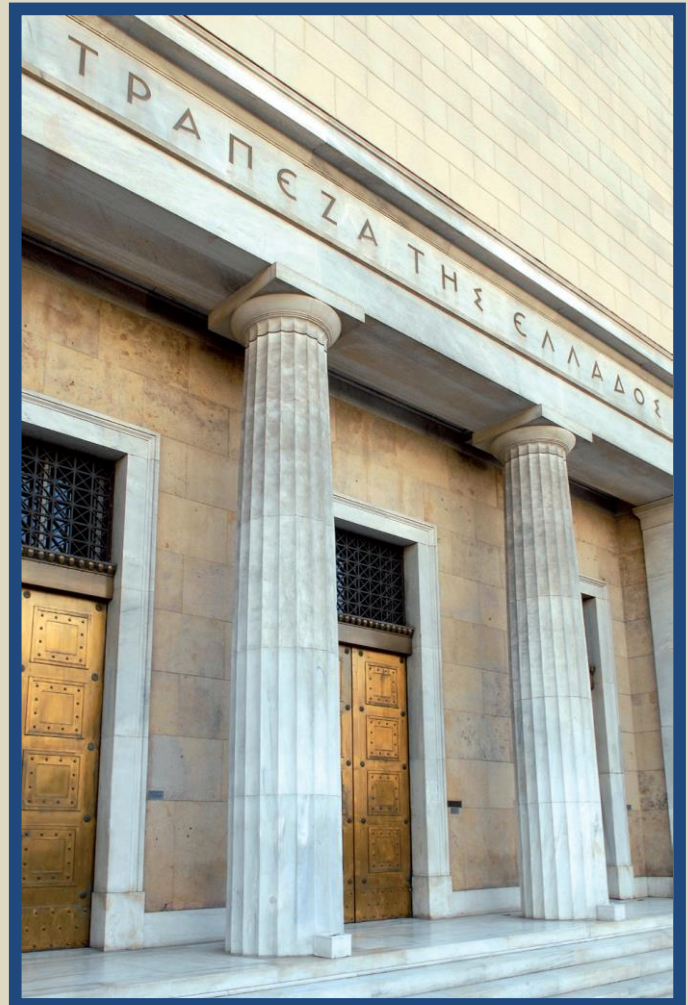


# FINANCIAL STABILITY REVIEW

## EXECUTIVE SUMMARY



MAY  
2023



**BANK OF GREECE**  
EUROSYSTEM



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## I. EXECUTIVE SUMMARY

In 2022, the Greek economy maintained its robust growth momentum, with real GDP growing at an annual rate of 5.9%, mainly due to substantially stronger private consumption and investment. The drivers of consumption were pent-up demand, the use of savings accumulated by households during the pandemic and fiscal measures taken in response to the energy crisis.

Strong economic growth mitigated to a degree the negative impact from particularly high inflation, which stood at 9.3% in 2022 (from 0.6% in 2021), as a result of the energy crisis and increased food prices. The persistence of inflationary pressures,<sup>1</sup> combined with lingering uncertainty associated with the war in Ukraine and other geopolitical risks, such as tensions in USA-China relations, the risk of a sharp repricing of assets in international money and capital markets, as well as the recent turmoil in the US and the Swiss banking system, has considerably heightened risks to financial stability.

The key figures of the domestic banking sector improved substantially, showing that the sector is now better placed than in the past to absorb international market shocks. During the year, the operational target to improve asset quality was achieved and non-performing loan (NPL) ratios were reduced to a single-digit level (December 2022: 8.7% of the loan portfolio, from 12.8% in December 2021), mainly using the government guarantees scheme (known as “Hercules”). Nevertheless, the stock of NPLs remains well above the corresponding European average (December 2022: 1.8%).<sup>2</sup>

Liquidity conditions improved on the back of Greek banks’ unimpeded access to money and capital markets,<sup>3</sup> increased resident deposits (December 2022: EUR 196.7 billion), as well as participation in the Eurosystem’s refinancing operations,<sup>4</sup> in the context of the implementation of the ECB Governing Council’s decisions. Moreover, the introduction of a new Transmission Protection Instrument (TPI)<sup>5</sup> in July 2022 reinforced considerably the tools available to the ECB for the effective transmission of monetary policy and contributed to containing the upward trend in bond yields. The banking sector’s capital adequacy improved further to a satisfactory level, above the regulatory minimum. Moreover, achieving significant profitability after two loss-making years, which is attributable to one-off gains and improved core profitability in the second half of the year, helped put in place the conditions for internal capital generation, further strengthening the banking sector and laying the ground for enhanced financing of the real economy.

The shift in the monetary policy stance, with the ECB’s interest rate hikes, is expected to contribute to higher bank profitability in the short term. However, the worsening financial condition of households, with high inflation reducing disposable income, as well as of certain firms due to

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<sup>1</sup> The Harmonised Index of Consumer Prices (HICP), which is the inflation tracking indicator, continuously registered higher annual rates until September 2022, which exceeded all historical highs.

<sup>2</sup> Source: European Banking Authority, Risk Dashboard, Q4 2022 [EBA Risk Dashboard - Q4 2022.pdf \(europa.eu\)](#).

<sup>3</sup> During 2022, significant banks raised a total of EUR 2.72 billion.

<sup>4</sup> It should be noted that during the year, banks made voluntary partial repayments (amounting to EUR 15.42 billion) of funds raised through the Eurosystem’s targeted longer-term refinancing operations (TLTRO III).

<sup>5</sup> TPI purchases focus on public sector securities (marketable debt securities issued by central and regional governments as well as agencies, as defined by the ECB, with a remaining maturity of between one and ten years (see <https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.pr220721~973e6e7273.en.html>).

higher operating and financing costs, could lead to a new wave of NPLs in the medium term, which would again affect banks' asset quality.

A potential deterioration of geopolitical risks; persistently high levels of inflation; gradually emerging vulnerabilities in the financial system of the European Union (EU),<sup>6</sup> particularly in the commercial real estate (CRE) market,<sup>7</sup> as reflected in the recent “Warning of the European Systemic Risk Board (ESRB)” in 2022; as well as the risk of new exogenous shocks to money and capital markets, highlight most emphatically the volatility of the international financial environment.

This brings to sharper relief the importance of macroprudential policy, since implementing appropriate macroprudential policy measures, mainly in the form of capital buffers over the medium term, will help create sufficient macroprudential space that will positively affect financial stability.

This Financial Stability Review covers the entire financial system, focusing on an analysis of banking developments, given the particular relevance of the banking sector for the Greek economy, and includes five Special Features.

Special Feature I analyses the importance of the CRE market and its interlinkages with financial stability. It discusses supervisory initiatives for monitoring the market both at European, Member State level and in Greece.

Special Feature II discusses developments in the structure of the Greek banking sector on the basis of specific structural indicators, including an account of major changes in the past twenty-five years, and measures the degree of banking intermediation in the economy (e.g. by total assets as a percentage of GDP). Additionally, it illustrates the structure of the Greek banking sector against corresponding EU and euro area figures, in the context of a peer benchmarking analysis (in terms of size, risk, branch network and staff allocation, business model, etc.).

Special Feature III examines borrower-based measures (BBMs), a special category of macroprudential policy measures related to borrower indebtedness. Specifically, it analyses key types of BBMs, describes the current legal framework in Greece, and briefly reviews practices in other EU Member States.

Special Feature IV presents the recent turbulence in the US and the Swiss banking system, leading to the failure of three US banks and the forced acquisition of the second largest Swiss bank.

Special Feature V examines the turmoil in energy markets during 2022, which led EU institutions to adopt a market correction mechanism to limit excessive gas prices, as well as any impact this mechanism may have on the operation of central counterparties.

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<sup>6</sup> Issued in September 2022, it is the first such warning by the ESRB, which is responsible for monitoring and preventing risks to the financial system in Europe, since its creation in 2010. See [Warning of the European Systemic Risk Board of 22 September 2022 on vulnerabilities in the Union financial system \(ESRB/2022/7\) \(europa.eu\)](https://www.esrb.europa.eu/en/press/pr/20220922). This general warning identified three main sources of systemic risk: (a) the deterioration in the macroeconomic outlook; (b) risks to financial stability stemming from a sharp fall in asset prices; and (c) the impact of these developments on the asset quality of credit institutions.

<sup>7</sup> [Recommendation of the European Systemic Risk Board of 1 December 2022 on vulnerabilities in the commercial real estate sector in the European Economic Area \(ESRB/2022/9\)](https://www.esrb.europa.eu/en/press/pr/20221201).

Liquidity and funding conditions of the Greek banking sector in 2022 presented a mixed picture. The normalisation of monetary policy to address inflationary pressures resulted in an increase in Greek banks' funding costs. Against the backdrop of rising interest rates and higher Greek bond yields, and expectations of further ECB rate hikes, access to capital markets and Eurosystem funding became more expensive for Greek banks.

During this period, deposits continued their upward trend, albeit at a lower annual rate, reflecting strong economic growth, despite the negative impact of high inflation. The upward path of deposits considerably helped Greek credit institutions to maintain high liquid assets in 2022, despite substantial voluntary repayments of funds raised through the ECB's Targeted Longer-Term Refinancing Operations (TLTRO III). Specifically, in December 2022, the balance of residents' deposits in Greece stood at EUR 196.7 billion, reaching a new ten-year high. Deposits by households and non-financial corporations rose to EUR 141.3 billion and EUR 43.8 billion, respectively, up by EUR 6.2 billion and EUR 3.4 billion, respectively. An increase in deposits by 4.6% on an annual basis is attributable to robust economic growth and depositors' stronger confidence in the financial system. In the first quarter of 2023, deposits decreased slightly by EUR 2 billion to EUR 194.7 billion, mainly on account of a decline in the deposits of non-financial corporations. Additionally, the acceptance of Greek government bonds as eligible collateral in Eurosystem refinancing operations, as well as Greek banks' participation – albeit reduced – in the Eurosystem TLTRO III, continued to support bank liquidity. It should be noted that Greek banks, taking into account the tightening of funding conditions under TLTRO III, in the fourth quarter of 2022 and the first quarter of 2023 made voluntary repayments of the relevant funds raised from these operations. As a result, in 2022, Eurosystem funding of Greek banks dropped considerably (December 2022: EUR 35.4 billion, December 2021: EUR 50.8 billion), with the trend continuing into the first quarter of 2023 (March 2023: EUR 28.3 billion).

In 2022, the quality of credit institutions' loan portfolios improved substantially. The ratio of NPLs to total loans in 2022 stood at 8.7%, from 12.8% in December 2021, with the total NPL stock standing at EUR 13.2 billion, down by 28.2% or EUR 5.2 billion (December 2021: EUR 18.4 billion).<sup>8</sup> It should be noted that the overall decrease of NPLs from their March 2016 peak reached 87.7% or EUR 94 billion. This reduction in NPLs reflected the progress achieved towards consolidating bank loan portfolios. It should be noted that all four significant banks have attained their operational target of a single-digit NPL ratio by end-2022, with one achieving a level below 5%. However, the NPL ratio of less significant institutions is very high, standing at 44.8%.<sup>9</sup> In addition, this ratio at banking sector level remains well above the European average (December 2022: 1.8%<sup>10</sup>), implying that banks must continue their efforts to reduce the existing NPL stock, especially in the light of emerging challenges.

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<sup>8</sup> According to on-balance-sheet data on a solo basis. It should be noted that, on a consolidated basis, the stock of NPLs stood at EUR 13.8 billion, down by 28.5% or EUR 5.5 billion from EUR 19.3 billion at the end of 2021.

<sup>9</sup> High ratios are also associated with the difficulties faced by smaller banks in meeting the eligibility conditions of the government guarantee scheme (HAPS/"Hercules") and, thus, their inability to benefit from the scheme.

<sup>10</sup> Source: European Banking Authority, Risk Dashboard, Q4 2022 [EBA Dashboard - Q4 2022.pdf \(europa.eu\)](https://www.eba.europa.eu/en/risk-dashboard/q4-2022). It should be noted that EBA data are calculated on a consolidated basis and include loans to credit institutions and central banks; therefore, they are not directly comparable with Bank of Greece data. For instance, the NPL ratio for domestic significant credit institutions on a consolidated basis and taking into account loans to credit institutions and central banks stands at 4.6%.

The shift in the ECB's monetary policy stance, resulting in a higher key interest rate environment, has adversely affected both the cost of financing and the debt repayment capacity of households and firms. The terminal rate will depend on the path of inflation, the evolution of the output gap and the existence of second-round effects via wages. This environment, combined with projected weaker growth rates for the Greek economy in 2023, might again affect the quality of banks' loan portfolios. However, the amount of new NPLs is difficult to estimate, amid uncertainty about geopolitical developments and a potential resurgence of the energy crisis during 2023. In this context and with a view to preventing a new generation of NPLs, banks introduced special arrangements applicable to performing and vulnerable borrowers.<sup>11</sup>

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In 2022, Greek banking groups posted profits, after tax and discontinued operations, amounting to EUR 3.6 billion, compared with losses of EUR 4.8 billion in 2021, returning to profitability after two loss-making years. Higher non-recurring income played a key part in this development, as did lower provisioning for credit risk. At the same time, core operating income (i.e. net interest income and net commission income) rose, while operating expenses decreased further. As a result, return on assets (RoA) and return on equity (RoE) of banking groups rose to 1.1% and 13.4% respectively.

Capital adequacy of banking groups strengthened considerably in 2022, on the back of, primarily, an increase in banks' prudential own funds by means of internal capital generation and, secondarily, issuance of additional capital instruments. In particular, the Common Equity Tier 1 (CET1) ratio on a consolidated basis rose to 14.5% in December 2022, from 13.6% in December 2021, and the Total Capital Ratio (TCR) to 17.5%, from 16.2%. These ratios are below the average for credit institutions supervised directly by the ECB (CET1 ratio: 15.5% and TCR: 19.4% in December 2022). Taking into account the fully phased-in impact of IFRS 9, the fully loaded CET1 ratio of banking groups stood at 13.4% and the TCR at 16.4%.

Furthermore, the quality of Greek banks' prudential own funds remains low: in December 2022, deferred tax credits (DTCs) amounted to EUR 13.7 billion, representing 52% of total prudential own funds (down from 59% in December 2021). This share comes to 56% of total prudential own funds when taking into account a fully phased-in impact of IFRS 9 (compared with 68% in December 2021). Moreover, deferred tax assets (DTAs) of EUR 2.3 billion are included in Greek banking groups' prudential own funds (on a fully phased-in IFRS 9 basis), accounting for about 9% of their total prudential own funds. It should be pointed out that, although DTAs of EUR 4.2 billion are not included in banks' prudential own funds, sufficient future profitability is needed in order for them not to pose risks to banks' capital base in the medium-to-long term.

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The Bank of Greece, in its capacity as macroprudential authority, monitors and assesses developments in the financial system and implements measures to reduce the build-up of systemic risks

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<sup>11</sup> See Box II.1 "Programmes to support vulnerable borrowers and reward performing borrowers with floating-rate mortgages".



and strengthen the resilience of the financial system. Specifically, it conducts a quarterly assessment of the intensity of cyclical systemic risk and the appropriateness of the Countercyclical Capital Buffer (CCyB) rate for Greece and sets or adjusts it, if necessary. In the first two quarters of 2023, this was maintained at 0%, i.e. the lowest possible level. The analysis of additional indicators examined by the Bank of Greece points to emerging cyclical systemic risks in certain areas, such as credit to non-financial corporations, residential real estate prices and the current account. Overall, however, it confirms the view of an absence of excessive credit growth and leverage. Also, the Bank of Greece identified Other Systemically Important Institutions (O-SIIs) in Greece for 2022 in accordance with the relevant EBA guidelines and set the 2023 O-SII buffer rate at 1% for the four O-SIIs in Greece.

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In 2022 the capital adequacy of insurance undertakings remained at very high levels and their profitability was satisfactory despite risks arising from the broader macroeconomic environment and those resulting from operational mergers and recent acquisitions of insurance undertakings. In an effort to address the above and other emerging risks, such as those related to climate change, aiming at maintaining the viability of their portfolios, insurance undertakings adjust their business models and review their pricing and investment policies.

At the same time, the smooth operation of financial market infrastructures, i.e. payment, clearing and settlement systems, made a positive contribution to the stability of the domestic financial system through the efficient processing of transactions. The use of electronic means of payment rose significantly in 2022, in terms of both volume and value.

In 2022, total assets of credit servicing firms (CSFs) stood at EUR 1.44 billion,<sup>12</sup> while CSFs' total own funds and liabilities (including provisions) came to EUR 891 million and EUR 546 million respectively. CSF profits amounted to EUR 164 million, while total staff and senior management costs correspond to 44% of their turnover. The total value of exposures under management<sup>13</sup> came to EUR 90.5 million, 74% of which concerns exposures managed by CSFs on behalf of credit acquiring firms<sup>14</sup> and the remaining 26% concerns management of exposures on behalf of credit institutions. Most exposures under management by CSFs on behalf of credit acquiring firms have been assigned to them over the past two years in the context of strategic decisions of credit institutions to reduce their NPLs. Taking into account CSF performance thus far, NPL management on their part needs to be materially improved. The satisfactory performance of CSFs is essential for a successful outcome of the “Hercules” scheme, the resolution of non-performing private debt and the use of dormant productive capacity.

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<sup>12</sup> It should be noted that balance sheet data as at 31.12.2022 are provisional and have not been audited by a statutory auditor.

<sup>13</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 206/1/3.6.2022 modified, inter alia, supervisory data and information to be submitted by CSFs to the Bank of Greece.

<sup>14</sup> Prudential data analysed in the present section may differ from data regularly posted on the Bank of Greece website because of the different perimeter of each data release.

According to the Bank of Greece Governor's Annual Report,<sup>15</sup> the Greek economy is expected to grow at a rate of 2.2% in 2023,<sup>16</sup> far above the euro area average, but clearly below its 2022 growth rate. Consumption and investment will keep on making a positive contribution to growth. In more detail, the moderation of consumption demand, a low growth rate of household real disposable income and higher interest rates are expected to result in a mild increase in private consumption. At the same time, the medium-term outlook for investment is quite positive, since it is expected to improve in terms not only of value, but also of quality, as a continuously larger share of new investment is directed towards high value-added infrastructure (especially green energy production).

However, heightened uncertainty and risks to the global financial environment leave no room for complacency. An abrupt worsening of financial conditions may negatively impact the financial position of firms, financial stability and the course of public debt reduction in several Member States. The structure of Greek public debt, about 76% of which is in the form of medium-to-long-term liabilities to the official sector, and the very favourable repayment profile, are rather reassuring. However, a potential generalised shock to investor confidence may potentially have negative effects at the domestic level too.

Furthermore, the recent banking turmoil in the US and Switzerland clearly demonstrated the swift transmission and spread of risks in the modern financial landscape. In the event of a shock to investors' and depositors' confidence, individual bank vulnerabilities are amplified and transmitted to other credit institutions at unprecedented speed, both at home and abroad, due to global financial interlinkages. Therefore, safeguarding financial stability requires further strengthening of the financial system. The Greek banking sector has made remarkable progress and has become more resilient over the past years, thereby being better placed to withstand potential turbulences and shocks. Although the near-term outlook remains positive, there are still challenges, including improving asset quality, achieving sustainable profitability and further enhancing banks' capital adequacy.

Cleaning up bank balance sheets is the greatest challenge, as the stock of NPLs, despite falling substantially in recent years, is well above the European average. Therefore, further actions are needed towards resolving the legacy NPL stock, which will further strengthen the banking sector and allow it to fulfil its intermediation role. Additionally, past experience has shown the importance of proper and timely recognition of NPLs. Thus, as the normalisation of monetary policy with interest rate hikes hampers households' and firms' debt repayment capacity, all stakeholders should focus on taking measures to prevent the creation of new NPLs. In this context, recently announced measures to protect vulnerable and reward performing borrowers are in the right direction.

As regards profitability, operating income is expected to increase further in 2023. The ECB interest rate hikes are set to further boost banks' net interest income in the short term, given that a very

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<sup>15</sup> See Bank of Greece [press release "Governor's Annual Report 2022"](#), 7 April 2023.

<sup>16</sup> The upward revision of the 2023 growth forecast vis-à-vis previous estimates is due to last year's carryover effect, given the economy's overperformance in 2022.

large part of bank loans carry floating rates. However, over the medium term, banks' funding costs are expected to rise on the back of increases in deposit rates and higher costs of bond issuance to meet capital requirements, including bonds to meet the minimum requirement for own funds and eligible liabilities (MREL). At the same time, credit growth is expected to gradually slow in the medium term, either due to early repayments of business loans or reduced demand for new loans. Slower economic growth, higher production costs and lower real household disposable income, coupled with higher debt servicing costs, will weigh on the financial situation of households and firms and may increase banks' cost of credit risk. Lastly, non-recurring income is expected to make a smaller contribution.

Capital adequacy, albeit satisfactory, will be affected by a number of factors: (a) internal capital generation capacity amid heightened uncertainty; (b) implementation of capital actions by banks (e.g. synthetic securitisations, capital increases by less significant banks) and the cost of issuing additional capital instruments (Additional Tier 1, Tier 2) to meet prudential capital requirements; (c) the quality of loan portfolios and its resulting impact on risk-weighted assets; and (d) the evolution of new loan disbursements to non-financial corporations and households.

Safeguarding financial stability in an international environment of heightened risk, including for instance geopolitical tensions, requires vigilance and targeted actions. As monetary policy is being normalised, market fragmentation risks could emerge in the euro area. For this reason, the ECB adopted the TPI. Additionally, the recent turmoil in the US and the Swiss banking system has fuelled risks to financial stability and brought, once again, to the fore the need to complete the banking union. The European Commission's recent proposals on crisis management<sup>17</sup> are a step in the right direction; meanwhile, it will be necessary to push forward with the creation of a bank deposit insurance scheme (European Deposit Insurance Scheme – EDIS)<sup>18</sup> for the euro area as a whole, combined with other measures to mitigate remaining risks in the banking sector. Lastly, it is crucial to implement a prudent fiscal policy for consolidating financial stability and for the Greek government to achieve investment grade, as this would help broaden considerably the investor base (e.g. by attracting institutional investors), which would have a favourable effect on the financing costs of the Greek government,<sup>19</sup> non-financial corporations and banks.

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<sup>17</sup> See Box III.3 “The European Commission’s proposal to adjust and further strengthen the EU’s existing bank crisis management and deposit insurance (CMDI) framework”.

<sup>18</sup> EDIS should help protect depositors, strengthen financial stability and further weaken the bank-sovereign nexus.

<sup>19</sup> The government bond market has already priced in the achievement of investment grade, as already reflected in the narrowing of Greek spreads against bonds issued by other European countries.



