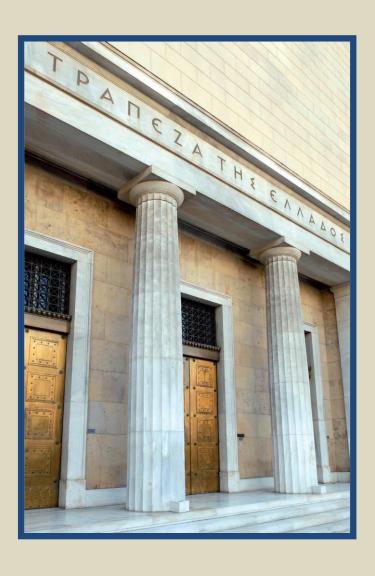
# **FINANCIAL STABILITY REVIEW**





# FINANCIAL STABILITY REVIEW



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## I. EXECUTIVE SUMMARY

Risks to financial stability in Greece remain mostly exogenous. The EU-US agreement in July averted a trade war; nevertheless, uncertainty remains elevated and, compounded by US tariffs on EU imports, is expected to dent economic growth in the EU, also indirectly affecting the Greek economy. Moreover, the ongoing war in Ukraine and the upheaval in the Middle East, despite the recent ceasefire agreement, maintain geopolitical tensions and cybersecurity risks, while the risk of a sharp repricing of financial assets worldwide remains exceptionally high. If the above risks were to materialise, they could have an indirect impact on the Greek financial system by dampening investment and credit expansion, increasing funding costs and eroding the quality of the loan and investment portfolios.

The Greek economy continued to grow in the first half of 2025. Real gross domestic product (GDP) growth stood at 2.0% year-on-year in the first half of 2025, with private consumption, net exports and investment being the key drivers. A significant contribution came from private consumption growth, which, however, decelerated to 1.5% (from 2.1% in the first half of 2024), while public consumption increased marginally by 0.2%. The contribution of net exports was positive, as a result of a simultaneous increase in exports and decrease in imports, while investment, following a temporary drop in the first quarter of 2025, recovered in the second quarter. It should be noted that investment has been growing steadily since 2019 (+60% by the end of 2024), covering part of the large investment gap created during the debt crisis. Inflation is steadily declining but remains above the euro area average. In January-September 2025, inflation, as measured by the Harmonised Index of Consumer Prices (HICP), stood at 3.0%, as in 2024. Moreover, core inflation (which excludes food and energy) increased by 3.9% in the same period.

The robustness of the Greek banking sector rests upon solid fundamentals. The profitability and capital adequacy of Greek banking groups remained at satisfactory levels, while asset quality improved further. Additionally, bank liquidity remains high and, following successive upgrades of their credit ratings, Greek banks are within investment grade territory. The resilience of Greek banks is also confirmed by the results of the 2025 EU-wide stress tests published recently. The results suggest that, under the severe scenario, Greek banks would maintain capital levels comfortably above regulatory requirements, higher than the European average.

In the first half of 2025, Greek banking groups continued to benefit from favourable liquidity conditions, further tapping alternative sources of funding. The liquidity ratios of Greek banking groups remain well above supervisory requirements and the average for significant institutions in the Banking Union. Specifically, in June 2025, the Liquidity Coverage Ratio (LCR) stood at 212.3% and the Net Stable Funding Ratio (NSFR) at 136.4%. In addition, Greek banks' smooth access to the interbank market and global capital markets, following successive credit rating upgrades, as well as their low Asset Encumbrance Ratio, have helped boost banks' resilience to potential shocks.

The quality of credit institutions' loan portfolios improved. In June 2025, the stock of non-performing loans (NPLs) on a solo basis stood at EUR 5.8 billion, down by 2.4% from December 2024, mainly due to loan recoveries, sales and write-offs. The NPL ratio stood at 3.6% in June

2025 (from 3.8% in December 2024), as credit growth was accompanied by a decline in NPLs. This is the lowest level of the NPL ratio since Greece joined the euro area, having largely converged with the average for significant institutions in the Banking Union (June 2025: 2.2%). In addition, the less significant institutions' NPL ratio also dropped to 5.9% in June 2025.

Greek banking groups' profitability remained satisfactory. In the first half of 2025, Greek banking groups' profits after tax and discontinued operations amounted to EUR 2.5 billion, against profits of EUR 2.4 billion in the first half of 2024. Specifically, in the first half of 2025, the operating income of Greek banking groups increased by 1.6% year-on-year. Despite credit expansion, net interest income fell by 2.8%, as a result of the cuts in key ECB interest rates, which started in June 2024 and continued into the first half of 2025. By contrast, net fee and commission income increased by 14.3%, on the back of higher asset management fees and other fee and commission income. As a result, core operating income (i.e. net interest income and net fee and commission income) rose by 0.4%. Gains from financial transactions and other operating results also grew. Concurrently, operating costs increased by 12.6%, mainly owing to higher staff and administrative costs. Additionally, impairment charges rose by 12.1%. Banking groups' return on assets (RoA) and return on equity (RoE) stood at 1.4% and 13.0%, respectively.

The capital adequacy ratios of Greek banking groups remained high. In particular, the Common Equity Tier 1 (CET1) ratio on a consolidated basis fell marginally to 15.8% in June 2025, from 16% in December 2024, and the Total Capital Ratio (TCR) rose to 20.4% (TCR: 19.8% in December 2024). This divergence is mainly attributable to the issuance of capital instruments that qualify as prudential own funds but are not classified under CET1 capital. However, in June 2025, Deferred Tax Credits (DTCs) amounted to EUR 11.8 billion, accounting for 44.6% of CET1 capital, from 47.5% in December 2024.

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In the current macroeconomic and financial environment, implementing an appropriate macroprudential policy to avoid the build-up of systemic risks and to enhance the resilience of the banking sector is of utmost importance. The Bank of Greece conducts a quarterly assessment of the intensity of cyclical systemic risks and of the appropriateness of the Countercyclical Capital Buffer (CCyB) rate for Greece and sets or adjusts it, if necessary. The analysis of the indicators examined by the Bank of Greece confirms that, overall, there is no excessive credit growth; however, the analysis points to emerging cyclical systemic risks in certain areas, such as credit to non-financial corporations, residential real estate prices and the current account. Moreover, the macroeconomic environment in Greece, the further improvement of the banking sector's fundamentals and prudential ratios, as well as the restructuring of less significant institutions are still shaping favourable conditions for building adequate macroprudential space to safeguard financial stability over the medium term. In this context, the Bank of Greece decided to raise the CCyB rate for Greece by 0.25%, setting it at 0.5%, i.e. at the Positive Neutral Countercyclical Capital Buffer (PN CCyB) target rate, applicable from 1 October 2026.

In addition, the Bank of Greece identified Other Systemically Important Institutions (O-SIIs) in Greece for the year 2025, applying the relevant European Banking Authority (EBA) guidelines,

and set the O-SII buffer rate for 2026 at 1.25% for Eurobank Ergasias Services and Holdings S.A. on a consolidated basis and at 1.00% for all other O-SIIs.

Lastly, the Bank of Greece has put in place macroprudential borrower-based measures (BBMs) for loans and other credit to natural persons secured by residential real estate located in Greece, effective from 1 January 2025. In more detail, a cap was introduced on the loan-to-value ratio at origination (LTV-O) of 90% for first-time buyers and 80% for second and subsequent borrowers, as well as a cap on the debt service-to-income ratio at origination (DSTI-O) of 50% for first-time buyers and 40% for second and subsequent borrowers.

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#### Insurance undertakings maintained high capital adequacy levels, boosting their own funds.

In the first half of 2025, insurance undertakings' own funds grew by 9% compared to December 2024, while in terms of quality, 93% of their eligible funds ranked in the highest quality class (Tier 1). It should be noted that efficient management of underlying and emerging risks confirms the resilience of the insurance industry in the volatile economic environment of recent years, highlighting the significant contribution of this sector to the economy and society as a whole.

The financial system infrastructures operated efficiently in the first half of 2025, thereby contributing to the safe and reliable operation of the financial system. Concerning the operation of the financial system infrastructures, i.e. payment, clearing and settlement systems, a notable development is the proposal submitted by Euronext N.V. for the acquisition of Hellenic Exchanges – Athens Stock Exchange S.A. (ATHEX), which was unanimously supported by the ATHEX Board of Directors. ATHEX is the parent company of ATHEXCLEAR (ATHEX's subsidiary clearing company) and ATHEXCSD (the Hellenic Central Securities Depository). The proposal includes certain commitments on the part of Euronext, among other things that ATHEX will maintain its legal, business and tax residence in Greece; Euronext will enhance the operational resilience of the Greek capital market; and will safeguard ATHEX's role as a national exchange and a regional hub. Transactions through electronic payment instruments remain high and are gradually expanding, now extending to low-value transactions. Moreover, the use of credit transfers also increased. Nevertheless, enhancing transaction security is a challenge, although in the first half of 2025 fraud-to-transaction ratios remained low, both in volume and in value terms.

Credit servicers play a significant role in managing private debt in Greece. In June 2025, total exposures under management by credit servicers amounted to EUR 94.0 billion, 87% of which referred to exposures managed by credit servicers on behalf of credit acquirers and the remaining 13% to exposures managed on behalf of credit and financial institutions. NPLs account for the bulk (83%) of the overall portfolio of exposures under management in June 2025, with performing exposures representing only 17%.

The activity of Payment Institutions (PIs) and Electronic Money Institutions (EMIs) was affected by corporate actions. In the July 2024-June 2025 period, the total value of payment transactions carried out by PIs stood at EUR 63.9 billion, up by 2.6% year-on-year. By contrast, the total annual value of payment transactions carried out by EMIs stood at EUR 9.1 billion, down by 73.4% year-on-year. This drop is attributable to a merger by absorption of the largest EMI by

the credit institution of the same group, resulting in payment services now being provided directly by the absorbing credit institution.

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The domestic macroeconomic environment is expected to remain favourable, but subject to downside risks. According to the latest projections by the Bank of Greece (September 2025), real GDP is expected to grow by 2.2% in 2025, i.e. almost double the euro area average rate, and inflation is estimated at 3.1% in 2025. Moreover, the achievement of high primary surpluses and a steady downward path of the public debt-to-GDP ratio contribute to fiscal sustainability. Concurrently, the direct impact of the new tariffs – following the recent EU-US trade agreement – on the Greek economy is expected to be limited, as the United States is not a major trading partner of Greece. Risks are more likely to be indirect, as a slowdown of global trade and its impact on euro area growth could lower demand for Greek goods and services and dampen the growth outlook.

The outlook for the Greek banking sector and the domestic financial system is positive, despite uncertainty in the international environment. The domestic banking sector has solid fundamentals and is much better placed than in the past to withstand potential shocks. This is also reflected in the stock valuations of ATHEX-listed banks, as well as in the interest of strategic investors, a prominent example being the increase in Italian UniCredit's stake in Alpha Bank to around 26%. Completing the Banking Union and promoting the Savings and Investments Union would deepen financial integration, improving risk-sharing and mobilising savings to finance investment, in the context of both the green and digital transitions and the need for higher defence spending. However, a deterioration of international financial conditions and/or an abrupt adjustment of asset valuations could have adverse effects both on the global financial system and on the financial situation of domestic firms and households. Hence, Greek banks should apply prudent lending standards, step up their efforts to clean up the NPL stock and pursue a moderate dividend policy, with a view to strengthening their capital buffers.

## II. ECONOMIC ENVIRONMENT

#### 1. ECONOMIC ACTIVITY: DEVELOPMENTS AND PROSPECTS

The Greek economy continued to grow in the first half of 2025, albeit at a slightly slower pace than in the corresponding period of 2024. The slowdown in growth is mainly due to weaker private consumption growth in the second quarter of 2025 and lower investment in the first quarter as a result of the under-execution of the Public Investment Programme (PIP) (see Table II.1). Nevertheless, growth remained consistently above the euro area average. In the first half of 2025, consumption, net exports and investment made a positive contribution.

Business confidence remained strong in January-September 2025, continuing to exceed the euro area average. By contrast, the consumer confidence indicator remained at low levels, driven by deteriorating expectations regarding the country's general economic situation and households' financial situation. The Purchasing Managers' Index (PMI) remained in positive territory throughout the period January-September 2025, still standing well above the euro area average.

In more detail, GDP grew by 2.0% year-on-year in the first half of 2025. Private consumption, despite a slowdown year-on-year (to 1.5%, from 2.1% in the first half of 2024), was a significant

Table II.1 GDP and its main components (2021 – Q2 2025)

(annual percentage changes; constant market prices of 2020)

	2021	2022	2023	2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
Private consumption	5.1	9.3	2.3	2.4	2.7	1.1	1.8	1.1
Public consumption	1.8	0.0	2.8	-2.6	-1.8	-3.4	-0.3	0.7
Gross fixed capital formation	21.7	22.1	6.5	4.5	0.5	8.1	-2.3	6.5
Residential investment	31.8	60.1	22.1	12.9	6.9	28.0	0.1	15.2
Other construction	18.4	13.8	13.8	8.1	2.9	9.2	-6.3	7.7
Equipment	23.8	23.1	0.4	0.9	-2.9	2.0	3.9	9.6
Domestic demand	7.2	7.7	1.0	3.8	1.5	1.2	0.8	1.9
Exports of goods and services	24.4	6.2	2.2	1.0	3.0	3.2	2.6	1.9
Exports of goods	14.4	3.4	0.5	-1.2	0.7	1.4	2.2	-1.1
Exports of services	37.6	9.3	4.0	3.2	4.3	4.9	0.6	3.9
Imports of goods and services	17.4	10.9	0.0	4.8	5.4	2.4	2.2	-3.2
Imports of goods	16.5	13.1	-1.4	4.2	3.5	2.0	1.4	-4.8
Imports of services	20.2	4.4	5.0	6.4	12.7	4.8	3.7	1.5
Real GDP at market prices	8.7	5.5	2.1	2.1	2.3	2.5	2.2	1.7

Sources: Hellenic Statistical Authority (ELSTAT) and Bank of Greece.

Notes: Annual data: non-seasonally adjusted; quarterly data: seasonally adjusted.

driver of growth. The slowdown in private consumption was largely driven by a weakening in disposable income, as the nominal disposable income of households and non-profit institutions serving households rose by 0.7% in the first quarter of 2025, while real disposable income declined by 3.3% due to inflation. At the same time, public consumption increased marginally by 0.2%.

After declining in the first quarter of 2025, investment rebounded in the second quarter, with gross fixed capital formation rising by 2.1% in the first half of 2025, up from 4.1% year-on-year. A positive contribution came primarily from investment in "Transport equipment" (13.0%), "Housing" (7.7%) and "Machinery and weapon systems" (4.7%). "Other construction" recorded a marginal increase of 0.4%, while investment in "ICT equipment" (-12.0%) declined significantly.

Net exports made a positive contribution of 1 percentage point to growth in the first half of 2025, due to a simultaneous increase in exports and decrease in imports. Exports rose by 2.2%, driven mainly by an increase in exports of services, while a 0.6% decline in imports was attributable to a 1.8% decrease in imports of goods.

On the supply side, total gross value added rose by 1.3% in the first half of 2025. Significant increases were recorded in the primary sector, in industry and in most services. Conversely, public administration and defence made a negative contribution.

The current account deficit contracted to EUR 6.6 billion in January-August 2025, down from EUR 8.7 billion in the corresponding period of 2024, due to an improvement in all sub-accounts, mainly in the balance of goods, primary income and services accounts. The goods deficit shrank as imports fell by more than exports in absolute terms. The surplus of the services balance grew in January-August 2025 on account of an improvement in the travel balance, more than half of which was offset by a deterioration in the transport and other services balances. The primary income account deficit fell year-on-year, mainly as a result of lower net interest, dividend and profit payments.

The labour market improved in the first half of 2025. More specifically, total employment rose by 1.2% and dependent employment by 5.4%, while the number of the self-employed dropped by 6.1%, mainly due to a 8.0% decline in the self-employed without employees. The unemployment rate fell to 9.5%, from 10.9% in the first half of 2024. This included a significant improvement for women (11.6%, from 13.7% year-on-year), as well as for youth aged 20-29 years (17.0%, from 19.4% year-on-year). At the same time, the long-term unemployment rate fell to 5.1%, from 5.7% year-on-year. The labour force participation rate for the 15-64 age group grew slightly in the first half of 2025 (to 70.8%, from 70.6% in the first half of 2024), reflecting an increase in the labour force participation rate for both men and women.

Labour cost growth decelerated in the first half of 2025 as labour market tightness declined, while at the same time raises in the minimum wage and public sector salaries were lower year-on-year. Compensation per employee increased by 3.5% (compared with 7.0% in the first half of 2024), while unit labour costs grew by 2.2% (compared with 6.0% in the first half of 2024), i.e. at a rate lower than the euro area average (3.2%).

Inflation, as measured by the Harmonised Index of Consumer Prices (HICP), stood at 3.0% in the first nine months of 2025, unchanged from 2024 and significantly above the euro area average. The main components that prevented an unwinding of inflation are unprocessed food and services. Core inflation (which excludes food and energy) increased by 3.9% over the same period.

According to the latest Bank of Greece projections (September 2025), in 2025 economic activity is expected to grow by 2.2%, while inflation is expected to stand at 3.1%. Risks to the growth forecasts of the Bank of Greece are tilted to the downside and stem from: (a) global trade uncertainty caused by the imposition of protectionist trade measures, which may lead to significant price increases; (b) a potential exacerbation of geopolitical tensions; (c) labour market tightness, which may add to wage pressures and worsen competitiveness; (d) the impact of climate change, which may lead to natural disasters and rising food prices; and (e) potential delays in implementing reforms and in absorbing available resources under the Recovery and Resilience Facility (RRF).

#### 2. FISCAL DEVELOPMENTS

In January-September 2025, tax revenues overshot both the budget targets and the estimates of the Annual Progress Report submitted in April 2025 in the context of the European Semester. This development primarily reflects rising incomes, stronger business profits, higher employment and improved tax compliance, while secondarily it is related to the impact of higher inflation.

The overperformance of tax revenue is partly attributable to a reduction of tax evasion through discretionary revenue measures, such as the strengthening of e-government and digital transactions, which facilitated audits and the procedures for collection of tax revenues and social security contributions. This allowed the adoption of a new package of permanent expansionary fiscal measures amounting to EUR 1.76 billion for 2026, at an additional cost of EUR 0.7 billion for 2027, as announced in the Thessaloniki International Fair in September 2025. In particular, the new package includes: (a) tax reliefs, such as a cut in direct tax rates with a focus on supporting the middle class, families with children and young workers, as well as a reduction in rental income taxation by introducing an intermediate rate; (b) interventions in real estate and consumption taxation, such as the phasing out of the property tax (ENFIA) in low population areas, a reduction in VAT rates on remote islands and a relaxation of income imputation criteria; and (c) income support measures, such as the phasing out of the so-called "personal difference" in pensions and wage increases for the armed forces and law enforcement personnel.

These measures were included in the 2026 Draft Budget, which was published on 6 October 2025. The Draft Budget projects a primary surplus of 3.6% of GDP for 2025 and a primary surplus of 2.8% of GDP for 2026. Nationally financed net primary expenditure is expected to increase by 4.4% in 2025 and 5.8% in 2026, following an estimated 0.4% reduction for 2024, mainly due to active measures to reduce tax evasion, which reduce the expenditure level in the calculation of the expenditure target. The cumulative increase for the years 2024-2026 is estimated at around EUR 10 billion, which corresponds to the expenditure benchmark under the Medium-Term Fiscal-Structural Plan 2025-2028. This increase encompasses, among other things, an estimated rise in pension payments based on new retirements and the inflation and GDP growth rule (around EUR 0.6 billion); an increase in the ordinary expenditure of general government entities based on commitments and inflation (EUR 1 billion); as well as increased physical deliveries of military equipment (estimated at EUR 500 million). Public debt is estimated to decline in 2025 to 145.4% of GDP (a post-2009 low) and further to 137.6% of GDP in 2026, primarily thanks to the debt-reducing impact of the interest rate-growth differential (snowball effect) and, secondarily, to primary surpluses.

The estimates for 2025 and the projections for 2026 meet the criteria of the new Stability and Growth Pact and are in line with the Bank of Greece's fiscal projections. Fiscal policy over this period is estimated to be expansionary, on account of increased investment spending through the Recovery and Resilience Facility.

The tax measures announced by the government in the 2025 Thessaloniki International Fair aim at boosting households' disposable income and employment, reducing the tax wedge on labour for middle- and high-income brackets, and addressing the demographic challenge through direct support to families with children. Moreover, the income tax exemption for young people up to 25 years with an income of up to EUR 20,000 facilitates their active participation in the labour market, while the reduction of taxation on rental incomes increases the disposable income of owners and may improve transparency and declared activity in the real estate market. Measures targeting regional Greece are also of particular importance, as they are expected to strengthen local economic activity, reduce regional inequalities and support social cohesion. Overall, the announced measures are expected to have a positive impact on growth and employment in 2026 and 2027.

However, as regards the demographic problem, tax measures alone are not sufficient to address future challenges. Their effectiveness can be significantly enhanced if combined with supportive policies, such as investment in high-quality and affordable childcare infrastructure, introduction of flexible working hours, housing support for young families and the strengthening of healthcare. In addition, special benefits, such as education allowances for children or home support for new mothers, can crucially enhance family security. The combination of fiscal and structural measures can materially increase the multiplier effects for the economy, while contributing to strengthening social cohesion. The demographic problem is a significant medium- to long-term fiscal risk as it affects employment, tax revenue and the sustainability of the social security system. Addressing it through complementary policies is crucial for ensuring fiscal resilience.

Attracting productive investment requires a stable and friendly business environment. Key measures in this direction include cutting red tape through the digitalisation of public services, simplifying procedures with high administrative costs and speeding up the delivery of justice. At the same time, tackling complex legislation and strengthening institutional efficiency will ensure the protection of property rights and the enforcement of contracts, thus improving the investment climate. Moreover, a stable tax system, the introduction of accelerated depreciation for fixed equipment and higher tax rebates for research and development (R&D) investment can make Greece more attractive for investing in industry and innovation, with positive effects on growth dynamics.

Looking ahead, efforts for the timely absorption and disbursement of RRF funds to the private sector need to be stepped up in order to reach the projected investment growth rates for 2025-2026. The Greek economy should also take full advantage of the latest EU initiatives to bolster European defence. To this end, a more active involvement of the domestic defence industry (where both the public and private sectors will join forces) in international military equipment programmes and partnerships should be pursued. Greater integration of domestic productive capacity into defence spending can increase the value added of the defence industry in the economy

<sup>&</sup>lt;sup>1</sup> IMF (2025), "Greece: Selected Issues", IMF Country Report No. 2025/086.

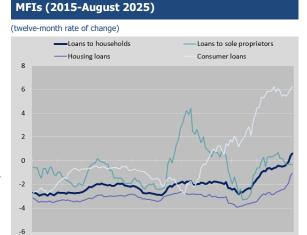
as a whole and lead to a gradual greater coverage of the country's defence needs by domestic production.

Lastly, safeguarding public debt sustainability must remain a non-negotiable priority for fiscal policy. Compliance with European fiscal rules, and measures that strengthen the credibility of fiscal policy, such as the planned early repayment of loans under the Greek Loan Facility (GLF), are crucial. At the same time, reforms are needed to make fiscal policy more growth-friendly. Priorities in this area include reforms to the tax system towards higher effectiveness and fairness, along with measures aimed at enhancing the quality and efficiency of public spending. A special effort should also be made to improve all kinds of public infrastructure, e.g. in the areas of transport, energy, health, education, as these investments strengthen the long-term growth dynamics.

#### 3. FINANCIAL CONDITION OF HOUSEHOLDS

#### 3.1 DEVELOPMENTS IN HOUSEHOLDS' CREDIT AND INDEBTEDNESS

The annual rate of change in household lending2 by domestic monetary financial institutions (MFIs) turned positive in June 2025 for the first time after 15 years of continuous deleveraging and stood at 0.8% in August 2025 (see Chart II.1). This increase is exclusively attributed to consumer and other household loans (August 2025: 6.1%), as the annual rate of change in housing loans and in loans to sole proprietors remained negative (-0.8% and -0.5%, respectively). For the remainder of the year, the annual rate of change in housing loans is expected to strengthen further, partially driven by disbursements under the 'My Home II' Programme.3 Overall, the reversal of the deleveraging trend observed in previous years is a positive development, while the ex-



2023

2015 2016 2017 2018 2019 2020 2021 2022

Note: The growth rates reflect changes in the balances, which have been

adjusted for loan write-offs, securities depreciation, foreign exchange variations

Chart II.1 Financing of households by domestic

pansion of consumer credit at a pace slightly above that of nominal GDP growth does not raise concerns.

Source: Bank of Greece.

and reclassifications.

According to the results of the Bank Lending Survey for the second quarter of 2025,<sup>4</sup> demand for housing loans decreased, reflecting a slowdown in applications for the 'My Home II' Programme compared to its initial phase in the first quarter of 2025. Demand for consumer loans increased moderately in response to financing needs during the second quarter, while no significant change is expected in demand for housing and consumer loans in the third quarter of 2025. On the loan supply side, in the second quarter of 2025, credit standards for household loans remained broadly unchanged for both housing and consumer loans. Terms and conditions of housing loans eased slightly, while those for consumer and other loans remained unchanged. During the same period, the rejection rate for household loan applications also remained almost unchanged compared to the previous quarter.

#### 3.2 HOUSEHOLDS' INTEREST RATE RISK

The cuts in ECB key interest rates (cumulative reduction of 200 basis points since the first cut decided by the ECB Governing Council in June 2024) have already started to feed into lending rates. In particular, the weighted average interest rate on the outstanding balances of housing loans with a maturity of over five years decreased by 73 basis points (bps) in the June 2024-August 2025 period (August 2025: 3.61%, June 2024: 4.34%), while for housing loans with a maturity of over one and up to five years it remained almost unchanged (August 2025: 5.43%, June 2024: 5.45%). The weighted average interest rate on the outstanding balances of consumer and other

<sup>&</sup>lt;sup>2</sup> Including the financing of individuals, private non-profit institutions serving households (NPISHs) and sole proprietors by domestic MFIs.

<sup>&</sup>lt;sup>3</sup> It should be noted that, typically, there is a reasonable time lag between the loan application under the 'My Home II' Programme and the loan disbursement.

<sup>&</sup>lt;sup>4</sup> See the Bank of Greece's Press Release on the Bank Lending Survey: Q2 2025, 22.07.2025.

loans to households decreased by 28 bps in the June 2024-August 2025 period for loans with a maturity of up to one year (August 2025: 14.65%, June 2024: 14.93%), by 45 bps for loans with

a maturity of over one and up to five years (August 2025: 10.63%, June 2024: 11.08%) and by 20 bps for loans with a maturity of over five years (August 2025: 8.16%, June 2024: 8.36%).

A more pronounced decline is recorded in the weighted average interest rate on outstanding loans to sole proprietors, which decreased by 69 bps in the June 2024-August 2025 period for loans with a maturity of up to one year (August 2025: 6.85%, June 2024: 7.54%), by 170 bps for loans with a maturity of over one and up to five years (August 2025: 5.50%, June 2024: 7.20%) and by 111 bps for loans with a maturity of over five years (August 2025: 5.72%, June 2024: 6.83%).

Interest payments as a percentage of household gross disposable income fell in June 2025, following a decline in the interest rates of existing loans (see Chart II.2). Nonetheless, the average annual balance of loans to households as a percentage of household gross disposable income stood at 56.2%, slightly up compared to 2024. In conclusion, interest rate risk for households has slightly eased.

Chart II.2 Household debt and interest payments as a percentage of gross disposable income (2011June 2025)



Sources: Bank of Greece calculations and Hellenic Statistical Authority. Notes:

- Interest payments are approximated by the product of the weighted average interest rate per category of outstanding performing loans and the average annual balance of household finance per each category.
- Household finance includes loans to sole proprietors, as well as housing, consumer and other loans provided by domestic credit institutions. It also includes loans in these categories that are serviced by credit servicing firms (CSFs) operating in Greece.
- 3. The annualised gross disposable income is derived as the sum of four quarterly income observations. The latest observation for 2025 takes into account data from Q2 2024 to Q1 2025. It is noted that the income of all households is taken into account, whether or not they are indebted.

#### 3.3 HOUSEHOLDS' INCOME RISK

The evolution of households' disposable income is a key determinant of the relative ease of servicing their loan obligations. According to quarterly data from the non-financial accounts of the institutional sectors compiled by the Hellenic Statistical Authority (ELSTAT), household nominal disposable income increased year-on-year by 0.7% in the first quarter of 2025, while real disposable income decreased by 3.3% on the back of inflation. The rise in nominal disposable income over this period is mainly attributed to positive contributions from self-employed income and dependent labour income. For 2024, nominal disposable income increased by 1.0%.

Furthermore, in 2025 the labour market continued to improve, as shown both by the unemployment rate and the European Commission's employment expectations index. In particular, according to the results of the ELSTAT's Labour Force Survey, the seasonally adjusted unemployment rate stood at 8.6% in the second quarter of 2025, compared with 9.8% in the respective quarter of

<sup>&</sup>lt;sup>5</sup> For more details on labour market developments, see Section II, Economic activity: developments and prospects.

2024. The employment expectations index for Greece stood at 114.4 in August 2025 (December 2024: 113.1), compared with an EU average of 98.1.6

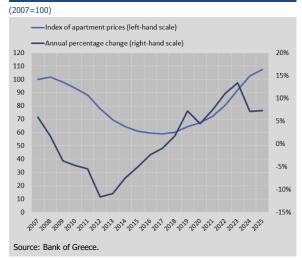
Overall, income risk for households remains limited, given the positive outlook for economic activity and employment, as well as the estimations on inflation developments.

#### 3.4 HOUSE PRICE RISK

The upward trend in residential real estate prices continued in the second quarter of 2025. Specif-

ically, apartment prices (in nominal terms) rose by 7.3% year-on-year in the second quarter of 2025, exceeding their previous peak recorded in the third quarter of 2008 (Q2 2025: 107.5, Q3 2008: 102.2, see Chart II.3). Prices for newly-built apartments (up to five years old) increased at an average annual rate of 6.8% in the second quarter of 2025 and have now exceeded their previous peak of the fourth quarter of 2008 by 9.4 index points (Q2 2025: 112.4, Q4 2008: 103), while older apartments saw an annual price rise of 7.6%, with the index reaching 104.5 in the second quarter of 2025, exceeding their prior peak by 2.8 index points (Q3 2008: 101.7). In terms of





geographical breakdown, strong annual growth rates were recorded in Thessaloniki (8.8%) and other areas of Greece (8.8%). In Athens, apartment prices rose by 5.9% year-on-year in the second quarter of 2025, with the price index standing at 112.2, overshooting the previous peak by 10.8 points (Q2 2008: 101.4).

A similar pattern was observed in rental prices, with the corresponding index reaching 114.7 in the third quarter of 2025, compared with 103.6 in the third quarter of 2024.<sup>7</sup> In contrast to the apartment price index, the rental price index remains below its peak (124.3 in the third quarter of 2011).

House price dynamics show no signs of fatigue so far. The upward trend is therefore expected to persist, as long as domestic<sup>8</sup> and foreign<sup>9</sup> demand continues to be robust and housing supply remains constrained. The low level of supply relative to demand is mainly due to the widespread commercial use of residential properties, the effective withdrawal from the market of properties

<sup>&</sup>lt;sup>6</sup> Values above 100 indicate high expectations on expected dependent employment.

<sup>&</sup>lt;sup>7</sup> Data from the Organisation for Economic Cooperation and Development (OECD), 2015=100, <u>OECD Data Explorer • Analytical</u> house prices indicators.

Residential real estate loan disbursements stood at EUR 819 million in the first quarter of 2025, up by 38% compared to the first quarter of 2024 (EUR 593 million). A significant part of domestic demand concerns property purchases made without banking intermediation (i.e. without loan financing).

<sup>&</sup>lt;sup>9</sup> Net foreign direct investment stood at EUR 938 million in the first half of 2025, down by 17.8% year-on-year. According to a consolidated report by the Ministry of Migration and Asylum (August 2025 - Legal Migration | Annex B, in Greek), the number of applications for the initial issuance of a permanent investor residence permit – Golden Visa amounted to 5,333 in 2025, broadly unchanged compared with the corresponding period of 2024 (5,290).

tied up as collateral for non-performing loans in foreclosure proceedings and the reduced construction of new dwellings between 2010 and 2020, which has impeded the smooth replenishment of the housing stock.

The decline in private building activity recorded in the first half of 2025 compared with the same period of 2024 (building permits down by 14.0% in number terms, by 24.1% in surface area and by 17.7% in volume terms) further slows the recovery of supply. This is partly attributed to the Council of State's ruling on the unconstitutionality of the incentive framework under the New Building Regulation. The revision of this framework in line with the Court's decision is expected to prompt a rebound in private construction activity.

The above developments in residential property prices point to emerging cyclical systemic risks, but do not raise concerns for financial stability, especially considering the low level of housing loan disbursements.

Rising house and rental prices, along with the level of property taxation and increasing operating costs, have exacerbated the housing crisis in recent years, as reflected in the share of housing costs<sup>10</sup> in disposable income (2024: 35.5%). Against this background, at the current juncture reinforcing and accelerating measures to mitigate the potential adverse effects of the housing problem on households' financial position is seen as an appropriate policy response, including by expanding and upgrading the housing stock and improving access conditions to the housing market.<sup>11</sup>

## 3.5 INTEGRATED ASSESSMENT OF THE FINANCIAL CONDITION OF HOUSEHOLDS

According to experimental wealth distribution accounts<sup>12</sup> compiled by the European System of Central Banks (ESCB),<sup>13</sup> adjusted net wealth<sup>14</sup> *per capita* in Greece reached EUR 87.6 thousand in the first quarter of 2025, up by 8.0% from the first quarter of 2024 (EUR 81.1 thousand). The increase in adjusted net wealth is mainly attributed to the rise in households' residence value during the period under review. Besides, the largest contribution to total net wealth originates from housing assets (59.5% of total adjusted net wealth per capita). The adjusted debt-to-asset ratio stood at 9.1% in the first quarter of 2025, up by 50 basis points from the corresponding period of 2024 (Q1 2024: 9.6%), and remained below the euro area average (Q1 2025: 10.7%).

Considering the aforementioned risk factors, the financial condition of Greek households does not, at present, raise any concerns regarding the safeguarding of financial stability over the short term.

<sup>&</sup>lt;sup>10</sup> Components of housing costs comprise charges for regular maintenance and repairs, and the cost of utilities (water, electricity, gas and heating); additionally for homeowners, they include mortgage interest payments, structural insurance and property ownership taxes, while for tenants they also include rent payments.

<sup>&</sup>lt;sup>11</sup> See Ministry of Social Cohesion and Family, presentation of housing policy measures (<u>September 2025, in Greek</u>). In addition, a recent European Parliament's resolution on the role of cohesion policy investment in resolving the current housing crisis (<u>P10\_TA(2025)0187</u>), as well as a draft report of the Special Committee on the Housing Crisis in the European Union (<u>15-09-2025 HOUS\_PR(2025)772037 PE772.037v01-00</u>), propose measures in this direction.

<sup>&</sup>lt;sup>12</sup> Experimental data are economic and financial data, collected and compiled by the ECB, whose quality is somewhat lower than that of other ECB statistics; however, these datasets are regarded as sufficiently reliable to be useful for monetary policy purposes and various ESCB tasks.

<sup>&</sup>lt;sup>13</sup> See <u>Distributional Wealth Accounts</u>.

<sup>&</sup>lt;sup>14</sup> A household's net wealth is the difference between its total assets (financial and non-financial) and its total liabilities.

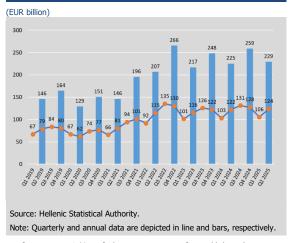
#### 4. FINANCIAL CONDITION OF ENTERPRISES

#### 4.1 FINANCIAL DATA

In the first half of 2025, the revenue of Greek corporates increased year-on-year. In particular, according to ELSTAT (Hellenic Statistical Authority) data,<sup>15</sup> the turnover for all enterprises and activities of the economy as a whole amounted to EUR 229.4 billion, up by 1.8% compared to the first half of 2024 (Chart II.4).

The largest year-on-year increase in turnover was recorded in the "Electricity, Gas, Steam and Air Conditioning Supply" sector (up by 20.8%), while businesses in the "Accommodation and Food Service Activities" sector registered a decrease of 1.4%. The turnover in the "Wholesale and Retail Trade, Repair of Motor

Chart II.4 Turnover evolution for all enterprises and the activities of the economy as a whole



Vehicles and Motorcycles" sector, which accounts for over 1/3 of the turnover for all businesses, remained almost unchanged (up by 0.5%). Likewise, the "Manufacturing" sector, which represents over 1/5 of the total turnover of the economy, also remained unchanged compared to the first half of the previous year (up by a mere 0.2%).

In the first quarter of 2025, the profitability of Greek non-financial corporations (NFCs), in terms of operating surplus, improved year-on-year. In particular, according to ELSTAT data, <sup>16</sup> the gross operating surplus of NFCs increased by 1.4% in Q1 2025 (against a decline of 2.1% in Q1 2024). However, the net operating surplus decreased marginally by 0.4% in Q1 2025 (compared with a drop of 6.0% in Q1 2024). Therefore, the performance of the business sector in terms of operating profits – as expressed by the net profit share (i.e. the ratio of net operating surplus to net value added) – stood at 25.4% in Q1 2025, compared with 27.6% in Q1 2024, remaining above the prepandemic three-year average for 2017-2019 (24.3%).

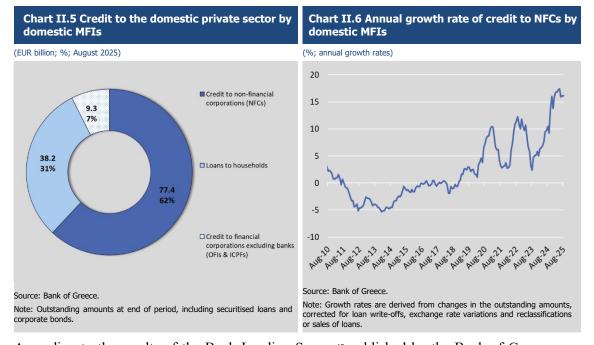
#### 4.2 CREDIT TO NON-FINANCIAL CORPORATIONS AND INDEBTEDNESS

Financing of NFCs by domestic monetary and financial institutions (MFIs) accounts for a significant part of the total financing of the private sector (around 62%, see Chart II.5). The annual growth rate of NFC financing by domestic MFIs accelerated strongly in the first half of 2025 (averaging 16.7%, compared with 7.0% in the first half of 2024) and remained high through to August 2025 (16.1%, see Chart II.6). It is worth noting that, in May 2025, the annual growth rate reached 17.4%, the highest level since early 2009. The expansion of business lending was supported by co-financing and guarantee programmes implemented through national development agencies, as well as by loans under the Recovery and Resilience Facility (RRF). In particular, in the first half of 2025, one in five new corporate loans was supported by such financial instruments,

<sup>&</sup>lt;sup>15</sup> <u>Press Release – Evolution of turnover of enterprises for H1 2025.</u>

<sup>&</sup>lt;sup>16</sup> Quarterly Non-Financial Accounts of Institutional Sectors for Non-Financial Corporations (S.11), Q1 2025.

and approximately 15% of total new loans were financed under the RRF. For small and medium-sized enterprises (SMEs), the share of new loans associated with financial instruments or the RRF reached 45%.



According to the results of the Bank Lending Survey<sup>17</sup> published by the Bank of Greece on a quarterly basis, credit standards for loans to NFCs "remained basically unchanged", while the overall terms of granting loans "eased somewhat" in the first and second quarters of 2025 compared with the fourth quarter of 2024. Total loan demand by NFCs "increased somewhat" during the same period, with banks expecting no change in demand in the following quarter. Factors with a small contribution to stronger loan demand included "mergers/acquisitions and corporate restructuring", "fixed investment", "inventories and working-capital" and "debt refinancing/restructuring and renegotiation". Other factors that affected loan demand mildly relate to the "use of alternative finance", such as loans from other banks or non-bank institutions, and issuance/redemption of debt securities and equity.

At the same time, Greek NFCs increased their funding through corporate bond issuance, taking advantage of the ECB interest rates cuts. Between January and September 2025, total corporate bond issues reached EUR 1.65 billion, and further issues are expected before year-end.

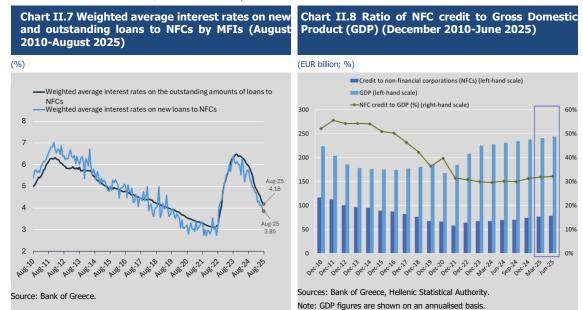
In implementing its monetary policy, the ECB's Governing Council has cut its interest rates by a cumulative 200 basis points (bps) since June 2024. The interest rate cuts have contributed to lowering borrowing costs for both businesses and households in the euro area. In Greece, the weighted average interest rate on new loans to NFCs decreased by 108 bps to 3.9% in August 2025, from 4.9% in December 2024, although it remained relatively high. Similarly, the weighted average

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<sup>&</sup>lt;sup>17</sup> The Bank Lending Survey is conducted on a quarterly basis by the national central banks of the euro area in collaboration with the European Central Bank (ECB), on a sample of approximately 150 banks from all euro area countries, including the four significant credit institutions in Greece.

<sup>&</sup>lt;sup>18</sup> The average of responses in the first and second quarter of 2025 was 3.50, compared with 3.0 in the fourth quarter of 2024. It is noted that the average of banks' responses is on a scale of 1 to 5, where: 1=lending standards "tightened considerably", 2="tightened somewhat", 3="remained basically unchanged", 4="eased somewhat" and 5="eased considerably".

interest rate on outstanding loans to NFCs fell by 102 bps to 4.2% over the same period (from 5.2% in December 2024, see Chart II.7).



More favourable financing conditions and improved borrowing costs for businesses are also reflected in the composite cost-of-borrowing indicator for NFCs, as calculated by the ECB. <sup>19</sup> For Greece, this indicator fell by 108 bps during the first eight months of 2025 (from 4.99% in December 2024 to 3.91% in August 2025), while the corresponding euro-area average declined by 90 bps (from 4.36% in December 2024 to 3.46% in August 2025). This indicator, although still higher in Greece than in most euro area countries, has been converging towards the euro area average since the summer of 2024. In particular, during the first eight months of 2025, the gap between Greece and the euro area narrowed, with the differential standing at 45 bps in August 2025 (down from 63 bps in December 2024).

The ratio of NFC financing to GDP increased slightly to 32.1% in June 2025, up from 31.3% in December 2024 and 30.3% in June 2024 (see Chart II.8).

Challenges for enterprises are linked to the uncertainty caused by the revised US trade policy and the intensification of geopolitical risks. Such uncertainty is fuelled by the possibility of a disruption of global supply chains, lower trade flows and investment, re-ignition of inflationary pressures and a global economic downturn. The potential impact on Greece, however, should be limited and milder compared with the European average. In particular, the Greek economy and businesses are expected to be impacted to the extent that the slowdown in international trade affects key European markets and, consequently, reduces demand for Greek goods and services. Moreover, broader uncertainty in international markets may weigh on foreign direct investment, adversely affecting investor confidence and delaying business decisions, thereby denting Greece's growth momentum.

Regarding the future developments and outlook, the expected rise in Greek GDP in 2025 is likely to support a sustained increase in bank lending to NFCs. Moreover, the lower cost of financing following the pass-through of ECB rate cuts to bank lending rates, combined with the continued

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<sup>&</sup>lt;sup>19</sup> ECB Bank interest rates dashboard - MFI interest rates and ECB cost of borrowing indicators - methodological note.

improvement in the fundamentals of the domestic banking sector and the positive outlook for the Greek economy, is expected to foster further credit expansion to NFCs. Accelerating the absorption of RRF funds remains critical for enhancing corporate resilience and mitigating potential market disruptions. The implementation of the planned investments and reforms under the RRF is expected to narrow the investment gap, strengthen potential output and the structural competitiveness of the economy, and increase its overall resilience. Additional new initiatives for the creation of modern financing tools – such as new co-financed loan, guarantee and micro-finance programmes under the 2021-2027 National Strategic Reference Framework (NSRF); funding programmes through the Hellenic Development Bank, etc. – are also expected to benefit credit supply and investment financing in the near future.

## DEVELOPMENTS IN DOMESTIC AND INTERNATIONAL MONEY AND **CAPITAL MARKETS**

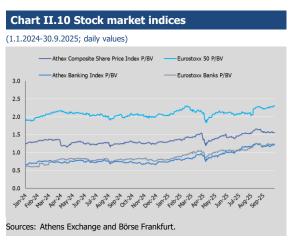
In the first nine months of 2025, equity markets recorded significant gains, with stock indices worldwide reaching new historical highs, although periods of elevated volatility were observed.

More specifically, the rise in trade protectionism and the imposition of tariffs by the United States (US) initially led to a sharp increase in volatility in money and capital markets (e.g. in April 2025, see Chart II.9). However, the rapid conclusion of trade agreements with several trade partners, including the European Union (EU), helped reduce uncertainty and led to a gradual normalisation. At the same time, the euro appreciated against the US dollar by 13.3% from the beginning of the year to 30 September 2025.



In Greece, the Athens Composite Share Price Index (ATHEX) rose by 38.4% from the beginning of the year to 30 September 2025, reaching a new fifteen-year high on 14 August 2025 (2,135.29 points) and outperforming most European stock market indices. Contributing factors included the favourable macroeconomic environment, successive upgrades of Greece's sovereign credit rating,<sup>20</sup> fiscal stability, as well as a significant improvement in the banking sector's fundamentals. It is worth noting that the banking sector was the main driver of the rally (see Box II.1). At the same time, the submission of a voluntary public offer by the Euronext Group to acquire all shares of "Hellenic Exchanges - Athens Stock Exchange" further strengthened confidence in the outlook for the Greek capital market.21

The price-to-book value (P/BV) ratio of European equities increased to 2.31 in September 2025, up from 2.04 in December 2024, while the corresponding ratio for the Athens Composite Share Price Index (ATHEX) also rose to 1.56 from 1.3, though remaining below the European average. In contrast, the P/BV ratio of Greek banks reached 1.22 in September 2025, converging with the corresponding European banking sector average (1.24 – see Chart II.10).

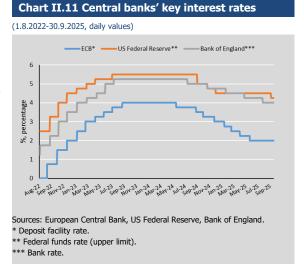


<sup>&</sup>lt;sup>20</sup> DBRS Morningstar, 9 May 2025: rating confirmed at BBB, stable outlook; Fitch, 16 May 2025: BBB-, positive outlook, upgraded from BBB-, stable outlook; S&P, 18 April 2025: BBB, stable outlook, upgraded from BBB-, positive outlook; Moody's, 14 March 2025: Baa3, stable outlook, upgraded from Ba1, positive outlook; and Scope Ratings, 6 December 2024: BBB, stable outlook, upgraded from BBB-, positive outlook.

21 The voluntary public offer by Euronext to Hellenic Exchanges (ATHEX).

The gradual reduction of interest rates by the ECB, the Bank of England and the US Federal Reserve (Fed), which began in June 2024, continued – with some divergences – throughout the first nine months of 2025.

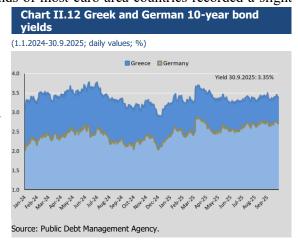
Specifically, the ECB reduced the deposit facility rate by a cumulative 200 bps to 2% between June 2024 and June 2025,<sup>22</sup> taking into account the easing of inflationary pressures. The Bank of England lowered Bank Rate by a total of 125 bps to 4% by August 2025, amid concerns about sluggish growth in the UK economy. The US Federal Reserve, after cutting the target range for the federal funds rate by a cumulative 100 bps in 2024 to 4.25%-4.5%, implemented only one additional rate cut of 25 bps in September 2025 (see Chart II.11).



During the period from January to 30 September 2025, the yields on ten-year sovereign bonds of most euro area countries recorded a slight

increase, amid concerns about the fiscal positions and debt-servicing capacity of Member States, as well as heightened uncertainty in the global macroeconomic and financial environment.

A similar trend was observed in the yields of Greek government securities, which increased from January to September 2025. However, the spread between the 10-year Greek sovereign bond and the corresponding German Bund narrowed from 85 bps at the beginning of January 2025 to 67 bps on 30 September 2025 (see Chart II.12).



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 $<sup>^{22}</sup>$  The ECB successively cut the deposit facility rate by 25 bps on 12 June 2024; 18 September 2024; 23 October 2024; 18 December 2024; 5 February 2025; 12 March 2025; 23 April 2025; and 11 June 2025.

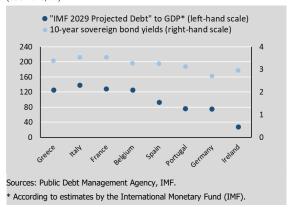
The yield on 10-year sovereign bonds relative to the expected debt-to-GDP ratio was lower in

Greece than in Slovakia, France, Italy and Lithuania. The International Monetary Fund's projection of a significant further decline in Greece's debt-to-GDP ratio to 125% by the end of 2029 has contributed to 10-year Greek sovereign bond yields remaining slightly below those of the corresponding Italian and French bonds (see Chart II.13).

Greek bank bond yields declined slightly from January to September 2025 (see Charts II.14 and II.15). Credit rating upgrades, combined with strong profitability, further improvement in asset quality and the timely achievement of



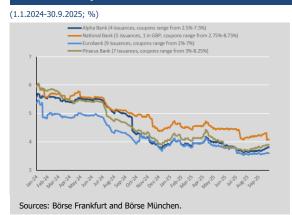
(30.9.2025; %)

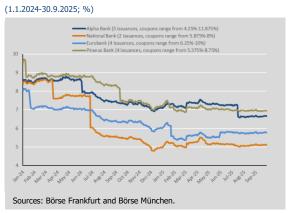


the Minimum Requirement for own funds and Eligible Liabilities (MREL) target, provided renewed momentum for attracting investment capital.<sup>23</sup> In this context, during January-September 2025, Greek banks raised a total of approximately EUR 4.3 billion through bond issuances, with an average coupon of 3.2% for senior preferred bonds, 4.3% for Tier 2 instruments and 6.7% for Additional Tier 1 instruments.



Chart II.15 Evolution of yields on subordinated and perpetual bonds issued by Greek banks





In conclusion, the risk of an abrupt correction in global capital markets remains exceptionally high. Moreover, uncertainty persists in anticipation of the finalisation of trade agreements, as do geopolitical tensions and ongoing conflicts in Ukraine and the Middle East. Lastly, concerns have arisen about political stability and fiscal conditions in several countries, partly due to increased defence spending. The rally in gold prices, which continues to break all-time highs, partly reflects investors' search for safe-haven assets.

<sup>&</sup>lt;sup>23</sup> In line with best common practices followed by investment funds (e.g. mutual funds, other institutional investors, etc.), a prerequisite for investing in a financial instrument is that the issuer of the instrument has been assigned an investment-grade rating by at least two internationally recognized credit rating agencies.

## Box II.1 Bank stocks' performance in Southern Europe

Bank stocks in Southern Europe recorded significant gains during the January-September 2025

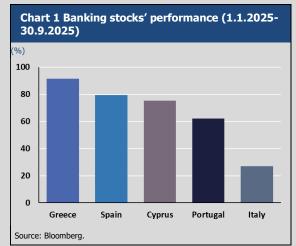
period (see Chart 1), primarily due to improvements in their fundamentals, a favourable financial and fiscal environment, and upgrades to the credit ratings of the respective countries.<sup>1</sup> High bank profitability, together with enhanced resilience supported by strong capital adequacy and improvements in asset quality due to a substantial reduction in non-performing loans (particularly in Greece, Italy and Cyprus), contributed positively to the stock market performance of these institutions.

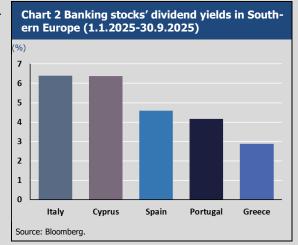
Specifically, strong profitability was driven by higher interest income, more efficient management of operating costs and a diversification of non-interest income sources, such as fees/commissions and asset management services. As a result, banks rewarded their shareholders with high dividend yields (see Chart 2) and share buyback programs, making their equity securities even more attractive for investment.

The positive macroeconomic outlook of the countries of Southern Europe, combined with a gradual increase in business and consumer activity, improved the investment climate.

In this context, bank stock valuations offered

additional upside potential, further strengthening the sector's investment momentum. However, it should be noted that the medium-term outlook largely depends on the international macroeconomic and financial environment, as challenges related to geopolitical tensions and uncertainty stemming from rising trade protectionism could adversely affect the economic growth of these countries, also impacting their financial systems.





<sup>&</sup>lt;sup>i</sup> In 2025, international credit rating agencies upgraded the creditworthiness of Southern European countries:

 $Greece: S\&P, BBB\ from\ BBB-,\ stable\ outlook,\ 18\ April\ 2025\ /\ Moody's,\ Baa3\ from\ Ba1,\ positive\ outlook,\ 14\ March\ 2025.$ 

Italy: Fitch, BBB+ from BBB, stable outlook, 19 September 2025 / S&P, BBB+ from BBB, stable outlook, 11 April 2025.

Spain: Fitch, A from A-, stable outlook, 26 September 2025 / Moody's, A3 from Baa1, stable outlook, 26 September 2025 / S&P, A+ from A, stable outlook, 12 September 2025.

Cyprus: DBRS, A from A(low), stable outlook, September 19, 2025.

Portugal: Fitch, A from A-, stable outlook, 12 September 2025 / S&P, A+ from A, stable outlook, 29 August 2025 / DBRS, A(high) from A, stable outlook, 17 January 2025.

## III. THE BANKING SECTOR

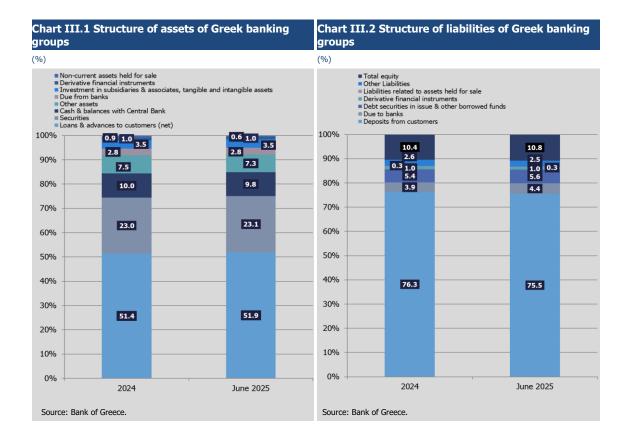
## 1. KEY BALANCE SHEET FIGURES

In June 2025, Greek banking groups' assets stood at EUR 352.6 billion, up by 2.2% (or EUR 7.6 billion) compared to December 2024 (see Table III.1).

(EUR million)					
	2024		June 2025		Change
Assets		%		%	
Cash & balances with Central Bank	34,340	10.0	34,493	9.8	153
Due from banks	9,676	2.8	9,734	2.8	57
Loans & advances to customers (net)	177,270	51.4	183,001	51.9	5,730
Derivative financial instruments	3,591	1.0	3,527	1.0	-64
Securities	79,377	23.0	81,574	23.1	2,197
Investment in subsidiaries & associates, tangible and intangible assets	11,954	3.5	12,295	3.5	342
Non-current assets held for sale	3,037	0.9	2,148	0.6	-889
Other assets	25,702	7.5	25,788	7.3	86
Total	344,947	100.0	352,558	100.0	7,612
	202	4	June 2	025	Change
Liabilities		%		%	
Deposits from customers	263,186	76.3	266,221	75.5	3,036
Due to banks	13,598	3.9	15,471	4.4	1,873
Derivative financial instruments	3,585	1.0	3,365	1.0	-220
Debt securities in issue & other borrowed funds	18,584	5.4	18,493	5.2	-91
Liabilities related to assets held for sale	1,186	0.3	1,178	0.3	-8
Other liabilities	9,083	2.6	9,848	2.8	764
Total contr.	35,724	10.4	37,982	10.8	2,258
Total equity	,				
Total	344,947	100.0	352,558	100.0	7,612

Specifically, changes in assets' volumes and composition (see Chart III.1) are mainly attributed to:

- (i) An increase of EUR 5.7 billion in net loans, as loan disbursements exceeded the reduction of balances due to loan repayments. As a result, the ratio of net loans to total assets increased (June 2025: 51.9%, December 2024: 51.4%).
- (ii) A rise of EUR 2.2 billion in debt securities, mainly due to an increase in foreign government bonds, resulting in a marginal growth of the share of debt securities in total assets (June 2025: 23.1%, December 2024: 23.0%).



On the liabilities side, the most significant developments (see Chart III.2) were as follows:

- (i) An increase of EUR 3.0 billion in deposits from customers primarily in Greece. Nevertheless, the ratio of customer deposits to total liabilities decreased (June 2025: 75.5%, December 2024: 76.3%).
- (ii) An increase of EUR 2.3 billion in equity, mainly due to a rise in retained earnings and the issuance of Additional Tier 1 capital instruments. As a result, the ratio of equity to total liabilities increased (June 2025: 10.8%, December 2024: 10.4%).
- (iii) An increase in amounts due to banks by EUR 1.9 billion, owing to a rise in repurchase agreements. Consequently, the ratio of amounts due to banks over total liabilities increased (June 2025: 4.4%, December 2024: 3.9%).

#### 2. RISKS

#### 2.1 CREDIT RISK

## **Evolution of key figures**

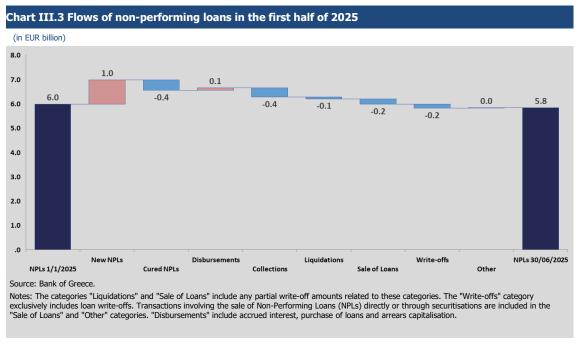
In the first half of 2025, credit institutions recorded a marginal improvement in the quality of their loan portfolios. At the end of the first half of 2025, the total stock of non-performing loans (NPLs) amounted to EUR 5.8 billion, down by 2.4% (or EUR 145 million) compared to end-2024 (EUR 6 billion), based on individual on-balance-sheet data<sup>24</sup> (see Table III.2). It should be noted that the cumulative decrease in non-performing loans (NPLs) from their peak level in March 2016 reached 94.5%, corresponding to a decline of EUR 101.4 billion.

Table III.2 Key figures – Total portfolio		
(in EUR million; on-balance-sheet items)	Dec. 2024	June 2025
Breakdown of NPLs		
Total loans	158,797	163,596
Performing loans	152,808	157,753
Non-performing loans	5,988	5,843
Unlikely-to-pay	2,015	1,778
Past due > 90 days	2,395	2,405
91-180 days	310	411
181-360 days	324	353
>1 year	1,761	1,642
Denounced loans	1,579	1,661
Breakdown of forborne loans		
Forborne loans	5,459	4,514
Performing forborne loans	3,405	2,615
Non-performing forborne loans	2,055	1,899
Breakdown of impairment losses and collateral		
Accumulated provisions for non-performing loans	2,441	2,434
Total collateral	99,285	97,615
Collateral for performing loans	95,231	93,691
Collateral for non-performing loans	4,054	3,925
Unlikely-to-pay	1,392	1,241
Past due > 90 days	1,546	1,503
Denounced loans	1,116	1,180
Collateral for non-performing loans under restructuring	1,398	1,275
Breakdown of non-performing loan flows and write-offs	Dec. 2024	June 2025
Flows of non-performing loans during the period	1,025	564
Flows to performing loans	-1,314	-424
Flows to non-performing loans	2,339	988
Write-offs	419	162
of which write-offs of denounced loans	304	79
Source: Bank of Greece.		

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<sup>&</sup>lt;sup>24</sup> On a consolidated basis, the NPL stock amounted to EUR 6.4 billion, down by 1.6% or EUR 103 million, from EUR 6.5 billion in 2024

The drop in NPLs in the first half of 2025 was primarily driven by collections, sale of loans and write-offs by significant credit institutions<sup>25</sup> (see Chart III.3), while collateral liquidation remained limited.



However, it should be noted that the net inflow of new NPLs during the first half of 2025 – calculated as the sum of new NPLs and disbursements, minus reclassifications to performing status (see Chart III.3) – remained positive, despite the substantial volume of NPLs reclassified as performing.

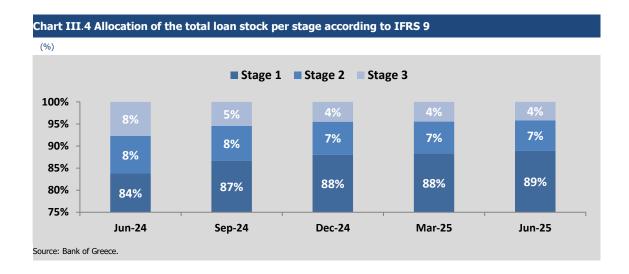
The ratio of NPLs to total loans in June 2025 stood at 3.6%, compared with 3.8% in 2024, as a result of both a decline in NPLs and credit expansion. This is the lowest level of the NPL ratio since Greece joined the euro area, having largely converged with the average for significant institutions within the Banking Union (June 2025: 2.2%<sup>26</sup>).

Furthermore, portfolio quality is evidenced by the allocation of the total loan stock across stages, classified according to credit risk levels, in compliance with International Financial Reporting Standard 9 (IFRS 9). In the first half of 2025, compared with 2024, there was a marginal decline in loans classified under Stage 3 – those with the highest credit risk – reflecting a decrease in NPLs. At the same time, the proportion of loans classified under Stage 1 – those with the lowest credit risk – increased, driven by credit expansion (see Chart III.4).

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<sup>&</sup>lt;sup>25</sup> It should be noted that portfolio sales include loan portfolios that have been transferred to the "Held For Sale" portfolio.

<sup>&</sup>lt;sup>26</sup> Supervisory data, ECB Banking supervision.



## Indicators for NPL monitoring and evaluation

Regarding the indicators used for monitoring and assessing NPL management as at end-2024, the following are observed (see Table III.3):

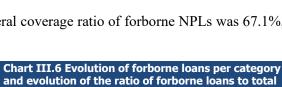
Table III.3 Total portfolio – Key indicators		
(%; on-balance-sheet items)	Dec. 2024	June 2025
Credit quality indicators		
NPL ratio	3.8	3.6
> 90 days past due	2.5	2.5
NPL structure		
Unlikely-to-pay	33.6	30.4
Past due > 90 days	40.0	41.2
91-180 days	5.2	7.0
181-360 days	5.4	6.0
>1 year	29.4	28.1
Denounced loans	26.4	28.4
Forborne to total loans		
Forborne loans	3.4	2.8
Forborne performing loans	2.1	1.6
Forborne non-performing loans	1.3	1.2
Coverage ratios and write-offs		
Coverage Ratio of NPLs by Provisions	40.8	41.6
Total write-offs to total loans	0.3	0.1
Total write-offs to NPLs	7.0	2.8
NPL collateral coverage ratio	67.7	67.2
Collateral coverage on forborne non-performing loans	68.0	67.1
Total NPL coverage (provisions + collaterals)	108.5	108.8
	Dec 2024	June 2025
Quarterly Default Rate and Recovery Rate (%)		
Default rate	0.4	0.3
Recovery rate of regular loan servicing	3.9	3.6
Cost of Credit risk		
Loan-loss impairment to net loans	0.7	0.7
Loan-loss impairment to total assets	0.4	0.4
ource: Bank of Greece.		

- The NPL coverage ratio (accumulated provisions) stood at 41.6% in June 2025, up from 40.8% in December 2024. As a result, the NPL coverage ratio in Greece now exceeds the average for significant institutions within the Banking Union (see Chart III.5). Specifically, accumulated provisions for covering NPLs in June 2025 amounted to EUR 2.4 billion, remaining almost unchanged compared to December 2024.
- Jun-24 Dec-24 Mar-25 Jun-25 Sep-24 The collateral coverage ratio of NPLs in Sources: Bank of Greece, EBA Risk Dashboard June 2025 was 67.2%, slightly lower than in December 2024 (67.7%), while the collateral coverage ratio of forborne NPLs was 67.1%, compared with 68% at the end of 2024.

40%

30%

- Total forborne loans<sup>27</sup> in June 2025 decreased to EUR 4.5 billion, from EUR 5.5 billion in December 2024, representing 2.8% of total loans (down from 3.4% in 2024, see Chart III.6). The decline in forborne loans is mainly due to transactions involving the sale of NPLs and loan write-
- It should be noted that 12.9% of forborne loans are in arrears for more than 90 days, up from 10.3% in December 2024.
- Among the decreases in the stock of NPLs registered in all loan portfolios in the first half of 2025, the most pronounced one was recorded in the business loan segment (-3.4% or EUR 124 million in absolute terms), specifically in loans to large corpo-

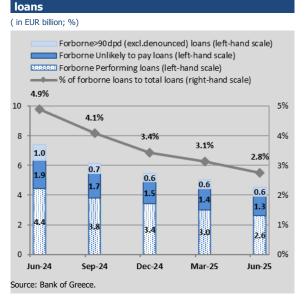


■ NPL coverage ratio (%) Greece

41.6%

Chart III.5 NPL coverage ratio

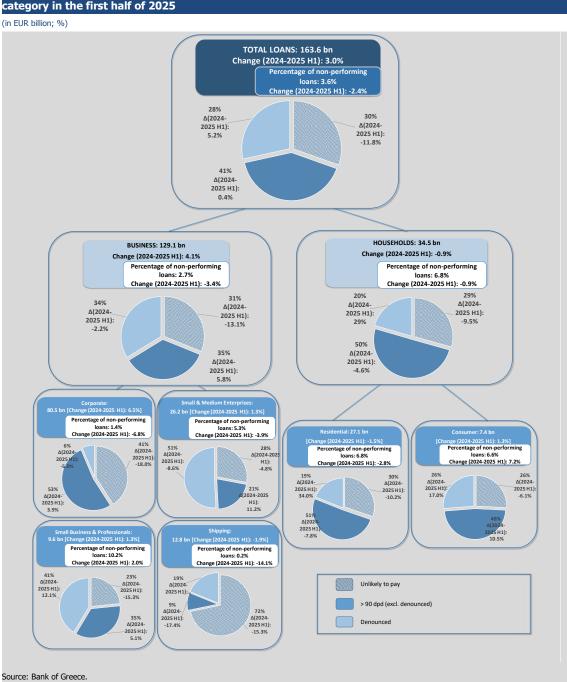
■ NPL coverage ratio (%) European Union



rates (-6.8% or EUR 82 million) and to small and medium-sized enterprises (-3.9% or EUR 56 million) (see Chart III.7).

<sup>&</sup>lt;sup>27</sup> Bank of Greece Executive Committee Act 175/2/29.7.2020 provides an indicative typology of forbearance and resolution and closure solutions for performing and non-performing loans.

# Chart III.7 Structure and evolution of Greek commercial banks' total loans and NPLs by loan portfolio category in the first half of 2025

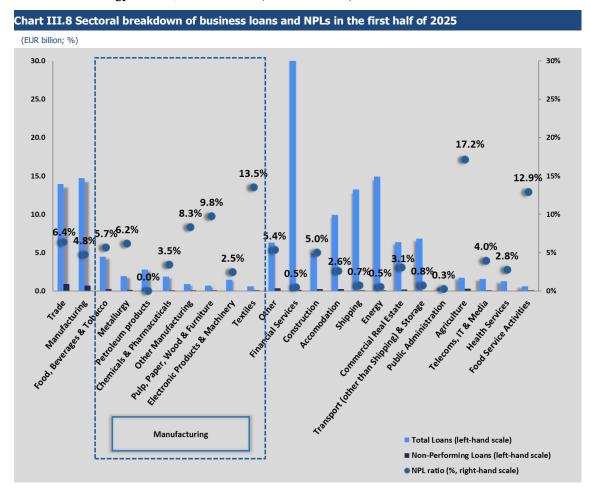


## **Credit Risk by Business Sector**

As of June 2025, the outstanding balance of on-balance-sheet financing to businesses amounted to EUR 129.1 billion on an individual basis.<sup>28</sup> The ratio of NPLs in the business portfolio was 2.7%, mainly due to the high percentage of NPLs among micro-enterprises (10.2%) and small and medium-sized enterprises (5.3%).

Regarding the sectoral composition of business financing in the Greek economy, the highest concentration is observed in financial services, accounting for 25% of total business credit. This is followed by the energy sector (12%), and the trade and manufacturing sectors, each representing 11% of the total.

The highest concentrations of NPLs are observed in agriculture (17.2%), food services (12.9%), trade (6.4%), construction (5.0%) and manufacturing (4.8%). Elevated NPL ratios are also recorded in certain manufacturing subsectors, such as the textiles (13.5%), paper, wood and furniture industries (9.8%), and other manufacturing activities (8.3%). However, these subsectors account for relatively small loan balances and therefore only have a limited impact on the overall NPL ratio of the manufacturing sector. Conversely, the lowest NPL ratios are seen in the financial services and energy sectors, both at 0.5% (see Chart III.8).



<sup>&</sup>lt;sup>28</sup> For the purposes of <u>Section 2.1</u> on Credit Risk, business loans are defined as the outstanding balances of credit facilities granted to: (a) self-employed professionals and micro-enterprises (SBPs); (b) small and medium-sized enterprises (SMEs); (c) large corporates; and (d) shipping companies.

Financial Stability Review October 2025 Source: Bank of Greece.

#### **Prospects**

The quality of banks' loan portfolios is expected to be mainly influenced by:

- the potential repercussions of elevated geopolitical risks and heightened global uncertainty on Greece's economic growth prospects, as well as on sectors with significant export orientation:
- the capacity of credit institutions to effectively and sustainably manage exposures to vulnerable borrower segments; and
- the attainment of credit institutions' targets for loan portfolio expansion, which is expected to contribute to an increase in the stock of performing loans.

#### 2.2 LIQUIDITY RISK

In the first half of 2025, Greek banking groups continued to benefit from favourable liquidity conditions, further tapping alternative sources of funding.



Specifically, deposits and repurchase agreements by non-financial corporations (including households) amounted to EUR 237.7 billion in June 2025, slightly above their December 2024 level (EUR 236.7 billion, see Chart III.9). Debt securities issued increased by EUR 2.2 billion (June 2025: EUR 21.2 billion, December 2024: EUR 19.0 billion). A rise was also recorded in liabilities

to other monetary financial institutions (June 2025: EUR 15.6 billion, December 2024: EUR 11.5 billion).

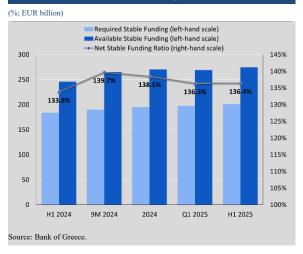
#### **Bank liquidity indicators**

In the first half of 2025, Greek banking groups maintained high liquidity levels. The Liquidity Coverage Ratio (LCR) stood at 212.3% in June 2025, compared with 217.6% in December 2024 (see Chart III.10), still more than double the minimum regulatory requirement of 100%. The decline in the LCR mainly reflects an increase in net liquidity outflows. The LCR for Greek banks remained markedly above the average level for significant institutions (SIs) within the Banking Union (157.84% for SIs in the first half of 2025).<sup>29</sup>

In addition, the Net Stable Funding Ratio (NSFR) stood at 136.4% in June 2025, compared with 138.5% in December 2024, reflecting the adequate funding of banks' long-term assets without requiring the excessive use of short-term funding (see Chart III.11). The minor decrease in the ratio was driven by increased flows to support the expansion of the loan portfolio. The NSFR for Greek banks remained above the corresponding average for SIs within the Banking Union (126.7% in the first half of 2025) 30. The supervisory requirement for the NSFR is set at 100%.







<sup>&</sup>lt;sup>29</sup> Supervisory data, ECB Banking Supervision.

<sup>&</sup>lt;sup>30</sup> Supervisory data, ECB Banking Supervision.

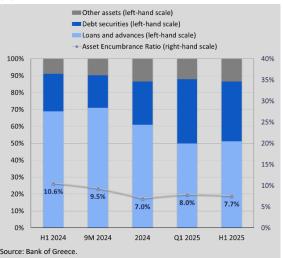
The Asset Encumbrance Ratio (AER) increased to 7.7% in June 2025, from 7.0% in December 2024, remaining significantly below the average for SIs in the Banking Union (16.4%<sup>31</sup> in the first half of 2025, see Chart III.12).

Regarding the structure of encumbered assets, loans and advances decreased by EUR 0.7 billion or 5.3%, while debt securities rose by EUR 3.2 billion or 56% between December 2024 and June 2025.

The loan-to-deposit ratio for households and non-financial corporations increased to 62.8%32 in June 2025, from 60.6\%33 in December 2024, remaining approximately 40 percentage points below the average ratio for SIs within the Banking Union (102.2%<sup>34</sup> in the first half of 2025).

#### Chart III.12 Asset Encumbrance Ratio — AER





The liquidity ratios of Greek banking groups, their smooth access to the interbank market following successive credit rating upgrades, as well as their low Asset Encumbrance Ratio have all strengthened their resilience to potential shocks.

<sup>&</sup>lt;sup>31</sup> Supervisory data, ECB Banking Supervision, Supervisory Banking Statistics for significant institutions - Second quarter 2025.

<sup>&</sup>lt;sup>32</sup> Supervisory data, ECB Banking Supervision, <u>Supervisory Banking Statistics for significant institutions - Second quarter 2025</u>.

<sup>&</sup>lt;sup>33</sup> Supervisory data, ECB Banking Supervision, <u>Supervisory Banking Statistics</u>, Fourth quarter 2024.

#### 2.3 MARKET RISK

The securities portfolio of Greek banks is mainly composed of Greek government securities, which account for around 43% on a consolidated basis.<sup>35</sup> Actually, the largest share (about 79%) of the Greek government bond portfolio held by credit institutions is composed of securities that are held to maturity and measured at amortised cost, rather than at fair value. Thus, daily price changes do not affect their book values, while at the same time it should be noted that banks also apply interest rate risk hedging strategies. In addition, foreign government bonds represent about 35% of the Greek banks' bond portfolio and have been on an upward trend.

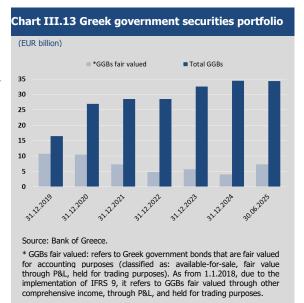
#### **Exposure to Greek government securities**

The total amount of Greek government securities (including Treasury bills) held by Greek banks in their portfolios amounted to EUR 34.3 billion in June 2025 (representing about 10% of their

assets), down by EUR 56 million (0.2%) compared to December 2024, and more than double the pre-pandemic level (EUR 16.5 billion in December 2019).

Specifically, the value of the portfolio of Greek government securities held by the banking sector in fair-valued<sup>36</sup> portfolios reached EUR 7.2 billion in June 2025, compared with EUR 4.1 billion in December 2024 (see Table III.4 and Chart III.13), up by 78.2%. The value of this portfolio as a percentage of banks' total assets increased to 2.1%, from 1.2% in December 2024.

It should be noted that, in analysing the interest rate risk of the total Greek government securities portfolio, based on its composition as of June 2025, a potential increase in the gen-



eral level of interest rates (risk-free rates) by 1 basis point (bp) (PV01) would result in a loss of EUR 27.2 million for all Greek banks, compared with a loss of EUR 26.9 million in December 2024. In the same vein, the effect of a potential increase in credit spreads by 1 bp (CS01) would lead to a loss of EUR 29.3 million in June 2025, compared with a loss of EUR 29.6 million in December 2024. However, it should be noted that the actual impact on banks' profits or capital would be limited to a loss of EUR 2 million in each case for the above-mentioned interest rate changes (PV01, CS01). This loss pertains only to the part of Greek government securities held in fair-valued portfolios (Fair value through Profit and Loss or through Other Comprehensive Income – OCI), for which any valuation changes are directly reflected in the income statement or capital.

<sup>&</sup>lt;sup>35</sup> Data in the Market Risk section have a cut-off date of 30.06.2025 and are drawn from supervisory data on a consolidated basis submitted by Greek credit institutions.

<sup>&</sup>lt;sup>36</sup> Based on IFRS 9, the assets classified in the following portfolios are fair-valued: Held For Trading – HFT, Fair Valued Through Profit and Loss – FVTPL, Mandatorily Through Fair Value – MTFV and Fair Valued Through Other Comprehensive Income – FVTOCI.

(EUR million)	2022	2022 2023		June 2025	% Change Dec. 2024-June 2025	
Total	56,030	66,768	82,304	84,739	3.0%	
Greek government securities	28,503	32,562	34,393	34,337	-0.2%	
of which Treasury Bills	2,632	3,031	1,588	1,562	-1.6%	
Foreign government bonds	15,240	18,160	26,227	28,302	7.9%	
Supranational bonds	700	1,125	1,751	1,603	-8.5%	
Bank bonds	5,283	7,015	8,821	8,395	-4.8%	
Corporate bonds	3,551	3,462	4,672	4,979	6.6%	
Other bonds	121	964	3,180	2,860	-10.0%	
Equities	694	822	813	1,033	27.1%	
Mutual fund units/shares	351	501	507	539	6.4%	
Participations	1,588	2,158	1,940	2,691	38.7%	
Portfolios held at fair value	11,532	12,651	13,283	18,130	36.5%	
Greek government securities	4,786	5,664	4,059	7,235	78.2%	
of which Treasury Bills	2,473	2,952	1,583	1,197	-24.4%	
Foreign government bonds	3,266	3,457	5,303	5,915	11.5%	
Supranational bonds	243	335	682	521	-23.6%	
Bank bonds	875	663	414	903	118.3%	
Corporate bonds	1,318	1,178	1,279	1,535	20.1%	
Other bonds	0	31	226	448	98.1%	
Equities	694	822	813	1,033	27.1%	
Mutual fund units/shares	351	501	507	539	6.4%	
Source: Bank of Greece.						

#### **Exposure to foreign government bonds**

The value of foreign government bonds held by banks amounted to EUR 28.3 billion as of June 2025. Foreign government bonds mainly concern issues by countries of the European Union (EU) and the Group of Ten (G10) and represent approximately 35% of the bond portfolio held by banks (8.1% of their assets). The majority of these bonds (79.1%) are held to maturity and are measured at amortised cost.

#### **Exposure to non-government bonds**

In addition to government bonds, banks hold in their portfolios bonds issued by supranational organisations, bank bonds, corporate bonds, and bonds issued by non-bank financial institutions. Specifically, in June 2025, the value of supranational bonds decreased by EUR 148.6 million (8.5%) to EUR 1.6 billion, bank bonds declined by EUR 426.2 million (4.8%) to EUR 8.4 billion, while corporate bonds increased by EUR 306.8 million (6.6%) to EUR 5 billion. At the same

time, banks also hold other bonds, primarily issued by non-bank financial institutions, amounting to EUR 2.9 billion.

#### Exposure to equities, mutual funds and participating interests

The value of equity securities, mutual fund shares/units and participating interests held by the banking sector as a percentage of its total assets recorded a small increase. Specifically, in June 2025 banks held equity securities, participating interests and mutual fund shares/units with a total value of EUR 4.3 billion, representing 1.2% of the banking sector's total assets, compared with EUR 3.3 billion in December 2024 (see Table III.4).

#### Exposure to foreign exchange risk

The open foreign exchange position of Greek banks, at system level,<sup>37</sup> amounted to EUR 481 million in June 2025, down by EUR 77 million compared to December 2024. As of June 2025, Greek banks mainly have open foreign exchange positions in US dollars (USD), amounting to EUR 104 million, in pounds sterling (GBP), amounting to EUR 41 million and in Swiss francs (CHF), amounting to EUR 20 million. Their relatively limited exposure to the above major currencies is due both to the fact that foreign currency-denominated assets are funded using deposits in the same currency, and to the use of foreign exchange derivative instruments (e.g. FX swaps, cross-currency swaps), which significantly mitigate foreign exchange risk. In addition, Greek banks are exposed to the local currencies of their subsidiaries' host countries, the foreign exchange risk of which is managed and hedged through derivative positions at the parent bank level. Compared to December 2024, banks' exposure to US dollars (USD) increased by EUR 48 million, while exposure to Swiss francs (CHF) decreased by EUR 39 million and to pounds sterling (GBP) by EUR 40 million.

#### Interest rate sensitivity of debt securities and derivatives

An interest rate risk analysis of the banking sector's securities and derivatives portfolio shows that an increase of 1 bp in interest rates (PV01) for fair-valued portfolios, whose fair value amounts to EUR 18.1 billion as of June 2025, would result in a loss of EUR 8.9 million. Regarding portfolios of securities and derivatives as a whole, i.e., assets valued both at fair value and at amortised cost, an increase of 1 bp in interest rates would imply potential losses of EUR 32.5 million based on June 2025 data. Similarly, a 1 bp widening of credit spreads (CS01) is estimated to cause a loss of EUR 5.7 million for the fair-valued portfolios, while the total potential loss across all portfolios would amount to approximately EUR 53 million. Greek banks maintain a portfolio of interest rate derivatives, primarily for economic hedging purposes. These instruments are generally simple in structure and are typically cleared through central counterparties or are involved in bilateral transactions governed by standardised counterparty risk mitigation agreements. These derivative positions help mitigate the overall interest rate sensitivity described above.

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<sup>&</sup>lt;sup>37</sup> For the calculation at system level, opposite positions in the same currency in different credit institutions are not netted. In addition, for the calculation of the open foreign exchange position, the larger of the buy (long) and sell (short) positions per currency is considered.

#### Capital requirements for market risk

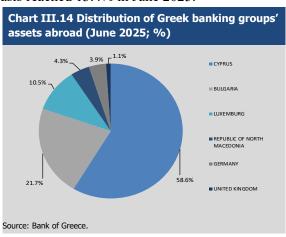
Total capital requirements for market risk rose to EUR 317.9 million in June 2025 (2.4% of total capital requirements), up from EUR 252.2 million in December 2024. This increase is mainly attributable to higher capital requirements for foreign exchange risk and interest rate risk. Capital requirements for market risk are distributed as follows: 54% for trading debt securities, 13% for equity securities, 23% for foreign exchange and 9% for commodities. Capital requirements for credit valuation adjustment (CVA) risk across the banking sector amounted to EUR 45.8 million in June 2025, compared with EUR 43.2 million in December 2024 (about 0.3% of total capital requirements).

#### 2.4 INTERNATIONAL ACTIVITY RISKS

In 2025, Greek banks stepped up their efforts to expand their international activities, tapping investment opportunities to further enhance their international presence. Specifically, in February 2025, Alpha Bank announced the acquisition of AstroBank through its subsidiary, Alpha Bank Cyprus.<sup>38</sup> Eurobank also acquired 100% of Hellenic Bank in Cyprus, following the completion of the squeeze-out procedure in June 2025.<sup>39</sup> Subsequently, in August, Eurobank announced the merger of its two Cypriot subsidiaries, namely Hellenic Bank and Eurobank Cyprus, as well as the change of the merged entity's name to Eurobank Limited.<sup>40</sup> Lastly, in September 2025, CrediaBank<sup>41</sup> announced an agreement for the potential acquisition of a 70.03% stake in HSBC Malta.<sup>42</sup>

The assets of Greek banks' subsidiaries and branches abroad stood at EUR 57.3 billion in June 2025, up by 4.6% compared to end-2024. Consequently, the share of international activities in the banking sector's total assets on a consolidated basis reached 13.4% in June 2025.<sup>43</sup>

Broken down by region, South-East (SE) Europe<sup>44</sup> accounts for 84.6% of the total assets of Greek banking groups' international activities as of June 2025, mostly located in Cyprus and Bulgaria (see Chart III.14). Financial centres, namely Luxembourg, Germany, and the United Kingdom represent 15.4% thereof, led by Luxembourg (10.5%). The share of SE Europe, where the highest number of business units and staff are concentrated, in Greek banks' deposits abroad is even larger (92.5%, see Table III.5).



<sup>&</sup>lt;sup>38</sup> As per the transaction terms, the acquisition perimeter excludes some of AstroBank's non-performing loans. Completion of the transaction is expected in the fourth quarter of 2025; see <u>Announcement of the agreement for the acquisition of AstroBank</u>.

<sup>&</sup>lt;sup>39</sup> Announcement for the completion of squeeze out procedure for the acquisition of the remaining shares of Hellenic Bank.

<sup>&</sup>lt;sup>40</sup> Announcement for the merger of Hellenic Bank with Eurobank Cyprus.

<sup>&</sup>lt;sup>41</sup> Formerly known as Attica Bank.

<sup>&</sup>lt;sup>42</sup> Announcement for the confirmation of the agreement regarding potential acquisition in HSBC Malta.

<sup>&</sup>lt;sup>43</sup> According to supervisory data submitted on the activity of credit institutions abroad through branches and subsidiaries, see <u>Bank of Greece Executive Committee Act 242/3/11.06.2025</u>.

<sup>44</sup> The activity of Greek banks in SE Europe concerns the following countries: Bulgaria, Republic of North Macedonia and Cyprus.

The profitability of banking subsidiaries and branches abroad rose sharply by 24%, reaching EUR 481 million in the first half of 2025, from EUR 387 million in the first half of 2024, mainly driven by the contribution of Hellenic Bank. The subsidiaries in Cyprus and Bulgaria were the main contributors, generating approximately 49% and 28%, respectively, of the total pre-tax profits in the first half of 2025. It should be noted that pre-tax profits of subsidiaries and branches abroad contributed 16.5% to the overall profitability of Greek banking groups.

(amounts in EUR million	1)						
Country	Assets	Gross loans	NPLs	NPL ratio (%)	Deposits	Number of business units	Number of employees
SE Europe	48,467	21,819	634	2.9%	38,790	329	7,742
Bulgaria	12,439	8,403	197	2.3%	9,393	200	3,737
Republic of North Macedo- nia	2,446	1,704	54	3.2%	1,843	56	966
Cyprus	33,582	11,712	383	3.3%	27,554	73	3,039
Financial cen- tres	8,804	5,460	43	0.8%	3,133	6	252
Germany	2,205	1,965	43	2.2%	92	1	13
United Kingdom	603	506	0	0.0%	497	1	83
Luxemburg	5,996	2,988	0	0.0%	2,544	4	156
TOTAL	57,270	27,279	677	2.5%	41,923	335	7,994

Gross loans stood at EUR 27.3 billion in June 2025. NPLs) amounted to EUR 677 million, representing 2.5% of the total loan portfolio. More specifically, the NPL ratio reached 1.8% for corporate loans, 3.3% for mortgage loans and 4.1% for consumer loans. The provisional coverage ratio of NPLs stood at 68.9%.

Deposits rose to EUR 41.9 billion in June 2025, remaining almost unchanged compared to December 2024, while the loan-to-deposit ratio stood at 65.1%.

The international activities of Greek banking groups help diversify their sources of income and mitigate concentration risk, which both enhance the viability of their business plans in the medium term. In this context, the forthcoming accession of Bulgaria to the euro area as of 1 January 2026 constitutes a positive development.

#### 3. RESILIENCE

#### 3.1 PROFITABILITY

In the first half of 2025, Greek banks recorded profits after taxes and discontinued operations amounting to EUR 2.5 billion, compared with profits of EUR 2.4 billion in the first half of 2024 (see Table III.6). This development was supported by extraordinary deferred tax income arising from the merger by absorption of Alpha Services and Holdings by Alpha Bank, within the context of the corporate transformation (hive-down reversal).

(EUR million)			
	First half	First half	Change (%)
	2024	2025	Change (%)
Operating income	5,781	5,876	1.6
Net interest income	4,443	4,321	-2.8
- Interest income	8,077	7,561	-6.4
- Interest expenses	-3,633	-3,240	-10.8
Net non-interest income	1,338	1,555	16.2
- Net fee income	994	1,136	14.3
- Income from financial operations	192	245	27.5
- Other operating results	152	174	14.4
Operating costs	-1,927	-2,169	12.6
Staff costs	-992	-1,130	13.9
Administrative costs	-616	-702	13.9
Depreciation	-318	-337	5.7
Net income (operating income less costs)	3,854	3,707	-3.8
Impairment charges	-601	-674	12.1
Other impairment losses	-136	-92	-32.5
Non-recurring profits/losses	-60	-24	-61.0
Pre-tax profits (+)/losses (-)	3,057	2,917	-4.6
Taxes	-740	-459	-38.1
Profits(+)/Losses(-) from discontinued operations	35	4	-88.6
After tax profits (+)/losses (-)	2,351	2,463	4.7
Source: Financial statements for the four significant institutions (SIs) and supervise	sory data for the less significa	nt institutions (LSIs).	

More specifically, in the first half of 2025, the operating income of Greek banking groups increased by 1.6% compared to the first half of 2024. Net interest income decreased by 2.8%. Interest income declined despite credit growth, affected by the ECB's policy rate cuts that started in June 2024 and continued throughout the first half of 2025. The decline in interest expenses was also driven by the same factor. Consequently, the net interest margin stood at 2.5%, down from 2.8% in the corresponding period of 2024, yet remaining above the corresponding European average for significant institutions within the Banking Union (1.5%).

Net fee and commission income rose by 14.3%, supported by fees from portfolio management and other fee and commission income. As a result, core operating income (i.e. net interest income and net fee and commission income) grew by 0.4%.

Income from financial operations increased in the first half of 2025, due to trading portfolio gains. Additionally, other operating income rose, reflecting the fact that the first half of 2024 had been

weighed down by non-recurring expenses, including costs associated with HFSF's divestment from several significant banks.

Operating costs grew by 12.6%, mainly due to higher staff and administrative costs. Operating expense grew faster than operating income, leading to a deterioration of Greek banks' cost-to-income ratio to 36.9% in the first half of 2025, although it remained significantly lower than the European average (54.2%, see Table III.7).

#### **Table III.7 Profitability indicators**

(%)	Gre	Banking Union <sup>1</sup>		
	First half 2024	First half 2025	First half 2025	
Net interest margin	2.8	2.5	1.5	
Operating costs/Total assets	1.2	1.2	0.6	
Cost-to-income ratio	33.3	36.9	54.2	
Cost of credit risk	0.8	0.7	0.5	
Return on Assets (RoA) <sup>2,3</sup>	1.5	1.4	0.7	
Return on Equity (RoE) <sup>2,3</sup>	13.8	13.0	10.1	

Sources: Financial statements for the four significant institutions (SIs) and supervisory data for the less significant institutions (LSIs). Single Supervisory Mechanism (SSM) – Supervisory Banking Statistics.

The cost of credit risk<sup>45</sup> marginally decreased in the first half of 2025 to 0.7% of net loans, primarily reflecting the improved quality of the loan portfolio. In absolute terms, impairment charges stood at EUR 674 million, compared with EUR 601 million in the first half of 2024. (see Table III.7).

As a result, Greek banking groups recorded profit after taxes and discontinued operations, while the RoA and RoE ratios amounted to 1.4% and 13.0% respectively.

Factors that should affect the profitability outlook include: (a) the negative impact on net interest income of the preceding ECB key interest rate cuts; (b) the achievement of banks' operational targets for new loan disbursements to non-financial corporations and households; (c) the adverse effects of US tariffs on the course of the European and Greek economies, which may weigh on demand for new loans and/or increase credit risk; (d) the diversification of banks' income sources through acquisitions and the contribution of some banking groups' international expansion; and (e) developments in the financial situation of vulnerable households and businesses that may affect banks' credit risk costs.

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 $<sup>^{\</sup>rm 1}$  Banking groups directly supervised by the ECB.

<sup>&</sup>lt;sup>2</sup> Indicators are calculated using total assets at the end of the corresponding period.

<sup>&</sup>lt;sup>3</sup> RoA and RoE indicators are calculated using profits/losses after tax and discontinued operations.

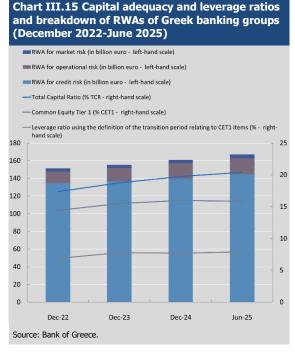
<sup>&</sup>lt;sup>45</sup> The cost of credit risk is the ratio of credit risk provisions to loans after accumulated provisions.

#### 3.2 CAPITAL ADEQUACY

The capital adequacy ratios of Greek banking groups remained at high levels in the first half of 2025. Specifically, the Common Equity Tier 1 (CET1) ratio on a consolidated basis declined marginally to 15.8% in June 2025, from 16% in December 2024, while the Total Capital Ratio (TCR) increased to 20.4%, from 19.8% in December 2024 (see Chart III.15). 46 The change in ratios mainly reflects the issuance of capital instruments which are accounted for as equity but do not form part of CET1 capital. In particular, during the first half of 2025, banks issued Additional Tier 1 (AT1) instruments amounting to EUR 1 billion and Tier 2 instruments totalling EUR 900 million.<sup>47</sup> Specifically, as of June 2025, the prudential

own funds of Greek banks increased by 7.2%,

reaching EUR 34.1 billion, as the positive im-



pact from profits after tax and discontinued operations and the issuance of capital instruments accounted for as equity, offset the negative impact from partial retainment of earnings for future distribution, as well as from the gradual amortisation of Deferred Tax Credits (DTCs), which has already been accelerated under the DTC acceleration plan. Nevertheless, as of June 2025, DTCs amounted to EUR 11.8 billion, representing 44.6% of CET1 capital (compared with 47.5% in December 2024).

Risk-Weighted Assets (RWAs) increased by 3.8% in June 2025 compared to December 2024. In detail, credit risk-weighted assets rose by 3.7%, mainly due to credit expansion and the implementation of Regulation (EU) 2024/1623 (CRR III), which introduces greater risk sensitivity in the calculation of credit risk. Credit risk-weighted assets accounted for 86.5% of total RWAs, reflecting the traditional business model of Greek banks, which remains focused on traditional banking and mainly lending activities. Operational risk-weighted assets constitute the second largest share of total risk-weighted assets, corresponding to 10.9% of total RWAs. Market risk-weighted assets accounted for only 2.6% of total RWAs.

The leverage ratio<sup>48</sup> increased slightly to 7.9% in June 2025, from 7.7% in December 2024, due to a greater rise in Tier 1 capital (by EUR 1.78 billion) than in total assets, as calculated for Leverage Ratio purposes. It should be noted that the leverage ratio of the Greek banking system

<sup>&</sup>lt;sup>46</sup> The CET1 ratio is slightly below the average level for SIs within the Banking Union (CET1: 16.1% in June 2025), while the Total Capital Ratio has converged towards the EU average (TCR: 20.2% in June 2025, see <u>Supervisory data</u>, ECB Banking Supervision).

<sup>&</sup>lt;sup>47</sup> Some of these issuances replaced earlier ones (EUR 200 million).

<sup>&</sup>lt;sup>48</sup> Defined as the ratio of Tier 1 capital (using the transitional definition of Tier 1 capital) over the Leverage Exposure Measure, as calculated according to the relevant articles of Regulation (EU) No 575/2013 and Regulation 2019/876 for Leverage Ratio purposes.

remains well above the average for significant institutions within the Banking Union (June 2025: 5.9%<sup>49</sup>).

Factors affecting the outlook for Greek banks' capital adequacy include: (a) maintaining the capacity for internal capital generation in an environment of lower key interest rates and accelerated DTC amortisation; (b) the implementation of capital enhancement actions (e.g. synthetic securitisations) and the ability to issue capital instruments (Additional Tier 1, Tier 2); (c) portfolio quality and its impact on risk-weighted assets; (d) profit distribution/dividend policy.

At the same time, Greek banks meet their Minimum Requirements for Own Funds and Eligible Liabilities (MREL). In this context, in addition to issuing capital instruments (AT1 and Tier 2), banks regularly issue senior unsecured bonds eligible for MREL purposes, thereby diversifying their funding sources.

<sup>&</sup>lt;sup>49</sup> <u>Supervisory data, ECB Banking Supervision</u>.

#### IV. MACROPRUDENTIAL POLICY

#### 1. SETTING THE COUNTERCYCLICAL CAPITAL BUFFER RATE

## 1.1 METHODOLOGY FOR THE APPLICATION OF THE COUNTERCYCLICAL CAPITAL BUFFER IN GREEC

The Bank of Greece, in accordance with Executive Committee Act 235/1/07.10.2024, assesses on a quarterly basis the intensity of cyclical systemic risks and the appropriateness of the countercyclical capital buffer (CCyB) rate for Greece and sets or adjusts it, if necessary.

The CCyB aims to prevent or mitigate the build-up of cyclical systemic risks and address the procyclicality of credit growth and leverage, i.e. to ensure an appropriate level of credit growth and leverage throughout the economic and financial cycle. The CCyB rate ranges from 0% to 2.5%, calibrated in steps of 0.25 percentage points or multiples of 0.25 percentage points.<sup>50</sup> The CCyB consists of Common Equity Tier 1 (CET1) capital and is expressed as a percentage of the total risk exposure amount of institutions that are exposed to credit risk in Greece.<sup>51</sup>

The setting of the CCyB rate above zero commences during the phase of the economic and financial cycle in which the level of risk is at a standard level (standard risk environment), i.e. when risks are neither subdued nor particularly elevated, in order to help institutions absorb any potential losses and ensure the smooth flow of financing to the real economy in the event of unexpected shocks (see Chart IV.1). The positive neutral rate of the countercyclical capital buffer (PN CCyB) is gradually built-up towards achieving the target rate.

In the upward phase of the economic cycle, the setting of the CCyB rate takes into account the PN CCyB target rate. Once the cyclical systemic risk assessment by the Bank of Greece indicates a build-up of cyclical systemic risks, the Bank of Greece decides, at its discretion, to increase the CCyB rate above the PN CCyB target rate with a view to preventing or mitigating the build-up of cyclical systemic risks and excessive credit growth and leverage.

Conversely, during the downward phase of the economic cycle or in the event of shocks, the CCyB's partial (reduction) or full release (setting to zero) may encourage credit supply, thereby contributing to the smooth financing of the real economy. The CCyB's partial or full release takes immediate effect as soon as it is announced, while any increase is applicable 12 months at the latest from the date of its announcement.

During the phase in which the economy or the financial system recovers from severe endogenous or exogenous shocks, or in the wake of a systemic crisis, the CCyB rate is set at zero to encourage the supply of credit, thereby contributing to the smooth flow of financing to the real economy. The CCyB rate remains at zero until the intensity of cyclical systemic risks is assessed to be at a standard level.

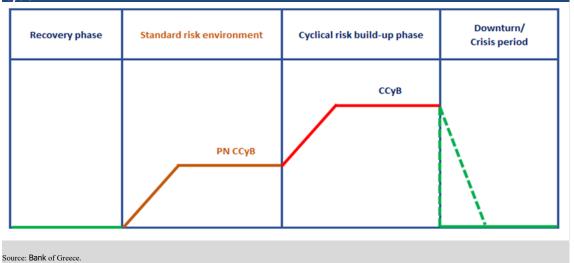
By Executive Committee Act 235/1/07.10.2024,<sup>52</sup> the Bank of Greece laid down the implementation procedure for applying, and the methodology for setting, the CCyB rate in Greece and set the PN CCyB target rate for Greece at 0.5%.

<sup>&</sup>lt;sup>50</sup> The Bank of Greece, as national designated authority, may set the CCyB rate in excess of 2.5%, where justified on the basis of the considerations set out in Article 130 of Law 4261/2014 with regard to the calculation of the institution-specific countercyclical capital buffer rate.

<sup>&</sup>lt;sup>51</sup> The total risk exposure amount is calculated in accordance with Article 92(3) of Regulation (EU) No 575/2013.

<sup>&</sup>lt;sup>52</sup> "Application of the countercyclical capital buffer in Greece – Repeal of Executive Committee Act 202/1/11.03.2022".

Chart IV.1 Stylised representation of the build-up and release of the countercyclical capital buffer (CCyB) depending on the intensity of cyclical systemic risks across the four phases of the economic and financial cycle



1.2 ASSESSMENT OF CYCLICAL SYSTEMIC RISKS

The quarterly assessment of the intensity of cyclical systemic risks and the appropriateness of the CCyB rate in Greece takes into account, inter alia, the "standardised credit-to-GDP gap", as defined in Recommendation ESRB/2014/1. This indicator reflects the deviation of the ratio of credit to GDP from its long-term trend. In more detail, the credit-to-GDP ratio is initially calculated as the sum of short and long-term debt securities and loans (i.e. credit), as reported in the financial liabilities of the private non-financial sector, to the sum of the figures of the last four quarterly observations of GDP (in nominal terms, non-seasonally adjusted). Subsequently, the long-term trend of the credit-to-GDP ratio is calculated by applying the Hodrick-Prescott filter. The "standardised credit-to-GDP gap" is the difference between the credit-to-GDP ratio and its long-term trend. A high positive value of the "standardised credit-to-GDP gap" indicates excessive credit growth relative to GDP growth, which poses increased risks to the financial system, thus requiring the setting of the CCyB rate at a level above 0%. In addition to the "standardised credit-to-GDP gap", the Bank of Greece also examines a number of additional indicators to monitor the build-up of cyclical systemic risks. These indicators are grouped into six regions:

- Credit developments, where the outstanding credit-to-GDP ratio at current prices, the growth of loans to households and the growth of credit to non-financial corporations are monitored;
- Private sector indebtedness, where the growth of credit to the domestic private sector, the
  ratio of outstanding credit to non-financial corporations to GDP and households' debt-toincome ratio and debt-service-to-income ratio at origination (DSTI-O) for loans secured by
  residential real estate are monitored;
- Potential overvaluation of property prices, where the rise in the price index of residential and commercial real estate (offices and retail) is monitored;
- The strength of bank balance sheets, where the net interest margin (NIM), the growth of risk weighted assets, the leverage ratio and the loan-to-deposit ratio are monitored;

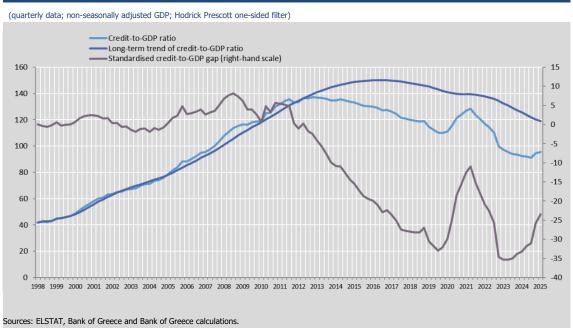
<sup>&</sup>lt;sup>53</sup> For definitions, see <u>Bank of Greece Executive Committee Act 235/1/07.10.2024</u>.

- External imbalances, as reflected in the evolution of the current account balance-to-GDP ratio:
- Potential mispricing of risk, where the ATHEX Composite Share Price Index and the FTSE/ATHEX bank index are monitored.

In Greece, the "standardised credit-to-GDP gap" has remained in negative territory since 2012. In the first quarter of 2025, it stood at -23.4 percentage points, compared with -25.8 in the previous quarter, mainly due to nominal GDP growth (see Chart IV.2). It should be noted that the first quarter of 2025 is the latest available quarter for the financial liabilities of the private non-financial sector. For this value of the "standardised credit-to-GDP gap", the benchmark buffer rate (buffer guide), as defined in para. 3(a) of recommendation B of Recommendation ESRB/2014/1, is zero.

The analysis of additional indicators examined by the Bank of Greece points to emerging cyclical systemic risks in certain areas, such as credit growth to non-financial corporations, residential real estate prices and the current account, but confirms that there is no excessive credit growth in Greece. Overall, cyclical systemic risks in Greece are assessed as low and the risk environment as standard.

Chart IV.2 Standardised credit-to-GDP gap, credit-to-GDP ratio and long-term trend of the credit-to-GDP ratio (Q4 1997-Q1 2025)



## 1.3 SETTING THE COUNTERCYCLICAL CAPITAL BUFFER RATE FOR GREECE

In October 2024, the Bank of Greece set the CCyB rate for Greece at 0.25%, applicable from 1 October 2025.<sup>54</sup>

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<sup>&</sup>lt;sup>54</sup> See Bank of Greece Executive Committee Act 235/2/07.10.2024.

At the current juncture, the macroeconomic environment in Greece, the further improvement of the banking sector's fundamentals and prudential ratios, as well as the restructuring of less significant institutions are still shaping favourable conditions for building adequate macroprudential space to safeguard financial stability over the medium term.

In this context, the Bank of Greece, by Executive Committee Act 248/1/06.10.2025,<sup>55</sup> decided to raise the CCyB rate for Greece by 0.25%, setting it at 0.5%, i.e. at the level of the PN CCyB target rate, applicable from 1 October 2026.

# 2. IDENTIFICATION OF THE OTHER SYSTEMICALLY IMPORTANT INSTITUTIONS IN GREECE (O-SIIS) AND SETTING OF THE O-SII BUFFER RATE

An O-SII buffer aims to reduce moral hazard and strengthen the resilience of other systemically important institutions (O-SIIs).<sup>56</sup> In this context, moral hazard arises when an institution expects not to be let to fail, given its systemic importance ("too big to fail"). Imposing additional capital requirements in the form of an O-SII buffer limits excessive risk-taking by a systemically important institution, thus reducing moral hazard by strengthening the systemically important institution's capital buffer to absorb potential losses and thereby limiting contagion risk.

The O-SII buffer consists of Common Equity Tier 1 (CET1) capital and its rate is set at a level of up to 3% of the total risk exposure amount.<sup>57</sup> The O-SII buffer is set on a solo, sub-consolidated or consolidated basis, as applicable, and its rate is reviewed at least once a year.

Under Law 4261/2014 (Article 124), the Bank of Greece is responsible for identifying O-SIIs among the institutions authorised in Greece. O-SIIs are identified on an annual basis, so as to consider the application of an O-SII buffer and the calibration thereof.

For the identification of O-SIIs, the Bank of Greece applies the methodology included in the relevant European Banking Authority (EBA) guidelines. In accordance with this methodology, the competent authorities should, for each bank falling under their jurisdiction, calculate relative scores indicating the systemic importance of each bank based on specific criteria. These criteria relate to size, importance for the economy, complexity/cross-border activity and interconnectedness of the institution with the financial system. These four criteria each consist of one or more mandatory indicators, which will be used as a minimum by the competent authorities in calculating the score of each institution. The score of each institution is expressed in basis points (bps). Each competent authority sets a threshold in bps; institutions with a score equal to or higher than that should be identified as O-SIIs. This threshold can be set from 275 bps up to 425 bps to take into account the specificities of the Member State's banking sector and to ensure the homogeneity of the group of O-SIIs designated in this way based on the O-SIIs' systemic importance. The 350 bps is proposed as an indicative threshold. Competent authorities may designate further relevant entities as O-SIIs based on additional qualitative and/or quantitative indicators of systemic importance.

<sup>57</sup> It should be noted that the O-SII buffer may exceed 3% upon approval by the European Commission.

<sup>55 &</sup>quot;Setting of the countercyclical capital buffer rate at 0.5%, applicable from 1 October 2026".

<sup>&</sup>lt;sup>56</sup> In contrast with Global Systemically Important Institutions (G-SIIs).

<sup>&</sup>lt;sup>58</sup> EBA/GL/2014/10, as they were adopted by Bank of Greece Executive Committee Act 56/18.12.2015 and further specified by Bank of Greece Executive Committee Act 221/1/17.10.2023.

In calculating the systemic importance scores of Greek banks, the Bank of Greece used only the mandatory indicators (see Table IV.1) and selected a threshold of 350 bps.

Table IV.1 Mandatory indicators for the scoring of O-SIIs in Greece						
Criterion	Indicators	Weight (%)				
Size	Total assets	25				
Importance	Value of domestic payment transactions	8.33				
	Private sector deposits from depositors in the EU	8.33				
	Private sector loans to recipients in the EU	8.33				
Complexity/Cross- border activity	Value of OTC derivatives (notional)	8.33				
	Cross-jurisdictional liabilities	8.33				
	Cross-jurisdictional claims	8.33				
Interconnectedness	Intra-financial system liabilities	8.33				
	Intra-financial system assets	8.33				
	Debt securities outstanding	8.33				

As a result, the following institutions were identified as O-SIIs for 2025 on a consolidated basis:

- Alpha Bank S.A.
- Eurobank Ergasias Services and Holdings S.A.
- National Bank of Greece S.A.
- Piraeus Financial Holdings S.A.

and respectively the following credit institutions at solo level:

- Alpha Bank S.A.
- Eurobank S.A.
- National Bank of Greece S.A.
- Piraeus Bank S.A.

The above four credit institutions identified as O-SIIs represent approximately 94% of the total assets of the domestic banking sector.

Pursuant to Bank of Greece Executive Committee Act 246/1/15.09.2025,<sup>59</sup> the Bank of Greece decided to set the O-SII buffer rate for 2026 as follows:

- at 1.25% for Eurobank Ergasias Services and Holdings S.A. at consolidated level, and
- at 1.00% for the following O-SIIs:
- Alpha Bank S.A. at solo and consolidated level,
- Eurobank S.A. at solo level,
- National Bank of Greece S.A. at solo and consolidated level, and
- Piraeus Financial Holdings S.A. at consolidated level and Piraeus Bank S.A. at solo level.

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<sup>&</sup>lt;sup>59</sup> "Identification of other systemically important institutions (O-SIIs) for the year 2025 and setting of O-SII buffer rates for the year 2026".

#### 3. BORROWER-BASED MEASURES

Borrower-based measures (BBMs) aim to prevent the accumulation of systemic risks stemming from the property market and related to private sector (household or business) financing. The activation of BBMs helps prevent excessive easing of credit standards, thereby strengthening borrower resilience and reducing credit risk for lenders.

The Bank of Greece is responsible for enacting macroprudential borrower-based measures under Article 133a of Law 4261/2014, which was inserted by Article 54 of Law 5036/2023, effective from 29 March 2023. In the context of its macroprudential mandate, the Bank of Greece may adopt a decision laying down, inter alia, the type of borrower-based measures, the ratios or features of credit to which caps apply, the cap percentages, the types of credit to which BBMs apply, as well as the terms and conditions of their implementation.

The Bank of Greece enacted BBMs for loans and other credit extended to natural persons and secured by residential real estate (RRE) located in Greece by Executive Committee Act 227/1/08.03.2024, applicable from 1 January 2025. More specifically, the cap on the loan-to-value ratio at origination (LTV-O ratio) is set at 90% for first-time buyers<sup>60</sup> and 80% for second and subsequent buyers. Additionally, the cap on the debt service-to-income ratio at origination (DSTI-O ratio) is set at 50% for first-time buyers and 40% for second and subsequent buyers. It should be noted that the DSTI-O ratio is the annual debt servicing costs of the total debt of the borrower divided by the borrower's total annual disposable income at the time of loan/credit origination, while the LTV-O ratio is the total amount of the loan or loan tranches secured by real estate property at the time of origination divided by the value of the real estate collateral at the time of origination.

More relaxed caps for first-time buyers were set to facilitate their access to the mortgage lending market. Furthermore, credit providers are allowed to exempt 10% of the total number of new loans and other credit approved and at least partially disbursed in each quarter at the institution or entity level from each of the abovementioned caps. Compliance with the exemption quotas is assessed separately for first-time buyers and for second and subsequent buyers. The abovementioned BBMs do not apply to non-performing loans and forborne loans, portfolios of re-performing loans purchased by credit institutions from NPL servicers, as well as to loans disbursed under national housing policy or green transition programmes.

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<sup>&</sup>lt;sup>60</sup> First-time buyer is a borrower who has not been granted a loan or credit secured by residential real estate in the past.

#### Box IV.1 Governing Council Statement on macroprudential policies

Heightened global geopolitical uncertainty and subsequent risks to financial stability have prompted the Governing Council of the ECB to issue a new statement on macroprudential policies, following up on its June 2024 statement. The ECB Governing Council reiterated its full support for those national authorities still planning to increase capital buffer requirements and called on the remaining national authorities to maintain existing capital buffer requirements. It also pointed out that existing borrower-based measures should be maintained to preserve sound lending standards. Amidst the current favourable banking sector conditions, particularly in terms of profitability and capital headroom, i.e. available capital above the regulatory minimum and buffer requirements, the main priority for national macroprudential authorities should be to preserve bank resilience. National authorities are called upon to adapt their macroprudential policy to changing conditions, closely monitoring systemic risks in an environment of heightened uncertainty.

<sup>&</sup>lt;sup>i</sup> Governing Council Statement on macroprudential policies, 7 July 2025.

ii Governing Council Statement on macroprudential policies, 28 June 2024.

#### V.OTHER SECTORS OF THE FINANCIAL SYSTEM

#### 1. STRUCTURE OF THE DOMESTIC FINANCIAL SYSTEM

In the first half of 2025, the structure of the domestic financial system showed no significant changes compared to December 2024, with banks remaining the main pillar (see Table V.1). In particular, the assets of credit institutions amounted to 84.3% of the total assets of the financial system, with Greek commercial banks representing 82.7%, while cooperative banks and branches of foreign banks accounted for only 0.5% and 1.1%, respectively. The high level of concentration is evident in the share held by the four significant banks (93% of total banking assets).

#### Table V.1 Structure of the domestic financial system

(amounts in EUR million)

	202	21	202	22	202	23	202	24	June 2	2025
Assets		%		%		%		%		%
Credit institutions	302,495	87.9%	304,148	88.3%	294,415	86.1%	303,926	84.8%	312,295	84.3%
Greek commercial banks	296,218	86.1%	297,324	86.3%	289,557	84.7%	298,143	83.2%	306,401	82.7%
Cooperative banks	1,787	0.5%	1,736	0.5%	1,617	0.5%	1,751	0.5%	1,831	0.5%
Foreign banks' branches	4,490	1.3%	5,087	1.5%	3,242	0.9%	4,033	1.1%	4,063	1.1%
Institutional investors	33,013	9.6%	31,896	9.3%	38,635	11.3%	45,294	12.6%	48,688	13.1%
Insurance undertakings	20,607	6.0%	18,718	5.4%	20,287	5.9%	21,224	5.9%	21,503	5.8%
Pension funds	1,887	0.5%	1,866	0.5%	2,196	0.6%	2,513	0.7%	2,639	0.7%
Undertakings for collective investment in transferable securities (UCITS)	6,605	1.9%	6,748	2.0%	11,237	3.3%	16,117	4.5%	18,766	5.1%
Mutual funds	6,247	1.8%	6,349	1.8%	10,449	3.1%	14,986	4.2%	17,608	4.8%
Money market funds	358	0.1%	399	0.1%	788	0.2%	1,131	0.3%	1,158	0.3%
Portfolio investment and real estate investment companies	3,913	1.1%	4,563	1.3%	4,915	1.4%	5,440	1.5%	5,780	1.6%
Other non-bank institutions	7,184	2.1%	6,898	2.0%	7,440	2.2%	8,085	2.3%	8,201	2.2%
Brokerage firms	807	0.2%	606	0.2%	818	0.2%	882	0.2%	1,052	0.3%
Leasing and factoring companies	6,186	1.8%	6,292	1.8%	6,618	1.9%	7,196	2.0%	7,137	1.9%
Consumer credit and venture capital compa- nies	191	0.1%	0	0.0%	4	0.0%	7	0.0%	12	0.0%
Credit servicing firms	1,535	0.4%	1,445	0.4%	1,294	0.4%	1,213	0.3%	1,229	0.3%
Total	344,226	100%	344,387	100%	341,784	100%	358,518	100%	370,414	100%

Source: Bank of Greece.

Since December 2022, there have been no active consumer credit companies, while the total assets of Microfinance Institutions are also included.

Institutional investors<sup>61</sup> continue to be the second largest sector of the domestic financial system. In June 2025, institutional investors' assets increased by EUR 3.4 billion compared with December 2024 and came to represent 13.2% of the financial system. This rise is primarily attributed to a EUR 2.5 billion increase in the assets of Undertakings for Collective Investment in Transferable

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<sup>&</sup>lt;sup>61</sup> This category comprises insurance undertakings, occupational insurance funds and UCITS.

Securities (UCITS), which reached EUR 17.6 billion (4.8% of the total). The assets of mutual funds have seen a notable rise over the past three years (more than doubling since the end of 2022), being regarded as an attractive alternative to time deposits, in particular since the introduction of target maturity funds in 2022. In June 2025, the assets of insurance undertakings increased slightly to EUR 21.5 billion (5.8% of the total) and their market share remained unchanged compared to end-2024.

Other non-bank institutions (brokerage companies, leasing companies, factoring companies and microfinance institutions) continue to hold a small share of the market, standing at 2.1% of the entire financial system.

Lastly, the share of credit servicing firms (CSFs) in the total assets of the financial system remains very small, representing just 0.3% of the entire financial system, with their role in the management of non-performing private debt remaining however significant.

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<sup>&</sup>lt;sup>62</sup> The increase in the assets of mutual funds is mainly driven by the introduction of target maturity funds, which typically have a maturity of two to five years. A detailed overview of target maturity funds can be found in Box V.1 "Developments in the mutual funds market", *Financial Stability Review*, May 2025.

#### 2. INSURANCE UNDERTAKINGS

#### 2.1 **KEY FIGURES**<sup>63</sup>

During the first half of 2025, no significant changes were observed in the structure of the Greek private insurance market. As at 30.06.2025, 34 insurance undertakings<sup>64</sup> were active in the Greek private insurance market. Insurance undertakings can be classified according to the type of license as follows:

- two life insurance undertakings;
- 19 non-life insurance undertakings; and
- 13 insurance undertakings (composites) writing both life and non-life business (including life insurance undertakings underwriting only non-life business of "Accident" and "Sickness" classes).

Of the above 34 insurance undertakings, 31 operate and are supervised in accordance with the European Directive "Solvency II", which applies to all Member States since 1.1.2016, while three insurance undertakings are excluded, due to their size, from several requirements related to all three pillars of Solvency II.65 Of 31 insurance undertakings subject to the provisions of Solvency II, 11 belong to insurance groups with their parent undertaking in other EU Members States and five to insurance groups subject to supervision by the Bank of Greece. In addition, eight insurance undertakings with their head offices in Greece operate in other EU Member States under the freedom to provide services (Table V.2).

Furthermore, according to the latest data available by the European Insurance and Occupational Pensions Authority (EIOPA), on 31.12.2024, 186 insurance undertakings with head offices in other EU Member States<sup>66</sup> operated in Greece, either under the freedom of establishment (branches) or the freedom to provide services, the financial supervision of which is under the responsibility of the supervisory authorities of their home Member State. 67

<sup>&</sup>lt;sup>63</sup> The cut-off date for information and data in this chapter is 30.6.2025.

<sup>&</sup>lt;sup>64</sup> Excluding the mutual insurance undertakings referred to in the first sentence of para. 1 of Article 7 of Law 4364/2016.

<sup>&</sup>lt;sup>65</sup> The Bank of Greece, based on the principle of proportionality, has allowed 3 insurance undertakings that meet the required size and business criteria to be exempted from certain Solvency II provisions regarding the solvency requirements, the system of governance and public disclosure.

<sup>&</sup>lt;sup>66</sup> European Insurance and Occupational Pensions Authority (EIOPA).

<sup>&</sup>lt;sup>67</sup> For the year 2024, annual gross written premiums of these undertakings amounted to EUR 416 million for the activity under the freedom of establishment and EUR 1,090 million for the activity under the freedom to provide services, which corresponds to 6% and 16%, respectively, of the total Greek insurance market.

Table V.2 Number of Insurance Undertakings active in Greece							
	2022	2023	2024	H1 2025			
Life insurance undertakings	2	2	2	2			
Non-life insurance undertakings	19	19	19	19			
Insurance undertakings writing both life and non-life business	15	13	13	13			
Total	36	34	34	34			
Insurance undertakings falling within the scope of Directive 2009/138/EC ("Solvency II")	34	31	31	31			
Branches of insurance undertakings established in other EU Member States	20	21	22	21			
Insurance undertakings established in other EU Member States pursuing business under the freedom of establishment or the freedom to provide services	230	187	186	n/a			
Source: Bank of Greece.							

It should be pointed out that these undertakings have a large market share in the field of third-party motor liability insurance, although in the first half of 2025 their share (in terms of number of vehicles) decreased slightly to 20%, from 22% in December 2024.

The financial figures presented below concern only the 31 undertakings operating in the domestic insurance market which are subject to supervision by the Bank of Greece according to Solvency II requirements.

The domestic insurance market is characterised by significant concentration, especially with regard to the undertakings that carry out life insurance business and to the undertakings that carry out both life and non-life insurance business. The five largest insurance undertakings hold 87% of the relevant market, in terms of technical provisions, while the five largest insurance undertakings operating in non-life insurance business, in terms of gross written premiums, hold a share of 61% of the relevant market.

Gross written premiums of the life insurance business<sup>68</sup> in the first half of 2025 amounted to EUR 1.4 billion, down by 4% compared to the first half of 2024. Of this amount, EUR 0.6 billion is related to insurance products linked to investments (45% of total gross written premiums of life business, compared with 44% in the first half of 2024, down by 3% year-on-year). At the same time, gross written premiums of insurance products with profit participation features dropped by 4% and of other life insurance business by 23% (see Chart V.1).

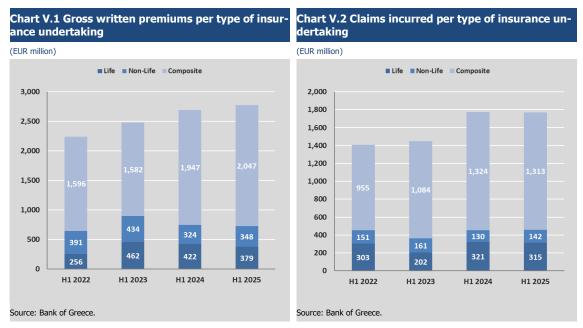
During the same period, non-life insurance premiums<sup>69</sup> amounted to EUR 1.4 billion, up by 11% compared to the first half of 2024. The lines of business with the most significant market shares are third-party motor liability (29%), fire insurance (21%) and hospital expenses insurance (18%), with year-on-year changes of +7%, +13% and +14%, respectively. In the first half of 2025, claims incurred (excluding reinsurance recoveries) amounted to EUR 1.2 billion for life insurance (up by 4%) and EUR 0.6 billion for non-life insurance (down by 13%, see Chart V.2).

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<sup>&</sup>lt;sup>68</sup> Including life insurance business of composite insurance undertakings.

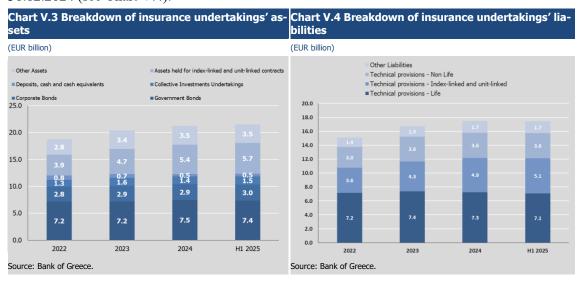
<sup>&</sup>lt;sup>69</sup> Including non-life insurance business of composite insurance undertakings.

Regarding non-life insurance, as at 30.06.2025, the market loss ratio amounted to 54% (compared with 51% as at 31.12.2024) and the expense ratio (administration expenses and commissions) amounted to 43% (compared with 47% as at 31.12.2024).



The total assets of insurance undertakings supervised by the Bank of Greece amounted to EUR 21.5 billion as at 30.06.2025, up by 1% compared to 31.12.2024. Of the total assets, EUR 7.4 billion (34%) were held in government bonds and EUR 3.0 billion (14%) in corporate bonds. Regarding the credit rating of these assets, 98% of the government bonds and 88% of the corporate bonds were BB- and above. In addition, an amount of EUR 5.7 billion (26%) related to unit and index-linked insurance products (see Chart V.3).

On the other hand, at end-June 2025, the total liabilities of insurance undertakings amounted to EUR 17.4 billion (against EUR 17.5 billion at end-December 2024), while total technical provisions stood at EUR 15.7 billion (against EUR 15.8 billion at end-December 2024), of which EUR 12.1 billion related to life insurance and EUR 3.6 billion to non-life insurance business. Of life technical provisions, 42% refers to unit and index-linked insurance products, against 40% as at 31.12.2024 (see Chart V.4).

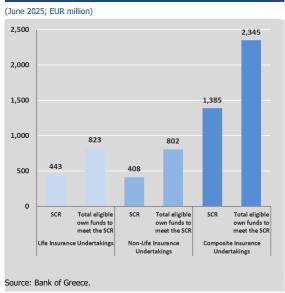


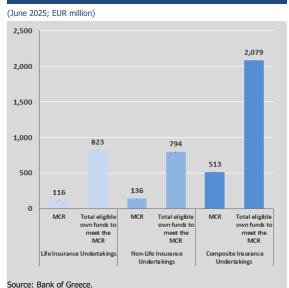
The total own funds of the insurance market amounted to EUR 4 billion, up by 9% compared to 31.12.2024. The Total Solvency Capital Requirement (SCR)<sup>70</sup> stood at EUR 2.2 billion and the corresponding total eligible own funds were EUR 4 billion. In terms of quality of the eligible own funds of the insurance market, 93% of these own funds are classified in the highest quality category (Tier 1). Additionally, the SCR coverage ratio for all insurance undertakings is significantly higher than 100% (see Table V.3 and Chart V.5). The Minimum Capital Requirement (MCR)<sup>71</sup> for the entire insurance market came to EUR 0.8 billion and the respective total eligible own funds amounted to EUR 3.7 billion (see Table V.3 and Chart V.6).

Table V.3 SCR, Total eligible own funds to meet the SCR and SCR Ratio; MCR, Total eligible own funds to meet the MCR and MCR Ratio							
(amounts in EUR million)	2022	2023	2024	H1 2025			
SCR	1,954	2,107	2,120	2,236			
Total eligible own funds to meet the SCR	3,606	3,697	3,669	3,970			
SCR Ratio	184.6%	175.5%	173.1%	177.5%			
MCR	676	737	740	766			
Total eligible own funds to meet the MCR	3,290	3,365	3,376	3,696			
MCR ratio	486.9%	456.8%	456.0%	482.7%			
Source: Bank of Greece.							

#### Chart V.5 Total SCR and total eligible own funds to meet the SCR per type of insurance undertaking

## Chart V.6 MCR and total eligible own funds to meet the MCR per type of insurance undertaking



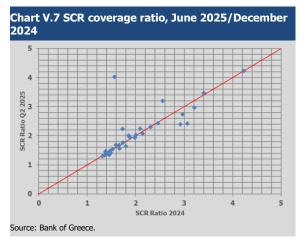


<sup>&</sup>lt;sup>70</sup> The Solvency Capital Requirement reflects the adequacy of own funds so that the insurance undertaking has the ability to absorb losses at a confidence level of 99.5% with a time horizon of one year.

<sup>&</sup>lt;sup>71</sup> The Minimum Capital Requirement reflects the adequacy of own funds so that the insurance undertaking has the ability to absorb losses at a confidence level of 85%, with a time horizon of one year, and represents a level of capital below which the interests of policyholders would be seriously jeopardised if the undertaking were allowed to continue operating.

Mixed changes in the SCR coverage ratio of insurance undertakings were observed in the first half of 2025, however all undertakings remain solvent.

Undertakings above the red line saw an improvement in the SCR coverage ratio in the first half of 2025 compared to end-December 2024 (48% of all insurance undertakings), while undertakings below the red line saw their SCR coverage ratio deteriorate (see Chart V.7).



#### 2.2 THE RISKS OF INSURANCE UNDERTAKINGS

Insurance undertakings are exposed to underwriting and investment risk. According to the analysis of the standard formula of the Solvency Capital Requirement, these risks have not significantly changed for 2024.

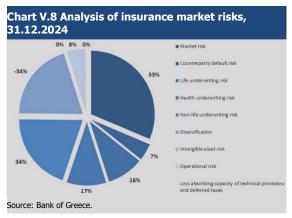
Life underwriting risks have mainly a long-term horizon, due to the nature of life insurance liabilities. For life insurance undertakings the biggest risk is market risk and, particularly, interest rate risk. Non-life underwriting risks mainly have a short-term horizon, although for some cases of insurance claims time is required until their full settlement, such as claims related to catastrophic events (earthquake or fire). Furthermore, for both life and non-life insurance, counterparty default risk and operational risk are considered important. In fact, operational risk is intertwined with the successful or unsuccessful business operation of an insurance undertaking.

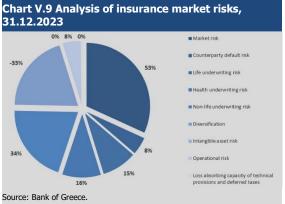
In 2024, market risk (which mainly concerns equity and credit spread risk), as well as underwriting risk remained almost unchanged compared to 2023. It should be noted that the risk analysis in the following charts concerns the net Solvency Capital Requirement, after the risk mitigating effect of reinsurance, which is important mainly for catastrophic risks (fire, earthquake lines of business).

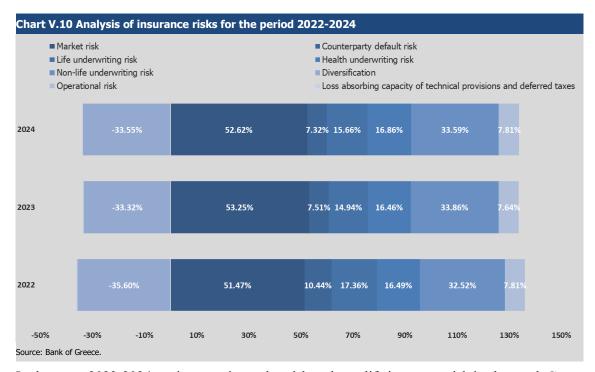
#### Analysis of the risks of insurance undertakings

The analysis of risks for the entire Greek insurance market over the past two years suggests a marginal decrease in market risk and a marginal increase in life underwriting risk, while non-life underwriting risk and health underwriting risk remained almost unchanged (see Charts V.8, V.9 and V.10).

<sup>&</sup>lt;sup>72</sup> Reinsurance is a risk mitigation technique whereby an insurance undertaking contractually agrees to transfer part of its risk and/or portfolio a third party.



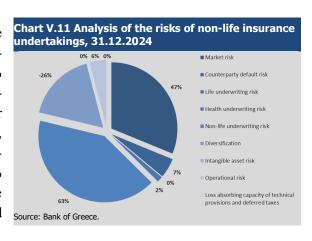




In the years 2022-2024, an increase in market risk and non-life insurance risk is observed. Counterparty default risk, life insurance risk and the diversification benefit decreased. Operational risk remained unchanged, while health risk showed little variation.

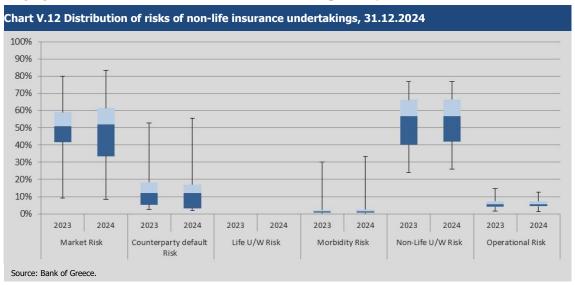
#### Non-life insurance undertakings

The most important risk for non-life insurance undertakings was non-life insurance undertaking risk, accounting for 63% (from 63.3% in 2023) of their risk profile. The second biggest risk was market risk, which accounted for 47.5% (compared with 47.3% in 2023). Next, in order of importance, was counterparty default risk, which – with a contribution of 7.3% – was almost unchanged against 2023, while operational risk remained quite low, at around



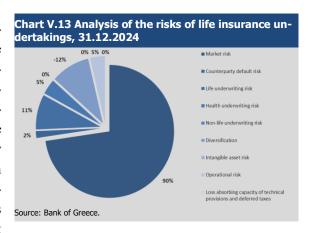
6.2% (6.3% in the previous year). Lastly, diversification mitigates the risk of insurance undertakings by 26.1% (see Chart V.11).

However, significant variations are observed between individual non-life insurance undertakings. In particular, there is great heterogeneity in the risk profile, especially in market risk and non-life underwriting risk, with the contributions of these risks to the risk profile of insurance undertakings ranging from 8.4% to 83.5% and from 26% to 77%, respectively (see Chart V.12).



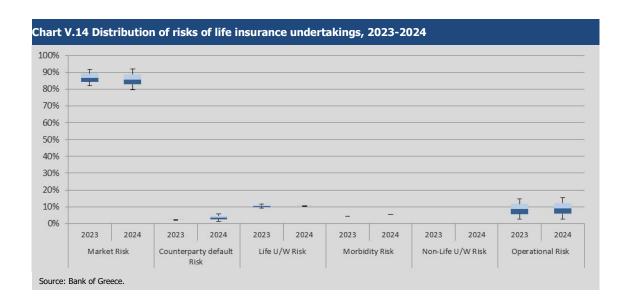
### Life insurance undertakings

For the two insurance undertakings that exclusively underwrite life insurance business, the biggest risk was market risk (90.3%), remaining almost unchanged compared to the previous year (90.5% in 2023), followed by life undertaking risk with 10.6%, from 11.3% in the previous year (see Chart V.13). Counterparty default risk decreased to 2.1%, from 2.4% in the previous year, while operational risk increased to 4.6%, from 4.3% in the previous year. Furthermore, health underwriting risk



reached 4.6%, up from 3.7% in 2023. Lastly, diversification benefits remained almost unchanged compared to the previous year (12.1% in 2024, from 12.2% in 2023).

Variations can likewise be observed between individual life insurance undertakings (see Chart V.14).



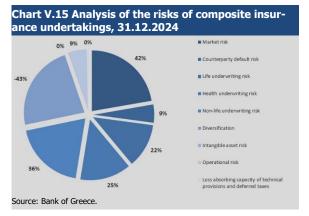
### **Composite insurance undertakings**

For insurance undertakings writing both life and non-life business (composite insurance under-

takings), the contribution of individual risks to their risk profile varied considerably.

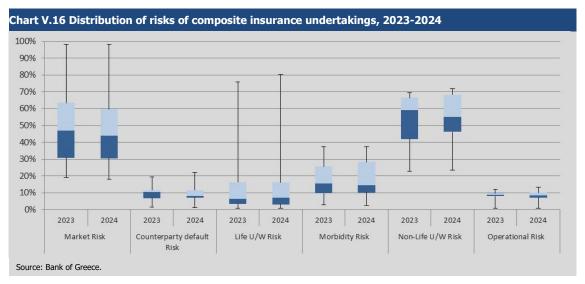
The biggest risk was market risk, accounting for 42% both in 2024 and in the previous year, while non-life underwriting risk, life underwriting risk and health underwriting risk accounted for 35.8%, 22.1% and 25.4%, respectively, compared with 37.2%, 20.6% and 25.1% in 2023 (see Chart V.15).

In addition, counterparty default risk remained high at 9.1% in 2024, registering a

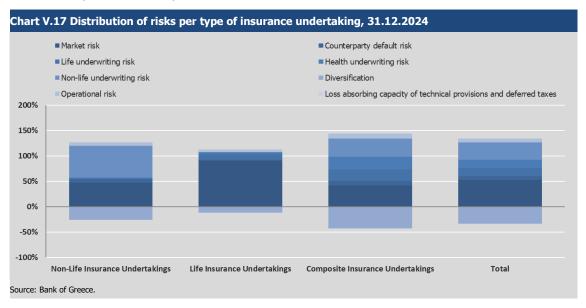


slight decrease compared to 2023 (9.4%). Diversification benefits were quite significant (reducing the risk by 43%), as these undertakings had greater potential to undertake unrelated or, in some cases, negatively correlated risks.

Comparing individual composite insurance undertakings, there is great heterogeneity, mainly attributable to the fact that composite insurance undertakings include both life insurance undertakings, which underwrite non-similar to life health business, and a significant number of composite insurance undertakings which underwrite mainly non-life business. Similarly, the high variation of life underwriting risk is due to the small number of undertakings that underwrite significant life insurance risk (see Chart V.16).

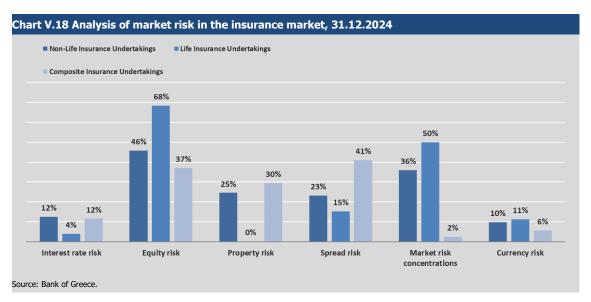


Across types of insurance business, the biggest risks for 2024 were non-life underwriting risk and market risk (see Chart V.17).

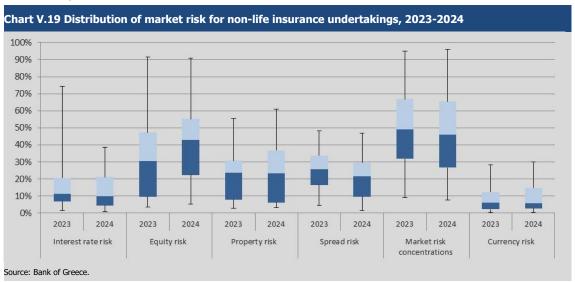


#### Market risk of insurance undertakings

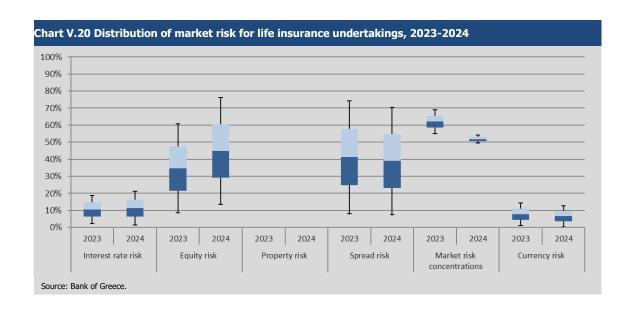
Regarding market risk, which accounted for 52.6% of insurance undertakings' total risk, it appears that there were large variations by different type of insurance undertaking and by specific risk category (see Chart V.18).



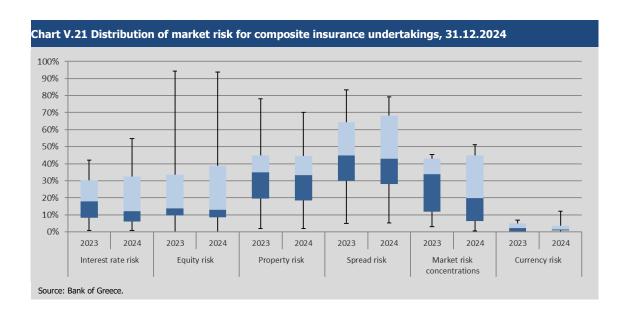
An analysis of market risk distribution of non-life insurance undertakings shows that, in 2024, these were mostly exposed to equity risk (45.7% of their total risk, compared with 39.3% in 2023), as well as market concentration risk (36%), spread risk (23.2%) and property risk (24.5%, see Chart V.19).



The most significant risk for life insurance undertakings was equity risk (68.4%), which grew significantly in 2024 compared to the previous year (54.5%), followed by market concentration risk and spread risk, which amounted to 50% (from 67.4% in the previous year) and 15.3% (from 15.9% in the previous year), respectively. Furthermore, interest rate risk remained at low levels, property risk was almost zero, while currency risk fell to 11.2%, from 12.9% in 2023 and 19.4% in 2022 (see Charts V.18 and V.20).



There was large variation in the exposure of composite insurance undertakings to market risk, with some of them having almost zero exposure and others quite large exposure. In these undertakings, the most significant component of market risk in 2024 was spread risk (41%, compared with 41.9% in 2023), followed by equity risk (37%, compared with 30.2% in 2023) (see Charts V.18 and V.21).



#### 3. OTHER FINANCIAL INSTITUTIONS

## 3.1 LEASING COMPANIES – FACTORING COMPANIES – CONSUMER CREDIT COMPANIES

In the first half of 2025, the assets of leasing companies decreased by 8.5% compared to end-2024 to stand at EUR 2.9 billion. Similarly, the assets of factoring companies amounted to EUR 3.8 billion, marginally down by 1.6% compared to 2024 (see Chart V.22), while the assets of microfinance institutions increased compared to 2024, although they remained at a very low level (EUR 12 million, from EUR 10.3 million in 2024).

The interconnection of other financial institutions with credit institutions is significant, given that the assets of entities that belong to banking groups represent 96.7% of the sector's total assets. Furthermore, borrowing from parent banking groups increased to 16.2% of their

liabilities, compared with 15.4% at end-2024.

In terms of income statements, the profitability of leasing companies decreased in the first half of 2025, as they recorded pre-tax profits of EUR 3.1 million, compared with EUR 14.7 million in the first half of 2024. However, it should be noted that increased pre-tax profits in the first half of 2024 were attributed to non-recurring factors, mostly the completion of the sale of securitised trade receivables by one company. The profitability of factoring companies also decreased, with pre-tax profits amounting to EUR 27.5 million in the first half of 2025, compared with EUR 32 million

Chart V.22 Evolution of assets of other financial institutions

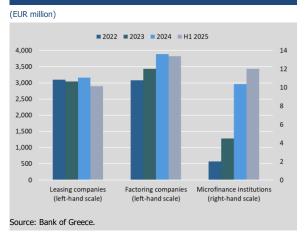
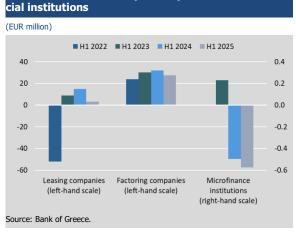


Chart V.23 Evolution of pre-tax profits of other finan-

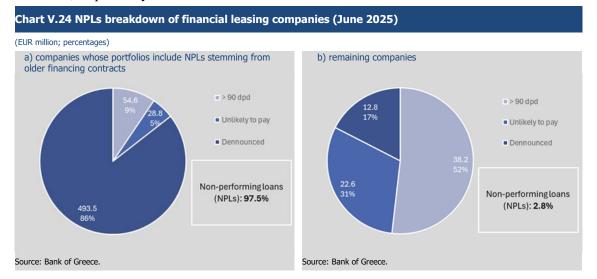


in the first half of 2024, mainly due to reduced interest income, as a result of the ECB's key interest rate cuts, as well as of narrower interest margins due to stronger competition. Microfinance institutions kept posting pre-tax losses, amounting to EUR 0.6 million in the first half of 2025, compared with losses of EUR 0.5 million in the first half of 2024, mainly owing to increased loan impairment charges (see Chart V.23).

The NPLs of other financial sector institutions (on-balance-sheet data) declined to EUR 702 million in June 2025, from EUR 737 million in December 2024. It should be noted that the largest share of NPLs is accounted for by leasing companies (EUR 650.5 million in June 2025, compared with EUR 682.7 million in December 2024), with the NPL ratio standing at 20.4% in June 2025, down from 22.2% in December 2024. The high NPL ratio is mainly attributable to three leasing

companies<sup>73</sup> whose portfolios include NPLs stemming from older financing contracts; for these companies, the NPL ratio reached 97.5% (see Chart V.24a). For the remaining leasing companies, the NPL ratio stood at 2.8% (see Chart V.24b).

In June 2025, the NPL ratio for factoring companies and microfinance institutions stood at 1.4% and 6.6%, respectively.



#### 3.2 CREDIT SERVICING FIRMS (CSFs)

In July 2025, the new Executive Committee Act of the Bank of Greece (ECA 244/4/25.07.2025) on the supervision of credit servicing firms entered into force, strengthening the Bank's supervisory role and introducing additional regulatory requirements mainly concerning corporate governance and internal control systems, as well as supervisory reporting. In particular, the new ECA sets out the supervisory requirements for CSFs based in Greece and CSFs based in another EU Member State and operating in Greece while specifying the reporting requirements of credit acquiring firms to the Bank of Greece. In particular, CSFs are required to:

- establish a sound and effective corporate governance system and internal control mechanisms that are adequate and proportionate to the nature, scale and complexity of the risks associated with the business model and activities of CSFs based in Greece;
- ensure that the members of the Board of Directors and key function holders of CSFs meet the fit-and-proper criteria defined by the Bank of Greece;
- maintain the minimum level of regulatory capital throughout their operation;
- submit to the Bank of Greece copies of their servicing agreements with credit acquiring
  firms, which must include provisions ensuring the secure and uninterrupted access and transmission of all data and information concerning the receivables under management;
- have in place arrangements for the outsourcing of credit servicing activities;
- ensure effective and transparent mechanisms governing the relationship between CSFs and borrowers; and

<sup>&</sup>lt;sup>73</sup> The assets of these three companies, whose portfolios consist mainly of non-performing loans (NPLs), account for 6.3% of the total assets of leasing companies.

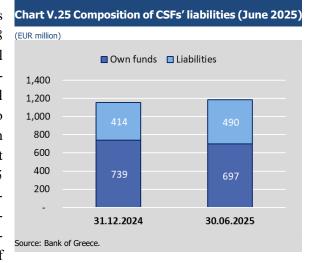
regularly submit supervisory data to the Bank of Greece on the receivables under management.

In the context of its supervisory tasks, the Bank of Greece assesses the data and information submitted to determine the degree of compliance of CSFs with the provisions of the legal and regulatory framework, investigate potential breaches of supervisory requirements and impose administrative penalties, including monetary fines and/or other corrective measures, where deemed necessary.

17 CSFs are operating in Greece; none of them has applied for authorisation to refinance receivables. The level of activity among CSFs varies considerably, with the three largest firms holding cumulatively a market share of 86.8% (based on the total value of exposures under management), another three firms accounting for 10.4% and eleven firms recording negligible to zero activity (cumulatively 2.8%, with none of them having a market share larger than 1%).

#### CSFs' aggregate financial data

In June 2025, the total assets of CSFs amounted to EUR 1.2 billion, up by EUR 33.8 million compared with December 2024. Total equity decreased to EUR 697 million (December 2024: EUR 739 million), while total liabilities (including provisions) increased to EUR 490 million, from EUR 414 million in December 2024 (see Chart V.25). CSFs' net profits after tax for the first half of 2025 reached EUR 51.8 million, up by 7.6% compared with the first half of 2024. Staff expenses and administrative costs as a percentage of turnover stood at 58.5% in the first half



of 2025, slightly higher than in the corresponding period of 2024 (54.2%).

As at June 2025, the total value of exposures under management<sup>74</sup> by CSFs amounted to EUR 94.0 billion, up by EUR 6.6 billion compared with December 2024, following the assumption of new portfolios, mainly on behalf of credit acquiring firms. 86.8% of the assets under management by CSFs concerned exposures managed on behalf of credit acquiring firms<sup>75</sup> and the rest exposures managed on behalf of credit/financial institutions.

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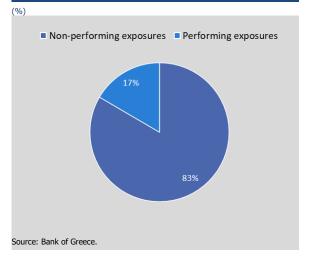
<sup>&</sup>lt;sup>74</sup> Exposures include all debt instruments (loans and advances and debt securities), excluding off-balance-sheet exposures and write-offs. It should be noted that Bank of Greece Executive Committee Act 244/4/25.07.2025 (available only in Greek) modified, inter alia, supervisory data and information to be submitted by CSFs to the Bank of Greece.

<sup>&</sup>lt;sup>75</sup> Any discrepancies between the supervisory data analysed in this section of the Financial Stability Report and the data regularly published by the Bank of Greece on its website are mainly due to the different perimeter of each data release.

The bulk of exposures managed by CSFs on behalf of credit acquiring firms has been assigned to them in the context of credit institutions' strategies for the reduction of non-performing exposures (NPEs).

The composition of the portfolios managed by CSFs remained broadly unchanged, in terms of asset quality, compared with end-2024, as in June 2025 the total exposures under management continued to consist mainly of NPEs (83%) and, to a lesser extent, performing exposures (17%, see Chart V.26).





#### Management of exposures serviced on behalf of credit acquiring firms

The total value of exposures managed by CSFs on behalf of credit acquiring firms increased by EUR 10.1 billion in the first half of 2025, reaching EUR 81.6 billion, mainly due to the onboarding of new loan portfolios for servicing. In particular, CSFs undertook the management of new portfolios with a total value of EUR 11 billion, originating from credit/financial institutions (EUR 6.3 billion) and from PQH Single Special Liquidation S.A. (EUR 4.7 billion).

The bulk of these exposures is associated with business loans (48.8%), followed by residential loans (31.2%) and consumer loans (20.0%), showing a similar composition to that of December 2024 (see Chart V.27).

Chart V.27 Exposures under CSF management by portfolio (June 2025)

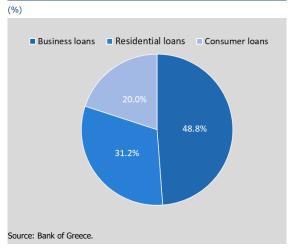
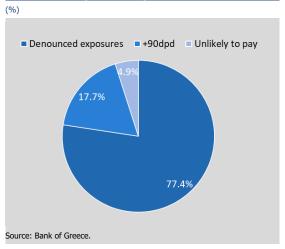


Chart V.28 Non-performing exposures under CSF management – portfolio composition by arrears bucket (June 2025)



As of June 2025, the exposures under management on behalf of credit acquiring firms were of poor credit quality, with 89.6% classified as NPEs. The bulk of these NPEs were denounced exposures (77.4%), while 17.7% were exposures more than 90 days past due and 4.9% were unlikely-to-pay exposures (see Chart V.28).

In the first half of 2025, repayments, liquidation of collateral and write-offs of exposures managed by CSFs on behalf of credit acquiring firms stood at EUR 1.8 billion. In particular, repayments amounted to EUR 1.1 billion, liquidation of collateral to EUR 0.5 billion, and write-offs to EUR 0.2 billion.

Lastly, modifications made until June 2025 represented 23.4% of the total portfolio managed on behalf of credit acquiring firms. The bulk of the modified exposures consisted of resolution and closure actions (58.2%), followed by long-term modifications (37.2%) and short-term modifications (4.7%, see Chart V.29). These figures show an increase in resolution and closure actions compared with December 2024 (55.7%) and a decline in long-term and short-term modifications (38.6% and 5.7% in 2024, respectively). As of June 2025, the stock of modified exposures on which resolution and closure actions were

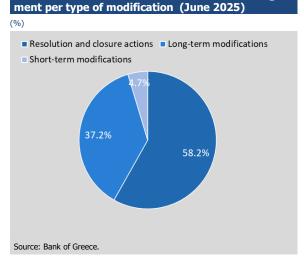
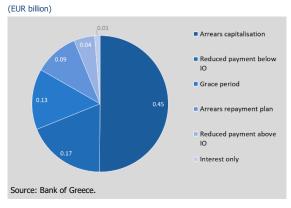


Chart V.29 Breakdown of debt under CSF manage-

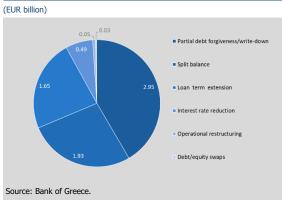
taken amounted to EUR 11.1 billion (December 2024: EUR 10 billion), long-term modifications to EUR 7.1 billion and short-term modifications to EUR 0.9 billion (December 2024: EUR 6.9 billion and EUR 1.0 billion, respectively).

Among short-term modifications,<sup>76</sup> capitalisation of arrears remained the most common tool, accounting for 50.1% of total short-term modifications (see Chart V.30a). The most common long-term<sup>77</sup> modification types were partial debt write-down (41.6%), split balance (27.1%) and extension of the loan term (23.3%, see Chart V.30b).





## Chart V.30b Long-term modifications (June 2025)

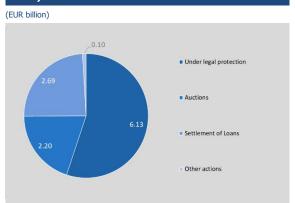


<sup>&</sup>lt;sup>76</sup> Short-term modifications are those with a duration of less than two years, applicable to cases where the repayment difficulties are reasonably judged to be temporary.

<sup>&</sup>lt;sup>77</sup> Long-term modifications are those with a duration of more than two years, based on conservative assumptions regarding the borrower's future repayment capacity throughout the repayment schedule.

Over the same period, the most common types of resolution and closure actions<sup>78</sup> were settlements of loans under legal protection (55.1%), loan settlements (24.2%) and auctions (19.8%), respectively (see Chart V.30c).

### Chart V.30c Resolution and closure actions (June 2025)



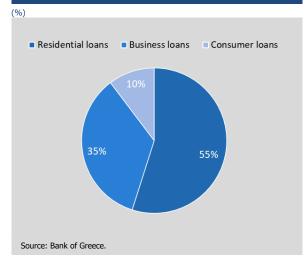
#### Management of exposures serviced on behalf of credit/financial institutions

Source: Bank of Greece

The total value of exposures managed by CSFs on behalf of credit/financial institutions stood at EUR 12.4 billion in June 2025, down by EUR 3.4 billion compared with December 2024 (EUR 15.8 billion), mainly due to portfolio sales to credit acquiring firms and management actions. Of these exposures, 40% were NPEs, compared with 53% in December 2024.

In particular, the portfolio of exposures managed on behalf of credit/financial institutions consists mainly of residential loans (55%), followed by business loans (35%) and consumer loans (10%, see Chart V.31). The corresponding breakdown in December 2024

Chart V.31 Breakdown of exposures under CSF management on behalf of credit/financial institutions per asset class (June 2025)



was 46% for residential loans, 45% for business loans and 9% for consumer loans.

In the first half of 2025, repayments and liquidation of collateral managed by CSFs on behalf of credit/financial institutions amounted to EUR 673 million, of which EUR 631 million were repayments and EUR 42 million collateral liquidation.

#### Secondary market activity

In recent years, there has been significant growth in the secondary market for loans managed by CSFs. Between 2019 and June 2025, secondary-market transactions involved 158 loan portfolios, with a total receivables value of EUR 10.6 billion. After peaking in 2024 – when 43 loan portfolios with a total receivables value of EUR 4.9 billion (value at the date of transfer) were transferred – 12 transactions were completed in the first half of 2025, with a total receivables value of EUR 1.5 billion. Transactions on the Greek secondary loan market are expected to continue, as CSFs

<sup>&</sup>lt;sup>78</sup> Resolution and closure actions include any change in the type of loan contract or termination of the contract.

stepped up their efforts to meet their recovery targets under the Hellenic Asset Protection Scheme ("Hercules").

#### Key takeaways and challenges

CSFs play a significant role in the management of non-performing private debt in Greece, as they managed NPEs amounting to EUR 78 billion in June 2025. The factors affecting the efficient management of NPEs by CSFs are mainly associated with lack of funding for debt restructuring and delays in completing legal actions and liquidation of loan collaterals (a solution typically used when all other restructuring options have been exhausted). The use of the option of refinancing of loans and/or restructuring of borrowers' debts through new financing, provided for under the current regulatory framework, could contribute to the resolution of part of the NPE portfolio (e.g. by providing working capital to viable businesses). This financing gap could be covered not only by CSFs (if the scope of their license is expanded accordingly), but also by credit companies, which under the new framework are allowed to provide all forms of credit. To date, however, no company has been authorised by the Bank of Greece to do so.

The key challenges facing CSFs refer to the intensification of their actions in private debt management and include meeting the recovery targets set under the 'Hercules' scheme; digitising processes; and upgrading the services offered to borrowers. In this context, the Ministry of Economy and Finance and the Ministry of Justice, in cooperation with other competent authorities and the Bank of Greece and in consultation with CSFs, have undertaken a series of initiatives and actions aimed at promoting structural reforms that should further facilitate the management of private debt, while ensuring fair treatment of all borrowers, in particular those belonging to vulnerable social groups.

## 3.3 PAYMENT INSTITUTIONS, E-MONEY INSTITUTIONS, PAYMENT INITIATION SERVICE PROVIDERS AND ACCOUNT INFORMATION SERVICE PROVIDERS

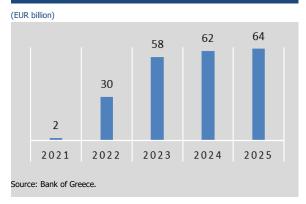
#### **Key figures**

#### (a) Payment institutions (PIs)

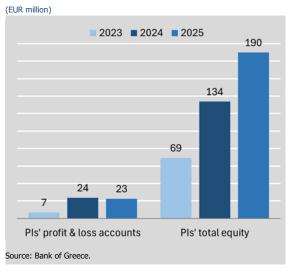
The Bank of Greece has authorised fourteen payment institutions (PIs) and one account information service provider (AISP).<sup>79</sup> During the reference period of 2025,<sup>80</sup> the total value of payment transactions carried out by the PIs amounted to EUR 63.9 billion, up by 2.7% compared to the reference period of 2024<sup>81</sup> (EUR 62.3 billion; see Chart V.32). Notably, 96.7% of the total transaction value was processed by five PIs that provide card-based payment acceptance services (acquiring). The remaining 3.3% primarily refers to money remittance services.

As of June 2025, the total equity of PIs amounted to EUR 189.8 million, reflecting a 42% increase compared to December 2024. This significant rise is primarily attributed to an increase in the net position of PIs operating in the card acquiring sector, mainly driven by their profitability. Furthermore, the PI sector as a whole continues to be profitable, recording pre-tax earnings of EUR 22.7 million in the first half of 2025, compared with EUR 23.7 million in the corresponding period of 2024 (see Chart V.33).

## Chart V.32 Total annual value of payment transactions by PIs



## Chart V.33 PIs' profit and loss accounts and total equity



<sup>&</sup>lt;sup>79</sup> Law 4537/2018 transposed into Greek law Directive 2015/2366/EE (Payment Services Directive II – PSDII) establishing the regulatory framework for payment services in the internal market. Furthermore, in accordance with Article 14 of Law 4537/2018, the Bank of Greece publishes on its official website a public register of authorised PIs, EMIs and AISPs with their head office in Greece (Supervised institutions (bankofgreece.gr).

<sup>&</sup>lt;sup>80</sup> Under the current regulatory framework, the total value of payment transactions relates to a 12-month period. In particular, the reference period for 2025 extends from 1.7.2024 to 30.6.2025.

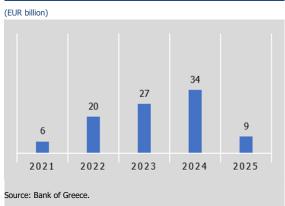
<sup>&</sup>lt;sup>81</sup> Under the current regulatory framework, the total value of payment transactions relates to a 12-month period. In particular, the reference period for 2024 extends from 31.12.2023 to 31.12.2024.

#### (b) Electronic Money Institutions (EMIs)

The Bank of Greece has authorised five (5) electronic money institutions (EMIs).

During the reference period of 2025, the total value of payment transactions carried out by EMIs amounted to EUR 9.1 billion, representing a decrease of 73.4% compared to the reference period of 2024 (EUR 34.3 billion; see Chart V.34). This decline in transaction value is attributed to the merger by acquisition of the largest EMI by a credit institution within the same group.<sup>82</sup> These payment services are now provided by the credit institution.





The remaining four electronic money institutions (EMIs) recorded payment transactions totalling EUR 9.1 billion in 2025, up by 41% compared to the reference period of 2024 (EUR 6.5 billion). Only two of these institutions offer electronic money services in addition to payment services.

As of June 2025, the total equity of electronic money institutions (EMIs) amounted to EUR 22.1 million, reflecting a decrease of EUR 45.9 million compared to December 2024 (EUR 68 million; see Chart V.35), attributable to the aforementioned corporate restructuring. The total equity of the remaining EMIs recorded an increase of EUR 2.5 million compared to December 2024 (EUR 22.1 million, up from EUR 19.6 million).

In the first half of 2025, the four electronic money institutions (EMIs) registered losses amounting to EUR 0.6 million, compared with losses of approximately EUR 1 million in the first half of 2024 (EUR 22.2 million, including the absorbed institution; see Chart V.35). It should be noted that performance within the sector varies, as two institutions reported profits totalling EUR 1.25 million, while the other two recorded losses of EUR 1.85 million. These losses do not require coverage through an increase in their share capital.

Furthermore, it should be noted that 319 payment institutions (PIs) and 244 electronic money institutions (EMIs) authorised in other

#### Chart V.35 EMIs' profit and loss accounts and total equity



Member States of the European Economic Area have notified the Bank of Greece of their intention to provide payment services in Greece under the EU passporting regime.

<sup>&</sup>lt;sup>82</sup> On 31 January 2025, following Decision No. 516/19.11.2024 of the Credit and Insurance Committee of the Bank of Greece, the merger by absorption of the electronic money institution under the name "VIVA Payment Services Single-Member S.A." by the credit institution under the name "VIVABANK Single-Member Banking S.A." was announced in the General Commercial Registry (GEMI).

The majority of these institutions exercise the freedom to provide services without establishment. As regards the type of payment services provided, most of the aforementioned institutions are engaged in the issuance of payment instruments and/or merchant acquiring, fund transfers and execution of remittances.

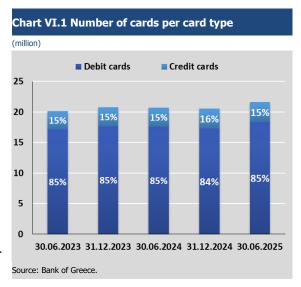
#### VI. FINANCIAL MARKET INFRASTRUCTURES

#### 1. ELECTRONIC PAYMENT INSTRUMENTS

#### 1.1 PAYMENT CARDS

#### Number of payment cards

In June 2025, the total number of active payment cards<sup>83</sup> in circulation stood at 21.6 million, up by 5.3% compared with December 2024 (see Chart VI.1). Breaking down the figures by card type, the number of debit cards rose by 6%, while the number of credit cards recorded a slight increase of 1%, resulting in a marginal change in the shares of debit and credit cards in total payment cards (85% and 15%, respectively). A key point to note is the number of prepaid cards, which recorded a significant increase of 39% in June 2025 compared with December 2024, reaching 11% of total active cards in circulation. Specifically,



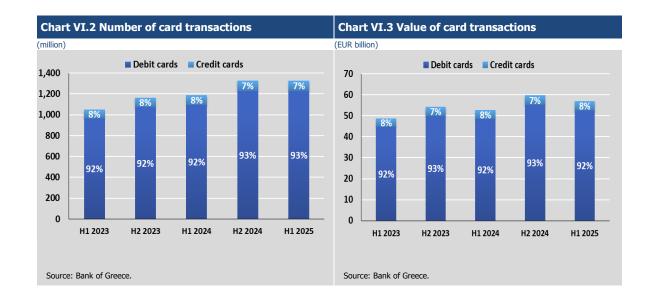
their number rose to 2.4 million cards, from 1.7 million in December 2024 – a development largely attributed to changes in the payment by public authorities of certain financial benefits, which are now credited to special prepaid cards issued to beneficiaries.

#### Transactions with payment cards

In the first half of 2025, the total number and total value of payment card transactions did not change significantly compared with the second half of 2024. Specifically, the number of card transactions amounted to 1,325 million, compared with 1,326 million in the previous half-year (see Chart VI.2), while the corresponding value stood at EUR 57 billion, down by 5% (see Chart VI.3).

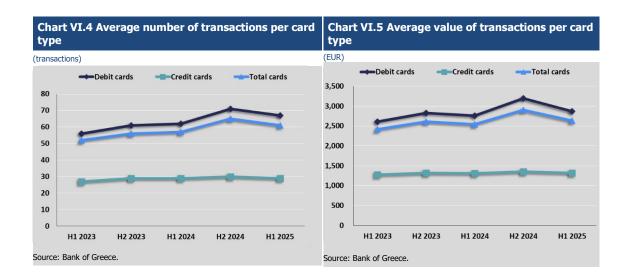
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<sup>&</sup>lt;sup>83</sup> For the purposes of this Review, debit cards comprise prepaid cards and cards that can be used for cash withdrawals but not for purchases. Credit cards comprise virtual cards and delayed debit cards.



The average number of transactions per card dropped to 61, from 65 in the second half of 2024. Debit cards, the main substitute for cash, continue to be widely used for low-value transactions. The average number of transactions per debit card fell to 67, from 71 in the second half of 2024. Similarly, the average number of transactions per credit card declined to 29, from 30 in the second half of 2024 (see Chart VI.4).

The average transaction value per card decreased by 9% compared with the second half of 2024, reaching EUR 2,631, down from EUR 2,904 (see Chart VI.5). This decline is mainly attributed to a corresponding 10% decrease in the average transaction value per debit card, which stood at EUR 2,865, compared with EUR 3,195 in the second half of 2024. The average transaction value per credit card also fell, by 2.6%, to EUR 1,317, down from EUR 1,352 in the second half of 2024.

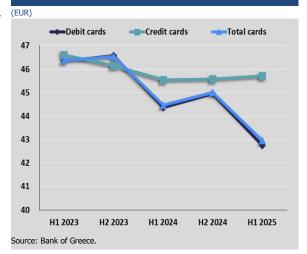


The average value per transaction for both credit and debit cards decreased by 4.5% to EUR 43, from EUR 45 in the second half of 2024 (see Chart VI.6).

By card type, the average value per transaction using a debit card fell to EUR 43 from EUR 45, down by 5%, while the average value per transaction using a credit card remained unchanged at EUR 46, as in the second half of 2024.

The downward trend in the average value per card transaction reflects both users' increasing familiarity with this payment method and its continued use for low-value purchases.

#### Chart VI.6 Average value per card transaction



#### Payment card transaction fraud

Regarding fraud incidents in payment card transactions in the first half of 2025, the number of fraudulent transactions recorded a marginal decrease of 1% compared with the second half of 2024 (see Table VI.1). Similarly, the ratio of fraud incidents to the total number of transactions fell slightly by 1% compared with the previous half-year, corresponding to one fraudulent transaction per 6 thousand transactions.

In contrast to the number of fraudulent transactions, which decreased, their value increased by 6% compared with the second half of 2024 (see Table VI.2). These changes did not have a significant impact on the ratio of the value of fraud incidents to the total value of transactions, which remained at the low level of 0.02%, as in the second half of 2024, amounting to EUR 1 of fraud value per EUR 4.6 thousand of transaction value.

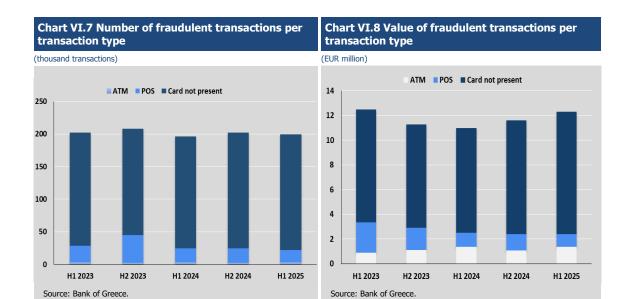
Table VI.1 Fraud-to-transaction ratio: Volume

(transactions)			
Period	Number of Num transactions	nber of fraudulent transactions	Fraud to transaction ratio
H1 2025	1,325,355,638	199,742	0.02%
H2 2024	1,326,435,611	202,188	0.02%
H1 2024	1,185,199,780	196,535	0.02%
H2 2023	1,162,672,464	208,345	0.02%
H1 2023	1,048,193,208	202,000	0.02%
Source: Bank of 0	Greece.		

Table VT.2	Fraud-to-	transaction	ratio: Va	alue

(EUR)		Value of fraudulent	Fraud to
Period	Value of transactions	transactions	transaction ratio
H1 2025	56,941,517,696	12,279,471	0.02%
H2 2024	59,693,442,078	11,615,874	0.02%
H1 2024	52,690,799,247	10,985,653	0.02%
H2 2023	54,112,403,611	11,278,698	0.02%
H1 2023	48,597,138,971	12,492,176	0.03%
Source: Bank of	f Greece.		

An analysis of fraud incidents by payment card transaction type, namely (a) ATM transactions; (b) POS terminal payments; and (c) card-not-present (CNP) transactions, reveals that the highest fraud rate is still recorded in CNP transactions (see Charts VI.7 and VI.8).



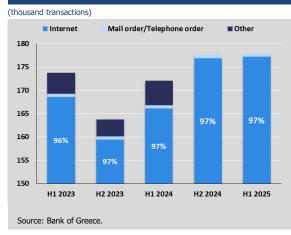
In the first half of 2025, the number of fraud incidents by transaction type amounted to 2,767 transactions at ATMs, 19 thousand transactions at POS terminals and 177 thousand in card-not-present (CNP) transactions. The corresponding values were EUR 1.3 million for ATM transactions, EUR 1 million for POS payments and EUR 9.9 million for CNP transactions. Regarding fraud in ATM transactions, both the number and the value increased by 9% and 26%, respectively, compared with the second half of 2024. For fraud incidents in POS payments, the value decreased by 19%, while the number fell by 13% between the second half of 2024 and the first half of 2025. Lastly, for CNP transactions, the number of fraud incidents remained unchanged, whereas their value increased by 7% compared with the previous half-year (see Charts VI.7 and VI.8).

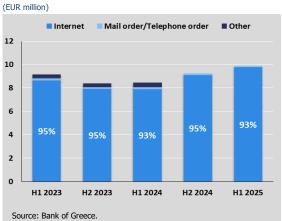
An analysis of ATM fraud incidents suggests that the majority are attributable to illegal transactions using lost/stolen cards (2.7 thousand transactions, up from 2.4 thousand in the second half of 2024). The corresponding value of these incidents reached EUR 1.3 million, up from EUR 1.1 million in the second half of 2024. Regarding fraud incidents in POS transactions, the decrease in the number of fraudulent transactions is attributed to a drop in fraud involving lost/stolen cards, which fell to 17,2 thousand transactions, down from 19,4 thousand, while the corresponding value increased slightly to EUR 883 thousand, from EUR 873 thousand in the second half of 2024.

A more detailed examination of fraud incidents in CNP transactions conducted via the internet or by mail order/telephone order shows that the majority of these incidents involve online transactions (see Charts VI.9 and VI.10).



#### **Chart VI.10 Value of fraudulent CNP transactions**

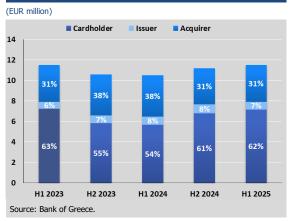




As in previous years, online fraud primarily refers to cross-border online purchases using cards issued in Greece. This is due to the more extensive use of the international technical standard for secure transactions "3DSecure" by Greek payment service providers compared to foreign payment service providers.

In the first half of 2025, financial losses resulting from fraudulent transactions increased by 3% compared with the second half of 2024, reaching EUR 11.5 million. Regarding the allocation of losses among the parties involved in the card transaction chain according to their degree of fault, cardholders accounted for 62%, card acquiring payment service providers for 31% and card issuing providers for 7% (see Chart VI.11).





#### 1.2 CREDIT TRANSFERS

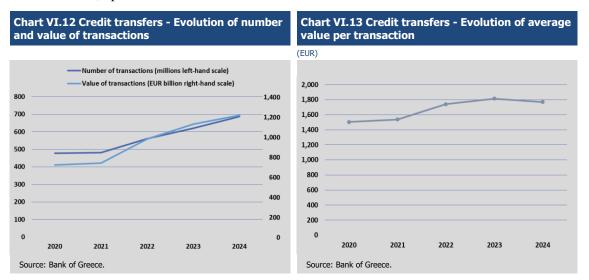
#### **Credit transfer transactions**

In 2024, 687 million customer transactions using credit transfers were conducted, amounting to a total value of EUR 1.2 trillion. Compared with 2023, the number of transactions increased significantly by 11%, and the corresponding value by 8% (see Chart VI.12). Conversely, the average value per transaction decreased by 2%, reaching EUR 1,770 in 2024, down from EUR 1,815 in 2023 (see Chart VI.13).

It is worth mentioning that, in 2024, a significant increase in instant credit transfer transactions was observed<sup>84</sup> compared to 2023. Specifically, the number of transactions executed via instant credit transfer rose by 88%, reaching 63.3 million transactions in 2024, up from 33.7 million in

<sup>&</sup>lt;sup>84</sup> Instant credit transfers refer to the option provided to an originator/payer to make funds available in the beneficiary's account within 10 seconds of the payment order being made.

2023. The value of instant credit transfer transactions also increased, by 31%, reaching EUR 27.8 billion in 2024, up from EUR 20.5 billion in 2023.



#### Credit transfer transaction fraud

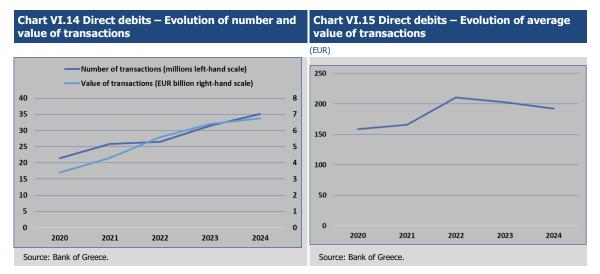
In 2024, fraud incidents in credit transfers showed a significant decrease, with the number of incidents down by 55% and their corresponding value down by 51%. Fraud incidents were recorded on the basis of the methodology under ECB Regulation 2020/59 on payment statistics, according to which 5,032 fraud incidents were reported, with a total value of EUR 12 million, compared with 11,214 fraud incidents totalling EUR 25 million in 2023. The ratio of fraud incidents and value of fraud to the number and value of credit transfer transactions stood at 0.00073% and 0.001%, respectively, amounting to one fraud transaction per 136 thousand credit transfer transactions, with a fraud value of EUR 1 per EUR 100 thousand of transaction value. Special mention should be made of the decrease in fraud incidents related to instant credit transfers, as in 2024 the number and value of cases decreased by 54% and 50%, respectively. The main reasons behind this significant decline in credit transfer fraud in 2024 are associated with the continued implementation of measures to prevent and address the risk of fraud by payment service providers, as well as users' growing familiarity with the appropriate use of these payment methods, along with payment service providers' growing familiarity with the requirements of ECB Regulation 2020/59, which resulted in improved accuracy of electronic payment data recording.

The above information, combined with a detailed analysis of data, shows that the majority of fraud incidents in credit transfer transactions is achieved with the following techniques: (a) issuance of a payment order by the fraudster in 43% of the cases; and (b) manipulation of payers by the fraudster to issue a payment order in 57% of the cases. According to the former fraud method, a fraudster issues an unauthorised payment order after having illegally acquired the payer's or the payee's sensitive payment information. Under the latter method, payers are manipulated by the fraudster to issue a payment order, or to instruct the payment service provider to do so, in good faith, to the payment account of a seemingly legitimate payee.

#### 1.3 DIRECT DEBITS

#### **Direct debit transactions**

In line with the methodology of ECB Regulation 2020/59, in 2024, customer transactions using direct debits increased by 11% compared to 2023, reaching 35 million transactions. Their corresponding value rose by 6% to EUR 6.8 billion. The average value per transaction dropped by 5% to EUR 192, from EUR 203 in 2023 (see Chart VI.15).



#### Direct debit transaction fraud

Direct debits continued to be regarded as the most secure payment instrument, given that there were no fraud incidents reported by payment service providers in 2024 as well.

#### 2. CENTRAL COUNTERPARTIES

#### 2.1 DEVELOPMENTS IN THE REGULATORY FRAMEWORK

Central counterparties are key financial market infrastructures, as they intervene in transactions between buyers and sellers by assuming the counterparty risk. Therefore, their smooth functioning is crucial for ensuring financial stability.

On 19 June 2025, the European Securities and Markets Authority (ESMA) published a report<sup>85</sup> with the Draft Regulatory Technical Standards (RTS) on the Active Account Requirement (AAR), which was introduced by the latest amendment to the EMIR Regulation (EMIR 3).<sup>86</sup> This requirement applies to financial and non-financial counterparties that:

- are subject to the clearing obligation under Union law; and
- exceed the clearing thresholds in any of the classes of derivatives that have been designated as significant systemically important.

Under this requirement, the above counterparties are obliged to:

- maintain an active account with a central counterparty authorised in the EU; and
- clear a minimum number of transactions through that account, which is representative of the different classes of significant systemically important derivatives.<sup>87</sup>

The primary objective of this requirement is to limit excessive exposure to significant systemically important clearing services provided by third-country central counterparties, thereby strengthening the financial stability and strategic autonomy of the European Union.

The ESMA report sets out the conditions for an account to be considered operational and capable of being used for a significant volume of transactions even in the short term. In addition, it includes a framework of technical and operational tests that will verify the operational capacity of the account in question. Finally, the report specifies requirements for counterparties regarding the submission of reports concerning their activities in the classes and sub-classes of systemically important derivatives, as well as the operational capacity of the active account.

The implementation of these Regulatory Technical Standards is expected towards the end of 2025, following their adoption by the European Commission and their examination by the European Parliament and the Council of the EU.

#### 2.2 ATHENS EXCHANGE CLEARING HOUSE (ATHEXCLEAR)

The Athens Exchange Clearing House (ATHEX) provides clearing services and acts as a central counterparty for the Athens Exchange's transactions, covering the securities and derivatives markets, as well as the securities lending facility. In addition, it undertakes the clearing of derivatives transactions of the Energy Exchange.

<sup>85</sup> ESMA Final Report - Conditions of the Active Account Requirement.

<sup>&</sup>lt;sup>86</sup> Regulation (EU) 2024/2987 of the European Parliament and of the Council of 27 November 2024 amending Regulations (EU) No 648/2012, (EU) No 575/2013 and (EU) 2017/1131 as regards measures to mitigate excessive exposures to third-country central counterparties and improve the efficiency of Union clearing markets.

<sup>&</sup>lt;sup>87</sup> Types of derivative contracts subject to the active account requirement are (a) interest rate derivatives in euro or Polish zloty; (b) euro short-term rate derivatives.

On 30 July 2025, Euronext N.V. submitted a takeover bid for Hellenic Exchanges – Athens Stock Exchange S.A. (ATHEX), the parent company of ATHEXClear, which was unanimously supported by the ATHEX Board of Directors. The proposal is accompanied by commitments on the part of Euronext that ATHEX will maintain its legal, business and tax residence in Greece; that the operational resilience of the Greek capital market will be enhanced and that ATHEX's role as a national exchange and a regional hub will be safeguarded.

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During the first half of 2025, derivatives and securities lending transactions cleared by ATHEX-Clear increased compared to 2024 in terms of both average daily volume and average daily value.

In more detail, the average daily volume of transactions in the derivatives market and the securities lending mechanism amounted to 51,647 transactions in the first half of 2025, up by 23% compared to the first half of 2024 (42,087 transactions) and 37% compared to 2024 (37,595 transactions), as presented in Table VI.3 and Chart VI.16. This change is mainly due to the increase observed in Stock Futures.

**Securities Lending Facility** (in thousand transactions) Lending (multilateral/bilateral) Stock options Index futures Index options Stock futures 50 45 40 35 30 25 20 15 10 5 0 2020 2021 June 2025 Source: Monthly Statisical Bulletin Derivatives - lending, Hellenic Exchanges Athens Exchange S.A.

Chart VI.16 Daily Average Traded Volume in the

Derivatives Market by type of contract and in the

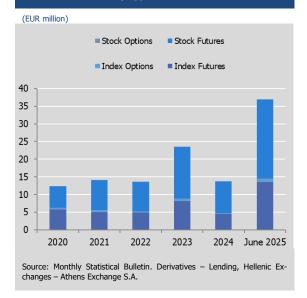
Table VI.3 Daily average traded volume in the derivatives market by type of contract and in the securities lending facility Lending (multilateral/bi-**Index Fu-Index Op-**Stock Fu-**Stock Options Total** tures tions tures lateral) 2020 1,698 147 38,154 62 1,121 41,182 2021 46,238 71 48,233 1,205 152 567 2022 1,162 33,064 39 678 35,029 87 2023 1,579 42,188 54 421 44,386 144 2024 37,595 1,306 79 35,807 20 383 June 2025 1,556 122 49,096 125 748 51,647 Source: Monthly Statistical Bulletin. Derivatives – Lending, Hellenic Exchanges – Athens Exchange S.A.

Similarly, the average daily value of transactions in the first half of 2025 amounted to EUR 36.9 million, recording a significant increase of 31% compared to the first half of 2024 (EUR 28.1 million) and 170% compared to 2024 (EUR 13.7 million). This change is explained by a corresponding increase in the average daily value of both Stock and Index Futures (see Table VI.4 and Chart VI.17).

#### Table VI.4 Daily average rraded value in the derivatives market by type of contract

(EUR million)									
	Index Futures	Index Op- tions	Stock Futures	Stock Op- tions	Total				
2020	5.81	0.51	6.02	0.03	12.37				
2021	5.02	0.64	8.32	0.06	14.03				
2022	4.88	0.37	8.24	0.03	13.51				
2023	8.12	0.83	14.43	0.04	23.42				
2024	4.52	0.28	8.86	0.01	13.66				
June 2025	13.51	1.02	22.34	0.07	36.94				
Source: Monthly Statistical Bulletin. Derivatives. – Lending, Hellenic Exchanges – Athens Exchange S.A.									

## Chart VI.17 Daily average traded value in the derivatives market by type of contract



#### 3. CENTRAL SECURITIES DEPOSITORIES

There are two Central Securities Depositories operating in Greece:

- The Bank of Greece Securities Settlement System (also known as the "System for Monitoring Transactions in Book-Entry Securities", hereinafter "BOGS"), which is managed by the Bank of Greece. Since 2015, the System has joined the common pan-European settlement platform TARGET2-Securities (T2S) of the Eurosystem, enhancing the integration and efficiency of securities transactions settlement at the European level.
- Hellenic Central Securities Depository S.A. (ATHEXCSD) of the company "Hellenic Exchanges Athens Stock Exchange S.A.", which provides settlement services for transactions in transferable securities and other financial instruments or securities.

#### 3.1 THE BANK OF GREECE SECURITIES SETTLEMENT SYSTEM (BOGS)

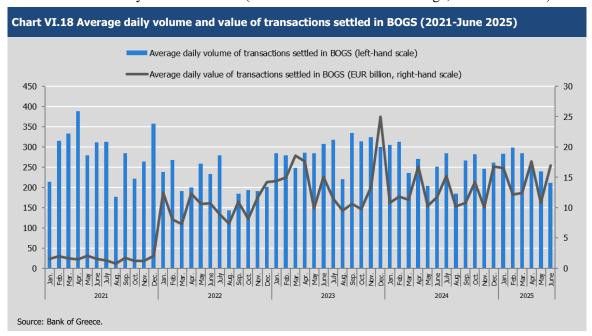
In the first half of 2025, BOGS demonstrated a high level of security and efficiency in the services provided, efficiently serving both the participants and the Hellenic Republic, which is the main issuer of the securities recorded and monitored through the System. The effective operation of BOGS enhances confidence and transparency in securities transactions, contributing to the stability of the domestic financial system.

The average daily value of transactions settled in BOGS in the first half of 2025 (buy/sell transactions, repos in securities, internal transfer of securities, etc.) amounted to EUR 14.4 billion, up by 19.1% year-on-year (first half of 2024: EUR 12.1 billion). The observed rise in trading activity is partially due to increased transactions in the special purpose Greek government Treasury bill, which is used extensively in repo transactions, and to the PDMA's issuing activity in the period

<sup>88</sup> The special purpose Greek government Treasury bill was issued under Article 1, subpara. C4 of Law 4254/2014, which provides that the Public Debt Management Agency (PDMA), in order to fulfil its objective: "As trustee and on behalf of the Greek government and in accordance with the procedure set out in Law 2628/1998 (A' 151), as applicable, may issue, hold and manage securities of the

under review (issuance of a 10-year bond, buyback of 5-year and 7-year bonds and reopening of 15-year and 30-year bonds). Specifically, the average daily value of buy/sell transactions in the first half of 2025 amounted to EUR 704 million, up by 40.2% year-on-year (first half of 2024: EUR 502 million).

The average daily volume of transactions in the first half of 2025 remained almost unchanged year-on-year and amounted to 262 transactions (first half of 2024: 263 transactions on average), of which 132 were buy/sell transactions (first half of 2024: 128 on average, see Chart VI.18).



## 3.2 THE DEMATERIALISED SECURITIES SYSTEM OF THE COMPANY "HELLENIC CENTRAL SECURITIES DEPOSITORY"

Settlement activity in the Dematerialised Securities System managed by the Hellenic Central Securities Depository (ATHEXCSD) showed a significant increase in the first half of 2025 both in terms of the value of settled stock transactions and in terms of the daily number of settled transactions compared to the corresponding period of 2024.

Specifically, the average daily number of settled stock transactions in the first half of 2025 amounted to 49,328, up by 18% compared to the first half of 2024 (41,844 transactions). At the same time, the average daily value of settled stock transactions in the first half of 2025 grew by 37% year-on-year and amounted to EUR 197.7 million, compared with EUR 143.8 million in the first half of 2024 (see Table VI.5).

Greek government, with the sole purpose of using them to enter into sales transactions with a repurchase agreement (repos) or to provide collateral in hedging transactions, on the entire debt of the Greek government, while at the same time carrying out their cash settlement."

2020 32	Average		bonds		debt	ket (stocks)	Total				
2020 32	Average daily number of transactions settled in ATHEXCSD										
	2,700	7	64	3	0.21	206	32,982				
2021 29	9,939	56	75	2	2	312	30,386				
2022 29	9,404	12	131	2	0	576	30,126				
2023 36	6,172	29	166	8	0	691	37,066				
2024 36	6,170	11	195	44	0	826	37,246				
JanJune 2024 4	0,429	7	197	52	0	1,160	41,844				
JanJune 2025 4	18,364	45	217	124	0	<i>578</i>	49,328				
Averag	ge daily cash	value of tr	ansactions s	settled in A	THEXCSD (E	UR thousand)					
2020 64	4,474	2	761	40	10	120	65,408				
2021 70	0,248	23	986	17	85	297	71,655				
2022 72	2,481	12	977	16	0.0	409	73,896				
2023 10	09,501	18	888	85	3	543	111,038				
2024 13	37,282	3	1,303	225	0	948	139,761				
JanJune 2024 14	40,903	0.4	1,330	296	0	1,298	143,828				
JanJune 2025 19	95,197	3,5	1,550	341	0	647	197,744				

The proposal for acquisition of HELEX submitted by Euronext N.V. on 30 July 2025<sup>89</sup> entails a change of control of ATHEXCSD as well.

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 $<sup>^{89}</sup>$  See Section VI.2.2 Athens Exchange Clearing House (ATHEXClear) in this Review.

#### SPECIAL FEATURE I EUROPEAN BANKING AUTHORITY 2025 EU-WIDE STRESS TEST

The primary objective of regulatory stress tests is to assess the resilience of financial institutions under adverse economic conditions. Through the implementation of hypothetical, yet plausible, stress scenarios by supervised financial institutions or by supervisory authorities, supervisors and banks can identify vulnerabilities, gauge capital adequacy and take proactive measures to mitigate risks, ultimately safeguarding the stability of the financial system and protecting depositors and investors.

According to Article 100 of Directive 2013/36/EU (Capital Requirements Directive IV – CRD IV), 90 all EU competent authorities are required to carry out on an annual basis supervisory stress tests on institutions they supervise. The supervisory stress test results are considered in the Supervisory Review and Evaluation Process (SREP) and, among other things, feed the estimations of the Pillar 2 guidance (P2G). P2G is a bank-specific recommendation that outlines the level of capital that supervisors anticipate banks to maintain beyond their mandatory capital requirements to ensure that banks can absorb potential losses resulting from adverse scenarios.

The European Banking Authority (EBA), in cooperation with the European Systemic Risk Board (ESRB), every alternate year, initiates and coordinates the EU-wide stress test. The EU-wide stress test is a forward-looking exercise and assesses the performance of banks under two different scenarios, the baseline and the adverse, over a 3-year horizon. For 2025, the EBA conducted the EU-wide stress test exercise on a sample of 64 EU banks covering roughly 75% of total banking sector assets in the EU. With respect to the Greek banking sector, three significant Greek credit institutions<sup>91</sup> were included in the EBA sample. The Single Supervisory Mechanism (SSM) conducted the stress test exercise for 96 significant institutions directly supervised by it, including those that were already covered by the EBA sample.

The 2025 EU-wide stress test exercise was conducted at the highest level of consolidation (group level), with reference date 31 December 2024. To consider the application, as from 1 January 2025, of the new requirements of Capital Requirements Regulation (CRR), as amended by Regulation (EU) 2024/1623 (CRR3)<sup>92</sup>, credit institutions were requested to submit both their end-2024 data and the restated figures with reference date 1 January 2025 based on the requirements of CRR3. The impact on balance sheet and P&L components over the exercise's time horizon, along with the impact on capital adequacy and leverage ratios, was assessed based on the new regulatory requirements. It is worth noting that no pass or fail capital thresholds are considered for the purpose of the exercise.

It should be noted that the EU-wide stress test focuses on the assessment of the impact of risk drivers on the solvency of banks. Specifically, banks were required to stress credit risk, market risk and operational risk. In tandem with the aforementioned risks, banks estimated the impact of

<sup>90</sup> OJ L 176, 27.6.2013, pp. 338-436.

<sup>&</sup>lt;sup>91</sup> Eurobank Ergasias Services and Holdings SA was not included in the exercise due to the acquisition of Hellenic Bank in Cyprus. This option is provided for in the methodology of the exercise[[προσέθεσα link στο 'methodology of the exercise, δεν χρειάζεται να παραθέσουμε ολόκληρο το link]] (1.3.1, paragraph 11) for credit institutions that take part in a merger or are acquired by another bank, as long as such corporate action has a significant impact on their balance sheet structure or business operations.

<sup>92</sup> OJ L 2024/1623, 19.6.2024.

macroeconomic scenarios on P&L (e.g. Net Interest Income, Net Fee and Commission Income) and capital items arising from all other financial risks. The EU-wide stress test exercise is a static balance sheet exercise, which assumes that the composition and size of a bank's balance sheet remain unchanged over the stress test horizon; that is, assets or liabilities that mature within the stress test horizon (i.e. 2025-2027) must be substituted with instruments similar in type, currency, credit quality and original maturity to those held at the start of the exercise.

#### Adverse scenario

The adverse scenario for the 2025 EU-wide stress test assumes more severe developments than the baseline scenario: 93 an escalation of geopolitical tensions, coupled with increasingly protectionist trade policies globally, contributes to a fragmentation of the global supply system. This trade fragmentation and renewed geopolitical tensions, in particular in the Middle East, give rise to supply-side inflationary pressures on the back of higher energy prices. Soaring macroeconomic uncertainty and trade barriers generate a drastic and persistent reduction in global trade, impacting on EU growth and employment. At the same time, the return of inflationary pressures initially leads to higher market interest rates, triggering corrections in asset prices. Finally, the escalation of geopolitical risks and the ensuing materialisation of macro-financial risks cause bank deleveraging and a tightening of credit standards, which, coupled with a reduction in households' incomes, ultimately trigger a fall in real estate prices.

Specifically for the Greek (GR) economy's dynamics, the macroeconomic scenario is broadly aligned with the euro area (EA) average for most key variables, except for the decline in residential real estate prices, which is considerably more severe for Greece. In the table below some of the key macroeconomic variables are provided for the adverse scenario.

Table 1 EU-wide Stress Test 2025 – Key ma	acroeconomic variables under th	e adverse scenario
3-year cumulative growth (%)	Greece	Eurozone
GDP	-6.1	-6.2
Unemployment (in percentage points)	4.2	5.6
Inflation	11.6	10.1
Residential Real Estate prices	-22.3	-14.8
Commercial Real Estate prices	-28.8	-28.6
Source: ECB.		

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<sup>&</sup>lt;sup>93</sup> The baseline scenario for EU countries is based on national central banks' December 2024 projections of the evolution of macrofinancial variables.

#### Main methodological changes relative to the 2023 EU-wide stress test exercise

The methodology of the 2025 EU-wide stress test was similar to the 2023 EU-wide stress test exercise, with the exception of the following noteworthy methodological changes:

- The calculation of net interest income (NII) was centralised at the EBA level for most balance sheet items. In particular, credit institutions were required to provide only the starting point balances and risk parameters, while the evolution of interest income and expenses was computed centrally through an EBA-developed platform, following the prescribed methodological constraints and the projected paths of interest rates and credit spreads. This methodological change reduced the time required for the quality assurance process and ensured a level playing field across all credit institutions. Furthermore, this change marks a significant step towards the transition to top-down approaches in the conduct of stress testing exercises at the European level.
- Several templates were adjusted to align with the new supervisory framework (CRR3), e.g. new asset classes subject to credit risk.
- A more risk-sensitive floor was introduced for losses related to trading book positions and their related hedges, based on the Alternative Standardised Approach for Market Risk (FRTB ASA).

#### Results of the 2025 EU-wide stress test exercise

The average CET1 ratio depletion over the horizon of the exercise was 329 bps for all SSM banks, against 134 bps for Greek banks. The outperformance of Greek banks relative to their European peers, as well as in comparison with their previous stress test exercises performance, can be attributed to the following factors:

- Greek banks have a materially higher positive contribution from Net Interest Income, by around 550 bps, due to their floating-rate assets that benefit from a rising interest rates scenario, while they have lower NFCI income by around 130 bps. Overall, their increased pre-provision profits serve as a first line of defense against additional losses.
- The negative impact from other P&L items is stronger mainly due to lower other operating income and higher dividends relative to the full sample, even though it is mitigated by lower operating expenses, as a result of which Greek banks are better placed to manage the additional losses resulting from the stress test exercise.
- At the same time, although the macroeconomic scenario is of comparable severity relative
  to the EEA average, the impact of credit risk on Greek banks is stronger by around 80
  bps.

Finally, it should be noted that the implementation of the new Capital Requirements Regulation (CRR3) impacts banks' regulatory capital ratios differently over time, thanks to the transitional arrangements that phase in the new rules. Full CRR3 implementation is set for 2033, so banks have ample time to adjust their balance sheets until then. On a transitional basis, the impact of the CRR3 rules on EEA banks' aggregate CET1 ratio at year-end 2024 balances is not significant, while the total capital ratio drops by 126 bps on a fully loaded basis, mainly due to the introduction of the output floor, which will be phased in by 2033. Still, in the adverse scenario the fully loaded CET1 ratio of the EEA banking system remains above 11%, higher than in previous stress tests.

Therefore, any "CRR3 restatement effect" should be interpreted with caution, as it disregards the fact that the transitional arrangements will be phased in by 2033, providing additional leeway for banks to take management actions to mitigate it.

The impact on the fully loaded CET1 ratio for Greek banks broken down into its main components is presented below.

Table 2 In (CET1R fu			, under	the adv	erse sc	enario, o	n the full	ly loaded	Common	Equity	Tier 1 ra	tio of Gre	ek banks
	CET1R end- 2024 (%)	Restated CET1R 1.1.2025 (%)	CRR3 impact (%)	Credit Risk	Market Risk	Net Interest Income	Opera- tional Risk	Net Fee and Commis- sion In- come	Other Profit and Loss items	Other Capi- tal items	Risk- Weighted Assets	CET1R FL end- 2027 (%)	Change CET1R (2024 - 2027) (%)
						Pe	ercentage	e impact	(%)				
Euro area	15.85	14.59	-1.29	-4.6	-1.2	9.3	-0.5	4.3	-9.7	-0.1	-0.7	11.31	-3.29
Greece	16.41	15.39	-1.02	-5.4	-0.9	14.8	-0.4	3.0	-11.1	-0.4	-1.0	14.05	-1.34
National Bank of Greece	18.31	17.27	-1.04	-4.7	-1.4	14.8	-0.3	2.4	-10.6	0.3	-1.1	16.77	-0.50
Alpha Bank	16.25	15.91	-0.34	-6.5	-1.0	14.8	-0.6	3.3	-10.7	-0.5	-0.9	13.94	-1.97
Piraeus Bank	14.47	13.01	-1.47	-5.1	-0.4	14.7	-0.5	3.4	-11.8	-1.0	-1.0	11.36	-1.65
Source: EC	CB.												

# SPECIAL FEATURE II THE USE OF THE STANDARDISED CREDIT-TO-GDP GAP

#### Introduction

The global financial crisis of 2007-2008 highlighted the need for a radical reform of the financial system, as it became clear that ensuring the robustness of individual financial institutions alone, which was the focus of microprudential policy, was not sufficient to prevent the accumulation of systemic risks and maintain financial stability in the system as a whole. In this context, the Basel III regulatory framework, proposed by the Basel Committee on Banking Supervision (BCBS), complemented the framework existing at the time, which had mainly a microprudential focus, and laid the foundations for the new macroprudential policy framework.<sup>94</sup> In particular, the new framework set new standards regarding capital requirements and introduced the notion of capital buffers.95 The countercyclical capital buffer (CCyB) is one of these new macroprudential measures. The CCyB aims at preventing or mitigating the build-up of cyclical systemic risks and ensuring an appropriate level of credit growth and leverage both at the upward and downward phase of the economic and financial cycle, as well as strengthening banking sector resilience. As a common reference indicator for monitoring the accumulation of systemic risks and setting the CCyB rate, the Basel Committee proposed the standardised credit-to-GDP gap, considered as an early warning indicator of banking crisis. The extensive use and publication of the indicator by a large number of countries in the context of their application of the Basel III regulatory framework brought to the fore a number of technical challenges and weaknesses of this indicator, as a result of which the accumulation of systemic risks may be underestimated and the adoption of appropriate macroprudential measures may be delayed.

This Special Feature presents how the framework of monitoring cyclical systemic risks for the purpose of calibrating the CCyB rate has evolved in European counties in the context of the implementation of the Basel III regulatory framework. Particular emphasis is given on a presentation of the main technical challenges and weaknesses of the Basel reference indicator, the standardised credit to GDP gap. It should be noted that, in light of these technical challenges and weaknesses, several countries, even though they estimate and publish the indicator as part of their implementation of the Basel framework, choose to put more weight in their analysis on other additional indicators. This is evident from the fact that many countries, from the first years of implementation of the new framework, have chosen to adopt a positive CCyB rate even though a strict reading of the values of the standardised credit-to-GDP gap would not justify a positive CCyB rate.

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<sup>&</sup>lt;sup>94</sup> Basel Committee on Banking Supervision (BCBS) (2010), "Basel III: A global regulatory framework for more resilient banks and banking system", December (revised June 2011).

<sup>&</sup>lt;sup>95</sup> See Lagaria, K. (2022), "Capital Conservation Buffer and Countercyclical Capital Buffer" in Joosen, B., M. Lamandini and T.H. Tröger (eds), *Capital and liquidity requirements for European Banks*, Oxford University Press, Oxford and Lagaria, K. (2021), "Releasable and non-releasable capital buffers in the European Union: From puberty to maturity", *Journal of Accounting and Finance*, 21(3).

## The implementation of the countercyclical capital buffer framework in Greece and the technical details relating to the estimation of the standardised credit-to-GDP gap

The regulatory framework that was proposed by the Basel Committee was introduced in the European Union by the provisions of Regulation (EU) No. 575/2013 (Capital Requirements Regulation – CRR) and of Directive 2013/36/EU (Capital Requirements Directive IV – CRD IV), which make up the new macroprudential framework. Then ESRB Recommendation ESRB/2014/1 clarified further technical details regarding the implementation of the CCyB framework. In Greece, the Bank of Greece is the designated authority for setting the CCyB rate. The Bank of Greece reviews every quarter the intensity of cyclical systemic risks and the appropriateness of the CCyB rate for Greece and, if deemed necessary, sets or adjusts the CCyB rate. The CCyB rate for Greece and, if deemed necessary, sets or adjusts the CCyB rate.

In their implementation of the Basel framework, as reflected in the European and national legal frameworks, the designated national authorities of European countries monitor, as mentioned earlier, the standardised credit-to-GDP gap for the assessment of the accumulation of cyclical systemic risks and the calibration of the of the CCyB rate. The standardised credit-to-GDP gap captures the deviation of the ratio of credit to GDP from its long-term trend and is estimated (every quarter) as follows:97 As a first step, the credit-to GDP ratio is calculated as the ratio of the sum of short-term and long-term debt securities and loans (i.e. credit), 98 as reported in the liabilities of the private non-financial sector, to the sum of the figures of the last four quarterly observations for GDP (calculated in nominal values, non-seasonally adjusted). Then the long-term trend of the credit-to-GDP ratio is estimated. The estimation of the long-term trend of the ratio of credit to GDP is performed using the one-sided Hodrick-Prescott filter with a value for the smoothing parameter set at  $\lambda$ =400,000. The Basel Committee proposed this value for the smoothing parameter basing its choice on the results of previous empirical studies.<sup>99</sup> The value of the smoothing parameter reflects certain technical assumptions regarding the duration of the financial cycle. A value of λ=400,000 reflects a financial cycle of around 30 years. 100 Finally, the standardised creditto-GDP gap is the difference in the credit-to-GDP ratio from its long-term trend. A high value of the standardised credit-to-GDP gap, i.e. of the credit gap or the Basel gap, as is usually referred to in literature, indicates excessive credit growth relative to the evolution of GDP, which leads to increasing cyclical risks for the financial system, requiring the setting of a CCyB rate at a level above 0%.

Basel Committee chose as a reference for the calibration of the CCyB rate an indicator that measures credit expansion on the basis of the findings of empirical research that related excessive credit expansion with financial crises, as well as with the fact that during periods of excessive

<sup>96</sup> See Law 4261/2014 (Article 127, paragraph 1).

<sup>&</sup>lt;sup>97</sup> For more details, see Recommendation of the European Systemic Risk Board ERSB2014/1.

<sup>98</sup> A broad definition of credit was chosen, which was not confined to the monitoring of bank credit alone, but to credit to the private non-financial sector from all sources. The reason for this choice rests on the need to monitor the accumulation of risks emanating from all sources and not from domestic bank credit alone, as well as to avoid regulatory arbitrage, which becomes possible when credit expansion is monitored in a specific part of and not in the financial system as a whole. See. BCBS (2010), "Guidance for national authorities operating the countercyclical capital buffer", and Detken, C., O. Weeken, L. Alessi, D. Bonfim, M. Boucinha, C. Castro, S. Frontczak, G. Giordana, J. Giese, N. Jahn, J. Kakes, B. Klaus, J.H. Lang, N. Puzanova, P. Welz (2014), "Operationalising the countercyclical capital buffer: indicator selection, threshold identification and calibration options", *ESRB Occasional Paper*, No 5.

99 See BCBS (2010), op. cit.

<sup>&</sup>lt;sup>100</sup> See Galán, J. E. (2019), "Measuring credit-to-GDP gaps. The Hodrick-Prescott filter revisited", *Documentos Ocasionales No. 1906*, Banco de España.

credit growth financial institutions tend to loosen credit standards and credit risk is not appropriately priced. 101 In addition, beyond the technical support of the explanatory power of the standardised credit-to-GDP gap regarding the occurrence of systemic financial crisis, it is an indicator that can be easily estimated and, as such, it could serve as a common reference indicator. Finally, as it is an indicator that is credit-based, it can be directly related to the main objective of the CCyB, which is to ensure an appropriate level of credit expansion during all phases of the economic and financial cycle.

#### Challenges for the calibration of the CCyB rate when using the standardised credit-to-GDP gap

The monitoring and publication by several countries of the standardised credit-to-GDP gap in the context of their analysis for the calibration of CCyB rate brought to the fore some of the indicator's technical challenges and weaknesses. In particular, the significantly negative values of the standardised credit-to-GDP gap over the years attracted the interest of analysts and researchers.<sup>102</sup> On the basis of these technical challenges and weaknesses, the risk of not assessing that the economy is entering a phase of excessive credit expansion, and thus not acting on a timely manner, was also highlighted.

The main technical weaknesses identified by analysts relate mainly to the parameters used to estimate the long-term trend with the Hodrick-Prescott filter. One of the issues raised concerns the choice of the value of the smoothing parameter, which as mentioned, was set at  $\lambda = 400,000$ according to the regulatory standards. The choice of this value was based on the findings of previous empirical studies and rests on the assumption that the duration of the financial cycle is around 30 years.

A question that arises in this context is whether the above assumption about the duration of the financial cycle is plausible. It seems that there is no consensus in literature regarding the duration of the financial cycle; there is, however, agreement on the fact that the duration of the financial cycle is longer than that of the economic cycle. However, an average duration of 30 years for the financial cycle is considered to be rather long. There is a range of estimates in literature regarding the duration of the financial cycle. 103 For instance, Drehmann et al. (2012), using data for a sample of 7 countries for the period 1960-2011, note that the duration and amplitude of financial cycles have increased from mid-1980s onwards and, if one focuses on the cycles that peaked after 1998, the average duration is 20 years, compared with 11 for the previous cycles. For the entire reference period, the average duration of financial cycles is estimated to be 16 years.<sup>104</sup>

What are the implications of a high value for the smoothing parameter? A high value for the smoothing parameter introduces a high degree of persistence in the estimated long-term trend, which influences the estimation of the standardised credit-to-GDP gap. For instance, for countries that have gone through a pronounced boom-bust financial cycle, the standardised credit-to-GDP gap will remain negative for a long period of time despite the fact that other indicators, such as real estate prices, suggest that the financial system has returned to normality. On the other hand,

<sup>101</sup> See Kelly, R., K. McQuinn and R. Stuart (2011), "Exploring the Steady-State Relationship between Credit and GDP for a Small Open Economy: The Case of Ireland", ECB Working Paper No. 1531.

<sup>&</sup>lt;sup>102</sup> See <a href="https://www.esrb.europa.eu/national\_policy/ccb/html/index.en.html">https://www.esrb.europa.eu/national\_policy/ccb/html/index.en.html</a>.

<sup>103</sup> For a short review see Galán (2019), op. cit.

<sup>104</sup> See Drehmann, M., C. Borio and K. Tsatsaronis (2012), "Characterising the financial cycle: don't lose sight of the medium term!", BIS Working Papers No 380. The countries included in the analysis are Australia, Germany, Japan, Norway, Sweden, United Kingdom and the United States.

the standardised credit-to-GDP gap will remain constantly positive over several years for countries moving through a period of low or falling credit growth to a period of increasing one.<sup>105</sup>

Another technical challenge with the estimation of the long-run trend that may impact the estimates of the standardised credit-to-GDP gap emanates from the so-called end-point problem. In general, if the first and last observations in the sample do not reflect similar points in the financial cycle, the estimation of the long-term trend will be biased and will depend on the path of the time series between the earliest and latest observations. <sup>106</sup> Finally, the estimates of the standardised credit-to-GDP gap are influenced by the size of the sample and tend to be unreliable when obtained from very small samples. <sup>107</sup>

Another issue, not involving the technical parameters of the estimation, relates to the fact that the standardised credit-to-GDP gap may not be able to detect credit developments that emanate from structural changes, such as financial market liberalisation. In such cases, the observed credit expansion may not be associated with the accumulation of cyclical systemic risks and, as a result, the critical judgement of the designated national authorities is necessary.<sup>108</sup>

As mentioned earlier, for many countries the standardised credit-to-GDP gap has been significantly negative for many years. <sup>109</sup> In particular for Greece, the standardised credit-to-GDP gap remains negative since the third of quarter of 2012. Greece is one of the countries that in the last decades have gone through a pronounced boom-bust credit cycle and, more specifically, a robust credit expansion that partly resulted from the liberalisation of financial markets that took place from the late 1980s and a significant credit contraction that relates to the global financial crisis of 2007-2009 and the ensuing sovereign debt crisis.

It should be noted that, in the years following the adoption of the new macroprudential framework, several countries, despite the fact that the standardised credit-to-GDP gap is negative, have chosen to set a positive rate for the CCyB. 110 This choice largely relates to the fact that these countries use additional indicators and information in their assessment of cyclical systemic risks and the calibration of the CCyB rate.

The use of alternative indicators and information for the assessment of cyclical systemic risks and the calibration of the CCyB rate is foreseen and referred to both in Basel documents and the Recommendation of the European Systemic Risk Board (ESRB/2014/1). In particular, it is acknowledged therein that the standardised credit-to-GDP gap may not work well in all occasions and time periods.<sup>111</sup> It is therefore suggested that the designated national authorities use additional indicators, complementary to the standardised credit-to-GDP gap, in their risk assessment. In order to set a homogeneous framework, these additional indicators can be chosen among a series of relevant indicators from the following six categories: credit developments (i.e. the ratio of credit

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<sup>&</sup>lt;sup>105</sup> See Baba, C., S. Dell'Erba, E. Detragiache, O. Harrison, A. Mineshima, A. Musayev and A. Shahmoradi (2020), "How Should Credit Gaps Be Measured? An Application to European Countries", *IMF Working Paper No. 20/6*, and Castro, C., A. Estrada and J. Martínez (2016), "The countercyclical capital buffer in Spain: An analysis of key guiding indicators", *Documentos de Trabajo No. 1601*.

<sup>106</sup> See Kelly, R. et al (2011), op. cit.

<sup>&</sup>lt;sup>107</sup> See Lang, J. H., C. Izzo, S. Fahr and J. Ruzicka (2019), "Anticipating the bust: a new cyclical systemic risk indicator to assess the likelihood and severity of financial crises", *ECB Occasional Paper Series*, No 219.

<sup>108</sup> See Baba, C. et al (2020), op. cit.

<sup>&</sup>lt;sup>109</sup> See ESRB, <u>Countercyclical capital buffer</u>.

<sup>&</sup>lt;sup>110</sup> Pekanov, A. and F. Dierick (2016), "Implementation of the countercyclical capital buffer regime in the European Union", ESRB, *Macro-prudential Commentaries Issue No:* 8.

<sup>111</sup> BCBS (2010), op. cit.

to the domestic private sector to GDP, the growth of credit to the domestic private sector), private sector indebtedness (i.e. debt-service-to-income ratio), potential overvaluation of property prices (i.e. price index growth for commercial and residential real estate), the strength of bank balance sheets (i.e. leverage ratio and net interest rate margin), external imbalances (i.e. current account balance developments) and potential mispricing of risk (i.e. developments of stock market indices).<sup>112</sup>

However, beyond the use of alternative indicators, from the early years of implementation of the new framework, many countries had modified the way the standardised credit-to-GDP gap is estimated. The modifications affected either the statistical methodology or the definition of the variable used to capture credit developments. Some countries used alternative smoothing techniques for the estimation of the long-run trend and several have applied different definitions for the credit variables, e.g. by focusing more on bank credit. It should be noted that Slovakia uses for its assessment of the accumulation of cyclical systemic risks a composite indicator, the 'cyclogram', which is the aggregation of certain relevant individual indicators. It In a similar vein, several recent empirical studies analyse the explanatory power of various composite indicators for the assessment of the accumulation of systemic risks.

#### **Conclusion**

Conclusively, the standardised credit-to-GDP gap was adopted as a common reference indicator for monitoring cyclical systemic risks in the context of the regulatory framework proposed by the Basel Committee. The broad use of the standardised credit-to-GDP gap, however, brought to the fore a number of technical challenges and weaknesses relating to its estimation and the risk of not assessing early enough that an economy is entering a period of excessive credit growth and, thus, of not responding on a timely manner. In this context, designated authorities have chosen to put more weight in their analysis on the additional indicators proposed in the Basel Committee documents and the Recommendation of the European Systemic Risk Board (ESRB/2014/1). Over the years, and in order to expand their systemic risk analysis toolkit, several countries have chosen to either proceed with some modifications of the common reference indicator or to adopt other indicators, after empirical testing of their properties, and therefore put less weight on the Basel common reference indicator.

<sup>&</sup>lt;sup>112</sup> The broad variable categories are defined in the Recommendation of the European Systemic Risk Board ERSB/2014/1.

<sup>&</sup>lt;sup>113</sup> See Pekanov, A. and Dierick, F. (2016), op. cit. for a detailed review.

<sup>114</sup> See Rychtarik, Š., (2014), "Analytical background for the counter-cyclical capital buffer decisions in Slovakia", *Biatec Ročník 22, 4/2014*, National Bank of Slovakia.

<sup>&</sup>lt;sup>115</sup> See Sandström, C. (2023), "d-SRI: A systemic risk indicator for Sweden", *FI Analysis No. 43*, Lang, J. H. et al (2019) ό.π και Koponen, H. (2024), "Constructing a composite indicator to assess cyclical systemic risks: An early warning approach", *BoF Economics Review No 3/2024*.