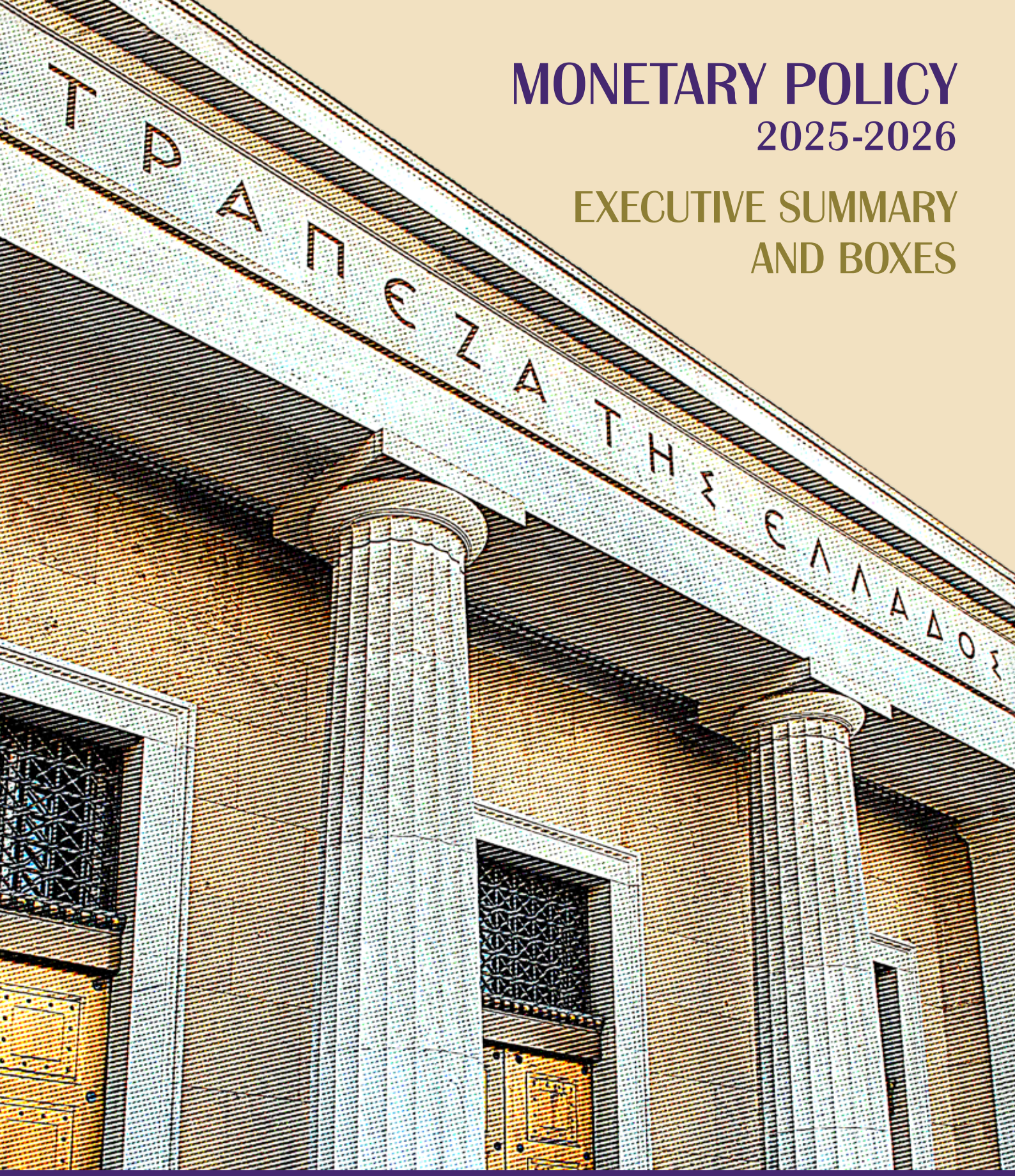
MONETARY POLICY
2025-2026

EXECUTIVE SUMMARY AND BOXES



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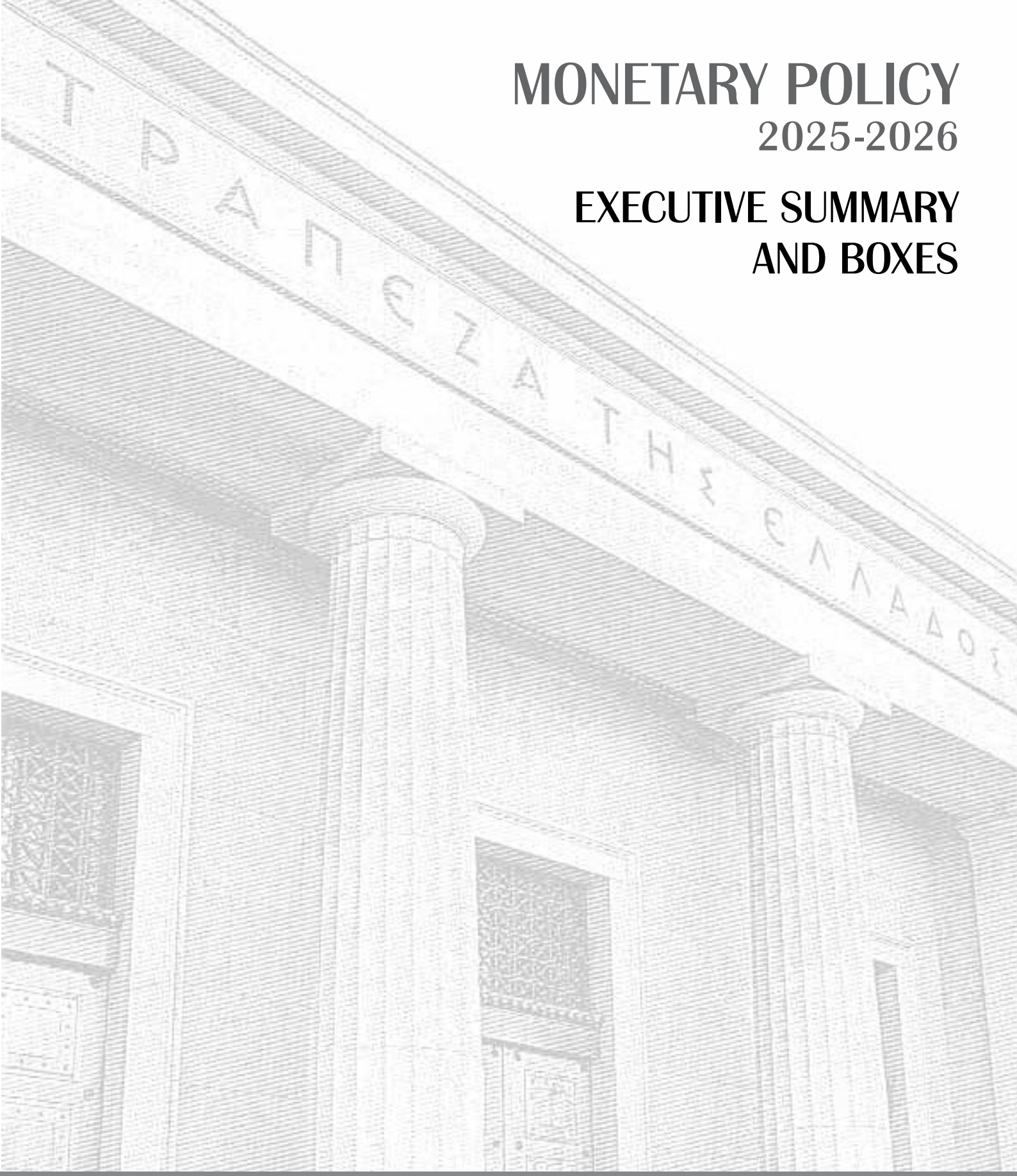

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Economic Analysis and Research Department

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EXECUTIVE SUMMARY

GREEK ECONOMY: RESILIENCE IN AN ENVIRONMENT OF ENERGY CRISIS AND GEOPOLITICAL UNCERTAINTY

1 INTRODUCTION

In 2026, the global economy faces a new period of heightened uncertainty and elevated geoeconomic risks, following a succession of unpredictable disruptions in recent years. The escalation of tensions in the Middle East and the disruption of global energy flows resulting from the closure of the Strait of Hormuz have triggered a sharp increase in international energy prices, weighing on growth prospects and reigniting inflationary pressures worldwide. At the same time, the persistence of high US tariffs, the increasing use of non-tariff barriers and the ongoing shifts in global supply chains are further amplifying uncertainty and constraining global trade growth. More recently, the US-Iran agreement raised hopes for an end to hostilities, thereby leading to a moderation in energy prices. However, its effectiveness will ultimately depend on consistent implementation and the full restoration of energy flows.

Against this backdrop, stagflation risks have increased globally. Hikes in both energy and non-energy commodity prices are adding to firms' production costs and compressing households' real incomes, while heightened uncertainty is adversely affecting investment sentiment and global economic activity. Meanwhile, increased volatility in international markets and rising government bond yields entail a high risk of sharp corrections in financial asset prices. Thus, central banks are confronted with a highly intricate monetary policy environment, as they must bring inflation back to target, while at the same time mitigating the consequences of the current crisis for economic activity. Against this backdrop, in June 2026 the Governing Council of the European Central Bank (ECB) decided to raise its three key policy rates by 25 basis points. The ECB is therefore the first G7 central bank to raise borrowing costs in response to the energy shock caused by the Middle East crisis.

Despite the resilience of the euro area economy over the past year amid significant trade tensions, the deterioration of the geopolitical environment and the new energy crisis are expected to weigh on short-term growth prospects in 2026, given the euro area's status as a net energy importer. The surge in international energy prices, compounded by heightened uncertainty, is denting consumer and business confidence and dampening domestic demand. By contrast, the robust labour market, the adoption of temporary fiscal measures to address the energy crisis, public expenditure on infrastructure, defence and energy security, as well as the gradual strengthening of European strategic autonomy are expected to support the growth dynamics of the euro area economy. At the same time, the new energy shock emphatically highlights the need for the European Union (EU) to minimise its reliance on energy imports by deepening energy cooperation; accelerating investment in renewable energy sources, electricity networks, interconnections and storage, as well as shared European infrastructures; and reinforcing common financing instruments at the EU level.

In this uncertain global environment, the Greek economy continued to expand into early 2026 at a pace above the euro area average, exhibiting remarkable resilience. The composition of growth has progressively improved, with investment now outstripping private consumption. The increasing contributions of productive investment and exports played a major part, while the labour market also remained strong. In the first half of 2026, however, the latest geopolitical crisis and energy shock led to renewed inflationary pressures, mainly via higher energy prices.

Yet the Greek economy today can boast improved fundamentals relative to the past, which means a much greater capacity to absorb external shocks and weather a new energy crisis. High primary surpluses, a rapidly declining debt-to-GDP ratio, large cash buffers, a favourable public debt profile, the recovery of investment grade, an improved labour market, solid growth rates and a sound banking system have enhanced the economy's overall resilience to exogenous shocks.

The diversification of energy sources, further expansion of renewables and strengthening of liquefied natural gas (LNG) infrastructure and energy interconnections signal greater energy flexibility and supply security for Greece. Nevertheless, heavy dependence on imported energy, inflationary pressures and possible implications for consumption, production and tourism remain key vulnerabilities, especially in the event of a protracted crisis. In this context, an effective response to a new energy crisis requires a prudent fiscal policy combined with targeted and temporary measures to support the most vulnerable households and the most exposed businesses, alongside a speedier energy transition on the back of investment in renewable energy sources, networks, storage and interconnections. Besides, utilising European resources is critical to maintaining the growth momentum of the Greek economy in an environment of geopolitical uncertainty.

Looking ahead, the Greek economy has already entered a phase of genuine transformation. Investment remains buoyant: productive investment excluding construction has risen considerably and foreign direct investment stands at historical highs, reflecting an improved investment climate and the country's restored credibility. European resources – through the Recovery and Resilience Facility (RRF) and the National Strategic Reference Framework (NSRF) – are a key driver of public and private investment in high value-added sectors, such as the green transition, digital infrastructure, innovation, energy and industry. Furthermore, the gradual recovery of productivity, progress in areas such as the digitalisation of public administration – with positive effects on tax compliance – and an improved business environment are strengthening the medium-term economic outlook.

The banking sector has also bolstered its fundamentals, with strong liquidity, better asset quality, increased profitability and higher capital adequacy, while enhanced competition in the financial system contributes to improved financing conditions.

The progress achieved in recent years is captured by the European Commission's assessment report in the context of the Spring package of the 2026 European Semester, according to which the reforms implemented by Greece have reduced its long-standing vulnerabilities. As a result, the country is no longer seen as facing macroeconomic imbalances, for the first time since the start of the debt crisis.

Despite the major economic achievements of the past few years, the Greek economy still faces complex challenges. Attaining strong growth rates in an environment of heightened global uncertainty warrants the continuation of reforms, further productivity gains, an effective use of European resources and a faster transition to a more extrovert, technologically advanced and resilient growth model. Moreover, tackling the impacts of climate change, raising energy security, improving housing affordability and addressing demographic pressures emerge as key conditions for the sustainable convergence of the Greek economy with the EU average in the years ahead.

2 GREEK ECONOMY: DEVELOPMENTS AND PROSPECTS

2.1 Macroeconomic developments: Resilient growth and rising inflation

Economic activity: In the first quarter of 2026, the Greek economy continued to expand at a solid pace. GDP grew by 2.0% year on year and by 0.2% quarter on quarter, significantly outperforming the euro area average (0.3% and -0.2%, respectively). Investment remained the

main driver of growth, while net exports and private consumption also made positive contributions. These developments underscore the sustained growth momentum of the Greek economy, despite the international uncertainty stemming from geopolitical tensions in the Middle East and the resurgence of inflationary pressures.

Specifically, private consumption grew, albeit at a slower pace, in the first quarter of 2026, supported by continued employment gains and wage growth. For the second quarter of 2026, the emergency support measures that were adopted by the government, amounting to EUR 800 million, aim to alleviate the impact from higher energy costs on real disposable income and consumer spending. Over the same period, investment gathered momentum, backed by RRF resources, and construction activity remained strong, especially in individual project and infrastructure categories. In the services sector, tourism in particular, developments remained favourable, as both tourist arrivals and travel receipts increased. However, the available indicators of business expectations and consumer confidence for the second quarter of 2026 show fluctuations, reflecting mounting geopolitical uncertainty and the effects of high energy prices on economic expectations.

Inflation: During the first five months of 2026, the expected further disinflation (from 2.9% in December 2025) was interrupted by the geopolitical crisis in the Middle East and the sharp increase in international energy prices. As a result, inflation accelerated to 4.9% in May, from 3.1% in February, remaining well above the euro area average of 3.2%.

Higher energy costs are expected to have knock-on effects on the prices of both services and industrial goods. Food inflation is also expected to remain elevated, mainly reflecting higher energy-related costs across the production, storage and transportation chain.

Real estate market: Over the first months of 2026, the Greek real estate market continued to expand, yet at a milder pace relative to previous years. Both domestic and foreign investor interest remained brisk, focusing mostly on the segments of housing, hospitality, warehousing-logistics and prime commercial spaces with high-end bioclimatic features. Residential property prices kept rising as the limited supply of new houses continued to push them upwards, though they showed signs of a slowdown. Meanwhile, increased construction costs and delays associated with the regulatory and building permit framework are still hampering the development of new projects. The outlook for the real estate market remains moderately positive in the coming period, in tune with the robustness of the Greek economy, even though its future path should be affected by international economic and geopolitical developments, as well as changes in energy and financing costs. The issue of housing affordability is still seen as a serious challenge, given that high property prices and rents are hindering households' access to the housing market, especially in large urban centres. The initiatives undertaken by the government so far to reinforce its housing policy and increase the supply of housing are important steps, but additional measures are needed in order to further ease pressures on the market.

Labour market: The labour market remained strong in the first quarter of 2026, despite mounting uncertainties related to international geopolitical developments and the continued instability across the Middle East in particular. Total employment grew by 1.3% year on year (compared with 1.0% in the first quarter of 2025), while the unemployment rate rose marginally to 10.6% from 10.4%, respectively. The rise in employment stemmed mainly from construction, tourism-related activities, financial and insurance services, as well as transport and warehousing, whereas smaller rises were recorded in trade and manufacturing. By contrast, a decline was observed in agriculture, public administration and education. Favourable developments are also captured by ERGANI data, as net dependent employment flows in the private sector remained positive over the first four months of 2026 and hovered at higher levels compared with one year earlier, underpinned by strong labour demand ahead of the tourist season. With regard to new hirings, full-time employment contracts continued to outnumber flexible

forms of employment. The short-term prospects of employment in the first five months of 2026 declined in services and construction, remained stable in manufacturing and improved considerably in trade. Labour market tightness is easing, as the job vacancy rate dropped to 1.7% in 2025 from 2.2% in 2024, though remaining a major drag on sectors such as construction, tourism and manufacturing.

Competitiveness: The international competitiveness of the Greek economy remained stressed throughout 2025 and into the first quarter of 2026, mostly in terms of relative prices, because of the euro's continued appreciation. The broad real effective exchange rate index increased by 2.2% in 2025 and kept rising by 3.5% in the first quarter of 2026, weighing on the country's international competitiveness. Similarly, the nominal effective exchange rate based on the Consumer Price Index rose by 1.7% in 2025, with inflation adding even more pressure to an already tough start in the first months of 2026. On the other hand, the real effective exchange rate based on relative unit labour costs increased only marginally, suggesting a slight deterioration in international competitiveness, as the negative effect from the stronger euro was largely offset by slower unit labour cost growth in Greece vis-à-vis its trading partners. In greater detail, unit labour cost growth in Greece was 2.3%, lower than in the euro area (3.1%), mainly on account of stronger labour productivity growth in Greece (1.2%, against 0.7% in the euro area).

In terms of structural competitiveness, despite significant progress in various areas, such as tax competitiveness, Greece still lags behind other advanced economies. Nevertheless, foreign direct investment in the first four months of 2026 retained last year's momentum, with inflows coming to EUR 4.4 billion and being channelled primarily to manufacturing and real estate, thereby suggesting investors' confidence in the prospects of the Greek economy.

Current account balance: In 2025, the current account deficit narrowed significantly to EUR 14.1 billion or 5.7% of GDP, from EUR 16.9 billion or 7.2% of GDP in 2024, mainly due to an improvement of the goods balance and a lower deficit of the primary income account. However, in the first four months of 2026, the current account deficit widened once again year on year, largely reflecting a worsening in the primary and secondary income accounts, which was only partially offset by an improvement in the balances of goods and services. More specifically, the deficit of the goods balance shrank as a result of the improved oil balance, since exports of fuels grew by 13.1% and imports of fuels declined. Total exports, at constant prices, increased by 4.6% during the January-April period, with positive contributions mainly from food-beverages-tobacco and pharmaceuticals, on top of fuels. Meanwhile, the surplus of the services balance widened considerably over the same period, chiefly on account of buoyant tourism performance. Travel receipts rose by 36.9%, driven by respective increases of 27.1% and 8.6% in inbound traveller flows and average expenditure per trip, mirroring a longer tourist season and Greece's sustained attractiveness as a tourist destination even in times of heightened geopolitical uncertainty. However, the positive contribution of the travel balance to the overall services balance was partly offset by a deterioration in the transport and other services balances.

2.2 Fiscal developments: Strong fiscal performance and continued debt reduction

Following the exceptionally strong fiscal performance recorded in 2024, fiscal outcomes remained highly favourable in 2025. According to available data, the general government balance turned out at a surplus of 1.7% of GDP in 2025, up from 1.3% in 2024, while the primary balance reached a historically high surplus of 4.9% of GDP, significantly exceeding the Budget target of 3.7% of GDP. This outcome primarily reflects stronger-than-expected revenue performance, particularly from VAT, individual income tax and social security contributions, on the back of improved tax and social security compliance through the expansion of electronic transactions, the wider use of digital tools and the further rollout of the digital labour card. At the same time, prudent expenditure management contributed to the stronger fiscal outcome, creating additional fiscal space for new targeted support measures from 2026 onwards.

The public debt-to-GDP ratio continued its downward trajectory, declining to 146.1% in 2025 from 154.2% in 2024, which was the largest reduction among EU Member States. This improvement was mainly driven by high primary surpluses and robust nominal GDP growth. Projections for 2026 remain favourable, as it is estimated that the primary surplus will continue to be high and the debt-to-GDP ratio will decline further.

Turning to the absorption of RRF funds, Greece's remarkable progress in the attainment of milestones/targets and the disbursement of available resources continues to compare favourably with the European average. After the disbursement of the 7th instalment in the form of grants and the 6th instalment in the form of loans in April 2026, the country has received a total of EUR 24.6 billion, corresponding to 68% of total available resources, against an EU average of 59%. Out of this amount, EUR 12.9 billion concerns grants and EUR 11.7 billion concerns loans, while 53% of the agreed milestones and targets has been fulfilled. Moreover, the penultimate payment requests regarding grants and loans (8th and 7th respectively), worth EUR 1.63 billion in total, have been submitted and are linked to the completion of 34 milestones and targets. The acceleration of disbursements to the real economy and the improvement of administrative efficiency have contributed to boosting investment and economic growth dynamics. Nevertheless, the full use of available resources remains challenging and calls for a faster implementation of projects and a speedier completion of the remaining milestones within the set deadlines.

2.3 Financial developments: Tighter global financial conditions – Resilient Greek market and sustained investor confidence

Global financial conditions have tightened since the beginning of 2026, mainly reflecting heightened geopolitical uncertainty stemming from the conflict in the Middle East and renewed inflationary pressures driven by higher international energy prices. Financial markets have revised upwards their expectations for inflation and policy rates, especially in the euro area, leading to increased volatility in global bond and equity markets and a tightening of international financial conditions. Currently, markets are pricing in an average inflation rate of around 3% over the next 12 months and of 2.6% two years ahead in the euro area, with similar expectations for the United States. Nevertheless, it should be noted that inflation expectations in the euro area were significantly higher when the conflict in the Middle East broke out and declined later with investors expecting interest rate hikes by the ECB, which eventually materialised at the June meeting of its Governing Council.

Against this backdrop, investors' expectations about monetary policy have changed substantially. While in early 2026 markets expected the ECB to hold and the US Federal Reserve (Fed) to hike, they are now pricing in up to two interest rate increases of 25 basis points each in the euro area by the end of the year, on top of the June hike. In the United States, markets expect the Fed to raise its key interest rates by end-2026, without ruling out a second increase by the beginning of the second quarter of 2027. In spite of tighter financial conditions globally, ample liquidity helps to partly buffer pressures on markets.

Despite the challenging international environment, the Greek government bond market has remained notably resilient. Sovereign credit rating upgrades, sustained high primary surpluses and the continued decline in public debt have whetted investor demand for Greek government securities. As a result, Greek government bond yields, while broadly tracking higher European yields, have continued to compare favourably with those of other euro area sovereigns, with the increase in yields effectively reflecting spillovers from international market developments. More specifically, the 10-year Greek government bond yield stood at 3.74% during the first fortnight of June 2026, against 3.48% at end-2025, while its spread vis-à-vis the German government bond narrowed to around 70 basis points, i.e. about 125 basis points lower than before the upgrade to investment category (in the first quarter of 2023).

At the same time, improvements in Greece's sovereign credit profile continued to support upgrades in bank credit ratings, reducing funding costs for Greek systemic banks and facilitating their access to international capital markets. In the year to mid-June 2026, issues of bank bonds totalled about EUR 4.15 billion, of which EUR 3.1 billion in senior bonds and EUR 1.1 billion in subordinated debt.

With regard to firms' market-based financing, buoyant issuing activity contributes to stronger investment and easier financing conditions for firms. In 2025, Greek non-financial corporations launched eight new issues totalling EUR 3.67 billion, mostly during the second half of the year. In 2026, issuing activity gathered pace and by the first fortnight of June firms had issued bonds worth EUR 0.85 billion. Greek corporate bond yields continued their downward path until early 2026, before being affected mainly by rising global yields.

The Greek equity market also recorded strong gains. The Athens Exchange composite share price index (ATHEX) rose by 44.3% in 2025 and by a further 13% in the year to mid-June 2026, outperforming the key European and international indices. ATHEX's robust performance reflected the strong performance of sectors linked to the real economy and was driven by increased participation by international investors, successive credit rating upgrades and the continued improvement in the overall investment climate. These developments also contributed to an upgrading of the Greek equity market's international classification. In this environment, trading activity on the Athens Exchange has strengthened and the funds raised by ATHEX-listed companies have increased, with considerable positive spillovers on investment financing and the smooth functioning of listed Greek corporations.

2.4 Banking sector: Interest rates, deposits and credit: Volatile interest rates, robust credit growth and diversified saving behaviour

Interest rates on term deposits broadly stabilised during the fourth quarter of 2025 and the first four months of 2026, reflecting the unchanged policy rates of the Eurosystem over the same period. In particular, the weighted average interest rate on term deposits in April 2026 stood at 1.1% for households and 1.8% for non-financial corporations (NFCs), remaining unchanged relative to end-2025. Furthermore, term deposit rates in Greece continued to be below the euro area average, although their differential narrowed to 50 basis points from about 120 basis points in early 2023.

Following an increase of EUR 10.4 billion in private sector deposits in 2025, the stock of deposits declined cumulatively by EUR 3.6 billion during the first four months of 2026, reaching EUR 209.6 billion in April 2026. Over the January-April 2026 period, household deposits shrank by EUR 0.2 billion, compared with a decrease of EUR 1 billion in the first four months of 2025. Year on year, household deposits grew by 4.1% in April 2026, supported by a past rise in disposable income. NFCs' deposits decreased by EUR 4 billion during the first four months of 2026, mainly on account of seasonal factors, but their year-on-year growth rate in April remained elevated (11.6%), reflecting robust entrepreneurial activity.

Interest rates on bank loans to NFCs showed pronounced volatility in the first four months of 2026, after the full pass-through of past Eurosystem policy rate cuts. The weighted average interest rate on total business loans stood at 4.5% in April 2026, as much as on business loans with a defined maturity. The cost of bank financing was significantly reduced through programmes of the European Investment Bank (EIB) Group and the Hellenic Development Bank (HDB), as well as through RRF loans, an effect that is not fully captured by the reported lending rates. It is estimated that one third of new business loans and one fourth of lending to small and medium-sized enterprises (SMEs) are supported by development bank financing instruments and/or the RRF.

Credit growth to NFCs remained strong, although it moderated from the high levels recorded a year earlier. The annual growth rate of bank lending to NFCs came to 9.5% in April 2026, down from 11.3% in December 2025 and 17.2% in April 2025, while over the January-April 2026 pe-

riod the average monthly net flow of financing amounted to EUR 294 million, against EUR 562 million over the same period of 2025. Continued robust lending to NFCs reflects both sustained demand for business credit and the supportive lending policies of banks.

For households, the weighted average mortgage lending rate declined slightly to 3.3% in April 2026, while around 30% of new mortgage loans granted in early 2026 was linked to the co-financed “My Home II” and “Upgrade My Home” programmes, which provide interest-free or low-interest financing. Bank lending to households also continued to expand year on year in early 2026, mirroring stronger consumer credit growth and a further acceleration in mortgage lending, supported primarily by rising house prices and increased private consumption.

The outlook for bank credit remains positive for the remainder of the year, as the expected maintenance of economic growth and the further utilisation of RRF resources and the programmes of the HDB and the EIB Group are anticipated to continue supporting the financing of the real economy.

Banking system: Strong fundamentals and enhanced resilience

Greek banks continued to perform strongly during the first months of 2026, maintaining solid profitability, capital adequacy and liquidity positions. The resilience of the Greek economy, despite ongoing geopolitical tensions and heightened uncertainty in the international environment, supported the continued strength of the banking sector. At the same time, Greek banks’ asset quality improved further, narrowing the gap with the European average. The sector’s strong performance is also reflected in the continued upgrades of banks’ credit ratings by international rating agencies. As a result, the four significant Greek banks are now rated BBB+, just one notch below the A rating category.

In greater detail, in the first quarter of 2026, net profits of Greek banks (both significant and less significant) that have released their financial results declined slightly year on year, as higher net interest income and improved net income from fees and commissions and other sources were offset by increased operating costs and non-recurring restructuring expenses associated with personnel voluntary retirement schemes.

Net interest income was mainly underpinned by net credit growth, among other things, due to higher credit backed by RRF funds, while the net interest margin remained broadly unchanged. Meanwhile, net fee and commission income rose markedly, supported by fees from portfolio management and new lending, thereby contributing to the diversification and resilience of income. The rise in net income after taxes was also driven by reduced loan-loss provisions, in connection with banks’ improved asset quality in recent years, but was somewhat dampened by higher operating costs. As a result, return on equity remained high and the cost-to-income ratio continued to hover below the European average.

Greek banks’ capital adequacy ratios remained elevated in the first quarter of 2026, despite strong credit growth. This can be attributed, alongside higher profitability, to issues of Additional Tier 1 (AT1) and Tier 2 bonds, which amounted to EUR 2.7 billion and EUR 0.9 billion, respectively, in 2025 as a whole and to EUR 0.7 billion and EUR 0.4 billion, respectively, since the start of 2026. Furthermore, significant banks have issued senior bonds worth EUR 3.1 billion since the beginning of the year, in their effort to meet the minimum requirement for own funds and eligible liabilities (MREL), and have stepped up the issuance of green bonds, raising EUR 1.2 billion for the financing of sustainable investments.

Greek banks’ asset quality improved further during the first months of 2026. The non-performing loan (NPL) ratio kept falling, further converging towards the respective European average, and Stage 2 loans as a percentage of total loans declined as well. These developments reflect improved financing conditions and the sustained robustness of the Greek economy.

With regard to bank liquidity, despite a modest drop in the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR) in the first quarter of 2026, both ratios remained well above minimum regulatory requirements and the respective averages of euro area banks. At the same time, the loan-to-deposit ratio continues to be considerably lower that the European average, reflecting the domestic banking system's solid liquidity position and its capacity to provide support to the real economy.

Overall, the Greek banking sector continues to bolster its resilience and profitability amid heightened external risks and uncertainties. The enhanced fundamentals of the banking system have thus paved the way for a further expansion of Greek banks' activities. Mergers, acquisitions and strategic partnerships with financial organisations in Greece and abroad continued into 2026, increasing extroversion, the sector's future growth prospects, the supply of new products and services to firms and households, as well as competition in the banking sector.

2.5 Projections: Sustained growth, disinflation, high primary surpluses and falling public debt

According to the latest projections of the Bank of Greece, the Greek economy is expected to continue expanding at a pace above the euro area average, supporting the ongoing convergence of real incomes. Real GDP growth is projected at 1.9% in 2026 and 2027, before strengthening slightly to 2.0% in 2028. Economic activity is expected to be driven primarily by private consumption, investment and exports, despite heightened uncertainty in the global economic environment. In the near term, investment is anticipated to keep benefiting from RRF resources, as only some 60% of the funds received has been channelled into the real economy to date. Thus, it is estimated that investment will increase by 5.5% in 2026 and should continue to help narrow the Greek economy's investment gap in the medium term.

The labour market is expected to continue growing over the projection horizon. The unemployment rate is projected to reach 8.2% in 2026, against 8.9% in 2025, and to drop further to 7.6% by 2028, reflecting the expansion of economic activity and the rise in employment. Moreover, nominal compensation per employee is set to increase at an annual rate of around 4.0%, mostly on account of continued labour market tightness. On the other hand, labour productivity is expected to grow more slowly than compensation, possibly weighing on the economy's international competitiveness.

HICP inflation, following its temporary acceleration in response to higher energy prices and renewed inflationary pressures, is expected to gradually moderate over the projection horizon. Specifically, inflation is projected to rise to 3.8% in 2026, from 2.9% in 2025, before declining to 2.6% in 2027 and 2.3% in 2028, as pressures stemming from energy and food prices gradually ease. The upward revision of the Bank of Greece projections for inflation in 2026, compared with the March projections, mainly reflects the anticipated rise in the energy and services components. The implementation of the expanded EU Emissions Trading System (ETS2) in 2028 should maintain some inflationary pressures on energy prices and on the prices of non-energy industrial goods.

The current account deficit as a percentage of GDP is expected to deteriorate in 2026, chiefly on account of rising fuel prices and higher imports of investment goods linked to RRF-related investment projects. However, from 2027 onwards the deficit is projected to decline, as exports of goods and services are expected to strengthen and travel receipts are set to rise, supported by a longer tourist season, the opening-up to new markets and the sustained cruise momentum.

Turning to fiscal aggregates, according to the Bank of Greece, in 2026 the primary surplus is estimated at 3.7% of GDP and public debt at 135.7% of GDP. The continued downward path of

the debt ratio is attributable to high primary surpluses, nominal GDP growth and the early repayment of loans under the Greek Loan Facility (GLF), amounting to EUR 7 billion. The latter should constitute a major milestone for the country, as the Greek public debt-to-GDP ratio would no longer be the highest in the EU.

The recent US-Iran agreement has raised expectations of an end to hostilities and further moderation in energy prices. This underpins the likely materialisation of a milder scenario for the Greek economy compared with the baseline projection. Under this scenario, which assumes a faster decline in oil and natural gas prices, inflation would be slightly lower and economic activity somewhat stronger than currently projected. In particular, real GDP growth is projected at 2.0% in 2026 and 2.1% in 2027 and 2028, while HICP inflation is projected at 3.7% in 2026, 2.5% in 2027 and 2.2% in 2028. Nevertheless, it should be stressed that the materialisation of the milder scenario depends heavily on the consistent implementation of the US-Iran peace agreement and the full normalisation of energy flows.

2.6 Risks and uncertainties: External risks and challenges to sustained growth dynamics

The risks surrounding the Bank of Greece's growth forecasts remain tilted to the downside and are mainly related to external factors. Specifically, risks to the outlook of the Greek economy include: a prolonged duration of geopolitical tensions in the Middle East; persistently higher inflationary pressures and their possible second-round effects on wages; protracted labour market tightness and stronger wage pressures; lower-than-expected absorption of RRF funds; slower implementation of reforms; and the impacts of the climate crisis due to natural disasters. Meanwhile, risks to inflation are tilted to the upside and are mostly associated with geopolitical developments.

On the other hand, the recent US-Iran agreement could lead to a more benign geopolitical environment, with positive macroeconomic effects (in terms of lower inflation and stronger economic growth) for the Greek economy.

Risks to public debt sustainability are estimated to remain contained in the medium term, conditional upon entrenching fiscal credibility and making efficient use of EU resources. However, in the long term, the gradual increase in the refinancing of public debt on market terms will increase exposure to interest rate risk and market risk.

3 THE EXTERNAL ENVIRONMENT OF THE GREEK ECONOMY

3.1 Developments and prospects outside the euro area: Global economic slowdown, rising inflation and increased geopolitical uncertainty

Despite the resilience of the global economy in 2025, developments in early 2026 have weighed on the growth prospects of international economic activity, mainly due to the new energy crisis that was triggered by the military conflict in the Middle East and shipping disruptions at the Strait of Hormuz. According to the IMF (April 2026), world GDP growth is projected to slow to 3.1% in 2026, from 3.4% in 2025, and to stabilise in 2027. In advanced economies as a whole, growth is estimated to fall to 1.8% in 2026 and 1.7% in 2027 (from 1.9% in 2025), largely reflecting negative effects from rising energy prices, weaker activity in manufacturing and sustained high uncertainty. In the United States in particular, despite the economy's resilience and a GDP growth rate of 1.6% in the first quarter of 2026 (on an annualised basis), consumer confidence plunged to historical lows in May 2026 and inflation kept rising from 2.4% in January to reach 4.2% in May. For 2026 as a whole, the US economy is projected to expand by 2.3%, compared with 2.1% in 2025, according to the IMF. Conversely, growth in emerging market and developing economies is expected to fall to 3.9% in 2026, from 4.4% in 2025, and recover to 4.2% in 2027, as these economies are more strongly affected by energy disruptions, currency depreciation and increased financing needs (compared with advanced economies).

World trade growth is expected to slow markedly in 2026, dragged down by the impacts of geopolitical developments and global supply chain disruptions. The IMF forecasts that world trade volume growth (goods and services) will decline to 2.8% in 2026, from 5.1% in 2025, and pick up to 3.8% in 2027, though remaining significantly lower than its pre-pandemic average (2000-19: 4.9%). Risks to world trade are firmly on the downside and stem from a further intensification of geoeconomic fragmentation and increased trade costs, due to higher costs of transport, energy and financing, as well as higher trade restrictions.

Inflationary pressures reignited in early 2026 worldwide, chiefly because of the surge in the international prices of energy and non-energy commodities. The average price of crude oil came to USD 100.4 per barrel in May 2026, while for the year as a whole an average increase of 21.1% is projected (USD 82.2/barrel) by the IMF (April 2026). Metal prices soared by 30.7% during the first five months of 2026, year-on-year, and food commodity prices rose by 4.1%, with the prices of fertilisers having jumped by 49.9% since the beginning of the year. The above developments exacerbate concerns about protracted inflationary pressures, in an environment where central banks are closely monitoring data releases and remain cautious as to the future path of monetary policy. For the whole of 2026, global consumer price index (CPI) inflation is expected to increase to 4.4% from 4.1% in 2025, according to the IMF forecast (April 2026). In advanced economies, inflation is estimated to stand at 2.8% in 2026, against 2.5% in 2025, while in emerging market and developing economies it is projected to rise to 5.5% from 5.2%, respectively.

3.2 Euro area developments and prospects: Muted growth dynamics in 2026 amid geopolitical uncertainty – Inflation returns above the ECB's target

The euro area economy maintained positive yet weak growth rates in the third and fourth quarters of 2025, but GDP shrank in early 2026, primarily on account of the turbulence in global energy markets caused by the Middle East war, but also as a result of a sharp contraction in Irish GDP. More specifically, real GDP contracted by 0.2% in the first quarter of 2026, quarter-on-quarter, against a 0.2% rise in the fourth quarter of 2025. Despite an expected temporary slowdown in economic activity in 2026, domestic demand is anticipated to remain the key driver of growth over the medium term, supported by a projected recovery in real incomes on the back of declining energy prices and sustained low unemployment levels, as well as by increased public spending on infrastructure and defence. According to the June 2026 Eurosystem staff projections, real GDP growth in the euro area is set to average 0.8% in 2026, against 1.5% in 2025, and increase to 1.2% in 2027 and 1.5% in 2028.

Adverse developments in energy markets are expected to weigh heavily on euro area private consumption growth, mainly owing to losses in households' purchasing power. Total investment is projected to weaken to 1.8% in 2026, from 3.1% in 2025, as a result of heightened uncertainty and lower demand, despite the continued support from the NextGenerationEU (NGEU) recovery instrument and from digitalisation and AI-related investment. Exports are estimated to remain subdued, reflecting weaker foreign demand, the appreciation of the euro and disruptions in energy and trade flows. Net exports are projected to provide a negative contribution (-0.2%) to real GDP growth in 2026 and a small positive contribution in 2027.

Headline HICP inflation in the euro area rose further in May 2026 to 3.2%, from 3.0% in April and 2.6% in March, overshooting the ECB's target after a prolonged period of disinflation (February: 1.9%). This rise is primarily associated with a steep increase in the energy component, higher services inflation and a slight pickup in the prices of non-energy industrial goods (NEIG). On the contrary, food inflation slowed in May. In the baseline of the June 2026 Eurosystem staff projections, headline inflation is expected to average 3.0% in 2026, 2.3% in 2027 and 2.0% in 2028. For inflation excluding energy and food, the baseline foresees an average of 2.5% in 2026 and 2027 and 2.2% in 2028.

3.3 Risks and uncertainties: Geopolitical tensions, energy crisis and increased fragmentation in the international environment

Risk and uncertainties surrounding the inflation and growth outlook for the global and euro area economies remain significant. Risks to the growth outlook are mainly on the downside, especially in the short term, reflecting heightened geopolitical uncertainty. More specifically, a continuation or escalation of the conflict in the Middle East poses a serious risk to global economic activity, as it could drive energy prices further up, exacerbate supply chain disruptions and dent economic sentiment.

Furthermore, a pronounced tightening in global financial conditions or renewed trade tensions could drag down exports, dampen industrial output and reduce investment. Besides, rising protectionist policies and increased geoeconomic fragmentation are likely to provoke new bottlenecks in global supply chains, particularly in critical areas such as raw materials and rare earths. Should AI-driven profitability expectations turn out to be overly optimistic, an additional downside risk would emerge, as an abrupt revision of those expectations could lead to a sharp correction in financial markets, slowing investment activity and denting consumption through negative wealth effects for households. On the other hand, a faster diffusion of new technologies, stronger productivity, further increases in defence and infrastructure spending, as well as an easing of geopolitical tensions and progress in international trade relations could reduce global energy prices, uncertainty and pressures on international value chains, thereby improving the medium-term growth outlook. In particular, the recent US-Iran agreement could lead to a more favourable geopolitical environment, with positive macroeconomic effects (in terms of lower inflation and stronger GDP growth) for both the world and euro area economies.

4 THE SINGLE MONETARY POLICY

Interest rate hike in June 2026

Following the successive cuts in key Eurosystem interest rates that began in June 2024 and lasted until June 2025, resulting in a cumulative reduction of 200 basis points, the Governing Council of the ECB kept interest rates unchanged during the second half of 2025 and the first four months of 2026. However, in June 2026 the Governing Council decided to raise the three key ECB interest rates by 25 basis points. Thus, the deposit facility rate, through which the Governing Council steers the monetary policy stance, was raised to 2.25%. At its June meeting, the Governing Council noted that the outlook remains uncertain, with upside risks for inflation and downside risks for economic growth. The full implications of the war for medium-term inflation and growth will depend on the intensity and duration of the energy price shock, as well as the scale of its indirect and second-round effects.

The Governing Council of the ECB remains committed to ensuring that inflation stabilises sustainably at its 2% target in the medium term and monitors a wide set of incoming economic and financial data for its monetary policy deliberations. In particular, its data-dependent and meeting-by-meeting approach is based on the assessment of (i) the inflation outlook and the risks surrounding it; (ii) the dynamics of underlying inflation; and (iii) the strength of single monetary policy transmission to the real economy. At the same time, the Governing Council reiterated that it is not pre-committing to a particular rate path, but maintains a flexible and agile policy stance.

According to the analysis by the Governing Council of the ECB during the first months of 2026, headline inflation rose significantly as a result of the surge in energy prices caused by the war in the Middle East. Moreover, some indicators of underlying inflation have already been driven higher by the energy shock. Inflation expectations over shorter horizons remain well above levels before the outbreak of the war in the Middle East. At the same time, most measures of longer-term inflation expectations stand at around 2%, supporting the stabilisation of inflation around target in the medium term.

According to the Governing Council of the ECB, the inflation and growth outlook remains highly uncertain. Alternative assumptions about the intensity and duration of the war in the Middle East and the energy price shock, their implications for the international environment and uncertainty, as well as the scale of indirect and second-round effects would lead to considerably different macroeconomic outcomes. A prolonged war in the Middle East could translate into a longer and more persistent increase in energy prices, further adding to inflationary pressures through direct, indirect and second-round effects. Furthermore, ongoing trade tensions could also give rise to more fragmented global supply chains, curtail the supply of critical raw materials and worsen capacity constraints in the euro area economy. By contrast, inflationary pressures could turn out to be weaker if a peace agreement was signed between the United States and Iran, if the energy shock proved to be more short-lived than currently expected or if indirect or second-round effects proved less pronounced than anticipated. In addition, more volatile and risk-averse financial markets could dent demand and lower inflation, thereby weighing on economic activity.

5 THE GREEK ECONOMY: CHALLENGES AND POLICY RECOMMENDATIONS

Challenges

The Greek economy has made remarkable progress in recent years and is internationally seen as a leading example of a country that has managed to overcome a severe economic crisis, grows faster than the euro area average, reduces its public debt-to-GDP ratio at a swift pace, has achieved financial stability and implements a series of important reforms. Nevertheless, it continues to face a complex set of structural and macroeconomic challenges, which will determine the country's capability to maintain high growth rates and achieve real convergence with the EU average.

In its latest assessment report, the European Commission considers that Greece no longer faces macroeconomic imbalances. Yet it acknowledges that important structural weaknesses remain relating to productivity, competitiveness, the human capital, the green transition and long-term economic resilience.

The main challenge that lies ahead is to preserve the economy's growth momentum in the post-RRF era. The significant impulse provided by European resources in recent years has decisively contributed to boosting investment and economic activity. However, what is now crucially needed is to efficiently use and mobilise the available European resources of the coming period – through the NSRF, the new Multiannual Financial Framework and the newly established EU funds – with a view to enhancing the Greek economy's productivity, competitiveness and real convergence in a sustainable manner.

At the heart of these challenges remains low productivity relative to the European average. Despite recent notable improvements, labour productivity continues to be adversely affected by the structure of Greece's production model, such as the high share of low value-added activities and the dominance of micro enterprises that struggle to invest in technology, research, innovation and extroversion. Besides, the years-long disinvestment during the crisis period has led to severe capital shallowing, which means that capital per worker remains low compared with other European economies. The limited diffusion of innovation, weak private spending on research and development (R&D), as well as financing constraints for startups and scaleups continue to dampen the economy's transition dynamics towards higher value added activities.

The slow transformation of the production model remains a critical issue. Despite a rise in investment and exports, the domestic economy still relies heavily on private consumption and activities that are strongly affected by external crises, geopolitical shocks and climate change impacts.

In particular, climate change poses increasing challenges for the Greek economy through more frequent extreme weather events, pressures on tourism, agricultural output and infrastructure, as well as growing needs for climate change adaptation and energy system transformation. The need to accelerate the green transition and strengthen the economy's resilience to natural disasters and energy shocks becomes imperative if sustainable growth and macroeconomic stability are to be achieved.

The energy transition is now inextricably linked with competitiveness. Despite a considerably higher share of renewables in the energy mix, Greece continues to greatly depend on imported fossil fuels. Electricity prices remain volatile and often higher than the European average, compressing households' incomes and firms' earnings.

The labour market appears to be equally stressed. The fast decline of unemployment has generated labour shortages in several economic sectors, especially in tourism, food services and construction. Labour market tightness leads to wage increases that often outpace productivity growth, generating pressures on unit labour costs and firms' competitiveness. In parallel, significant imbalances are still observed in labour market participation, with the rate of female participation remaining low compared with the European average and with high percentages of young people not in education, employment or training. A more effective matching of education and training with labour market needs, as well as the promotion of active employment policies are highlighted as top priorities.

The demographic crisis is perhaps the most profound structural challenge for the country. Low birth rates, population ageing and a shrinking labour force are set to weigh on growth, investment, productivity and the viability of the social security system. Meanwhile, the brain drain during the crisis of the past decade has substantially eroded the country's human capital, depriving it of young and high-skilled professionals. Low participation in lifelong training, shortages in digital skills and limited availability of specialised staff in high-tech sectors are amplifying the challenges to Greece's demographics and production model.

At the same time, households' low purchasing power continues to thwart actual improvements in living standards. Although employment and nominal incomes have risen, the high inflation of the past few years – especially housing, energy, food and services inflation – has constrained real income growth, often leading to negative household savings and thereby reducing domestic savings which could finance investment and growth. In parallel, persistent relatively high shares of population at risk of poverty or social exclusion suggest that economic expansion is not evenly spread across all social groups. On the other hand, a number of studies show that, despite the progress achieved in curbing tax evasion, undeclared income still stands at high levels, well above the European average, and should it be declared, the relevant indicators would improve and the saving ratio would increase.

Against this backdrop, housing affordability proves to be one of the biggest socio-economic challenges. Increased housing demand – both domestic and foreign – compounded by the low supply of available houses has led to sizeable increases in property and rental prices. The problem affects young people and young households in particular, hampers labour mobility across regions and aggravates the country's demographics. Limited availability of affordable and social housing has become a critical issue of social policy and economic cohesion.

In addition, the Greek economy has to complete the twin (green and digital) transition in a setting of comparatively weak structural competitiveness. Despite improvements in certain areas, there are still chronic weaknesses related to slow delivery of justice, red tape, poor diffusion of innovation, skills shortages and difficulties in investing in new technologies and digital infrastructure faced by many SMEs. It should be noted that firms continue to face heavy regulatory burdens, delays in licensing and entry barriers in a number of services markets,

while the adoption of cutting-edge digital technologies remains low compared with the European average.

The current account deficit remains a major source of macroeconomic vulnerability for the Greek economy. Even though the economy's extroversion has visibly improved over time, the country is still highly dependent on imports, especially for energy, capital equipment and consumer goods. Limited domestic savings and the sluggish expansion of the production and export base are slowing the unwinding of external imbalances.

Climate change and natural resource management constitute another major challenge to long-term, sustainable growth. Greece is among the EU countries that are most exposed to natural disasters, such as wildfires, flooding, droughts and weather extremes. Bolstering the resilience of infrastructure, civil protection and insurance mechanisms against natural catastrophes becomes all the more imperative. At the same time, the country is facing growing water stress, which calls for investments in modern infrastructures for water management, storage and reuse. In the same vein, poor recycling rates and strong reliance on sanitary waste burial highlight the need to shift towards a more efficient and environment-friendly model of resource management.

The level of public debt remains high in absolute terms, in spite of its substantial reduction as a percentage of GDP and the overall improved fiscal position of the country. Maintaining fiscal credibility, sustaining market access and building resilience to external shocks are still seen as critical challenges for the macroeconomic stability of the Greek economy. Meanwhile, enhancing tax administration efficiency, improving tax compliance and sustaining the downward dynamics of public debt are key to ensuring the long-term sustainability of public finances.

Last but not least, the persistence of inflation at higher levels than the euro area average poses an intricate problem for the domestic economy. Although the real convergence of Greece's GDP per capita and price levels towards the respective euro area levels is associated with positive inflation differentials vis-à-vis the euro area average, the persistence of such differentials for too long might dent the competitiveness of the economy and erode households' purchasing power. Besides, inflationary pressures have significant distributional effects, hitting disproportionately harder lower-income households.

Policy recommendations

The Greek economy has entered a new phase of challenges and opportunities, in an environment of heightened geopolitical uncertainty, energy shocks, higher international protectionism, climate risks and sluggish economic activity in Europe. As already mentioned, despite the important progress achieved in recent years – restored fiscal credibility, regained investment-grade status, rising employment, sound public finances and higher investment – strong and sustainable growth rates cannot be taken for granted. The key challenge now is not only to preserve economic growth, but also to manage a transition to a more productive, outward-oriented, technologically advanced, green and resilient growth model.

Monetary policy tightening by the Governing Council of the ECB in June 2026 must be complemented by economic policy actions at the national level, both in the short and medium term, with a view to bringing inflation down in a sustainable manner and mitigating its impact on households and businesses. In this respect, domestic economic policies should be supportive to the single monetary policy and not generate additional inflationary pressures. At the same time, increases in goods and services prices and wage growth should be consistent with the medium-term objective of price stability. In this context, any emergency support measures for households and businesses should be targeted, temporary and fiscally sustainable. In the short term, the competent authorities should step up audits to safeguard effective competition in product markets and eliminate distortions that leave room for price gouging. In the medium term, competition in goods and services markets must be enhanced to reduce inflationary pressures,

by removing all kinds of regulatory barriers to market entry. Containing second-round effects on prices and production costs is key to preventing an erosion of the Greek economy's competitiveness.

Apart from reining in inflation, another focus of economic policy should be on strengthening the Greek economy's productivity. This requires a combination of structural reforms and investments. Further improvements in the business climate, a speedier delivery of justice, less red tape, a stable and transparent tax framework, a more efficient public administration and the completion of spatial and urban planning reforms are critical for raising total factor productivity.

Special emphasis must be placed on simplifying the regulatory framework and reducing the administrative burden that continues to act as a drag on investment. Speeding up the environmental licensing procedures, finalising the institutional frameworks relating to investment and concessions, furthering the digitalisation of administrative procedures, removing unnecessary regulatory restrictions on professional services and systematically reviewing regulatory interventions can improve the investment environment and significantly enhance the economy's competitiveness.

Moreover, it is necessary to effectively improve the quality of investment. Available European resources should be directed towards sectors that sustainably strengthen the economy's productive capacity, including industry, R&D, energy infrastructures, logistics, agri-food, pharmaceuticals, export-oriented services and cutting-edge technologies. Investments in intangibles, innovation, AI and cutting-edge digital applications are of particular relevance, being a key determinant of the economy's future productivity and competitiveness.

In this regard, the post-RRF era calls not only for an efficient use of the available European financing tools, but also for sustaining the reform momentum generated by the RRF. The fast mobilisation of funds under the NSRF, the new Multiannual Financial Framework, the Social Climate Fund, the Modernisation Fund and the newly launched European financial instruments should be accompanied by continued reforms in public administration, the justice system, tax administration, the labour market and public services digitalisation. The single most important challenge is to ensure the long-term growth effect of such resources, rather than their absorption.

Increasing the Greek economy's extroversion is another critical priority. Raising the production of high value added goods and services in tradable sectors is a necessary condition for the sustainable improvement of the current account balance as well as the reduction of external imbalances. The restructuring of global value chains and Europe's increased focus on strategic autonomy are also opening significant opportunities for the country to attract new productive investment.

Besides, an innovative and technologically upgraded economy requires enhanced governance of the national research and innovation ecosystem, less fragmented financing instruments, closer synergies between universities, research institutes and businesses, as well as a fully-fledged venture capital market. In the same vein, the faster digitalisation of SMEs and the wider adoption of technologies such as AI, cloud computing and data analysis can greatly augment the economy's productivity and competitiveness.

Firms' access to finance remains a key prerequisite for a transition to a more productive growth model. Despite the considerably improved fundamentals and lower concentration of the banking system, a newly created ecosystem of smaller but more robust credit institutions (the so-called "5th pole") and strong credit expansion, a number of obstacles are still in the way of SMEs. Expanding financial instruments through the HDB, the EIB Group and the European Investment Fund, alongside developing venture capital markets and alternative financing channels, can

help reduce financing gaps. In parallel, the continued strengthening of bank balance sheets and the accelerated resolution of non-performing loans would further support credit provision to the real economy.

Geopolitical developments and energy insecurity highlight the need to increase both energy security and competitiveness. Expediting investment in renewables, energy storage, offshore wind farms, smart grids and island interconnections can lower energy costs and reduce dependence on fuel imports. At the same time, promoting the economy's electrification, phasing off inefficient subsidies on fossil fuels and raising energy efficiency could contribute to enhancing competitiveness and achieving climate targets.

The green transition is directly associated with the need to bolster the country's resilience to climate change. The increasing frequency of extreme weather events warrants more investment in resilient infrastructures, flood and wildfire prevention projects, civil protection and adaptation of productive activities to new climate conditions. In tandem, it is imperative to establish a comprehensive strategy for natural risk management, increase insurance coverage against natural disasters and better incorporate climate parameters into public and private investment planning.

Particular emphasis should also be placed on the sustainable management of natural resources. Given that Greece is among the most water stressed countries in the EU, investment in water-related infrastructure is needed in areas such as water supply, storage, efficiency and reuse. At the same time, improved waste management and higher recycling rates coupled with the promotion of a circular economy are crucial factors for sustainable development.

Turning to the labour market, the key challenge is not merely to drive unemployment rates further down, but also to increase labour force participation, job quality and labour productivity. Demographic developments and workforce shortages in dynamic sectors are weakening the economy's growth potential. Thus, labour market policies should focus on raising labour force participation among women, young people, older workers and vulnerable social groups. Expanding early childhood education, childcare and long-term care services, promoting flexible working arrangements and strengthening active labour market policies can substantially help raise employment rates.

At the same time, upgrading human capital is a key determinant of the economy's long-term competitiveness, requiring improvements in educational attainment, schools' enhanced autonomy, teachers' more systematic training and assessment, stronger vocational training systems, as well as a better alignment of skills with labour market needs. Higher participation in lifelong learning and the development of digital skills would facilitate adaptation to technological and productive shifts in the decades to come.

The housing crisis has also evolved into a critical social and economic issue. Addressing housing affordability challenges requires increasing housing supply through faster permitting procedures, mobilising underutilised housing stock, encouraging residential investment and expanding affordable and social housing policies.

Strengthening social cohesion also requires a more effective system of social protection and easier access to quality public services. Further development of primary healthcare, addressing medical and nursing staff shortages and reducing regional disparities in access to healthcare services can lead to households' lower health spending, thereby improving the quality of life and strengthening social cohesion.

Maintaining fiscal credibility and financial stability remain key prerequisites for the country's macroeconomic stability. Sustained prudent fiscal policies, a continued decline in the public

debt-to-GDP ratio, stronger tax compliance through digital tools, higher efficiency of tax and customs administration, systematic review of tax exemptions, improved efficiency in the financial system and enhanced competition in the banking sector are major underpinnings of a successful economic policy.

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In recent years, the Greek economy has made substantial progress on many fronts, gradually recovering its credibility and stability after the deep crisis of the past decade. The country is recording higher growth rates than the euro area average, attracting strong FDI, enhancing its extroversion and steadily improving its ranking in institutional and economic indicators. Meanwhile, a robust fiscal position, the reduction in public debt, return to investment grade and the banking sector's consolidation have greatly strengthened the country's macroeconomic and financial stability.

Such progress is all the more important considering that it is taking place in an environment of heightened international uncertainty. Geopolitical tensions, conflicts, energy shocks, a restructuring of global value chains, rising protectionism and the impacts of climate change are creating a very challenging environment for all European economies. Against this backdrop, higher economic resilience and adaptability to unforeseen events become strategically important.

A key determinant of this progress has been political stability. Although it is often taken for granted, it is in fact a crucial public good for a well-functioning economy, especially in times of international turmoil. Political stability has facilitated decision-making, whenever required, has enabled the consistent implementation of reforms over the medium term and has enhanced the credibility of economic policymaking in the eyes of investors, markets and European institutions. Furthermore, it has supported the effective management of successive crises and upheld confidence in a period of strong external pressures.

The goal for the years ahead is to take full advantage of these gains, so that the country can enter a new phase of sustainable growth and real convergence with the most advanced EU economies. This requires the continuation of reforms, an optimal use of available European resources, stronger investment and sustained fiscal credibility, with the aim of transitioning to a more productive, outward-oriented, innovative and resilient growth model.

Besides, today's challenges cross national borders, affecting the whole of Europe. Strengthening energy and defence security, accelerating the green and digital transitions, and boosting European competitiveness underscore the need for more decisive common policies and more effective financing mechanisms at the EU level. Further deepening European integration, including the Banking Union and the Savings and Investments Union, can financially support the investment needed, reduce financial fragmentation and strengthen Europe's strategic autonomy.

Greece is much better placed than in the past to navigate the years ahead. Preserving political and economic stability, continuing reforms and adapting to big global shifts will determine whether or not the country can turn these challenges into opportunities, ensuring higher standards of living for the next generations.

Box 1

FOREIGN DIRECT INVESTMENT AND GEOPOLITICAL SHOCKS

The rapid geopolitical changes in recent years are transforming the world economy, pushing businesses, households and investors to rethink the way in which they make their decisions. Geopolitical uncertainty is shaping a new economic landscape, in which comprehending and adapting to change are essential. Economic policymakers and international institutions have turned their attention to how recent geopolitical tensions, through the imposition of economic sanctions, e.g. higher tariffs, elevated commodity prices and disruptions in supply chains, amplify downside risks to the international economy, bringing about changes in global supply and demand and harming international investment, entrepreneurship and trade.[1] This box examines how recent geopolitical shocks affect foreign direct investment.

1 Foreign direct investment and geopolitical instability: concepts and measurable aggregates

A thorough understanding of geopolitical instability requires distinguishing between risk and uncertainty. Risk refers to known chance, or measurable probability, while uncertainty describes conditions of unmeasurable probability, or indeterminable chance.[2] Geopolitical shocks fall under the second category as the time, intensity and implications of these shocks are hard to predict and quantify. This makes geopolitical uncertainty different from macroeconomic and/or policy uncertainty, which is typically associated with predictable facts, such as elections or economic policy decisions.[3] By contrast, geopolitical uncertainty is associated with the possibility of an exogenous harmful fact occurring, the timing of which cannot be predicted.

A measure of geopolitical instability which quantifies the uncertainty arising from international geopolitical shocks, such as trade wars, diplomatic conflicts, terrorist acts, hostilities and wars, is the global geopolitical risk (GPR) index.[4] Using this index, one can examine the correlation between foreign direct investment (FDI) flows and geopolitical uncertainty. As shown in the chart (panels A, B and C), the correlation between the two variables is, ceteris paribus, negative: the more geopolitical tensions escalate and uncertainty increases, the more FDI decreases. This negative correlation holds true not only for the world economy as a whole, but also for groups of countries, such as high-income countries (developed economies) and middle- and low-income countries (emerging and developing economies). Actually, the reaction is comparatively stronger for high-income countries, as demonstrated by the value of the correlation coefficient.[5] This can be attributed to the higher degree of economic interconnection of these countries and the closer economic cooperation between them, making them more vulnerable to elevated geopolitical risk.

The construction of a measurable index of geopolitical uncertainty allowed scholars to turn to investigating the causal relationship between, on the one hand, geopolitical shocks and, on the other hand, international financial markets, international commodity prices, corporate investment and FDI. All studies empirically confirm the ne-

1 See a) IMF (2025), "Geopolitical risks: implications for asset prices and financial stability", *Global Financial Stability Report*, Chapter 2, April; b) Bank of England (2024), "System Risk Survey Results – 2024 H2", October; c) ECB (2025), *2025 stress test of euro area banks – Final results*, Banking Supervision, August; and d) Gourinchas, P.-O. (2026), "War darkens global economic outlook and reshapes policy priorities", *IMF Blog*, 14 April.

2 See Rakow, T. (2010), "Risk, uncertainty and prophet: The psychological insights of Frank H. Knight", *Judgment and Decision Making*, 5, 458-466.

3 The theoretical and empirical literature on how economic and policy uncertainty cause changes in investor preferences and decisions is extensive. See e.g. Rodrick, D. (1991), "Policy uncertainty and private investment in developing countries", *Journal of Development Economics*, 36, 229-242, Elder, J. and A. Serletis (2010), "Oil price uncertainty", *Journal of Money, Credit and Banking*, 42, 1137-1159, Bloom, N., M. Floetotto, N. Jaimovich, I. Saporta-Eksten and S. J. Terry (2018), "Really uncertain business cycles", *Econometrica*, 86, 1031-1065, and Bernanke, B. (1983), "Irreversibility, uncertainty, and cyclical investment", *The Quarterly Journal of Economics*, 98, 85-106.

4 It was recently developed by Caldara, D. and M. Iacoviello (2022), "Measuring geopolitical risk", *American Economic Review*, 112, 1194-1225.

5 The correlation coefficient takes a negative value in both groups of countries. Nevertheless, the value is higher in the group of high-income countries (-0.195 against -0.107).

Foreign direct investment and global geopolitical risk (1985-2024)

Sources: GPR: Caldara, D. and M. Iacoviello (2022), "Measuring Geopolitical Risk", American Economic Review, last update: April 2026, https://www.matteoiacoviello.com/gpr.htm. FDI: World Bank Data, https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS.
Notes: x= GPR, y= FDI (% of GDP). GPR: index (1985-2019 = 100). The annual data have been calculated as the simple average of the monthly data points. FDI: net inflows of foreign direct investment as a percentage (%) of GDR. They are calculated as the sum of equity capital, reinvestment of earnings, other long-term capital and short-term capital, minus disinvestment, as shown in the balance of payments (unweighted averages). The index reflects the objective of acquiring a lasting management interest, as a 10% threshold or more of voting power stock in an enterprise operating in an economy other than that of the investor. Hence, it covers strategic investments. The countries are classified into the individual categories on the basis of real per capita gross national income (high-income≥ 14,000 US dollars, middle- and low-income≤ 1,145 US dollars.

gative impact of geopolitical uncertainty on market functioning and investor behaviour.[6] Recent empirical literature documents the existence of a negative and statistically significant causal relationship between the GPR index and net FDI inflows. This negative impact is confirmed by many statistical robustness checks of empirical estimates and at multiple analysis levels: both using firm-level and industry-level business investment data[7] and using panel data for a broad range of countries and for long periods.[8]

2 Impact channels

Geopolitical uncertainty affects investor decisions through three channels.

First: when a geopolitical shock occurs, investor decisions adjust to new supply and demand conditions. The adjustment takes place through the activation of the real options approach, namely of the option of suspending investment risk-taking or even cancelling the investment altogether.[9] In more detail, the higher the uncertainty and the more illiquid an investment (high investment irreversibility), the more the opportunity cost of the investment increases, prompting investors to adopt a wait-and-see approach and avoid risk-taking (risk aversion). Usually, investors opt for waiting and, as a result, delay or postpone the investment until uncertainty is dispelled. The impact is stronger in anticipation of a geopolitical threat and relatively smaller when one has to act once the threat materialises. This is so because the occurrence of forceful events tends to reduce uncertainty about the future, so investment is affected to a lesser extent. By contrast, threats tend to prolong and sustain risk, with major negative consequences. Thus, in an effort to spread risk, investors reallocate their funds, which results in flight-to-safety flows.

Second: geopolitical uncertainty accentuates financial constraints and liquidity problems.[10] Mounting uncertainty creates information asymmetries among market participants. This makes it difficult for investors to tell which assets are safe, leading to a widespread lack of confidence and higher risk-pricing, and thereby to a significant downward adjustment of asset prices. Borrowing costs increase due to uncertainty, resulting in outflows from emerging markets or more uncertain investments to safer options. The tightening of financial conditions hampers the financing of new investment, eventually leading to lower investment spending and weaker aggregate demand.

Third: in a limited number of firms, heightened uncertainty does not seem to have a significant effect on investment. More specifically, in certain cases where specific structural features are observed, such as a monopolistic market structure, inelastic demand, the possibility of substituting labour with capital, relatively high investment reversibility, stable revenues and flexible production models, as well as in the case of firms receiving government grants or enjoying other incentives under the host country's economic strategy, investment may increase even in conditions of heightened uncertainty.[11] Examples of such businesses are large multinational corporations with

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6 As regards the impact of GPR on financial aggregates, see inter alia Salisu, A., L. Lasisi and J.P. Tchankan (2022), "Historical geopolitical risk and the behaviour of stock returns in advanced economies", *The European Journal of Finance*, 28, 889-906, Feng, C., L. Han, S. Vigne and Y. Xu (2023), "Geopolitical risk and the dynamics of international capital flows", *Journal of International Financial Markets, Institutions and Money*, 82, 101693, and Fiorillo, P., A. Meles, L.R. Pellegrino and V. Verdoliva (2023), "Geopolitical risk and stock liquidity", *Finance Research Letters*, 54, 103687. For an analysis of the impact of geopolitical shocks on GDP and inflation, see Caldara, D. and M. Iacoviello (2022), "Measuring geopolitical risk", *American Economic Review*, 112, 1194-1225. Specifically for the case of inflation in Greece, see Lazaretou, S. and G. Palaiodimos (2025), "The long record of inflation shocks in Greece: drivers and impacts", Bank of Greece, *Economic Bulletin*, 61, 63-86, and "Geopolitics, uncertainty and inflation shocks in Greece: domestic versus global shocks", SUERF Policy Brief No. 1240.

7 See Wang, X., Y. Wu and W. Xu (2024), "Geopolitical risk and investment", *Journal of Money, Credit and Banking*, 56, 2023-2059.

8 See Kapopoulos, Th., A. Sakkas and K. Drakos (2025), "Geopolitical risk and foreign direct investment inflows: the moderating role of water and energy risks", *International Journal of Finance and Economics*, 30, 4039-4062, and Bussy, A. and H. Zheng (2023), "Responses of FDI to geopolitical risks: the role of governance, information, and technology", *International Business Review*, 32, 102136.

9 See Dixit, A. and R. Pindyck (1994), *Investment under uncertainty*, Princeton, Princeton University Press.

10 See Fiorillo, P. et al. (2023), op. cit., and Mokdadi, S. and Z. Saadaoui (2023), "Geopolitical uncertainty and the cost of debt financing: the moderating role of information asymmetry", *The Journal of Risk Finance*, 24, 684-720.

11 This is known as "convexity effect" and indicates the curvature in the relationship between risk and return. See: Lee, J. and K. Shin (2000), "The role of a variable input in the relationship between investment and uncertainty", *The American Economic Review*, 90(3), 667-680.

a presence in many markets, which allows them to spread risk and borrow cheaply, natural monopolies, public utility companies that invest in network modernisation, or labour-intensive businesses that can be automated, as they are capable of continuing or expanding their activities even in periods of uncertainty.

Conclusions

Geopolitical shocks and the resulting uncertainty are crucial elements in investors' decision-making and, by implication, an integral part of risk management analysis. Heightened uncertainty affects investor behaviour through business risk reassessment and risk aversion, resulting in a decline of international investment and a reallocation of investment resources not only across countries, but also sectors, with a preference for low-risk, low-return and low-growth investments. The current juncture is characterised by the transition from a model of close global cooperation to geoeconomic fragmentation with rising protectionism, deglobalisation and a surge of geopolitical tensions. In the emerging geopolitical environment, the European economy is faced with major challenges. The need for a coordinated strategic investment policy is more pressing than ever. A key prerequisite is the mobilisation not only of public financing resources, but also of private capital, with the aim of achieving three investment priorities for the EU: a) strengthening productivity and competitiveness, b) energy autonomy and green transition, c) common defence and security.

Box 2

THE PREDICTIVE POWER OF THE PURCHASING MANAGERS' INDEX (PMI) FOR GDP GROWTH

Nowcasting Gross Domestic Product (GDP) growth aims to produce reliable estimates as promptly as possible, given that data on macroeconomic variables are released with a lag, while monetary policy measures are decided mainly based on current economic conditions. Therefore, enhancing the predictive ability as regards economic activity is important for the conduct of monetary policy. As regards GDP growth, the literature has covered a broad spectrum of forecasting models, using methodologies ranging from simple to highly complex.[1]

According to the literature, the explanatory variables that enhance models' predictive ability are (mainly monthly) high-frequency data classified into soft data and hard data.[2] Soft data comprise mainly survey-based indicators, which capture the perceptions of economic agents about the current and future economic conditions. Their key characteristic is that they are released immediately after the reference period. The most widely used indicators are the Purchasing Managers' Index (PMI) and the Economic Sentiment Indicator (ESI), which provide valuable information on current economic developments. By contrast, hard data mainly consist of official statistical indicators, such as the Industrial Production Index (IPI) and the Retail Trade Index (RTI). While both categories of indicators are released monthly, they differ greatly in terms of publication lags. More specifically, the PMI and ESI are released a few days after the reference month, whereas the IPI and RTI may be published as much as two months later. Research studies conducted for a variety of economies show that the PMI is not only regarded as an important variable for the more up-to-date tracking of GDP growth,[3]

1 Representative sources are the following: a) Schumacher, C. and J. Breitung (2008), "Real-time forecasting of German GDP based on a large factor model with monthly and quarterly data", *International Journal of Forecasting*, 24, 386-398; b) Jansen, W.J., X. Jin and J.M. de Winter (2016), "Forecasting and nowcasting real GDP: Comparing statistical models and subjective forecasts", *International Journal of Forecasting*, 32(2), 411-436; c) Kilinc, Z. and E. Yucel (2016), "PMI Thresholds for GDP Growth", MPRA Paper No. 70929; d) Zheng, T., X. Fan, W. Jin and K. Fang (2024), "Words or numbers? Macroeconomic nowcasting with textual and macroeconomic data", *International Journal of Forecasting*, 40, 746-761.

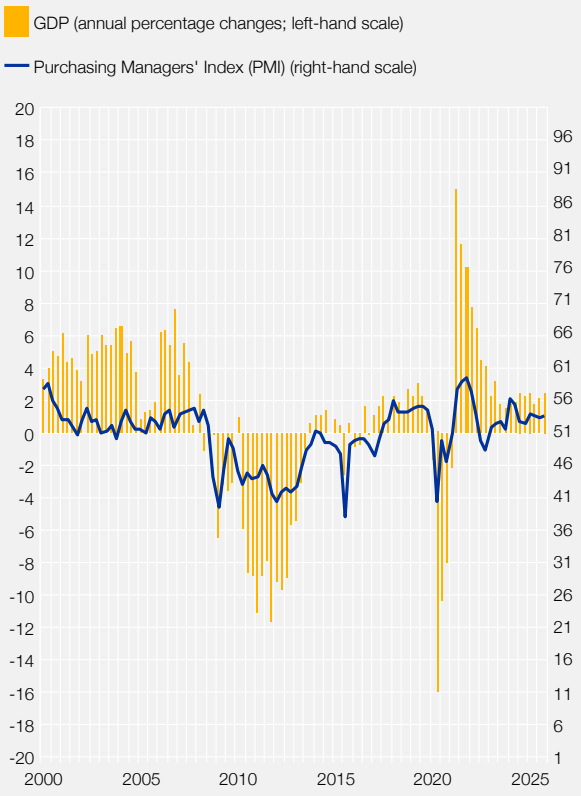
2 See Bańbura, M. and G. Rünstler (2011), "A look into the factor model black box: Publication lags and the role of hard and soft data in forecasting GDP", *International Journal of Forecasting*, 27(2), 333-346.

3 See Harris, E. (1991), "Tracking the economy with the Purchasing Managers' Index", Federal Reserve Bank of New York, *Quarterly Review*, 16(3).

but also greatly enhances the predictive ability of forecasting models during the reference quarter for which GDP growth is being forecast.[4]

This box aims to investigate the predictive ability of the PMI for GDP growth in Greece from a nowcasting perspective. It should be noted that the analysis is based on econometric techniques applied using real-time forecasting settings. The resulting empirical findings provide valuable insights into the predictive ability of the PMI for GDP growth compared with other explanatory variables of the two categories of high-frequency data.

GDP and Purchasing Managers' Index (PMI)
(Q1 2000 - Q4 2025)



Sources: Eurostat and S&P Global.

Evolution of variables over time: the case of Greece

To this end, it is useful to present both the evolution over time of the variable under investigation (PMI) and its correlation with GDP growth across various sub-periods of the sample. First, data for the PMI, notably the Greece Manufacturing PMI, have been collected from S&P Global. They are of monthly frequency and cover the period from January 2000 to December 2025. The monthly time series has been converted into a quarterly by calculating the average of the observations for each reference quarter, to allow for comparison of the variable with the GDP growth rate. As regards the GDP time series, the quarterly data used are at constant market prices, with 2020 as the base year, they are seasonally adjusted, and cover the period from Q1 2000 to Q4 2025. To better illustrate the relationship between these two variables, the chart presents the annual percentage changes in GDP (% y-o-y[5]), after removing the short-term quarterly fluctuations.

As shown also in the chart, the PMI closely tracks the phases of the business cycle and exhibits a strong correlation with the dynamics of economic activity in Greece. During the first sub-period of the sample (2000-2007), the PMI stood at levels consistent with economic growth. In the period 2008-2013, which was marked by a slowdown in economic activity, the PMI followed a parallel downward trajectory falling to lower levels and reflecting a deterioration in economic sentiment. This co-movement corroborates the PMI's role as a leading indicator of economic activity. Then, it is particularly interesting to look at the trajectory of both the PMI and the GDP growth rate during the COVID-19 pandemic, when the PMI initially declined markedly and in tandem with the GDP growth rate, reflecting the rapid deterioration in expectations and economic conditions. In the immediate post-pandemic period, the PMI registered an equally strong rebound, directly linked to the elevated GDP growth rate.

Therefore, the evolution of the PMI over time appears to be directly correlated with economic activity in Greece and, consequently, this indicator can be used as an explanatory variable to provide a timely capture of the growth rate of the Greek GDP. Given that the monitoring of periods of elevated uncertainty is considered to be of high significance for the conduct of monetary policy, the PMI appears to provide early signals of the direction and magnitude of GDP changes during such periods.

4 Indicatively, see Lombardi, M. and P. Maier (2011), "Forecasting economic growth in the euro area during the Great Moderation and the Great Recession", ECB Working Paper No. 1379, and Lahiri, K. and G. Monokroussos (2013), "Nowcasting US GDP: The role of ISM business surveys", *International Journal of Forecasting*, 29(4), 644-658.

5 It should be noted that, consistent with the literature, the econometric models use the quarterly percentage change in GDP (% q-o-q) as the dependent variable.

Evaluation of predictive ability

Root Mean Square Error (RMSE)

Model	Reference quarter		
	1st month	2nd month	3rd month
AR(1)	*7.92*	*7.92*	*9.81*
PMI	0.63	0.71	0.61
ESI	0.97	0.92	0.73
IPI	-	-	0.85
RTI	-	-	1.53

Mean Absolute Error (MAE)

Model	Reference quarter		
	1st month	2nd month	3rd month
AR(1)	*1.39*	*1.39*	*1.48*
PMI	0.93	0.94	0.85
ESI	0.99	0.96	0.89
IPI	-	-	1.35
RTI	-	-	1.93

Source: Bank of Greece calculations.
Note: Values (in italics) in the cells of the AR(1) model, used for comparison purposes, correspond to RMSE and MAE, while values for the PMI, ESI, IPI and RTI models are in relation to AR(1).

Forecast generation and evaluation framework

As mentioned above, high-frequency variables provide valuable insights into economic activity. However, the availability of these variables at a monthly frequency poses an econometric challenge for model specification due to the mismatch in data frequencies. To address this issue, the literature proposes, among more sophisticated methodologies, the use of "bridge equation" regression models.[6] More specifically, bridge equation models are linear regressions that link the monthly explanatory variables to the dependent variable of the quarterly real GDP growth rate.[7] In the present analysis, the regression equation is estimated for each explanatory variable separately, thereby nowcasting GDP growth for the current reference quarter based solely on the information available for the month in which the exercise is conducted.[8]

An initial sample of observations is used for the first estimation (Q1 2000-Q4 2014), while the remaining quarters (from T1 – Q1 2015 – until the end of the sample – Q4 2025) constitute the out-of-sample forecasting period. Consequently, the first set of real-time forecasts is generated on the basis of the initial sample of observations, while all subsequent forecasts are produced using a recursive estimation window. Finally, the models' predictive ability is assessed using two statistical measures that capture the deviation between the realised and the forecasted value of the quarterly GDP growth rate.[9]

Empirical results

The results in the table show that the model using the PMI level as explanatory variable outperforms the alternative models throughout the reference quarter. More specifically, based on the Root Mean Square Error (RMSE) and the Mean Absolute Error (MAE), the PMI model records the lowest RMSE value compared to the other models in all three months of the reference quarter. The results suggest that soft data, in particular the PMI, incorporate timely and valuable information on current developments of economic activity in Greece. By contrast, the hard variables – IPI and RTI – are not only unavailable during the first two months of the quarter, but even when they are incorporated into the GDP growth forecasting models in the third month, their predictive ability is considerably lower than that of the variables capturing expectations for the Greek economy. Specifically, when incorporated on its own into the bridge equation models, the RTI exhibits the poorest performance in terms of both the RMSE and the MAE. Finally, the empirical results demonstrate that, in a real-time forecasting exercise, the PMI is the most reliable explanatory variable for nowcasting GDP growth in Greece.

Conclusions

In conclusion, the following guidelines emerge regarding the production of reliable forecasts of GDP growth in Greece. First, during the first two months of the reference quarter, when hard data are not yet available, nowcasting should rely primarily on soft indicators, with particular emphasis on the PMI, which exhibits the strongest predictive power. Second, the PMI constitutes a key tool for the timely detection of turning points in the business

6 See Parigi, G. and R. Golinelli (2007), "The use of monthly indicators to forecast quarterly GDP in the short run: an application to the G7 countries", *Journal of Forecasting*, 26(2), 77-94.
7 More specifically, in the case of real-time forecasting, monthly variables are converted into quarterly series using the average of the observations available during the reference quarter.
8 Regarding data availability, it should be noted that during the first two months of the reference quarter only the PMI and ESI indicators are available, whereas the IPI and RTI become available in the third month.
9 In particular, these measures are the Root Mean Square Error (RMSE) and the Mean Absolute Error (MAE).

cycle, especially in periods of heightened uncertainty or abrupt shocks, such as the COVID-19 pandemic. Third, during the final month of the quarter, information provided by hard indicators should be used to complement, rather than substitute for, the primary signal from the PMI.

Box 3

CHALLENGES IN THE DEVELOPMENT OF GREEK TOURISM: CLIMATE CHANGE AND OVERTOURISM

Greek tourism has a large economic and social footprint. It cuts across a wide range of sectors, from transport and the food industry to construction and trade, and it contributes to the reduction of the current account deficit. However, the high dependence of the domestic economy on tourism implies an increased sensitivity to external shocks. At the same time, the rapid expansion of the sector in recent years has brought to the fore critical challenges, such as climate change and overtourism, which, in the medium term, undermine the sustainability of tourism.

Climate change and Greek tourism

Climate change is recognised as the greatest challenge for the sustainable development of tourism in the 21st century (UNWTO 2008).[1] In 2025, 85% of Europeans considered climate change to be one of the most serious problems, with the concern rate reaching 89% in Greece (European Commission 2025).[2] Tourism is a major contributor to air pollution, as a large part of greenhouse gas emissions is linked to human travel and tourism consumption. Nearly 50% of global travel is directly or indirectly linked to tourism activities,[3] while tourism is estimated to account for around 8% of total greenhouse gas emissions.[4]

International and Greek literature suggests that the impact of climate change on Greek tourism can be captured by a set of bioclimatic and composite indices. Central to this are thermal comfort indices, such as the Physiologically Equivalent Temperature (PET) and Universal Thermal Climate Index (UTCI), which are used to quantify thermal stress at tourist destinations. Indicatively, Nastos et al. (2025)[5] demonstrate a systematic shift towards higher PET values and thus an increase in thermal stress in Greek destinations, especially during the summer months. At the same time, in terms of urban environments, specialised indices have been developed which capture the direct relationship between thermal discomfort and the tourist experience in Athens (Kapetanakis et al. 2022).[6] Moreover, Lemesios et al. (2024)[7] employ a set of indices to assess the attractiveness of different forms of tourism in Greece, showing that impacts vary between coastal, urban and mountain destinations. Finally, tools such as the Climate-Tourism-Information-Scheme (CTIS), in combination with PET, are used to simulate future tourism suitability conditions, providing critical information for strategic planning

1 UNWTO (2008), *Climate Change and Tourism – Responding to Global Challenges*, United Nations World Tourism Organization and United Nations Environment Programme.
2 European Commission (2025), Special Eurobarometer 565: *Climate change. Eurobarometer Report, February – March 2025*.
3 See Sunlu, U. (2003), "Environmental impacts of tourism", in: Camarda, D. and L. Grassini (eds.), *Local Resources and Global Trades: Environments and Agriculture in the Mediterranean Region*, Bari: CIHEAM, 263-270 (Options Méditerranéennes: Série A. Séminaires Méditerranéens, n. 57), and Chapungu, L. et al. (2024), "Climate change perceptions and experiences from tourists visiting popular destinations in South Africa", *Cogent Social Sciences*, 10(1).
4 See Lenzen, M. et al. (2018) "The carbon footprint of global tourism", *Nature Climate Change*, 8, 522-528.
5 Nastos, P.T., J. Kapsomenakis and C.S. Zerefos (2025), "Evaluating climate change risks for Greek tourism destinations: a bioclimatic approach", *Environmental and Earth Sciences Proceedings*, 35(1), 47, https://doi.org/10.3390/eesp2025035047.
6 Kapetanakis, D., E. Georgopoulou, S. Mirasgedis and Y. Sarafidis (2022), "Weather preferences for urban tourism: an empirical study in the Greek capital of Athens, Greece", *Atmosphere*, 13(2), 282, https://doi.org/10.3390/atmos13020282.
7 Lemesios, G., K.V. Varotsos, E. Georgopoulou, Y. Sarafidis, D. Kapetanakis, S. Mirasgedis, N. Gakis and C. Giannakopoulos (2024), "Effects of climate change on the future attractiveness of tourist destinations in Greece", *Atmosphere*, 15(10), 1185, https://doi.org/10.3390/atmos15101185.

(Matzarakis et al. 2014).[8] Overall, the above studies converge on the conclusion that bioclimatic and composite indices are reliable tools for the quantitative assessment of the impact of climate change on Greek tourism, highlighting in particular the growing importance of thermal stress.

In addition, several economic and environmental analyses find that increased temperatures, loss of natural resources, drought, coastal erosion and more frequent occurrence of extreme weather conditions may negatively affect all types of tourism activities. These changes can degrade the visitor experience, increase operating costs and change the attractiveness of entire geographic regions over time. In addition, they underline the possibility of tourist flows shifting to countries of the European north, if temperature rises persist in the mediterranean during the summer months.[9] Moreover, overheating may reduce the level of comfort for visitors to coastal and island areas, triggering a restructuring of travel preferences. Such an event could cause significant economic losses in countries where a large part of their GDP relies on tourism. In conclusion, there is a dual relationship between tourism and the climate crisis: on the one hand, tourism contributes to the worsening of climate change; on the other hand, it suffers its negative consequences.

In the case of Greece, the literature classifies the country among the tourist economies expected to be severely affected by climate change,[10] although its well-developed tourism infrastructure and related policies may act to partially offset the impacts. Climate change – and especially the way it manifests in Greece, i.e. through excessive heat/heatwaves and extreme weather events such as medicanes Ianos or Daniel, etc. – significantly affects both demand and supply. On the demand side, it seems that the most significant impact is a shift in the timing of vacations to avoid excessive heat in the summer months. Also, changes in travellers' preferences, especially of younger generations, are reflected in a clear shift towards more sustainable forms of travel, smaller and less saturated destinations and options that contribute to the preservation and enhancement of natural and cultural heritage.[11] Increasing environmental awareness leads to a preference for sustainable accommodation, low carbon transport and activities promoting nature protection.

On the supply side, the need to transition to infrastructure and services with a low environmental footprint is becoming increasingly urgent. Investment in renewable energy, resource-saving technologies, waste management systems and ecological materials is necessary both to protect the environment and to improve the competitiveness of tourism businesses. The gradual adoption of green practices is now a factor in the diversification of tourism services, as tourism demand shows an increased interest in environmentally responsible destinations and businesses. Some studies underscore that management measures need to be tailored to the specificities of individual areas, varying from the rational use of natural and cultural resources to spatial planning and investments in infrastructure with a low environmental footprint.[12] The promotion of alternative forms of tourism, such as cultural, walking and thermal tourism, or ecotourism, is also crucial. Together, these changes shape the green transition of tourism.

Overtourism: The case of Athens

In many popular destinations in Greece and around the world, the rapid growth of tourism over recent decades has led to the emergence of overtourism, a phenomenon with significant negative impacts. Overtourism is defined

8 Matzarakis, A., C. Endler and P. Nastos (2014), "Quantification of climate-tourism potential for Athens, Greece – Recent and future climate simulations", *Global NEST Journal*, 16(1), 43-51, https://doi.org/10.30955/gnj.001264.

9 See Deutsche Bank Research (2008), "Climate change and tourism: Where will the journey lead?", *Current Issues*, April.

10 For the economic and physical (direct and indirect) impacts of climate change on Greek tourism, see Skourtos, M., C. Tourkolias, D. Damigos and A. Kontogianni (2014), "Climate change and adaptation policies in the Greek tourism sector: A first cost-benefit analysis", Chapter 5, 105-128, in the Bank of Greece collective volume (Climate Change Impacts Study Committee), *Greek Tourism and Climate Change: Adaptation Policies and New Growth Strategy*, Athens (in Greek).

11 See Stratigea, A. and V. Katsoni (2015), "A strategic policy scenario analysis framework for the sustainable tourist development of peripheral small island areas – the case of Lefkada-Greece island", *European Journal of Futures Research*, 3(5), 1-17, and Stratigea, A. and T. Hatzichristos (2011), "Experiential marketing and local tourist development: a policy perspective", *International Journal of Leisure and Tourism Marketing*, 2(4), 274-294.

12 See Coccossis, H. and I. Spilanis (2014), "Institutional changes and arrangements; environmental and tourism policies", Chapter 6, 129-148, in the Bank of Greece collective volume (Climate Change Impacts Study Committee), *Greek Tourism and Climate Change: Adaptation Policies and New Growth Strategy*, Athens (in Greek).

as the excessive concentration of visitors that negatively affects both the quality of life of residents in these areas and the satisfaction of tourists.[13] It should be noted that overtourism is not simply a matter of the volume of tourists in absolute numbers, but also of spatial, temporal and management dysfunctions due to tourist flows.[14]

Tourist arrivals in the most popular tourist destinations in the euro area

(million travellers)

	2018	2019	2023	2024
France	89.4	90.9	100.0	102.0
Spain	82.8	83.5	85.2	93.8
Italy	61.6	64.5	57.2	57.7
Germany	38.9	39.6	34.8	37.5
Greece	30.1	31.3	32.7	36.0
Austria	30.8	31.9	30.9	31.9
Portugal	22.8	24.6	26.5	29.0
The Netherlands	18.8	20.1	20.3	21.3

Source: UNWTO, World Tourism Barometer.
Note: Arrivals of cruise ship passengers are excluded.

The academic literature identifies multiple factors of overtourism. The most important is the global growth in tourism demand, facilitated by low-cost airlines, digital booking platforms and growing disposable income internationally.[15] Also, affordable air travel and cruise tourism have made short-term, high-volume visits more affordable. Travel blogs and online rating systems further enhance the preference ranking of certain destinations, contributing to the overcrowding of these areas.[16] In addition, weak organisational (governance) structures, incomplete (fragmented) planning systems and, in some cases, the prevalence of economic growth over social and environmental concerns exacerbate pressures from tourism flows.[17]

Overtourism puts significant stress on both natural and urban environments. The high volume of visitors contributes to pollution, excessive waste generation, degradation of ecosystems and excessive use of scarce resources such as water and energy.[18] Fragile environments, including coastal zones, national parks and cultural heritage sites, are particularly vulnerable to irreversible damage. In urban destinations, overtourism accelerates the degradation of infrastructure and cultural heritage assets and alters the local identity. It also has a negative impact on host communities. Residents in heavily visited areas often report overcrowding, rising housing costs, loss of local services and a decline in social cohesion.[19] Short-stay platforms, such as Airbnb, have been linked to shifting housing from long-term to short-term rentals and altering the character of local neighbourhoods, thus intensifying discontent among residents.[20] Such impacts undermine the social sustainability of destinations and call into question the long-term strategic development of tourism. In economic terms, while tourism generates income and employment, overtourism can contribute to reduced economic returns. Congestion and a decrease in the quality of the tourism experience can worsen the competitiveness of destinations over time.[21] In this context, overtourism can ultimately undermine the economic viability of tourism-dependent destinations.

In urban destinations, overtourism is characterised by a high concentration of visitors in limited geographical zones, mainly in the historical centres of cities and areas of cultural interest. The examination and evaluation of

13 The United Nations World Tourism Organization describes overtourism as the impact of tourism on a destination, or parts thereof, that excessively influences perceived quality of life of citizens and/or quality of visitors experiences in a negative way (see UNWTO (2018), '*Overtourism'? – Understanding and Managing Urban Tourism Growth beyond Perceptions*, United Nations World Tourism Organization).
14 See Dodds, R. and R. Butler (2019), *Overtourism: Issues, realities and solutions*, De Gruyter.
15 See Gössling, S., D. Scott and C.M. Hall (2021), "Pandemics, tourism and global change: a rapid assessment of COVID19", *Journal of Sustainable Tourism*, 29(1), 1-20.
16 See Seraphin, H., P. Sheeran and M. Pilato (2018), "Over-tourism and the fall of Venice as a destination", *Journal of Destination Marketing & Management*, 9, 374-376.
17 See footnote 10.
18 See footnote 12.
19 See Milano, C., M. Novelli and J.M. Cheer (2019), "Overtourism and tourismphobia: A journey through four decades of tourism development, planning and local concerns", *Tourism Planning & Development*, 16(4), 353-357.
20 In extreme cases, these pressures have led to reactions featuring protests, anti-tourism sentiments and political mobilisation against tourism development (Milano et al. 2019, op. cit.).
21 See Koens, K., A. Postma and B. Papp (2018), "Is overtourism overused? Understanding the impact of tourism in a city context", *Sustainability*, 10(12), 4384.

overtourism is based on a set of quantitative and qualitative indices. This box assesses the ratio of foreign visitor arrivals to the permanent population for Greece's main urban destination, Athens.[22] Next, a comparison is made with the main urban tourist destinations of the euro area economies, in particular the eight economies in the euro area with the highest numbers of arrivals for the period 2018-24, excluding the years of the 2020-22 pandemic (see the table herein). According to tourist arrivals, as measured by the arrivals of non-residents staying in a rental tourist accommodation, the most popular countries in the euro area are Spain, Italy, France, Germany, Austria, Greece, the Netherlands and Portugal. It is noted that the ranking of countries remains the same for the period 2018-24, with Greece ranking consistently 5th. Thus, the destinations with which Athens is compared are the most popular urban destinations of these countries, namely: Paris, Madrid, Barcelona, Rome, Venice, Florence, Berlin, Vienna, Amsterdam and Lisbon.

Chart A shows the evolution of tourist arrivals per inhabitant (tourist-to-resident ratio) in the selected popular tourist cities for the pre-pandemic period (2015-19) and the most recent years (2023 and 2024). In cases of unavailability of data, arrivals of travellers in specific cities are approximated by arrivals in the greater metropolitan area to which these cities belong. Based on the relevant literature, overtourism is considered to occur for index values exceeding 2. Consequently, based on Chart A1 data, overtourism is observed in the cities and greater metropolitan areas of Amsterdam, Vienna, Venice and Barcelona. The biggest strain from the increase in visitors is shown to be on the greater Amsterdam area, followed by Vienna and Venice. According to this index (which remains close to 1), Attica, the greater Athens area does not face any overtourism problems, despite an increase in arrivals compared to the pre-pandemic period. The analysis of the evolution of tourist arrivals per square kilometre in the selected popular tourist cities for the same time period (see Chart A2) does not lead to different conclusions, as Attica ranks low.

The greater Athens region ranks low compared to the most popular urban destinations in the euro area. In addition, the occupancy rate in Athens (see Chart B) falls short of other cities already under pressure from a significant visitor turnout. In fact, according to Chart C, seasonality in Attica is pronounced and concentrated in the summer months, with only Florence, Venice, and Barcelona showing higher levels of concentration throughout the year. Therefore, the slight shift already becoming apparent – with an increase in revenue and visitor numbers during periods outside the traditional tourist season – offers further opportunities for growth. Nevertheless, as the user base continues to grow, there is a need for sustained infrastructure upgrade projects[23] in the energy, water supply, sewerage and waste management networks, as well as in public transport. Such projects could be financed by European and national funds. The negative examples of cities that have already experienced significant strain from tourist influxes underscore the need for Greece to adopt appropriate policies in a timely manner, with the aim of mitigating the burden on permanent residents and infrastructure.

Conclusions and policy proposals

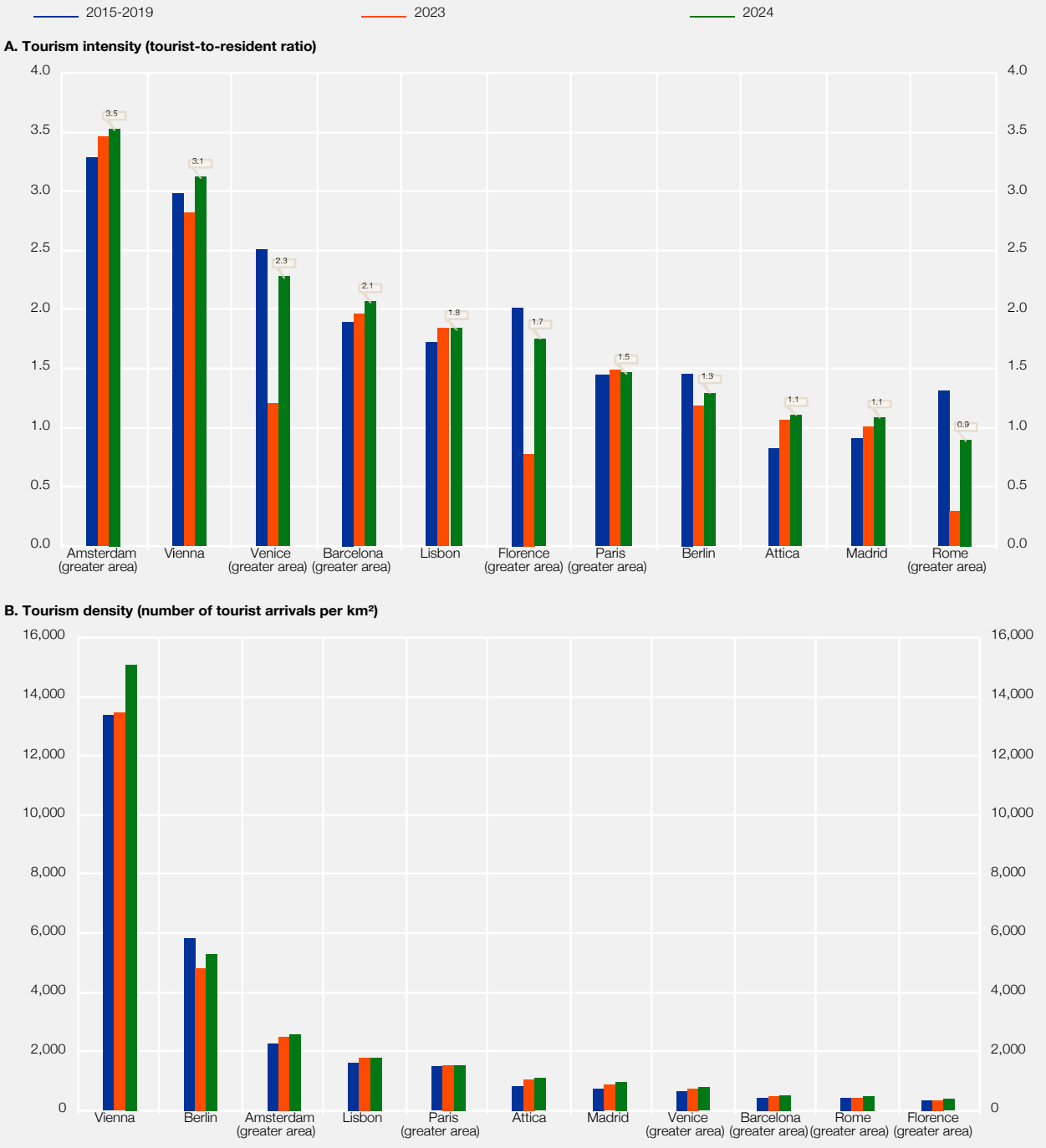
Climate change is having a major impact on tourism, making it necessary to integrate climate risks into tourism policy design. Reducing seasonality, spreading tourist activity more evenly across the country, developing alternative forms of tourism and strengthening the environmental management of the sector's activities can be the mainstays of a sustainable development model for Greek tourism. To this end, it is crucial to strengthen investment in infrastructure, green investment, as well as to rationally manage natural resources, with the aim of enhancing the resilience and long-term competitiveness of the Greek tourist product.

In parallel, the same measures can help address the pressures resulting from the spatial and temporal concentration of tourism activity. The rapid growth of the sector is likely to lead to the emergence of overtourism in Greece as well, with negative consequences for residents' quality of life, infrastructure and the tourist experience.

22 Key quantitative indices include the tourist-to-resident ratio and bed-nights per inhabitant (tourism intensity) and tourist arrivals per square kilometre (tourism density). At the same time, social indices such as the increase in the cost of living, the displacement of permanent residents for urban regeneration (gentrification), the deterioration of the quality of life and the triggering of social reactions are crucial elements in assessing this phenomenon.

23 The Athens Water Supply and Sewerage Company's (EYDAP) ten-year investment plan amounts to EUR 2.1 billion: see: EYDAP (2024), "Sustainable Development Report 2023".

Chart A Overtourism indices in the most popular urban destinations in the euro area (average for 2015-2019, 2023, 2024)

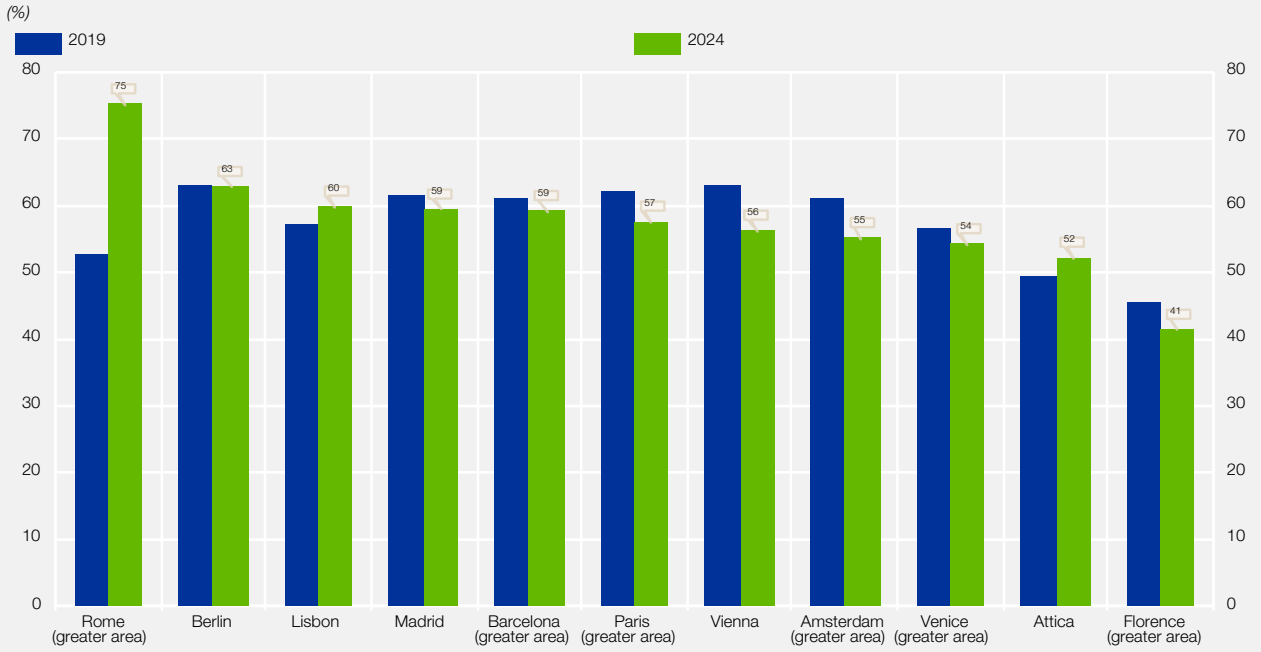


Source: Eurostat.

Overtourism is not only related to the number of visitors, but also to geographical, temporal and management imbalances. According to tourist arrivals data, the greater Athens area does not yet show signs of overtourism. However, the upward trend in arrivals makes it necessary to plan for tourism development in a timely and strategic manner. The proposed policies should focus on developing and adopting systems to monitor tourism indices; improving the geographical and temporal distribution of tourist flows to relieve congestion at popular tourist destinations; strengthening environmental sustainability and infrastructure; training professionals; and raising visi-

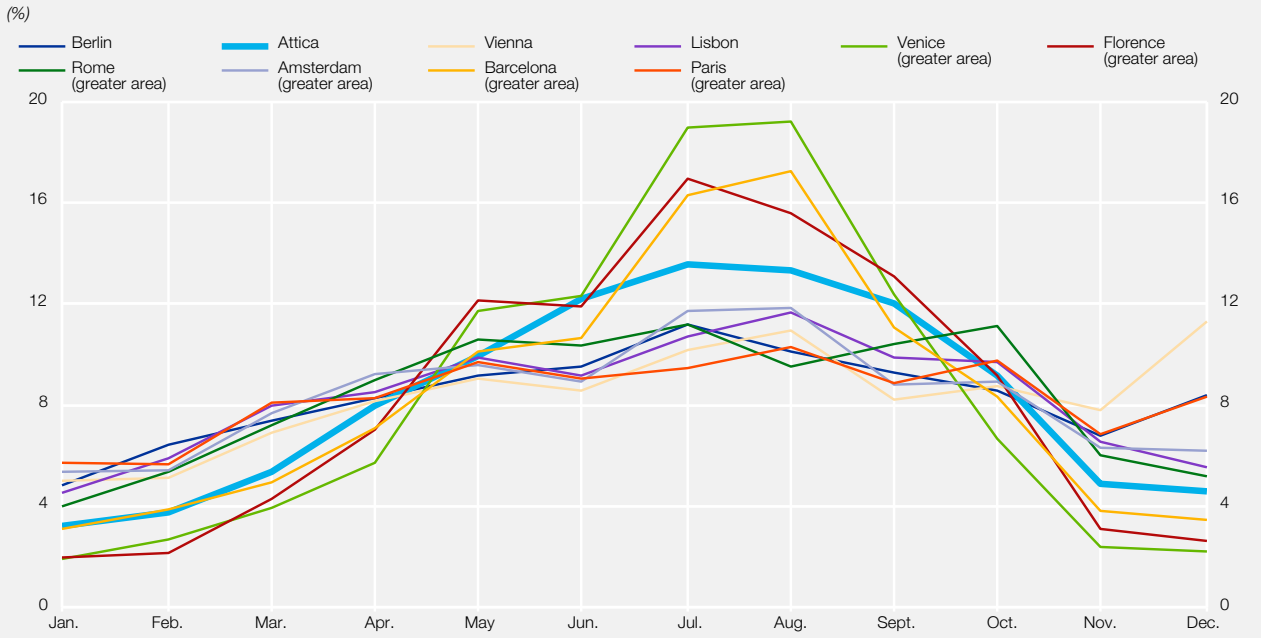
tors' awareness regarding the protection of historical monuments and the protection of the quality of life of local residents. Therefore, adaptation to climate change and the prevention of overtourism should be treated as part of a unified strategy for the sustainable development of tourism.

Chart B Occupancy rates in hotels and similar accommodations in the most popular urban destinations in the euro area (2019, 2024)



Source: Eurostat.

Chart C Bed-nights per month in tourist accommodations and short-term rentals offered through sharing economy platforms in the most popular urban destinations in the euro area (2024)



Source: Eurostat.

Box 4

GREEK SHIPPING, NATIONAL ECONOMY AND THE REVIVAL OF THE GREEK SHIP-BUILDING INDUSTRY

Greek shipping has historically been a pillar of the economy's openness, with the Greek-owned fleet holding a leading position globally. The management of a significant part of this fleet within Greece is key to the formation of a dynamic maritime cluster, encompassing a wide range of related services and business activities. However, enhancing the economic impact of Greek ocean-going shipping requires its closer connection with other productive sectors, including the shipbuilding and ship-repair industry. Strengthening these links can contribute to higher domestic value added, a stronger export base driven by high value-added goods and services and a broader economic footprint of both the shipping and shipbuilding industries in the Greek economy.

1 Greek shipping and the national economy

According to UNCTAD,[1] the Greek-owned fleet maintained its global leadership in 2025 (in terms of capacity – dwt), accounting for over 16% of the world fleet. Although this fleet is largely managed in Greece, currently only about one in ten Greek-owned vessels flies the Greek flag, compared with about one in five a decade ago. This development reflects an increase of more than 40% in Greek-owned vessels under foreign flags, while those under the Greek flag have declined by approximately 25%. The structure of the active Greek-owned fleet is uneven across individual segments of ocean-going shipping. Specifically, the Greek-owned fleet is dominated by dry bulk carriers and, to a lesser extent, oil tankers, which together account for over 80% of total capacity. At sectoral level, Greek-owned oil tankers hold a share of more than 20% in the global fleet, while dry bulk carriers account for about 18%. At the same time, over the past fifteen years there has been a trend toward further diversification of the Greek-owned fleet, mostly with regard to the liquefied natural gas and petroleum gas (LNG/LPG) sector, whose share has nearly doubled, standing at around 10% of the global fleet.[2]

Receipts (exports) from sea transport services, which primarily reflect the activity of the Greek ocean-going shipping in cross-trade, are recorded under the services account of the balance of payments. Over the 2021-25 period, sea transport receipts accounted for over 38% of services exports and 19% of Greece's total exports of goods and services, corresponding to 8.2% of GDP on a period average basis. However, when the corresponding payments are also taken into account – which reflect, among other things, the necessary inputs for exports of sea transport services – the sea transport balance stands at around 3% of GDP (see Table A).[3] Demand for sea transport services is mainly driven by the volume of global trade in combination with distance travelled. Furthermore, sea transport receipts are also influenced, apart from the size of the fleet managed in Greece, by international freight rates and the exchange rate of the euro against the US dollar.[4] The aforementioned concentration of the Greek-owned fleet in the segments of dry bulk carriers and oil tankers is also reflected in the relevant receipts, as developments in freight rates in these segments has the largest impact on the total level of sea transport receipts.[5]

A geographical breakdown of sea transport receipts shows the main regions and countries where the fleet managed in Greece provides services. In particular, in 2021-25, almost 36% of receipts related to Asian countries,

1 UNCTAD (2025), *Review of Maritime Transport: Staying the course in turbulent waters*, United Nations, New York and Geneva.
2 See Greek Shipping Co-Operation Committee, "Greek Controlled Shipping: An Informative Report Based on data provided by S&P Global Market Intelligence", March 2026, https://maritimes.gr/en/greek-controlled-shipping-an-informative-report-based-on-data-provided-by-sp-global-market-intelligence-3/.
3 For the methodological classification of revenues and expenses in the balance of payments accounts, see Papaspyrou, M. and A. Petralias (2019), "The Greek shipping estimation model", Bank of Greece, *Economic Bulletin*, No. 49, July.
4 The main trading currency in ocean-going shipping is the US dollar. However, sea transport receipts in the balance of payments are recorded in euro. Therefore, an appreciation (depreciation) of the US dollar against the euro contributes to an increase (decrease) in the relevant receipts.
5 For example, receipts reached a record EUR 21 billion in 2022, when dry bulk and oil tanker freight rates were elevated and the US dollar had strengthened against the euro.

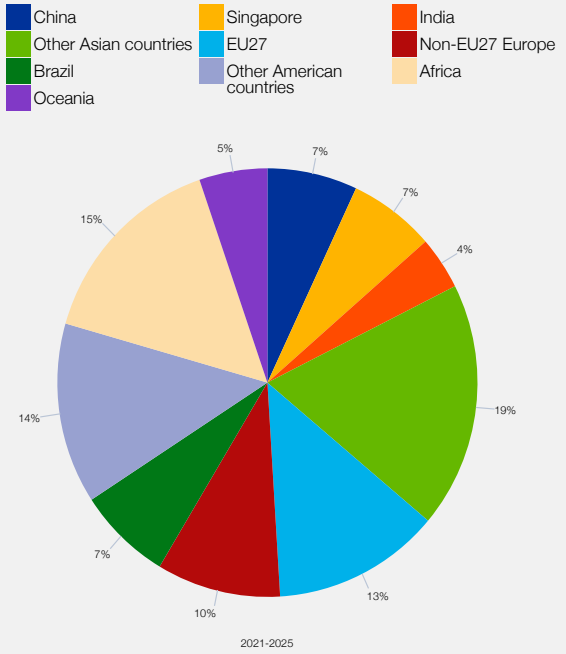
Table A Main items of the sea transport services account

	2021	2022	2023	2024	2025	2021-2025 (average)
Sea transport services account (EUR millions)	6,214.2	7,490.0	6,673.7	6,829.3	5,981.4	6,637.7
– Receipts	17,153.4	21,003.9	18,239.5	18,349.8	15,608.8	18,071.1
– Payments	10,939.2	13,513.9	11,565.8	11,520.5	9,627.4	11,433.4
Sea transport services account (% of GDP)	3.4	3.6	3.0	2.9	2.4	3.0
– Receipts	9.3	10.1	8.1	7.8	6.3	8.2
– Payments	5.9	6.5	5.1	4.9	3.9	5.2
Sea transport receipts						
– as a percentage of services receipts	48.9	44.0	37.2	35.7	30.5	38.5
– as a percentage of goods and services exports	23.1	20.5	18.4	18.3	15.8	19.0

Sources: Bank of Greece and ELSTAT (for GDP).

Sea transport receipts by country

(percentages %; 2021-2025 average)



Source: Bank of Greece.

mainly China, Singapore, India and the United Arab Emirates. The EU27 countries and the rest of Europe together accounted for 22% of receipts, while the American market, mainly Brazil and the USA, represented 21% of receipts (see chart).

In 2020-24,[6] in terms of gross value added (GVA – current prices), the sector of water transport services, which mainly reflects ocean-going shipping, accounted for over 2% of total GVA in the Greek economy and was among the 15 most important economic sectors, leaving the other transport sectors (land and air transport) behind.[7] The impact of an activity on the national economy is captured *inter alia* by the size of the domestic value added incorporated in the sector's exports, compared with the corresponding value of imported inputs. According to OECD estimates,[8] during 2018-22 (for which data are available), the domestic value added in the total exports of the sea transport sector amounted to approximately 36%, hence the imported value added accounted for the remaining 64%. Moreover, according to input-output tables for 2020,[9] 63% of direct intermediate inputs used in the production of water transport services in Greece are imported, while the remaining 37% are domestically produced. The main input, both from abroad and from domestic production, comes from the sector itself, while the second largest share is associated with the fuel sector.[10] The substitution of imported inputs with domestically produced ones would enhance the footprint of Greek shipping on the economy, while at the same time opening up prospects for a further rise in the activity of

6 On the basis of available ELSTAT data on gross value added by sector (64 sectors).
7 According to the Foundation for Economic and Industrial Research (IOBE), the total impact of shipping on Greek GDP is estimated at 7.9% (2018-21 average); see IOBE (2023), "Contribution of shipping to the Greek economy. Challenges and outlook".
8 OECD Trade in Value Added (TiVA) Indicators, 2025 edition, https://www.oecd.org/en/topics/sub-issues/trade-in-value-added.html.
9 Eurostat, Supply, use and input-output tables (SUIOTs) for year 2020.
10 Other key inputs include storage, architectural and engineering, financial and retail trade services.

the maritime cluster, from which these inputs would be sourced. Along these lines, strengthening shipbuilding and the sectors associated with it, e.g. maritime equipment, is important, as these sectors can contribute to the production of high-technology and high value-added goods and services.[11]

2 Current state of the shipbuilding industry

While Greek shipping is a leader in the global merchant fleet, most Greek-controlled vessels are built and repaired outside Greece. In their majority, Greek ship owners, as is the case internationally, have shifted towards shipyards in the Far East (primarily in China, South Korea and Japan), which meet around 80% of global shipbuilding demand (see Table B).[12]

Table B Merchant fleet built

(gross tonnage)

	2014	2017	2020	2023	2024	2025
Asia	61,384,521	62,761,436	56,004,770	63,031,941	70,098,542	74,862,903
America	475,543	608,952	74,271	67,158	38,664	31,477
Europe	1,789,435	2,324,033	1,668,709	1,623,926	1,465,548	2,332,301
EU*	1,494,180	2,202,113	1,349,513	1,414,907	1,332,018	2,060,262
Italy	303,951	469,558	518,236	402,164	455,590	647,783
France	483	173,053	132,141	326,680	289,196	408,810
Germany	499,217	469,696	288,228	289,666	189,970	434,320
Finland	101,546	173,136	181,808	261,654	162,177	296,657
Netherlands	130,754	106,005	109,164	90,596	142,935	108,510
Greece	0	2,653	0	686	4,918	5,522

Source:UNTradeandDevelopment, UNCTAD Data hub (last update18.6.2026).
* Concerns the following countries: Austria, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Spain and Sweden.

At the same time, the projected rise in shipbuilding activity, with an ensuing expansion of the market from USD 207 billion in 2025 to USD 219 billion in 2026 and to an estimated USD 275 billion in 2030,[13] creates new growth opportunities for shipbuilding at the global level. In this context, the upgrade and modernisation of shipbuilding and repair facilities, coupled with the recent increase in ship-repair activity at Greek shipyards – driven by maintenance, retrofitting, component manufacturing and new building agreements – raise expectations for a revival of the shipbuilding and ship-repair industry in Greece. In the current environment of global geopolitical instability, such a development could, in turn, be a very positive step in the pursuit of European strategic sovereignty and of sustainable economic growth, enhanced structural competitiveness and social prosperity in Greece.

3 The EU and the Blue Economy

Shipbuilding and ship repair are sectors of the Blue Economy[14] which, owing to their synergies with diverse productive industries, generate a significant multiplier effect.[15] The roughly 300 shipyards operating in the EU are primarily active in the construction of fishing vessels, passenger ships and tugboats.[16] However, the European

11 See, for example, IOBE (2024), "Manufacturers of marine equipment – trends and prospects for the Greek Economy".
12 With regard to shipbuilding in Europe, the figures reported by Commissioner for Sustainable Transport and Tourism, Apostolos Tzitzikostas, are illustrative: "In the early 1980s, 45% of new shipbuilding orders were placed in Europe. Today, that number has fallen to just 5%". See: Commissioner Tzitzikostas' opening speech at the European Shipping Summit, 20.3.2025.
13 See Research and Markets (2026), *Ship Building Market Report 2026*, ID: 5939088.
14 See European Commission, Directorate-General for Maritime Affairs and Fisheries (2025), *The EU Blue Economy Report 2025*, Chapter 2, Section 2.5, https://data.europa.eu/doi/10.2771/2333701.
15 Indicatively, the multiplier effect of the Italian shipbuilding group Fincantieri is estimated at 4.05.
16 See European Commission, Directorate-General for Maritime Affairs and Fisheries (2024), *The EU Blue Economy Report 2024*, p. 28, https://data.europa.eu/doi/10.2771/186064.

shipbuilding and ship-repair industry has the know-how to undertake not only complex shipbuilding, maintenance, repair or retrofitting projects,[17] but also other projects that are at first glance unrelated to shipbuilding, such as the construction of aquaculture units, offshore wind farms or even structures for other sectors, e.g. bridges or railway wagons. It should be pointed out that shipyards do not exclusively engage in the repair and construction of ships and, for this reason, in every policy recommendation, shipyards should be understood as an extremely important and multifaceted industrial and manufacturing activity.

Recognising the economic and geopolitical importance of the sector, the European Commission presented in March two relevant strategies: the Industrial Maritime Strategy for a competitive, sustainable and resilient EU maritime sector and the new EU Ports Strategy.[18] With regard to the former, the key actions to strengthen EU shipping and shipbuilding are structured around three main pillars:

1 The first pillar, *Build, Equip and Repair*, focuses on reinforcing Europe's maritime manufacturing capabilities and technological leadership by promoting *inter alia* a faster digital transformation of European shipyards;

2 The second pillar, *Transport and Connect*, includes measures to strengthen competitiveness, sustainability and connectivity of maritime transport; and

3 The third pillar, *Secure and Protect*, mobilises various instruments to support the naval production capacity and pursue a dual-use ferry construction support mechanism with enhanced military specifications.

It should be noted that these are strategies directly linked to economic and defence security, regional development and employment, the green and digital transitions, competitiveness and the protection of critical infrastructure in Europe.

Moreover, the Draghi Report on the competitiveness of the EU also recognised the leading role of shipping and the need to preserve its international competitiveness. Specifically with regard to shipbuilding, the Report noted that European shipyards are called upon to compete with shipyards in other countries that are either State-owned or benefit from targeted public subsidies or even provide refundment guarantees and can offer prices up to 30%-40% lower than the EU shipyards. As would be expected, shipowners in the EU, as well as in the US, have turned almost exclusively to Asian shipyards.[19] Amid geopolitical instability, dependence on Asian shipyards poses risks for Europe's economic security and strategic autonomy. Therefore, it is necessary to strengthen Europe's position in complex shipbuilding and maritime equipment manufacturing and to regain strategic ship types for the European Blue Economy (e.g. autonomous ships, vessels supporting offshore installations, cable-laying ships).[20]

4 Proposals for the future

The Draghi report makes specific reference[21] to the shipbuilding industry and suggests that the EU could leverage synergies with industrial defence production and public support provided for dual use technologies, consider conditionalities in EU financial instruments or tax incentives for shipowners (to buy ships made in EU) and extend EU financial and policy instruments dedicated to renewable energy projects to specialised vessels. More specifically, the Report proposes the following objectives for the shipbuilding industry: (a) to maintain the current industrial base; (b) to regain leadership in ferries, energy transport and research vessels; and (c) to gain global leadership in the production of floating technologies and in the supply of vessels for the installation and maintenance of offshore wind.

17 Indeed, according to Lloyds' Register *Engine Retrofit Report*, currently there is a shortage in yard capacity and capability, as the potential market of large merchant vessels that could consider engine retrofits to decarbonise by 2050 is estimated at 9000-12,900 vessels.
18 See European Commission, "Commission launches Industrial Maritime Strategy for a competitive, sustainable and resilient EU maritime sector", 4.3.2026.
19 On the other hand, the European shipyards lead in building cruise ships and icebreakers, accounting for 97% and 67% of the global shipbuilding production, respectively, see European Commission, EU Industrial Maritime Strategy, March 2026.
20 See SEA Europe, press release, 17.5.2024.
21 See Draghi, M. (2024), "The Future of European Competitiveness. Part B: In-depth analysis and recommendations", p. 222.

4.1 Cooperation with the defence industry

In 2025, a Greek shipyard manufactured and delivered warship components to a foreign shipyard. This marks the first export of naval shipbuilding material from Greece and constitutes a highly positive development, fully aligned with the promotion of synergies with the defence industry, which is also a pillar of the EU's new strategy. The ReArm Europe Plan could prove particularly beneficial in this direction, as it aims to mobilise over EUR 800 billion in defence spending (through national fiscal flexibility, a new EUR 150 billion loan instrument (SAFE) for joint procurement, a potential redirection of cohesion funds and expanded support from the European Investment Bank). Under the Plan, Greek shipyards could be included in co-financing programmes for the development and production of maritime systems or vessels, carry out research and development programmes (e.g. in the fields of green shipping or smart ships) and cooperate with EU counterparts to transfer know-how and best practices. At the same time, the Greek shipbuilding and ship-repair industry can tap into resources from the European Defence Fund, which has already delivered digital transformation projects, such as the digital ship and digital ship architecture, while the development of standardised architecture and interfaces for smart ships is among the expected outcomes of the programme for the current period (up to 2027).

4.2 At the national level

a) Strategic investments and growth policy

Strategic investments carry significant weight for the national or local economy, as they enhance employment and promote balanced and sustainable growth through attraction of investment capital, openness and exports, innovation and high value added.

More specifically, as international experience has demonstrated, the full exploitation of the potential of a thriving shipyard can reshape its economic zone of operation by transforming it into a construction, energy and transit hub. Such a development requires planning and coordinated action at the local, regional and national levels, combined with legislative measures,[22] in order to ensure long-term benefits, sustainable employment and sustainable growth.[23]

On a smaller scale, individual segments of the shipbuilding industry can be brought within the thematic schemes of the development law in order to receive State aid. Investments in the modernisation of facilities, green shipping, research and development, as well as maritime and shipbuilding education and training in Greece are steps in the right direction.

b) Incentives and facilitations

The completion of the Capital Markets Union is expected to contribute to reducing the cost of private investments, while the introduction of fiscal incentives could unlock private funds. At the same time, ensuring a predictable tax environment that allows for long-term planning, coupled with a reduction in red tape, would strengthen legal certainty and have positive effects on investment in the shipbuilding industry. In this context, it may be appropriate to reconsider individual measures, e.g. the VAT regime applicable to shipbuilding works for small ferries or the cabotage rules in yachting services for foreign-flagged vessels.

c) Strategic partnerships

By using and developing new technologies, Greek shipyards can play a leading role in ship retrofitting, maintenance and construction, thereby contributing to sustainability, regulatory compliance and economic growth. The administrative restructuring of large shipbuilding units in Greece, the signing of memoranda of understanding and the entry of new investors are steps in this direction. In the same vein, the increased export activity of Greek manufacturers of marine equipment[24] and the provision of specialised services by Greek experts to foreign ship-

22 Law 5255/2025, Article 51 "Flagship Investments of Exceptional Importance and investment incentives".
23 "Governments should prioritise [...] strategic investment and growth-enhancing structural reforms", ECB, *Economic Bulletin*, Issue 8/2025, p.41, January 2026.
24 See Hemexpo, "Marine Equipment Manufacturing – Trends, Prospects and Contribution to the Greek Economy", various years.

yards attest to the existing potential and the high level of quality. The development of partnerships within a maritime cluster, the collaboration with educational and research institutions both within and outside Greece, the transfer of know-how and best practices and the strengthening of cooperation at the EU level can yield positive results and support the revival of the country's shipbuilding industry.

5 Conclusions

The leading position of Greek shipping in the global maritime landscape is reflected in the economic performance of the sea transport sector, which constitutes a pillar of the Greek economy and of Greek services exports. However, the contraction of the fleet under the Greek flag over time and the high share of imported inputs limit its potential economic footprint. The shipbuilding industry could significantly contribute to addressing these challenges. Through coordinated action, forward-looking planning and the effective utilisation of the potential available at both the national and EU levels – without excluding specific vessel types or smaller shipbuilding and repair units that support local communities – the progress achieved recently can be transformed into a genuine revival of the Greek shipbuilding industry. The first steps have been made, the current conditions are favourable, and harnessing the potential of the shipbuilding industry could serve as a counterbalance to a possible slowdown in investment following the expiry of the Recovery and Resilience Facility (RRF) at the end of 2026. Openness, strategic partnerships and investment in the green transition and human capital constitute key prerequisites for achieving this objective.

Box 5

EU MEMBER STATES' INTERVENTIONS IN RESPONSE TO THE ENERGY CRISIS

The surge in energy prices associated with the war in the Middle East brought back to the fore the usual trade-off between fiscal discipline and macroeconomic stabilisation in economic policy-making. With energy costs rising rapidly, governments are under pressure to provide protection to households and businesses. In light of the new EU fiscal rules and given the need to reduce public debt, the question is not only whether it is possible to adopt economic support measures, but also how such fiscal interventions are to be calibrated in line with the constraints set in the revised fiscal framework, which are mainly related to the net primary expenditure benchmark. In this respect, the fiscal policy response should take the form of targeted, temporary and tailored interventions complementary to monetary policy, which mainly aims to contain inflationary shocks.

In the context of a simple aggregate demand and aggregate supply model, initially the current energy crisis acts as a negative supply shock that shifts the short-term aggregate supply curve to the left, leading to simultaneous price increases and a decline in GDP. Depending on the duration and depth of the shock, second-round effects on the demand side are possible in the medium term. Contingent upon the existence of fiscal space, a fiscal policy mix that complements monetary policy to contain inflationary shocks may include, *inter alia*, tax cuts and/or subsidies, as well as price caps.

Tax relief measures aimed at curbing energy prices are often based on the premise that they are expected to have a favourable impact on the supply side, by stabilising economic activity, lowering production costs and maintaining incentives to complete existing and/or undertake new investment projects. However, their effectiveness largely depends on such factors as the level of competition in individual markets and the size and duration of an inflationary shock. Cuts in taxes on energy consumption, for instance VAT or excise taxes, may have effects on the demand side by boosting real income, provided that the tax rate cut is directly passed through to consumer prices. Moreover, subsidies to businesses are beneficial on the supply side, while subsidies to households seek to directly protect the most vulnerable social groups.

Key policy lessons from the recent energy crisis of 2022-23

Experience from the 2022-23 energy crisis and the fiscal expansion implemented by EU Member States, given that the general escape clause had already been activated since the pandemic, demonstrate that many of the

measures applied were untargeted (broad) and lacking a clear implementation horizon. This mitigated the effectiveness of policy interventions and led to a significant increase in fiscal costs compared with what could have been achieved through more targeted policies. Moreover, the implemented fiscal response mix weakened energy-saving incentives and made it more difficult to withdraw the support measures later.

As regards addressing inequality pressures that arise during an inflationary shock, recent studies analysing the lessons learned from the 2022-23 crisis[1] confirm that income measures were more targeted and better-designed to address these pressures at a relatively low fiscal cost compared with price measures. By contrast, based on experience gained in the same period, price measures were in most cases applied horizontally and, thus, proved more costly and less effective in supporting the most vulnerable social groups. However, when passed through to consumer prices, they can contain inflation over a relatively short span and reduce the inflationary gap between higher and lower income groups. Moreover, if more targeted by design, relevant interventions can have a strong contribution to reducing the losses of lower-income households.

Therefore, the optimal policy mix depends not only on country-specific circumstances, but also on the objectives of national policy makers. In addition, policy measures aimed at mitigating the adverse effects of inflation need not be solely reactive, but may well be proactive, in the form of structural reforms that reduce households' exposure and vulnerability to energy price fluctuations. To this end, recent major initiatives at the EU level include enhancing European energy independence (REPowerEU); promoting sustainable buildings (Energy Performance of Buildings Directive); and reducing overall – specifically household – energy consumption (Energy Efficiency Directive).

In the current crisis, the European Commission is making a clear effort to take a more moderate approach, with a focus on narrowing the timeframe of interventions, reducing fiscal costs and more effectively targeting support measures. In this context, the European Commission[2] notes that any short-term measures to tackle energy price increases should: (a) be consistent with the need to decarbonise the energy system and phase out costly natural gas[3]; (b) not unduly increase aggregate demand for energy goods (e.g. natural gas and oil); (c) be temporary and minimise fiscal costs; and (d) be targeted to the most vulnerable households and the most affected industries.

Policy responses to the contemporary energy and inflation shock at the EU level

Based on the data available so far, the size of public interventions varies across countries, depending on the fiscal space available. Greece appears to be among the countries that have already allocated substantial public funds (0.2% of GDP) to addressing the current energy crisis. While still having a high debt-to-GDP ratio, Greece has generated adequate budgetary room compared to other high-debt countries, due to its current favourable structural fiscal position and the rapid decline in public debt.

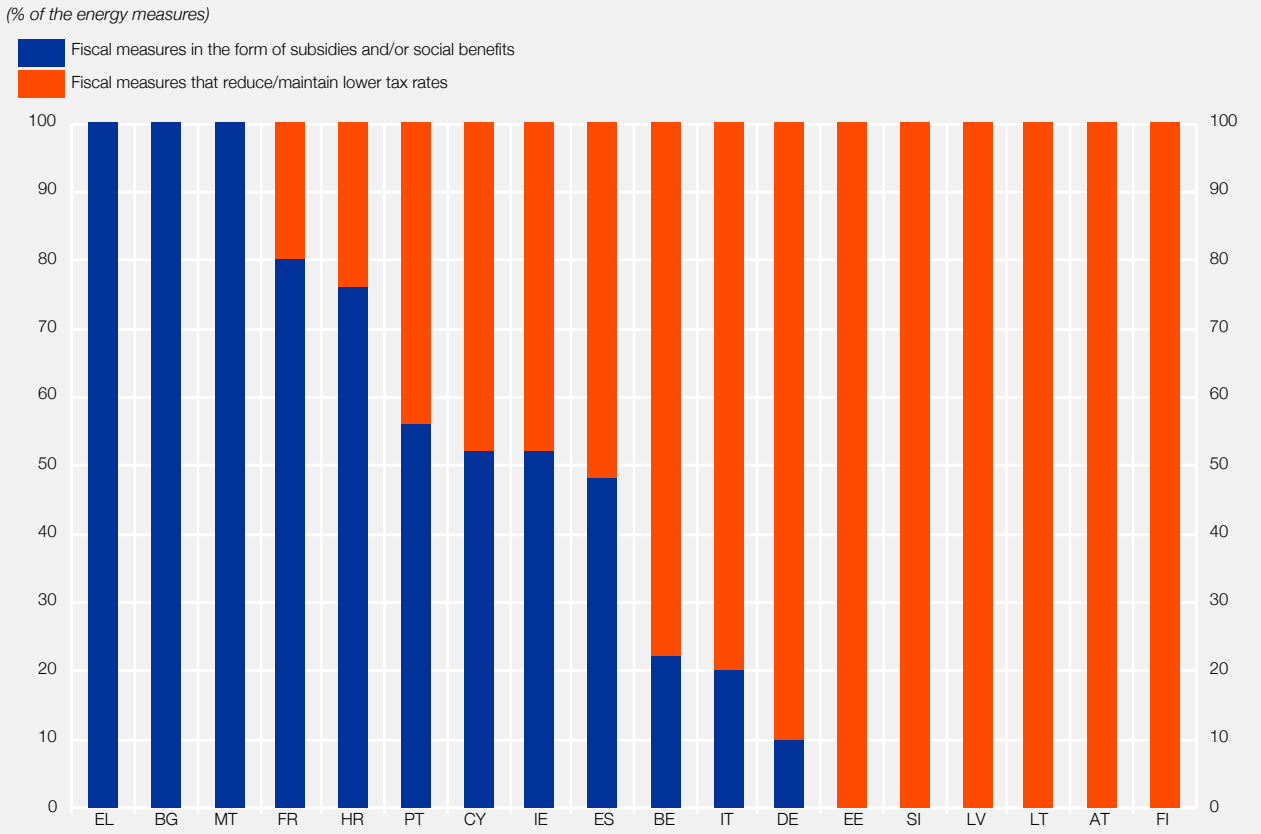
Specifically, the Greek case involves an array of temporary and targeted interventions combining administrative measures (a cap on profit margins for liquid fuels and key food items); direct subsidies and targeted support measures for energy consumption (diesel oil subsidy and a digital fuel card – fuel pass); and temporary income support measures for families with children of a clear social (and redistributional) nature. At the same time, a specific intervention for the primary sector (fertiliser subsidies) aims to reduce agricultural production costs and

1 The distributional impact of the surge in euro area inflation since 2021 and the internal governance measures taken by euro area governments are examined in: (a) Amores, A.F. et al. (2025), "Inflation, fiscal policy, and inequality: the impact of the post-pandemic price surge and fiscal measures on European households", *The Review of Income and Wealth*, 71(1), e12713; and (b) Flevotomou, M. et al. (forthcoming), "Fiscal policy and high inflation in 2022", ECB, *Occasional Paper Series*.

2 DG-ECFIN (2026), "Energy measures to attenuate the impact of the current spike in energy prices".

3 At the EU level, the broader policy framework builds on "AccelerateEU", a European Commission toolbox aimed at providing consumers with immediate relief from high energy costs and reducing reliance on fossil fuels while at the same time promoting the rapid deployment of homegrown clean energy sources through funding and streamlined procedures to safeguard the EU's energy security.

Fiscal response mix in selected EU countries (2026)



Source: Bank of Greece estimates.

acts as a supply-side stimulus, mitigating second-round pressures on food prices. Overall, this mix seeks to strike a balance between the need for effective financial support and the preservation of fiscal stability.

At the euro area level, interventions to address the energy crisis have so far concentrated mainly on horizontal rather than targeted fiscal measures. The present policy mix relies primarily on lowering energy taxes across the board, and secondarily on providing subsidies and/or social benefits, mainly targeted at vulnerable households and firms (see chart).

Specifically, a cut in indirect taxes on energy, such as the excise tax[4] and the value added tax (VAT), is the most widespread rapid-response measure implemented by EU Member States, aimed at both directly reining in fuel prices and supporting the supply chain. Major euro area economies, such as Spain, Italy and Germany, have adopted a mix of interventions that remain focused on horizontal reductions in indirect taxes on energy. In this context, countries such as Greece, Bulgaria and Malta have adopted a different approach, avoiding an horizontal cut in energy taxes. In the case of Greece, this is explained by the need to maintain fiscal sustainability, as well as by expectations of a limited pass-through to final consumer prices.[5] Uncertainty about the persistence of supply shocks and concerns about the impact on the current account (through increased import costs) are additional reasons explaining this policy.

4 Specifically, the excise tax is measured in terms of euro per kilolitre and is summed with the costs from the intermediate stages of production and processing, from refinery to fuel station pump, to determine the final selling price per litre.

5 For VAT in particular, it is uncertain that any rate cut would pass through to retail prices (see Palaiodimos, G. and D. Papageorgiou (2025), "VAT rate shocks and inflation: A theoretical and empirical analysis for Greece", Bank of Greece, *Economic Bulletin*, No. 61).

In addition, in the euro area, measures are being adopted to drive down costs in critical sectors of the supply chain, i.e. transport (Italy, Ireland, Croatia) and in industries such as the primary sector (Greece, France, Spain, Bulgaria), as well as to support the most vulnerable households based on income and social criteria, with a view to making more efficient use of limited fiscal space. The key reasons behind choosing a more sectoral approach are those sectors' high exposure to energy costs and their critical role in the supply chain.

Another characteristic shared by most national strategies is the largely temporary nature of the interventions, with timeframes usually ranging from a few weeks to one year, while permanent fiscal interventions remain limited so far. In the case of Greece, all adopted measures are essentially temporary interventions.

Addressing the energy crisis under the new Stability and Growth Pact (SGP)

According to the European Commission,[6] under the new fiscal framework, any fiscal measures introduced to address the energy crisis should remain consistent with the net expenditure growth paths recommended by the Council, based on a European Commission proposal. Deviations from the net expenditure path will be treated the same, irrespective of whether they originate from energy measures or any other fiscal intervention. To the extent that measures are temporary in nature, their impact on the cumulative deviation from the primary expenditure rule should be limited over a medium-term horizon.

With regard to a possible activation of the general escape clause (GEC), it should be noted that the GEC can only be activated in the event of a severe economic downturn in the euro area or the EU as a whole, depending on the duration and intensity of the crisis. Currently, there is no evidence that this condition[7] is or will soon be met. By contrast, the national escape clause (NEC) has been activated for several Member States regarding defence spending, which is expected to put off debt reduction in highly indebted Member States by several years.

Drawing on the lessons from the previous energy crisis, energy measures should not be *a priori* considered as one-offs. Classifying a measure as one-off requires that it is inherently temporary, while the degree of government control and the political risk involved are also considered, as is the implementation horizon of the measures and the sustainability of public finances. As noted by the European Commission,[8] recent experience from 2022-23 showed that even if energy measures are introduced on a temporary basis, they are prone to remain in place for an extended period of time or even become permanent.[9] If they do not include an explicit sunset clause, measures taken to address inflationary pressures are expected to be *de facto* classified as permanent.

Conclusions

The current energy disruption is still unfolding and its duration remains uncertain. Since March 2026, EU Member State governments have reacted promptly to protect households and businesses from the impact of rising fuel costs. The scope of fiscal measures was decided primarily on the basis of available fiscal space, as appropriate.

Governments' rapid response mainly focused on reducing fuel prices through broad-based interventions. Nevertheless, there has been a gradual shift towards targeted interventions in critical industries of the production and supply chains that are materially exposed to fuel price volatility, such as agriculture and road freight transport, as well as towards supporting the most vulnerable households. In terms of duration, as announced, most policy measures are temporary, as they either include a clear sunset clause or they are introduced as one off interventions. The case of Greece is a prime example of this approach, which is fully in line with the European Commission's guidelines and directives, as the policy response to the energy crisis combines targeted subsidies to energy-intensive sectors and direct income support and social benefits to vulnerable households through short-term measures.

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6 DG-ECFIN (2026), op. cit.
7 At the time of drafting this report this condition did not apply.
8 DG-ECFIN (2026), op. cit.
9 For these reasons, the support measures introduced in response to the increase in energy prices in 2022 were not classified as one-offs. The same applied to the measures introduced in response to COVID-19.

Given the need to reduce public debt internationally,[10] the financing of broad interventions poses challenges to fiscal stability. With mounting spending needs for defence and the energy transition, it is deemed necessary to safeguard fiscal sustainability and ensure the credibility of euro area Member States in international capital markets.

10 Chapter 1 "Fiscal Policy under Pressure: High Debt, Rising Risks" of the IMF's *Fiscal Monitor* (April 2026) underscores the need for fiscal responsibility in the current environment of government interventions to contain the impact of the energy crisis, as global public debt deteriorates and is expected to reach 100% of GDP by 2029.

Box 6

THE PASS-THROUGH OF POLICY RATE CHANGES TO LENDING RATES ON NEW LOANS TO NFCs IN GREECE

The adjustment of bank lending rates in response to changes in policy rates is a fundamental element of the monetary policy transmission mechanism and therefore requires regular monitoring and assessment. Banks' pricing policies, as reflected in the spread between the interest rate charged on loans and a reference rate (the lending margin), can be influenced by structural factors, such as the degree of competition in the banking sector,[1] as well as by factors related to the credit cycle and intermediation costs, including credit risk and liquidity conditions. However, the most immediate determinant of banks' lending rates continues to be changes in policy rates – and, by extension, in money market rates – through their impact on banks' funding costs.

Focusing on Greece, this box examines the pass-through of policy rate changes to bank lending rates for non-financial corporations (NFCs) in recent years by analysing its speed and extent across two sub-periods: the most recent monetary policy tightening cycle and the subsequent period of policy rate easing. The results provide evidence of a symmetric adjustment of lending rates on new loans to NFCs across the two sub-periods, suggesting the presence of sufficient competition in the market for bank credit.

In addition, although empirical findings suggest a close relationship between NFC lending rates and Euribor rates, they also indicate some heterogeneity in the pass-through of Euribor rate changes across the two main categories of NFC loans: fixed-maturity loans and loans without a fixed maturity (revolving credit).

Empirical analysis

In this analysis, Euribor reference rates are taken to be the main channel through which changes in the ECB's key policy rates are transmitted to bank lending rates on new loans, as they reflect banks' short-term money market funding costs and serve as the basis for the pricing of bank credit. The pass-through of changes in Euribor rates is examined separately for two broad categories of new NFC loans: fixed-maturity loans and loans without a fixed maturity.

The analysis focuses on the pass-through mechanism using monthly data on Euribor rates and lending rates on new loans to NFCs for the period July 2022-October 2025 (see chart). The sample is divided into two sub-periods based on the timing of the ECB's monetary policy decisions during the review period:[2] July 2022-September 2023, corresponding to the monetary policy tightening cycle, and October 2023-October 2025, corresponding to

1 The main models of banks' interest rate-setting behaviour imply that the lower the price elasticity of loan demand, the greater the margin banks are able to charge if they possess sufficient oligopolistic market power. Consequently, banks' lending margins may be influenced by factors such as financial innovation, the availability of alternative funding sources, and changes in the competitive environment in which banks operate. For a discussion on this issue, see ECB, "Recent developments in the retail interest rate pass-through in the euro area", *Monthly Bulletin*, July 2007.

2 On 27 July 2022, the ECB raised the deposit facility rate from -0.5% to 0.0%. Successive increases followed until 20 September 2023, bringing the rate to 4.0%. A turning point came on 12 June 2024, when the ECB cut the rate from 4.0% to 3.75%. Further reductions followed until 11 June 2025, bringing it down to 2.0%.

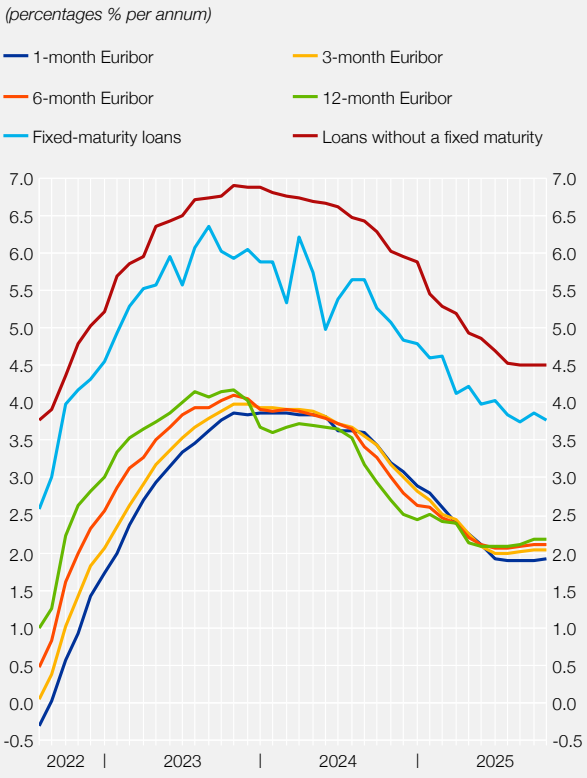
the subsequent monetary policy easing cycle. The two sub-periods are defined primarily on the basis of turning points in Euribor rates. In particular, the second sub-period extends beyond the actual easing cycle, reflecting the fact that Euribor rates had incorporated market expectations of policy rate cuts well before the relevant decisions were taken by the ECB Governing Council.

The main objective is to estimate separate vector error correction models (VECMs) for each of the two monetary policy cycles, using Johansen's VAR-based approach to test for cointegration between NFC lending rates and Euribor rates.

Interest rates on new fixed-maturity NFC loans

As part of analysing how NFC lending rates respond to changes in Euribor rates, empirical estimates were used to examine the relationship between interest rates on fixed-maturity NFC loans and Euribor rates at different maturities (1, 3, 6 and 12 months). The analysis revealed a stable long-run equilibrium relationship between the two variables only for the 12-month Euribor rate. The relationship was found to hold during both the monetary policy tightening cycle and the subsequent easing cycle.

Euribor rates and lending rates on new loans to NFCs (July 2022-October 2025)



Source: Bank of Greece.

During the monetary policy tightening cycle, the results point to only a partial long-run pass-through of changes in the 12-month Euribor rate, with banks' lending margin estimated at 270 basis points. As regards the short-run adjustment speed, interest rates on fixed-maturity NFC loans are estimated to adjust to changes in the 12-month Euribor rate within two months.

Turning to the monetary policy easing cycle, the results indicate a full long-run pass-through of changes in the 12-month Euribor rate, while banks' lending margin is estimated at 180 basis points. Once again, the estimated short-run adjustment speed for interest rates on fixed-maturity NFC loans is two months.[3] The fact that the short-run adjustment speed remains unchanged across the two monetary policy cycles suggests a symmetric short-run adjustment of lending rates.

Interest rates on new NFC loans without a fixed maturity

Similarly, empirical estimates were used to examine the relationship between interest rates on NFC loans without a fixed maturity and Euribor rates at different maturities (1, 3, 6 and 12 months). The analysis identified a stable long-run equilibrium relationship between the two variables only for the 1-month Euribor rate. The relationship was found to hold during both the monetary policy tightening cycle and the subsequent easing cycle.

During the monetary policy tightening cycle, the results point to a full long-run pass-through of changes in the 1-month Euribor rate, with banks' lending margin estimated at 290 basis points and the short-run adjustment speed estimated at one month.

Correspondingly, during the easing cycle, the results indicate an excess long-run pass-through of changes in the 1-month Euribor rate to interest rates on new NFC loans without a fixed maturity, with banks' lending margin

3 These findings are in line with previous analysis showing a high adjustment speed for interest rates on outstanding fixed-maturity NFC loans, most of which, despite having maturities exceeding five years, carry either floating interest rates (adjusted monthly or quarterly) or adjustable interest rates (revised at the discretion of the lender).

estimated at 240 basis points. The short-run adjustment speed remains one month, suggesting a symmetric adjustment of lending rates across the two monetary policy cycles.

Conclusions

Empirical results support the view that lending rates on new loans to non-financial corporations (NFCs) in Greece have adjusted symmetrically to policy rate changes in recent years. Specifically, no evidence is found that Greek banks have exploited oligopolistic market power by increasing lending rates by more than the corresponding rise in Euribor rates during monetary tightening cycles, or by reducing them by less than the corresponding decline in Euribor rates during easing cycles. Particularly with regard to the latest monetary policy easing cycle, the empirical findings are consistent with those of the SAFE survey, in which Greek SMEs reported successive reductions in lending rates in 2025. They are also in line with Greek lenders' responses to the Bank Lending Survey, which indicated an easing of lending conditions for NFCs, mainly driven by lower lending rates and margins amid competitive pressures and perceived improvements in borrowers' creditworthiness.[4]

Compared with previous studies,[5] the current analysis suggests a more symmetric transmission of monetary policy to NFC lending rates in Greece, reflecting stronger competition among credit institutions for highly creditworthy borrowers and the normalisation of money market conditions relative to the periods of the global financial crisis and the Greek sovereign debt crisis.

While empirical findings indicate a close relationship between NFC lending rates and Euribor rates, the pass-through of Euribor rate changes exhibits some heterogeneity across the two main categories of new NFC loans. Owing to their longer maturities and more predictable cash flows, fixed-maturity NFC loans are associated with more favourable financing conditions, lower lending margins, and a weaker and slower pass-through of Euribor rate changes. NFC loans without a fixed maturity, by contrast, tend to exhibit a more immediate relationship with Euribor rates, resulting in a faster and more extensive pass-through, while also being associated with higher lending margins. Compared with fixed-maturity NFC loans, banks appear to require higher margins for this latter category, reflecting loan-management costs, liability management policies aimed at avoiding liquidity strains, and greater exposure to uncertainty and risk.[6]

4 See Bank of Greece, *Summary of the Annual Report 2025*, Box 14 "Financing conditions for SMEs: insights from the SAFE survey" and Box 15 "The Bank Lending Survey", June 2026.
5 See Bragoudakis, Z. and A. Tsioutsios (2025), "Bank concentration and asymmetric interest spreads pass through: evidence from selected euro area countries", *Bank of Greece Working Paper Series*, No. 352, 1-28.
6 SMEs are the main recipients of NFC loans without a fixed maturity.

Box 7

THE SAVINGS AND INVESTMENTS UNION

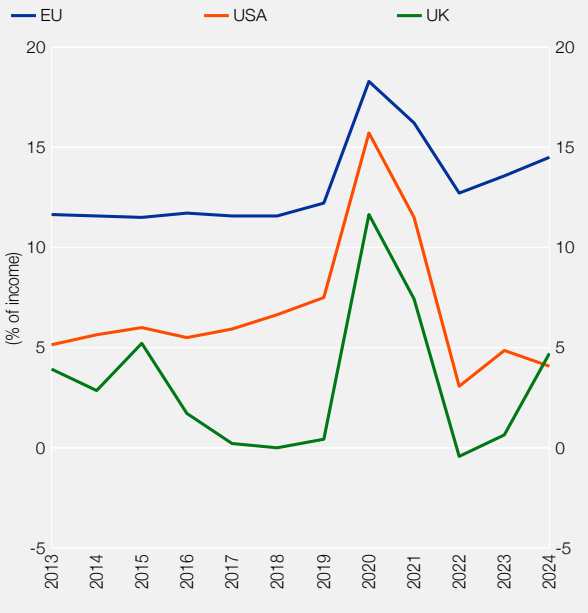
The Savings and Investments Union[1] (SIU) aims to increase investment opportunities for natural and legal persons in the European Union (EU) so as to strengthen the resilience of the European economy in the face of challenges stemming from the digital transition, climate change and geopolitical developments. Mobilising investment in these strategic priorities requires an estimated EUR 750-800 billion of funding annually until 2030, of which EUR 700 billion per year is needed to achieve the EU's climate objectives (the "Fit for 55" package), while investment in digital transformation is estimated at around EUR 125 billion annually.[2] The ultimate goal is to boost the competitiveness of the European economy and raise the productivity of European businesses.

1 See Communication from the European Commission, "Savings and Investments Union – A Strategy to Foster Citizens' Wealth and Economic Competitiveness in the EU", COM(2025) 124 final, 19.3.2025.
2 See the report by Mario Draghi (2024), "The Future of European Competitiveness", Part A (https://commission.europa.eu/topics/eu-competitiveness/draghi-report_en).

A significant scaling-up of investment in the European economy is thus needed, amounting to around 4.5% of total EU GDP for the year 2025. At the same time, as shown in Chart A, European households save a significantly higher share of their income than their counterparts in peer economies such as the United States and the United Kingdom. However, these elevated savings are mainly channelled into bank deposits. In 2024, deposits in the EU increased by EUR 450 billion, equivalent to 60% of the estimated financing needs for the digital and green transformation of the European economy.

In particular, as shown in Chart B, European households hold a substantially smaller share of their financial assets in securities (equity and mutual fund units/shares) than households in the United States. For instance, at the end of 2024 European households held around EUR 12 trillion in bank deposits and EUR 14.5 trillion in equity and mutual fund units/shares, while US households held USD 5.6 trillion in bank deposits and USD 58 trillion in equity and mutual fund units/shares.[3]

Chart A Household saving rate (2013-14)



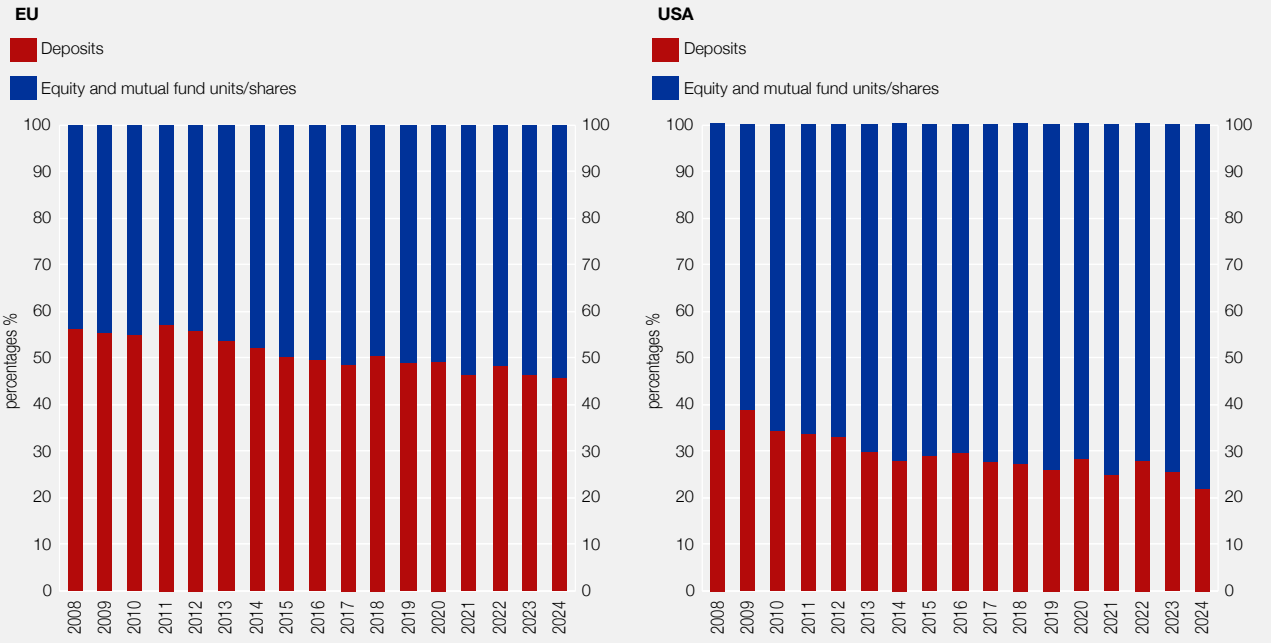
Sources: EUROSTAT and OECD.

At the same time, as shown in Chart C, the fact that US households hold more financial assets in equity and mutual fund units/shares is also associated with significantly stronger growth in the US non-bank financial sector than in the EU. As a result, the total assets of European investment funds corresponded to about 62% of the total assets of US investment funds. In other words, the asset size of European investment funds is 26% smaller than what would correspond to the size of the European economy compared to that of the United States.[4] Therefore, the failure to channel European households' savings into securities or mutual fund units/shares to the extent observed in peer economies largely explains both the smaller size of European investment funds, compared with those in the United States, and the overall lag of the European capital market vis-à-vis that of the United States.

Unlike in the United States, this fact does not favour investment in research and development.[5] In turn, it also contributes to the weaker productivity growth of European firms relative to their US counterparts and thus to the lower natural real interest rate and reduced potential growth rate of the European economy. In particular, while bank deposits are intermediated into loans to the real economy, banks are reluctant to finance innovative firms that would introduce disruptive innovation in sectors where these banks provide significant financing to existing firms that may be adversely affected by innovation.[6] On the other hand, non-bank financial institutions, such as investment funds and other capital market entities, are much more likely to take the additional risk and finance technological innovations. Studies[7] have shown that economies with highly developed equity markets have a significantly higher degree of innovation.

3 Sources: Eurostat (national accounts) for European household data and FRED for US households.
4 The comparison is based on the size of the two economies. By way of illustration, at the end of 2024 the GDP of the EU-27, at constant prices, stood at EUR 18 trillion, i.e. around 80% of US GDP (EUR 23 trillion based on the EUR/USD exchange rate at the end of 2024).
5 In 2024, R&D investment in the EU amounted to EUR 403 billion or 2.1% of Member States' total GDP. In the same year, R&D investment in the US amounted to around EUR 1 trillion or 3.3% of GDP.
6 See Degryse, H., O. De Jonghe, L. Gambacorta and C. Huylebroek (2025), "Bank specialization and corporate innovation", *Review of Finance*. According to international literature, other reasons why banks refrain from financing start-ups and innovative companies include a lack of collateral and high business risk.
7 See Hsu, P.-H., X. Tian and Y. Xu (2014), "Financial development and innovation: Cross-country evidence", *Journal of Financial Economics*, 112(1), 116-135.

Chart B Allocation of household financial assets (2008-2024)



Sources: EUROSTAT and FRED.
Note: Figures show the proportion of households' bank deposit balances (red bars) to the value of their positions in equity and mutual fund units/shares (blue bars). The cumulative figures of all 27 Member States are used for the EU.

The Savings and Investments Union seeks to increase the financing of the European economy through capital markets, *inter alia*, by simplifying the regulatory and supervisory framework for the financial system. The creation of an integrated European capital market is also in line with the EU leaders' initiative "One Europe, One Market" to boost the competitiveness of the European economy, endorsed at the March 2026 European Council.

The Savings and Investments Union strategy will be implemented through a set of policy measures affecting different aspects of the EU financial system. The flagship initiative is the Market Integration and Supervision Package (MISP), which substantially simplifies the regulatory and supervisory framework for the EU financial system. The proposed measures in the package mostly include regulations aimed at increasing harmonisation and consistent application of the rules at EU level.[8] The aim is to remove barriers to trading, post-trading and asset management, thereby helping market participants move more freely across Member States' capital markets and reducing cost differentials between domestic and cross-border transactions. The proposed measures include the transfer to the European Securities and Markets Authority (ESMA) of the direct supervision of systemically important financial infrastructures with cross-border activity, such as trading venues, central counterparties, central securities depositories and crypto-asset service providers.

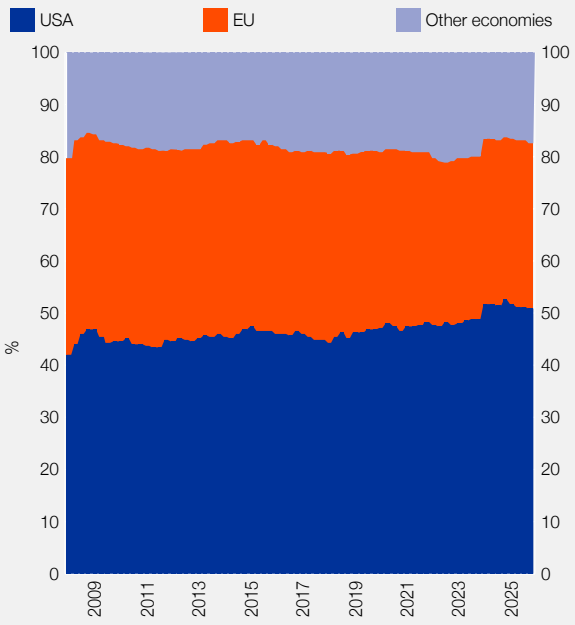
At the same time, the European Commission proposes to establish a centralised European supervisory framework for the EU financial system to address inconsistencies and complexity arising from fragmented national supervisory approaches, so that supervision will be more favourable to cross-border activities and better adapted to emerging risks. Furthermore, it proposes the introduction of a Pan-European Market Operator (PEMO) for trading venues to streamline corporate structures and authorisations by creating a single entity or a single

8 a) Proposal for a Regulation as regards the further development of capital markets and supervision within the Union, COM(2025) 943 final, 4.12.2025; b) Proposal for converting the Settlement Finality Directive into a Regulation, COM(2025) 941 final, 4.12.2025; and c) Proposal for a Directive as regards the further development of capital market integration and supervision within the Union, COM(2025) 942 final, 4.12.2025.

licensing format to be granted directly by ESMA, alongside streamlining the cross-border distribution of investment funds (Undertakings for Collective Investment in Transferable Securities (UCITS) and Alternative Investment Funds (AIF)) in the EU. In addition, the focus of the package is on removing regulatory barriers to distributed ledger technology (DLT) innovation, in particular by significantly broadening the scope (raising the issuance and trading cap on DLT financial instruments to EUR 100 billion and removing time constraints); creating a simplified regime for DLT infrastructures that manage a total market value of DLT financial instruments of less than EUR 10 billion; and expanding passporting rights for central securities depository services in a DLT environment.

Another important package presented by the European Commission concerns the mobilisation of long-term capital. On the one hand, the European Commission proposed to expand and strengthen supplementary retirement to increase the participation of EU citizens in voluntary (occupational and individual) pension schemes.[9] In particular, mechanisms such as auto-enrolment in supplementary pension schemes and the development of tools to monitor pension entitlements are promoted, in particular through (public and supplementary) pension dashboards to enhance transparency and participation. On the other hand, a new legislative proposal on the Pan-European Pension Product (PEPP) has been presented[10] with the aim of addressing existing weaknesses and promoting it in the market.

Chart C Value of investment funds' assets
(Q1 2009 - Q4 2025)



Source: International Investment Funds Association.
Note: The chart shows the allocation of investment funds on the basis of asset value and economy of origin. Placements by funds of funds are not included.

Complementary non-legislative initiatives have been promoted by the European Commission to encourage citizens' participation in capital markets. In particular, a Recommendation was issued on increasing the availability of savings and investment accounts in EU Member States with simplified and favourable tax treatment.[11] These accounts enable EU citizens to invest in equities, bonds and UCITS shares/units and are provided by licensed financial service providers. In parallel, the European Commission adopted a Communication on a EU financial literacy strategy to promote access to, and effective use of, financial services by its citizens.[12]

Additional measures expected in 2026 include the planned revision of the European Venture Capital Regulation[13] to make the European venture capital label more attractive; continued support for financing initiatives under the auspices of the European Investment Bank, such as TechEU and the European Technology Champions Initiative (ETCI 2.0), aimed at mobilising institutional investment; as well as further simplification actions, such as the adoption of simpler delegated and implementing acts under the Regulation and the Listing Act Directive; and targeted measures to facilitate the exit of private investors.

9 Proposal for a Directive on strengthening the framework for occupational pension benefits (Revision of the Institution for Occupational Retirement Provision (IORP) II), COM(2025) 842 final, 20.11.2025.
10 Proposal for a Regulation on a Pan-European Pension Product (PEPP), COM(2025) 840 final, 20.11.2025.
11 Recommendation on increasing the availability of savings and investment accounts with simplified and favourable tax treatment, C(2025) 6800 final, 30.9.2025.
12 See European Commission press release, 30.9.2025.
13 Targeted consultation on the EU venture and growth capital funds reform.

Finally, the European Commission's Report on the Competitiveness of the EU Banking Sector[14] will address, inter alia, market fragmentation and structural barriers to cross-border activity and financial integration, and will be accompanied by legislative initiatives, taking into account the responses of stakeholders to the related public consultation.[15]

Conclusions

At the current juncture, the European economy is facing challenges, related both to new technologies and the geopolitical environment. The EU strategic initiative to create a Savings and Investments Union aims to provide citizens with better opportunities by offering them more choices for their savings, and to strengthen the ability of the financial system to link savings to productive investments, while supporting the growth of businesses. Increasing the financing of investment is particularly important in order to enhance the competitiveness of the European economy, as well as the productivity of European businesses. The Savings and Investments Union strategy should contribute to the integration of European capital markets by simplifying the regulatory framework, enhancing cross-border transactions and activities and entrusting supervisory powers to a single European body. Key proposals in this direction have already been launched for a wide range of thematic areas, with the ultimate aim of making better use of available savings in the EU. In summary, the Savings and Investments Union initiative is a catalyst for the EU's successful response to the new economic, technological and geopolitical realities.

14 It is expected to be published in September 2026.
15 This consultation ended on 19.4.2026.

Box 8

INTERNATIONAL SPILLOVER EFFECTS ON GREEK GOVERNMENT BONDS

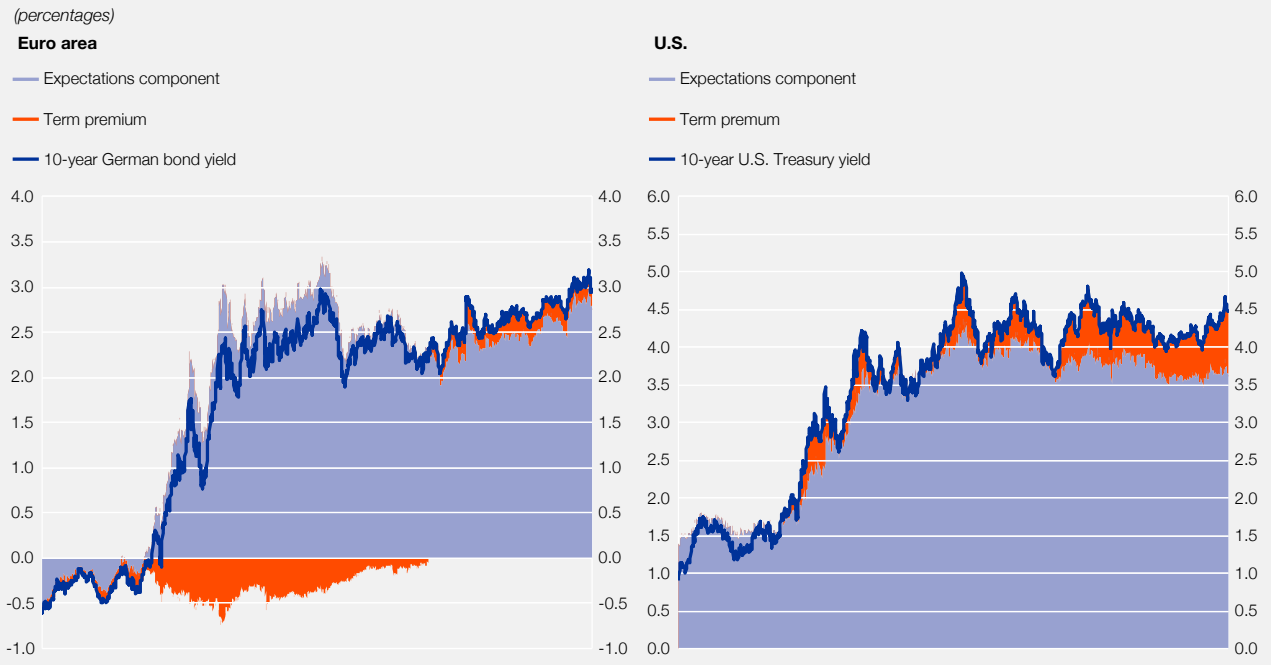
Yields on euro area government bonds, as well as U.S. Treasury yields, have increased since early 2026, reflecting higher inflation expectations in both economies following the U.S.-Israeli attack on Iran in late February and the subsequent surge in energy prices. Indicatively, 10-year German government bond yields rose by around 10 basis points (bps) between the beginning of the year and early June, while yields on 10-year U.S. Treasury bonds increased by 30 bps. The rise in yields though has been heterogeneous across the euro area, with French government bond yields remaining roughly unchanged from their levels at the beginning of the year, whereas yields on Italian, Portuguese and Greek government bonds rose by around 15 bps.

This box presents estimates of the contribution of various factors to Greek government bond yields, with the aim of explaining the observed rise in bond yields in Greece and assessing the extent to which yield movements can be attributed to international and domestic developments. To this end, we make use of the Bank of Greece econometric model constructed in order to measure the contribution of individual factors to Greek government bond yields.[1] The international developments examined in this analysis relate to: (a) uncertainty regarding economic policy decisions in the United States, as well as fiscal and political developments in major euro area economies; and (b) expectations of a tighter monetary policy stance in both the euro area and the United States relative to the expectations prevailing at the beginning of 2026. At the same time, the model allows for disentangling Greek government bond yield movements due to domestic factors.

As a first step, we estimate the expectations component of the 10-year government bond yields, in order to quantify the effects of markets' pricing in of a higher interest-rate outlook, compared to the expectations prevailing

1 The model consists of a Structural Vector Autoregression (SVAR) matrix which is designed to examine spillover effects between 10-year government bond yields in selected euro area economies, the United States and the United Kingdom. The analysis consists of daily data spanning the period from 1 January 2021 to 2 June 2026. The data source is LSEG Datastream.

Chart A 10-year benchmark bond yields in the euro area and the United States



Source: Bank of Greece econometric estimates, based on data from LSEG-Workspace.
Note: The blue line represents the yield on the 10-year German government bond (left panel) and the corresponding 10-year U.S. Treasury (right panel). The shaded grey area represents the expectations component and the shaded orange area represents the term premium.

prior to the U.S. attack on Iran.[2] This component (the "expectations component") captures expectations regarding the level of interest rates over the lifetime of the bond, while the deviation of nominal yields from these expectations reflects the uncertainty associated with economic policy (the "term premium").[3]

These two components are illustrated in Chart A, which shows that the increase in benchmark government bond yields in the euro area and the United States has been heterogeneous, i.e. driven by different factors. Specifically, the rise in euro area bond yields between the beginning of 2026 and early June is largely attributable to higher interest rate expectations, which account for an increase of 8 bps, while the term premium has increased by only 2 bps, thus accounting for 80% and 20%, respectively, of the estimated increase in nominal bond yields. On the other hand, in the United States, the change in expectations regarding key interest rates (i.e. expectations of Fed rate hikes, as against expectations of cuts in early 2026) explains an increase of 7 bps, or approximately 20% of the total rise, in 10-year U.S. Treasury yields, while the term premium explains an increase of 26 bps or approximately 80%, respectively.

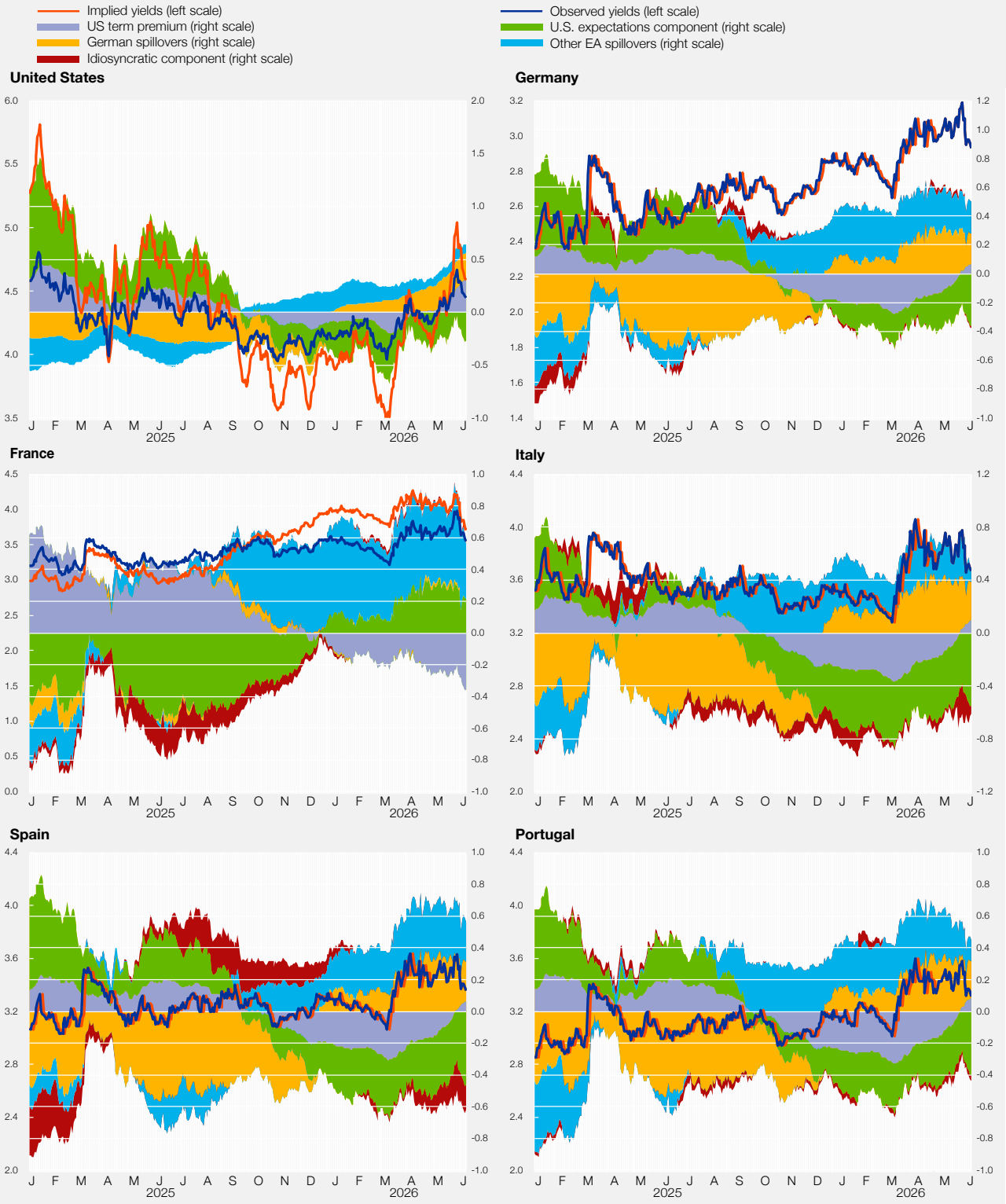
These developments have, to a large extent, also been transmitted to Greek government bond yields. This is attributable to the fact that movements in U.S. treasury yields spill over into the global financial system, thereby af-

2 The estimation was performed by adjusting the parameters of a Nelson-Siegel yield curve (see Nelson, C.R. and A.F. Siegel (1987), "Parsimonious modeling of yield curves", *The Journal of Business*, 60(4), 473-489, and Svensson, L.E.O. (1994), "Estimating and interpreting forward interest rates: Sweden 1992-1994", NBER Working Paper No. 4871), on daily data for the yields of Treasury bills with maturities of 3, 9 and 12 months and of zero-coupon bonds with a maturity of 2-30 years. The estimation period extends from 14 March 1990 to 2 June 2026.

3 This second component reflects uncertainty regarding the path of interest rates until the maturity of the bond and scales higher as the bond's lifetime increases. At the same time, it reflects bond investors' maturity preferences. See e.g. Adrian, T., R. Crump and E. Moench (2013), "Pricing the term structure with linear regressions", *Journal of Financial Economics*, 110(1), 110-138, and Gurkaynak, R., B. Sack and J. Wright (2007), "The U.S. Treasury yield curve: 1961 to the present", *Journal of Monetary Economics*, 54(8), 2291-2304.

Chart B Observed and model-implied 10-year government bond yields

(percentages %)

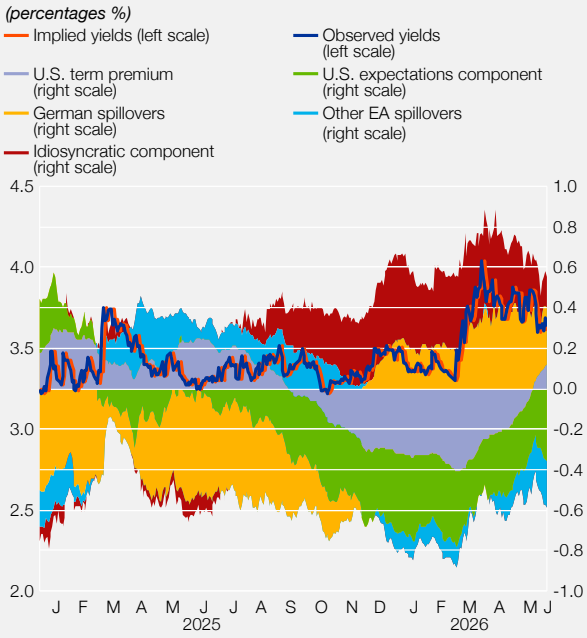


Source: Econometric estimates of the Bank of Greece.
Note: The panels show the decomposition of government bond yields derived from the estimation of a SVAR model. The blue and orange lines depict the model-implied and observed yields of 10-year government bonds, respectively. The coloured areas show the contributions of the transmission effects: the effects of the term premium on U.S. Treasury bonds are shown in grey, while the effects of the expectations component of U.S. Treasury yields are shown in green. The transmission effects from the German benchmark bond are shown in yellow and those from the component associated with other European sovereigns are shown in light blue. The contribution of the idiosyncratic component is depicted in dark red.

fecting European government bonds, while, at the same time, within the euro area, there are strong spillover effects across sovereign bond markets.[4] Under the econometric model used in this analysis, shocks originating from U.S. Treasuries are transmitted first to the expectations component of euro area benchmark government bonds and subsequently to the sovereigns of the remaining euro area countries, which also interact with each other. U.S. Treasuries are ranked first in the transmission mechanism because they serve as the benchmark for global bond markets. Moreover, it is well established that the monetary policy of the U.S. Federal Reserve (Fed) exerts a significant influence internationally, considerably affecting international financial conditions.[5]

The results of the model estimation are presented in Chart B. As shown, the model has a very good fit for 10-year government bond yields across all economies in the sample, with the model-estimated yields being very close to the observed yields. Consequently, it is assumed that the model captures quite well the driving factors of the 10-year government bond yields since early 2026. The term premium for U.S. economic policy has contributed 25-35 bps, depending on the economy, to the increase of euro area government bond yields since the beginning of the year. This development reflects the recent geopolitical crisis, as the spillover effects turned upward in early March 2026 after being downward earlier, suggesting the international aspect of the energy shock. This comes in contrast to the effects that originated from domestic inflation on the U.S. economy following the announcement of tariffs in April 2025, which triggered capital outflows from U.S. securities and corresponding inflows into euro area government bonds. In addition, German government bond yields have an upward effect, reflecting, as mentioned above, mainly the change in key interest rate expectations in the euro area. By contrast, during 2026 the reduction of the term premia of European benchmark bonds has had a dampening effect on EA government bond yields. This effect probably reflects the improvement in investor sentiment toward the sovereign debt of major euro area economies, particularly France and Italy. Contributing factors include the adoption of France's budget in February and the improvement in Italy's fiscal performance.

Chart C Components of 10-year Greek government bond yields



Source: Econometric estimates of the Bank of Greece.
Note: The blue and orange lines depict the model-implied and observed yields, respectively, of the 10-year Greek government bond. The coloured areas show the contributions of the transmission effects: the effects of the term premium on U.S. Treasury bonds are shown in grey and the effects of the expectations component of U.S. Treasury yields are shown in green. The transmission effects from the German benchmark bond are shown in yellow and those from the component associated with other European sovereigns are shown in light blue. The contribution of the idiosyncratic component of Greek government bonds is depicted in dark red.

Finally, as shown in Chart C, the increase in Greek government bond yields is mainly explained by (a) a rise in the term premium in the U.S. and (b) changes in key interest rate expectations in the euro area. The term premium in the U.S. seems to have a significantly higher upward effect (+44 bps). Notably, its contribution shifted from negative during the period from April 2025 to early 2026 to positive by mid-March 2026. The change in sign means that an increase in U.S. Treasury yields due to uncertainty surrounding economic policy, which from April to the end of 2025 would have led to a decline in yields on both Greek and other European government bonds, as investors fled to European bonds amid uncertainty in the United States, is now accompanied by increased uncertainty about the outlook for the Greek economy, in an environment of elevated inflation arising from external

4 See among others Favero, C. (2013), "Modelling and forecasting government bond spreads in the euro area: A GVAR model", *Journal of Econometrics*, 177(2), 343-356.
5 See Miranda-Agrippino, S. and H. Rey (2020), "U.S. monetary policy and the global financial cycle", *The Review of Economic Studies*, 87(6), 2754-2776.

shocks. The shift in ECB key interest rate expectations in the euro area – from hold to hike after the outbreak of the war in the Middle East – as well as the rise in yields in Germany, for other reasons, also have a significant but comparatively smaller upward effect compared to the U.S. (+6 bps).

On the other hand, in 2026 so far, these upward pressures have been partly offset by the retreat of uncertainty in France (-4 bp), a reduction in the component associated with Italian, Spanish, and Portuguese government bonds, which is not explained by the increase in euro area rate expectations (-12 bps), and, finally, a lower idiosyncratic risk component for Greek government bonds (-27 bps). These effects add up to an increase of 13 bps (bp), which is very close to the observed rise in Greek government bond yields over the same period.

Conclusions

Overall, between early 2026 and early June, Greek government bond yields increased. However, the rise in Greek government bond yields was lower than that implied by (a) heightened international uncertainty and (b) changes in investors' expectations about the path of interest rates in the euro area, as other factors, related to the decline in idiosyncratic risk premiums on sovereign bonds of both the major euro area economies and of Greece, have dampened the upward pressure stemming from international developments. Specifically, international uncertainty associated with U.S. geoeconomic policy has exerted upward pressure on Greek government bond yields during 2026, as well as on other euro area government bond yields. This development followed the outbreak of the war in the Middle East and reflected international investors' search for safety, from which U.S. Treasuries benefited. Moreover, the strengthening of expectations about rises in EA interest rates, following the surge in energy prices, has contributed to higher yields on both Greek and other euro area government bonds. Nevertheless, the overall upward pressure generated by these two factors has been offset, to a large extent, by a decline in idiosyncratic risk premiums on both the government bonds of major euro area economies (such as Italy and France) and of Greece. This development reflects the resilience of the Greek economy and the overachievement of fiscal targets, both of which lead to an improvement in the country's creditworthiness.

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