

# HFSF Bulletin Issue No 3



2023 EU-wide Stress Test results:
"Deep Dive" Analysis on Greek Systemic Banks

Despoina J. Ntaikou & Michael P. Haralabidis

November 2023



HFSF Bulletins are papers written by staff members of the Hellenic Financial Stability Fund, and occasionally in cooperation with third parties. The papers relate to subjects of topical interest and are technical in nature. The views expressed therein are those of the authors and do not necessarily reflect the views, official policy, or position of the HFSF.

The authors are grateful to Stavros Rimbas for his valuable comments.

The editor of the HFSF Bulletin series is Michael Haralabidis, HFSF's Chief Risk Officer (mharalabidis@hfsf.gr).

This publication is available on the HFSF website.

© Hellenic Financial Stability Fund 2023. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.



Despoina I. Ntaikou, Ph.D., MPhil, MSc. Senior Risk Officer <a href="mailto:dntaikou@hfsf.gr">dntaikou@hfsf.gr</a>

Michael P. Haralabidis Chief Risk Officer mharalabidis@hfsf.gr

### **KEY TAKEAWAYS**

- ✓ Greek Systemic (GR-S) banks **emerged stronger** from **the toughest**, so far, solvency stress test on how they would weather a hypothetical sharp economic downturn, increasing interest rates and credit spreads. They **performed significantly better** compared to previous Stress Test (ST) exercises given their successful loan portfolio derisking e.g., their capital depletion has been remarkably decreased by c.80% and c.60% vs 2018 and 2021 ST exercises, respectively.
- ✓ **Greece ranked 4th within 16 countries** (compared to 11<sup>th</sup> and 15<sup>th</sup> position in 2021 and 2018, respectively), as GR-S banks have demonstrated **notable progress** when compared to EU/EEA and Peripheral Economies' (PEs) banks'¹ performance in the areas of capital adequacy, credit risk and profitability. The Greek banking system **was ranked 1st** among the banking systems of the EU countries of the South.
- ✓ Reasonable expectations on GR-S banks' reduction of P2G² requirements but also the improvement in their P2R³ provide room for shareholder remuneration, in the short term, in the form of **cash dividends** and/or **share buybacks**.
- ✓ GR-S banks having notably improved their capital positions and asset quality, should inter alia: (i) focus on their loan book expansion in a prudent risk oriented approach regarding single borrowers and economic sectors' credit risk concentration, (ii) further enhance their risk management capabilities not only in granting loans but also dealing with emerging risks (e.g. cyber risk), (iii) enhance risk-free fee income through further developing their business activities (e.g. utilizing the "originate to distribute model") and using innovative tools (e.g. synthetic securitization), and (iv) incorporate Environmental, Social and Governance (ESG) international best practices, focusing on managing the risks of climate change, into their business model and operations.
- ✓ As the next EU-wide EBA/ECB ST is scheduled for 2025, GR-S banks should soon start preparing for the EBA Climate Risk Scenario analysis and the ECB Cyber Resilience ST scheduled for 2024.

### 1. INTRODUCTION

EU/EEA banks demonstrated resilience under the toughest, so far, ST as full sample<sup>4</sup> saw an average CET1 drawdown of 459 bps vs 485 bps in 2021. Adverse drawdowns were better vs 2021 ST at most banks, despite harsh projections of 3 years' cumulative GDP contraction of

c.6% across EU area vs 3.6% in 2021. Core economies' (i.e., France, Germany, and the Netherlands) banking systems exhibit CET1 equal or below 10% in 2025. Credit risk remains the main driver of the CET1 depletion in ST 2023. Corporate exposures contribute the most to total losses (41%) followed up by retail

<sup>&</sup>lt;sup>1</sup>Peripheral economies include: (PT) Portugal, (ES) Spain, (IT) Italy, (IE) Ireland and (GR) Greece. GR is not included in the averaging calculations.

<sup>&</sup>lt;sup>2</sup> The Pillar 2 Guidance (P2G) is a bank-specific recommendation that indicates the level of capital the ECB expects banks to maintain in addition to their binding capital requirements to ensure they can absorb potential losses resulting from adverse scenarios (ECB).

<sup>&</sup>lt;sup>3</sup> The Pillar 2 Requirement (P2R) is a bank-specific capital requirement which applies in addition to the minimum capital requirement (known as Pillar 1) where this underestimates or does not cover certain risks. A bank's Pillar 2 requirement is determined as part of the Supervisory Review and Evaluation Process (SREP). The requirement is legally binding, and if banks fail to comply with it, they could be subject to supervisory measures, including sanctions.

<sup>&</sup>lt;sup>4</sup> EU Wide ST 2023 involved 70 banks from 16 EU and EEA countries. Banks were selected to cover roughly 75% of banking assets in the euro area. To be included, banks needed to have at least €30 billion in assets at the time of the sample selection.



unsecured exposures, which account for 36%. Half of credit losses are related to large corporates and SMEs while manufacturing, accommodation & food services, construction, and energy sectors appear to be the most vulnerable sectors under a stress scenario.

Greece is recording a **significantly lower capital depletion** than EU/EEA average. GR-S banks' capital hit is half of EU/EEA respective hit, at 228 bps vs EU/EEA banks' capital<sup>5</sup> hit on CET1 at 459 bps. Lower negative impact from credit losses than 2021 ST due to better initial asset quality of GR-S banks. GR-S banks' capital hit is also lower than peripheral economies' average (373 bps) illustrating the **notable progress** over the past years in improving their asset quality, despite globally challenging economic conditions.

The present analysis<sup>6</sup> aims to: (i) provide the background information on the EU-wide ST exercise, (ii) review Greece's 2023 results (iii) benchmark these against Europe (core economies & PEs) and (iv) identify potential areas of improvement for GR-S banks with a view to solidify their business model resilience.

### 1.1 SCOPE & APPROACH OF EU WIDE ST

EU ST is coordinated by the EBA and carried out in cooperation with the ECB, the ESRB and the Competent Authorities from all (CAs) relevant national jurisdictions. It is designed to provide valuable input for assessing the resilience of the European banking sector in the current uncertain and changing macroeconomic environment. It assesses the solvency of EU banks in a hypothetical adverse macroeconomic scenario over a three-year horizon (2023-2025). In other words, it is designed to strengthen **market discipline** through the disclosure of consistent and granular information.

2023 ST is **not a "pass-or-fail" exercise**. Therefore, there is no "shortfall" in the usual sense. Instead, the exercise provides key inputs into the SREP<sup>7</sup> decisions for each bank. In line with this approach, banks with significant capital depletion should generally expect a higher P2G.

ST follows a bottom-up approach, with some top-down elements. Banks apply their own models to project the impact of the scenarios, subject to strict rules and a thorough review by CAs, which involves the use of models to benchmark the main risk parameters. In 2023 exercise, banks, for the first time, use prescribed parameters for net fee & commission income.

Another novelty is that banks reported their provisions for expected losses at sectoral level based on sector-specific projections in the scenarios. In the context of its quality assurance (QA) of banks' submissions, ECB carries out a deep dive into leveraged finance exposures for selected banks with material leveraged finance activities.

<sup>&</sup>lt;sup>5</sup> Post reference date capital enhancement actions and other events are not considered in the ST results but inform the SREP process.

<sup>&</sup>lt;sup>6</sup> The analysis considers only the adverse scenario impact on CET1 FL.

<sup>&</sup>lt;sup>7</sup> Supervisory Review & Evaluation Process (SREP) is an annual holistic, forward-looking assessment of the overall viability of the Bank. It assesses

<sup>4</sup> elements: business model and profitability, internal governance and risk management, risks to capital and risks to liquidity and funding. Supervisor issues a decision asking banks to meet specific requirements.



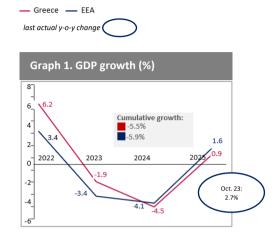
### 2. MACROECONOMIC ASSUMPTIONS

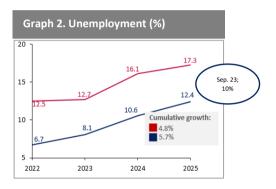
EU wide ST adverse scenario is based on a narrative of hypothetical heightened geopolitical tensions, with high inflation and higher interest rates having strong adverse effects on private consumption and investments, both domestically and globally. In terms of GDP decline, the 2023 adverse scenario is the strictest used<sup>8</sup>, up to now, to assess the resilience of the European banking system to a hypothetical severely deteriorated macroenvironment.

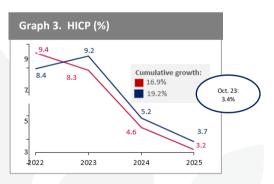
The adverse scenario assumes a strong c.6% 3-year cumulative decline of EU/EEA GDP, large drops in RRE and CRE prices and, high, persistent inflation and higher interest rates. As it becomes evident from Graphs 1-4, GR-S banks are expected to operate in a less severe macroeconomic environment than EU/EEA banks, since:

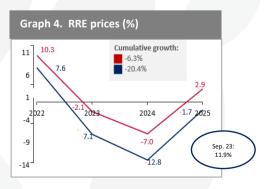
- 3yr GDP contraction for Greece is expected to be lower than EU/EEA average (-5.5% vs -5.9%);
- Unemployment cumulative growth is also lower for Greece at 4.8% vs EU/EEA at 5.7%.

However, ST scenario differences are significant regarding inflation (Graph 3) and expectations for RRE prices' evolution over the ST horizon (Graph 4). Also, current macro-economic momentum, as per last actual figures (in blue circle), reveals that ST scenario assumptions are considerably stricter than current conditions, therefore leaving space for further optimism as regards GR-S banks' performance.









<sup>&</sup>lt;sup>8</sup> <u>EBA launches 2023 EU-wide stress test.</u>, <u>HELSTAT</u>



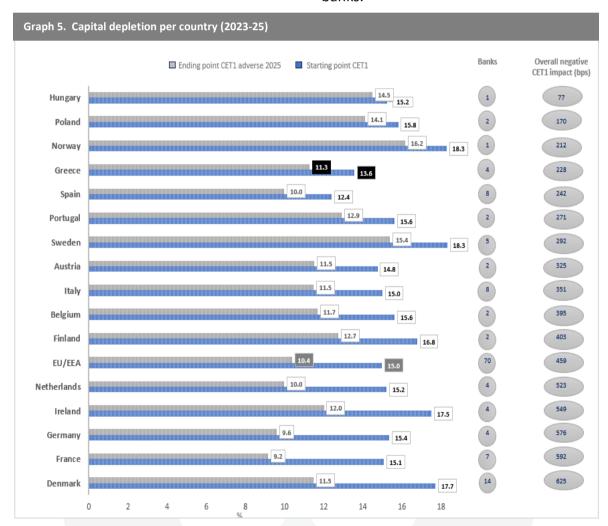
### 3. CAPITAL DEPLETION PER COUNTRY

EU wide ST impact shows average capital depletion of 459 bps (Graph 5) lower by 26 bps than the respective depletion observed in 2021 EBA ST (485bps).

**Top 5** performing countries by CET1 depletion include: Hungary (-77 bps), Poland (-170), Norway (-212), **Greece (-228)** and Spain (-242). It must be noted that results are more representative for Greece and Spain as they are based on a larger sample of banks compared to the

top three countries which participated with 1 or 2 banks.

Greece ranks 4th within 16 countries (228 bps capital depletion) compared to 11<sup>th</sup> (550 bps) and 15<sup>th</sup> (1.100 bps) position in 2021 ST and 2018 ST, respectively. Banks in core countries (i.e., Germany, France and the Netherlands) are within the top 5 worst performers, while Southern European banks outperformed Northern banks.



Source: EBA publishes the results of its 2023 EU-wide stress test

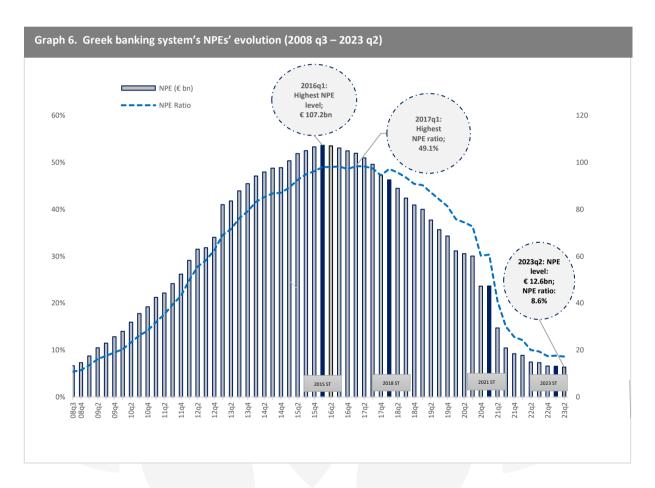


### 4. GREECE 2023 ST RESULTS

GR-S banks demonstrated **remarkably improved resilience** in 2023 ST compared to previous ST exercises (2021, 2018 & 2015). Key drivers of comparative performance are associated with: (i) improved **asset quality** since they have managed to achieve a **mid-single digit NPE ratio** (c.6.5% on average) at the end of 2022 and (ii) **enhanced net Interest Income (NII)**.

It should be noted that GR-S banks exhibit an NPE ratio of 5.9% on average, while Greek banking system's NPE ratio has returned to pre-crisis level reaching **8.6%** at the end of June 2023 (Graph 6).

GR-S banks end the exercise in 2025 significantly better than core European economies' banks (Graph 8).



Source: Bank of Greece, Evolution of Loans and Non-Performing Loans

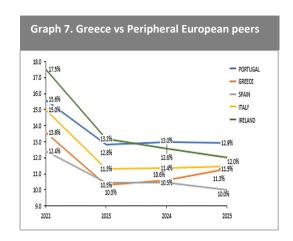


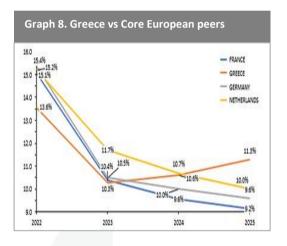
## 4.1 CAPITAL IMPACT BENCHMARKING ANALYSIS PER COUNTRY

EU wide ST is also an exercise to evaluate banks' efforts to normalize their balance sheets, as well as their ability to organically generate new capital through their core earnings.

Benchmarking analysis of CET1 evolution of Greece vs its European peers (reveals that:

- a) Among PEs' peers (Graph 7) and more evidently vs core European countries' peers (Graph 8), GR-S banks manage to increase significantly their CET1 trajectory.
- b) Although the starting point of CET1 is lower for Greece compared to EU/EEA (13.6% vs 15%), GR-S banks end up in 2025 with higher CET1 vs Core EU peers (Graph 8). This is mainly due to the credit risk losses' limited impact as well as on the Net Interest Income significant positive contribution.





Source: EU Wide Stress Test Results 2023 Dashboard

# 5. CAPITAL IMPACT: BENCHMARK ANALYSIS PER BANK

GR-S banks' capital hit of 228 bps illustrates the notable progress over the past years in improving their asset quality and profitability, especially regarding the aggressive NPE clean up<sup>9</sup>, despite globally challenging economic conditions, mainly associated with evolving geopolitical uncertainty.

NII positive contribution mainly due to high interest rate environment is a key driver which alleviates capital depletion.

• NBG is the top performer in the domestic banking landscape and one of the best performers at EU/EEA level as it ranked 5<sup>th</sup> in the 70-bank data set with a capital (CET1) reduction of only 136 bps.

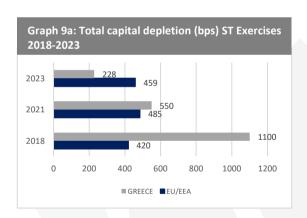
<sup>&</sup>lt;sup>9</sup>As per <u>Bank of Greece</u> relative data, Greek Banking system's NPE ratio stood at 8.6% in 2023 q2, a level last seen in 2009 q3 (8.8%).



 Eurobank, Piraeus Bank and Alpha Bank<sup>10</sup> ranked 12<sup>th</sup> (capital reduction of 220 bps), 13<sup>th</sup> (240 bps) and 19<sup>th</sup> (307 bps) respectively.

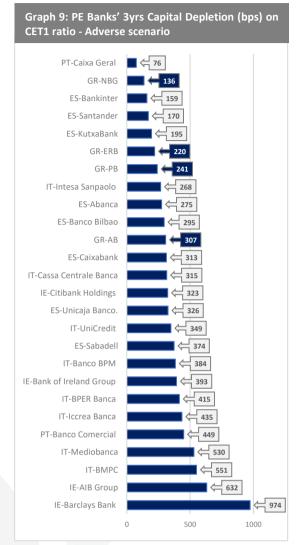
GR-S banks' performance is even better when compared to PE banks' performance (Graph 9). PEs' banks (26 in total) show an average capital hit of 375 bps<sup>11</sup> on CET1 ratio during the ST 3-year horizon (Graph 9).

It is also worth mentioning that GR-S banks' provision coverage (financial resources to cover credit risk) for Stage 1<sup>12</sup> and Stage 2 loans is twice and 1.4 times higher than EU/EEA average respectively. Respective figure for Stage 3 loans' coverage for GR-S banks (44.1%) is at almost the same level with EU/EEA average (44.5%) in June 2023. Overall, said figures highlight the fact that GR-S banks' loan quality has **improved remarkably** during the last 5 years and has **converged with EU/EEA average**.



An additional evidence of GR-S banks' remarkably improved performance is the fact that total capital depletion has decreased by c.60% and c.80% vs 2021 and 2018 ST exercises, respectively. At the same time the EU/EEA figure has

increased by c. 9% since 2018 ST. (Graph 9a).



Source: EU Wide Stress Test Results 2023 Dashboard

### 5.1 CREDIT RISK LOSSES: BENCHMARKING OF INDIVIDUAL PES' BANKS

**Credit risk losses** is a major key driver of the exercise. GR-S Banks' average credit risk impact on CET1 higher than peripheral economies' banks (excl. GR-S banks) at 544 bps vs 474 bps.

that have deteriorated significantly in credit quality since initial recognition but offer no objective evidence of a credit loss event. **Stage 3 Loans**, are loans that offer objective evidence of a credit loss event.

<sup>&</sup>lt;sup>10</sup> Alpha Services and Holdings announces 2023 Stress Test Results

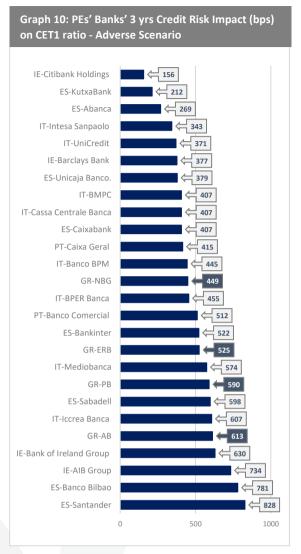
<sup>&</sup>lt;sup>11</sup> Average credit risk impact of 375 bps does not include GR-S banks, when included, said figure shapes at 345 bps.

<sup>&</sup>lt;sup>12</sup> **Stage 1 Loans**, in the context of IFRS 9 are loans that either have not deteriorated significantly in credit quality since initial recognition or have low credit risk. **Stage 2 Loans**, are loans



Positive contributors to GR-S banks' performance being the improved asset quality combined with robust provision coverage and the management **buffers** created as forward-looking provisions before the end of 2022, related to performing exposures. Said buffers are consumed entirely over the first year of the ST horizon leading to an equal reduction in the flow of credit losses. As depicted in Graph 10, NBG demonstrates the lowest credit risk impact to capital among GR-S banks at 449 bps.

It should also be noted that, c.58% of GR-S banks' impairments refer to 2023 (1<sup>st</sup> year) mainly due to projected increased NPE inflows stemming from forborne products' anniversaries, while the respective figure for peripheral economies' banks is at c.44%.



Source: EU Wide Stress Test Results 2023 Dashboard

5.2 NET INTEREST INCOME (NII) AND NET FEE & COMMISSION INCOME (NFCI): BENCHMARKING OF PES' INDIVIDUAL BANKS

Cumulative EU/EEA NII positive impact at €803 bn (938 bps) in the adverse scenario reflecting high interest rate environment.

Total NII of PEs' individual banks estimated at c.€336 bn with GR-S banks' relative share at c.15.7 bn. GR-S banks' average NII positive impact on Capital (CET1 ratio) is higher than PE banks, at 1.093 bps vs 1.044 bps.

As per Graph 11, Piraeus Bank ranks first (1.171 bps) in terms of NII positive capital



impact out of GR-S banks. GR-S banks perform better than PEs' banks' average mainly due to:

- high share of variable rate loans benefiting from loan repricing within the scenario horizon;
- high share of sight and savings' "sticky" deposit funding (sight and savings deposits exhibit lower interest rate pass-through to depositors which favorably impacts NII compared to other market-based funding);
- effective and prudent hedging policy even for the small amount of fixed income assets (mainly government bonds).

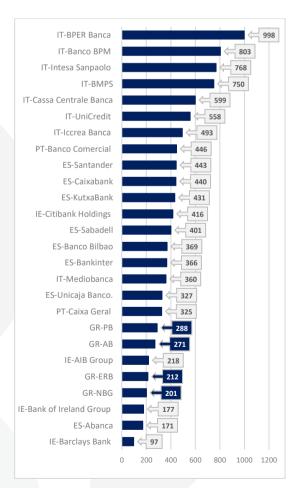
As far as NFCI is regarded, GR-S banks' relative positive impact on capital stands at 243 bps, which is considerably lower than PEs' average of 453 bps (Graph 12).



Source: EU Wide Stress Test Results 2023 Dashboard

Overall, it becomes evident that, GR-S banks' profitability is far less dependent on NFCI's impact and that, the latter's contribution on their capital depletion is significantly lower than PEs' banks (Graphs 12). It appears that, NFCI in Greece is significantly lower compared to South European countries, potentially depicting the lower banking fees structure in Greece. GR-S banks might consider to utilize the "originate to distribute" model combined with innovative tools (e.g. synthetic securitization) in order to transfer credit risk, improve capital adequacy and MREL ratios and also ensure a loan servicing risk-free fee.

Graph 12: PEs' Banks' 3 yrs NFCI impact (bps) on CET1 ratio – Adverse Scenario



Source: EU Wide Stress Test Results 2023 Dashboard



### 5.3 MARKET RISK IMPACT: BENCHMARKING OF PERIPHERAL ECONOMIES' INDIVIDUAL BANKS

From a prudential point of view, market risk stems from all the positions included in banks' trading book, as well as from commodity and foreign exchange risk positions in the banking book. Market risk losses contribute to a worsening of capital positions as per EBA ST 2023 results.

Portuguese banks exhibit a rather notable market risk impact, through the ST horizon, with a capital depletion of 203 bps, whilst Italian and Irish banks follow with 157 bps and 147 bps respectively (Graph 13).

GR-S banks expect market risk to negatively affect their capital position by only 66 bps (vs EU average of 131 bps) due to their relatively low exposures associated with market risk which are combined with a prudent hedging policy.

Graph 13: PEs' Banks' 3 yrs Market Risk impact (bps) on CET1 ratio – Adverse Scenario



Source: EU Wide Stress Test Results 2023 Dashboard

### **6. GREEK ECONOMY SELECTED SECTORS**

The 2023 ST scenario includes for the first-time information on the growth of Gross Value Added (GVA) in 16 sectors of economic activity. Such decomposition will help to better assess banks' performance depending on their business model and sectoral exposures.

The rationale for introducing the sectoral dimension in the ST is based on increased supervisory scrutiny of banks' exposures to certain economic sectors against the background of more frequent supply chain



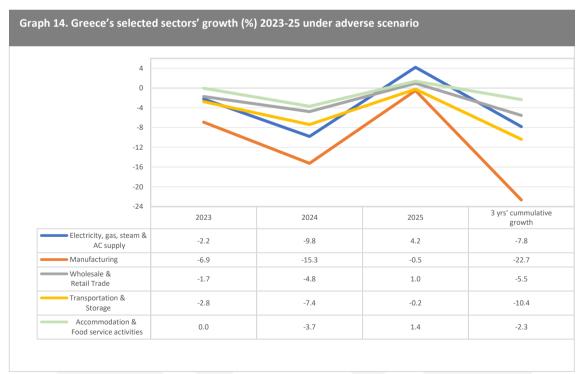
disruptions following the pandemic and the higher vulnerability of energyintensive sectors after the surge in energy prices following geopolitical tensions (e.g., War in Ukraine). system's corporate loans as a percentage of total loans are considerably higher than EU/EEA on an aggregate weighted average basis (15% vs 8%, Graph 15).

Greek banking system's corporate loans in the five specific sectors, that are expected to face a significant downward trend under ST adverse macroeconomic scenarios, amount at c.€47.7 bn¹³ (Graph 14). As it becomes evident, ST negative impact peaks in 2024, as respective ST macroeconomic assumptions become stricter. However, estimated GVA enters positive trajectory in 2025 for the three out of the five said sectors.

On the other side, Greece is considered to be amongst the "privileged" countries of the Recovery and Resilience Fund (RRF) since c. €36 bn (in loans and subsidies) are estimated to flow in the Greek economy in the next years.

It is also worth mentioning that, in these five specific sectors, Greek banking

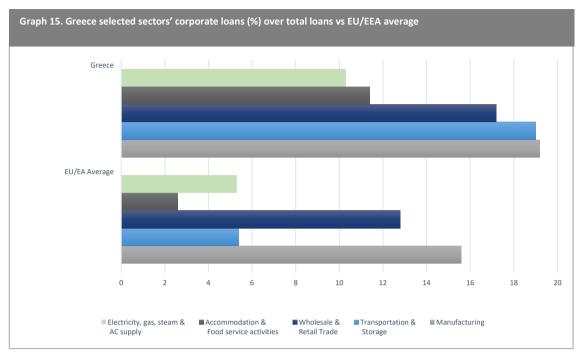
Overall, RRF funds are expected to enhance Greek corporates' productivity and competitiveness in order to be able to effectively offset any upcoming adverse macroeconomic shocks.



Source: EBA launces 2023 EU wide ST

<sup>&</sup>lt;sup>13</sup> As per Bank of Greece data regarding *Loans by economic activity* excluding Attica Bank's relative exposures.





Source: EBA Risk Dashboard as of 2023q2

Finally, it should be noted that four of the abovementioned economic sectors (i.e. Electricity & Gas, Transportation & Storage, Wholesale & Retail Trade and Manufacturing) are considered as high climate impact and carbon-emitting sectors by the ECB's 2022 climate risk stress test.

### 7. SREP CAPITAL REQUIREMENTS

ST results support the SREP process, both for P2R and P2G calibration. The qualitative outcome<sup>14</sup> of ST influences the P2R determination process as it relates to banks' internal governance and risk management.

It is worth mentioning that, both the ability of banks to cope with the data requirements and their responsiveness are measured. In addition, Joint Supervisory Teams (JSTs) carry out a qualitative assessment of banks' performance during the ST QA cycles.

The methodology for setting the P2G follows a two-step approach. In *step 1*, the bank is placed in a bucket according to its maximum CET1 capital depletion.

The buckets are designed based on recent supervisory experience, risk tolerance and statistical analysis of ST results.

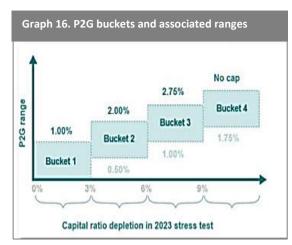
In *step 2*, the JSTs apply their **expert judgement to** adjust the P2G to the profile of each bank. The JSTs can adjust this within the ranges of the corresponding bucket and, exceptionally, beyond them, based on banks' individual circumstances such as their risk profiles.

accuracy of data, as well as the quality of information received. Similarly, quantitative metrics derived directly from data aim to provide the JSTs with measurable criteria to assess a bank's performance.

<sup>&</sup>lt;sup>14</sup> ST offers supervisors insights into the risks and vulnerabilities of a bank, as well as its risk management capabilities. The JSTs consider different aspects when assessing a bank's internal governance and risk management. These aspects include, for instance, the timeliness and



Based on 2023 ST results, GR-S banks are reasonably optimistic that their P2G could potentially fall, as CET1 reduction corresponds to bucket 1 that has an upper P2G limit of 1% (Graph 16). Consequently, the existing GR-S banks' P2G could be potentially reduced, creating a notable capital buffer, that could be used for further business expansion profitability enhancement or shareholders' remuneration.



Source: **ECB Supervisory Practices** 

### **8.KEY CONSIDERATIONS LOOKING AHEAD**

The present analysis on GR-S banks' remarkable performance in 2023 ST underscore the importance for them to **strengthen** their capabilities in the following areas:

- Addressing the remaining legacy NPE stock to fully converge with the European average NPE ratio. The reintroduction of "Hercules<sup>15</sup> 3" will be a very useful tool in this direction.
- Further enhancing portfolios' credit risk management & control mechanisms, proactively dealing with new NPE inflows that might occur due to high interest rate environment.
- Developing adequate risk mechanisms to proactively capture signs of deterioration of sectoral exposures, especially in Manufacturing, Energy and Transportation.
- Focusing on their loan book expansion as part of the broader Greece 2.0

- package utilization dealing with single borrowers and sectoral credit risk concentrations in a prudent risk based approach.
- Enhancing their business models by integrating ESG considerations in their risk and business operations focusing on managing the impacts of climate change. Special focus should be given to high climate impact and carbonemitting sectors.
- Enhancing risk-free fee income through further developing their business activities (e.g. utilising the "originate to distribute" model) and using innovative tools (e.g. synthetic securitization),

As the next EU-wide EBA/ECB Stress Test is scheduled for 2025, GR-S banks should soon start preparing for the EBA Climate Risk Scenario analysis and the ECB Cyber Resilience Stress Test which are planned for 2024.

balance-sheets with the senior tranche retained by the originating Bank and receiving a 0% risk weighted sovereign guarantee.

<sup>15</sup> The Hellenic Asset Protection Scheme (renamed to "Hercules" scheme) was an HFSF strategic initiative, implemented by the Ministry of Finance, designed to assist banks in securitizing NPE moving them out of their



### **ABBREVIATIONS**

"bps": basis points (100 bps = 1%)

CA: Competent Authority
CET1: Common Equity Tier 1

CET1 FL: Common Equity Tier 1 Ratio

**Fully Loaded** 

CRE: Commercial Real Estate

EBA: European Banking Authority

ECB: European Central Bank

**ECL: Expected Credit Losses** 

EEA: European Economic Area

ESG: Environmental, Social & Governance

ESM: European Stability Mechanism

ESRB: European Systemic Risk Board

EU: European Union

JSTs: Joint Supervisory Teams

HICP: Harmonised Index of Consumer Prices

LGD: Loss Given Default

LRs: Loss Rates

MREL: Minimum Requirement for Own Funds

& Eligible Liabilities

NFCI: Net Fee & Commission Income

NII: Net Interest Income

**NPE: Non-Performing Exposures** 

PD: Probability of Default
P2G: Pillar 2 Guidance
P2R: Pillar 2 Requirement
QA: Quality Assurance

RRE: Residential Real Estate

SREP: Supervisory Review & Evaluation Process

SSM: Single Supervisory Mechanism

TRs: Transition Rates

### SOURCES

- 1. <u>Alpha Services and Holdings announces 2023</u> <u>Stress Test Results</u>
- 2. Alvarez & Marshall ST Tests Results 2023
- 3. Bank of Greece Monetary and Banking Statistics
- 4. Deloitte EBA Stress Tests Results 2023
- 5. EBA publishes the results of its 2023 EU-wide stress test
- 6. EBA publishes the results of its 2021 EU-wide stress test
- 7. <u>ECB Banking Supervision</u>, 2023 Stress Test of <u>Euro Area Banks Final results</u>
- 8. ECB P2G Guidance
- 9. European Banking Authority Risk Dashboard
- 10. Hellenic Statistical Authority
- 11. HFSF Greek Banking Sector's 2021 EU wide ST Results
- 12. NBG 2023 EU wide stress test
- 13. OT Greek systemic banks easily pass 2023 ECB stress tests
- 14. Moody's Issuer in depth on Greek banks 09-2023
- 15. MorningStar DBRS Commentary; EU Banks
  Proved Resilient in the 2023 EBA Stress Test3
- 16. <u>Piraeus Financial Holdings: 2023 EBA Stress</u>
  <u>Tests Results</u>
- 17. Hellenic Republic Stability Programme 2022
- 18. 2023 EU-wide Stress Test results Key figures of Eurobank Group