and Policy*, 73, 737–752.

Tanzi, V., and Schuknecht, L. (2000). *Public Spending in the 20th century: A Global Perspective.* Cambridge University Press, Cambridge, U.K.

The Productivity Institute (2024). *Why does inward investment matter for productivity?* Sep.18 2024. Available online: https://www.productivity.ac.uk/news/why-does-inward-investment-matter-for-productivity/

Thomas, V.J., Sharma, S., and Jain, S.K. (2011). Using patents and publications to assess R&D efficiency in the states of the USA. *World Patent Information*, 33(1), 4–10.

Tsekeris, T. and Papaioannou, S. (2017). Regional determinants of technical efficiency: evidence from the Greek economy. *Regional Studies*, *52*(10), 1398–1409.

UNIDO (2024a). *Manufacturing-led growth: driving and sustaining economies.* United Nations Industrial Development Organization, Vienna, Austria.

UNIDO (2024b). *The future of industrialization: Building future-ready industries to turn challenges into sustainable solutions.* United Nations Industrial Development Organization, Vienna, Austria.

Vogel, L. (2025). *Reforms and investments: The benefits of joint implementation.* European Economy Economic Brief 084,Publications Office of the European Union, Luxembourg.

Wang, E.C. (2007). R&D efficiency and economic performance: A cross-country analysis using the stochastic frontier approach. *Journal of Policy Modeling*, 29(2), 345–360.

World Bank (2025). *Worldwide Governance Indicators*, World Bank, Washington, D.C. Available online: https://www.worldbank.org/en/publication/worldwide-governance-indicators

WTO (2025). *Global trade outlook and statistics*. World Trade Organization, Geneva, Switzerland. Available online: https://www.wto.org/english/res_e/publications_e/trade_outlook25_e.htm

GREEK NATIONAL PRODUCTIVITY BOARD ANNUAL REPORT 2025

The 2025 edition of the Greek National Productivity Board Annual Report is composed of two parts. Following Chapter 1, which introduces the report and recent productivity developments in Greece and Europe, the first part (Chapter 2) describes how the Greek economy is progressing in major macroeconomic aggregates and emphasises the main productivity indicators, through the output per capita, labour productivity and labour utilisation decompositions. Both the sectoral and regional dimensions of labour productivity are examined. Special consideration is given to challenges concerning the efficiency performance of the public spending and the performance of the R&D system in Greece, compared to other European countries. The second part (Chapter 3) presents the main developments in public finance and macroprudential policies, and current accounts, considering relations with trade partners of increased geopolitical importance/risk, and cost/price competitiveness indices. Several competitiveness indicators are examined to demonstrate the score and ranking of Greece in overall terms and in key thematic areas for sustainable development and attraction of investment, such as the digital society, AI readiness, and government/institutional effectiveness. Recent structural reforms are also presented to support sustainable industrial development. Chapter 4 summarises and concludes, encompassing a range of policy implications for boosting productivity and competitiveness at various levels, including foreign trade and investment, industry and new technologies, R&D and innovation, and government institutions.