EUROBANK
Holdings

EUROBANK ERGASIAS
SERVICES AND HOLDINGS S.A.

CONSOLIDATED PILLAR 3 REPORT

FOR THE YEAR ENDED
31 DECEMBER 2022

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1. Introduction – General Information

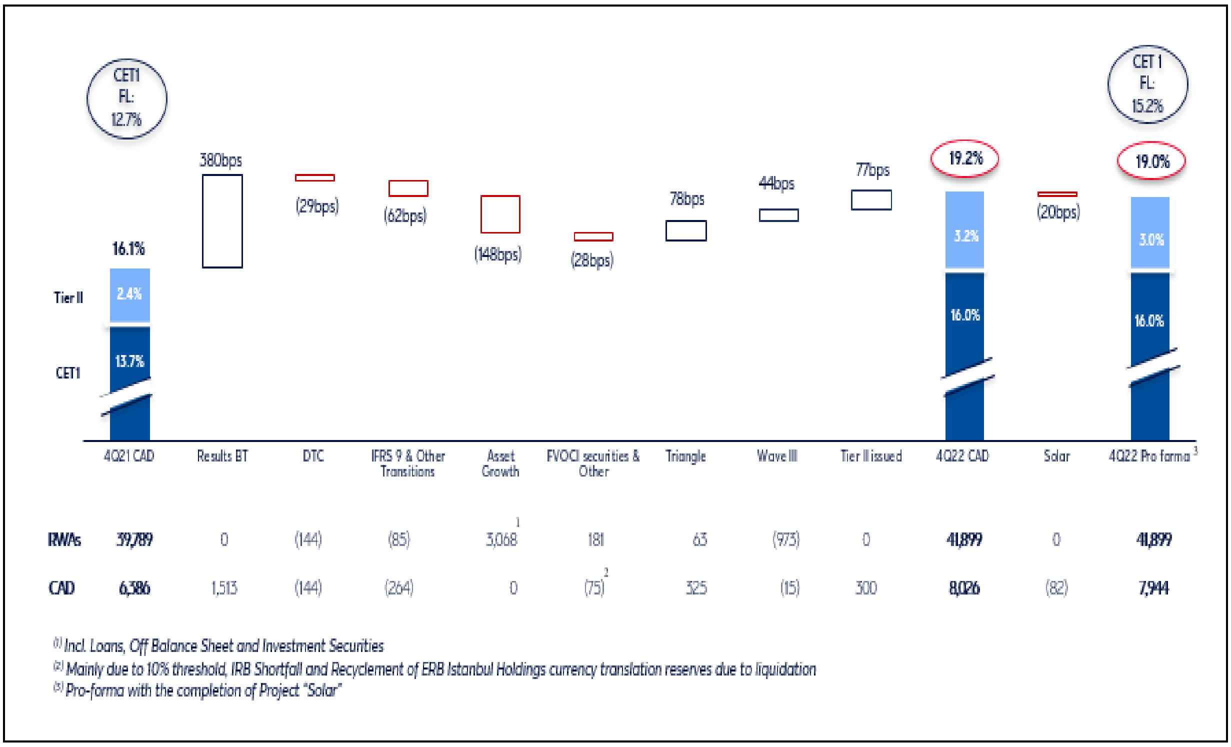
Eurobank Ergasias Services and Holdings S.A. (the Company or Eurobank Holdings), which is the parent company of Eurobank S.A. (the Bank) and its subsidiaries (the Group), consisting mainly of Eurobank S.A. Group are active in retail, corporate and private banking, asset management, treasury, capital markets and other services. The Group operates mainly in Greece and in Central and Southeastern Europe. The Company is incorporated in Greece and its shares are listed on the Athens Stock Exchange.

Eurobank Holdings. is supervised on a consolidated basis and Eurobank S.A. is supervised on a standalone basis by the European Central Bank (ECB) and the Bank of Greece (BoG).

Pursuant to article 22A of Greek Law 4261/2014 (as amended), which incorporated article 21 (a) of Directive 2013/36/EU (as amended) into the Greek legislation and following the ECB's decision in December 2021, Eurobank Holdings was licensed as a financial holding company. This Decision entails that Eurobank Holdings is required to meet the prudential requirements set out in CRR and CRD IV at consolidated level.

1.1 Highlights

Evolution of Capital Ratio y-o-y



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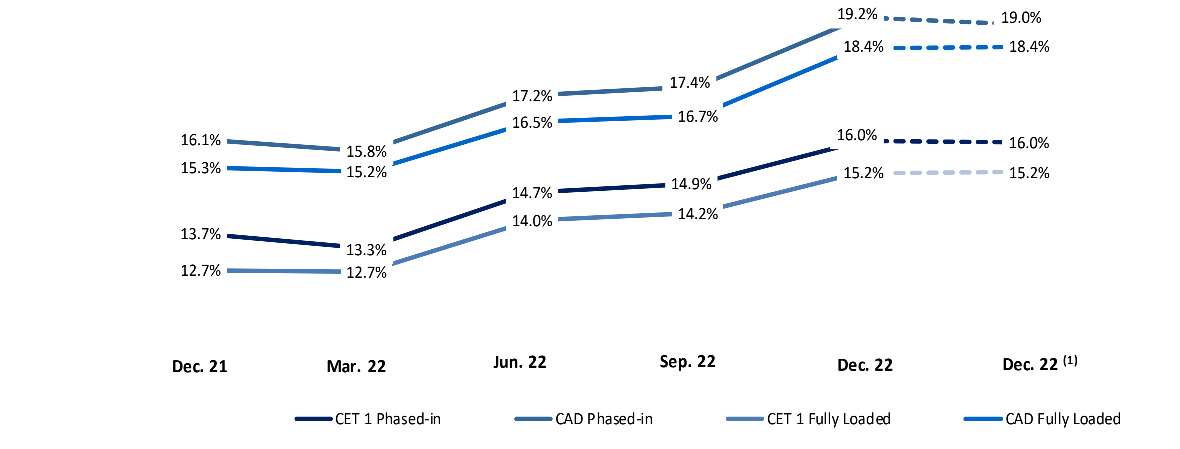
Risk profile

	31 December 2022 (1) & (3) € million	31 December 2022 (1) € million	30 September 2022 (1) & (3) € million	31 December 2021 (1) & (2) € million
Available own funds				
Common Equity Tier 1 (CET1) capital	**6,694**	6,715	6,302	5,769
Tier 1 capital	**6,694**	6,715	6,302	5,769
Total capital	**7,944**	8,026	7,261	6,719
Risk-weighted exposure amounts				
Total risk-weighted exposure amount	**41,899**	41,899	42,183	39,880
Capital ratios				
Common Equity Tier 1 ratio (%)	**16.0%**	16.0%	14.9%	14.5%
Tier 1 ratio (%)	**16.0%**	16.0%	14.9%	14.5%
Total capital ratio (%)	**19.0%**	19.2%	17.2%	16.8%
Leverage ratio				
Leverage ratio	**7.9%**	7.9%	7.4%	8.2%
Liquidity Ratio				
Liquidity coverage ratio (%)	**172.9%**	172.9%	169.0%	152.2%
Net Stable Funding Ratio (%)	**128.0%**	128.0%	127.2%	123.3%

(1) Including profits € 1,330 million for year ended 31 December 2022 and €1,106 million for the 9M 2022.
(2) Pro-forma with the completion of the sale of Eurobank's merchant acquiring business.
(3) Pro-forma with the completion of Project "Solar".

Evolution of Capital Ratio



(1) Pro-forma with the completion of Project "Solar".

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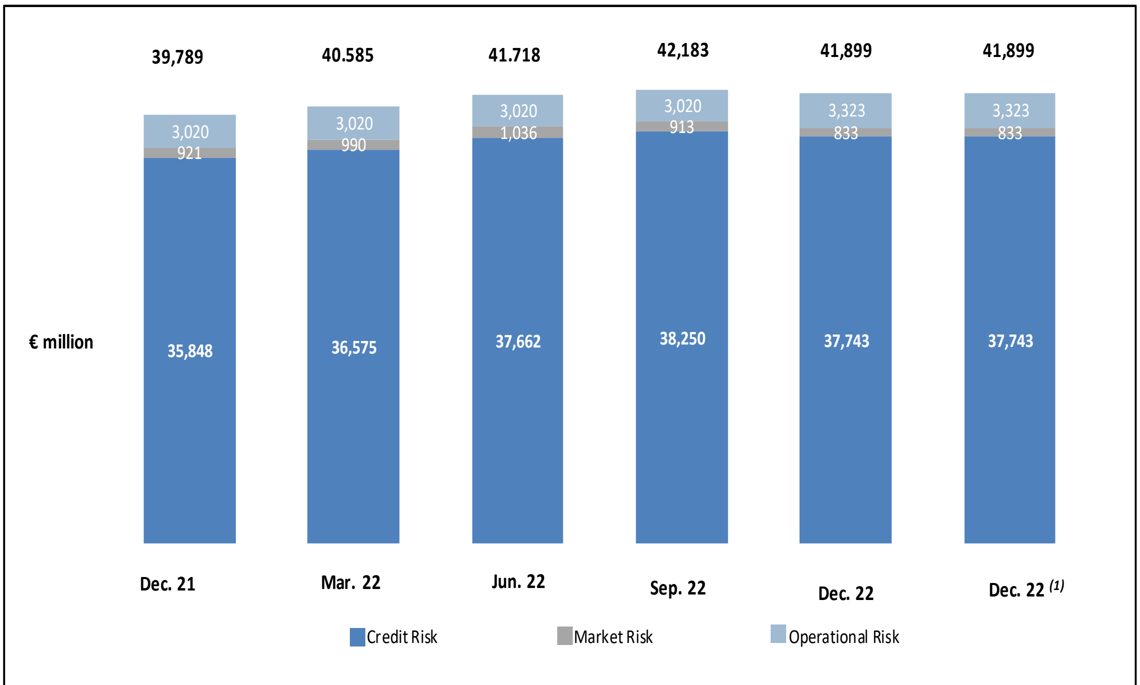
Evolution of Risk Weighted Assets Amount



(1) *Pro-forma with the completion of Project "Solar".*

1.2 NPE Operational targets

In line with the regulatory framework and Single Supervisory Mechanism (SSM) requirements for Non-Performing exposures (NPE) management, in March 2023 the Group submitted its NPE Management Strategy for 2023-2025, along with the annual NPE stock targets at both Bank and Group level. The plan envisages the decrease of NPE ratio at 5.2% at the end of 2023 and at 4.5% in 2025.

1.3 Project Solar

In the context of its NPE management strategy, the Group has structured another NPE securitization transaction (project "Solar"), as part of a joint initiative with the other Greek systemic banks initiated since 2018, in order to decrease further its NPE ratio and strengthen its balance sheet de-risking. In addition, the Group targets to the prudential and accounting derecognition of the underlying corporate loan portfolio from its balance sheet by achieving a Significant Risk Transfer (SRT) and including "Solar" securitization under the Hellenic Asset Protection Scheme (HAPS), thus the senior note of the securitization to become entitled to the Greek State's guarantee. In parallel, the Management along with the other participating banks have initiated actions towards the disposal of the majority stake of the mezzanine and junior notes to be issued in the context of the above-mentioned securitization.

As at 31 December 2022, following the classification of project "Solar" underlying loan portfolio as held for sale in June 2022, the Group's NPE stock amounted to € 2.3 billion (30 September 2022: € 2.4 billion) driving the NPE ratio to 5.2% (30 September 2022: 5.6%), while the NPE coverage ratio stood at 74.6% (30 September 2022: 72.7%).

1.4 Project Wave

In December 2022, the Bank, proceeded with the execution of the third synthetic risk transfer transaction (project "Wave III") through a financial guarantee (in a funded form, with the guarantee provided by a newly established SPV), providing credit protection over the mezzanine loss of a portfolio of performing shipping loans amounting to $ 1.7 billion (the reference portfolio). Similarly to the previous two synthetic risk transfer transactions (projects "Wave I" and "Wave II"), that were executed in December 2021 over a reference portfolio of performing SMEs and large corporate loans of € 1.7 billion, the Wave III transaction was accounted for as a purchased financial guarantee contract that is not integral to the contractual terms of the reference portfolio, where a compensation right resulting from the expected credit losses of the protected loans is recognized, to the extent that it is virtually certain that the Group will be reimbursed for the credit losses incurred. The reference portfolios of Wave projects continued to be recognised on the Group's Balance Sheet.

As at 31 December 2022, the Wave III transaction, that was performed in the context of the Group's initiatives for the optimization of its regulatory capital, resulted in a capital benefit of 40 bps.

1.5 Eurobank Merchant Acquiring business - Project "Triangle"

On 7 December 2021, the Company announced that its subsidiary Eurobank S.A. ("Eurobank") has signed a binding agreement with Worldline B.V. ("Worldline") that includes: a) the sale of 80% of Eurobank's merchant acquiring business ("PayCo") to Worldline and b) a long term agreement for the exclusive distribution of PayCo products in Greece through Eurobank's sales network. On the basis of the aforementioned agreement, as of 31 December 2021 "PayCo" was classified as held for sale.

On 30 June 2022, after receiving all necessary approvals, the spin-off of the Bank's merchant acquiring business to Cardlink Payment Institution S.A. ("Cardlink One"), a licensed payment institution, and the transfer of 80% of Cardlink One's shares to Worldline was completed for a cash consideration of € 254 million, after certain adjustments.

Further information is provided in the Consolidated Financial Statements note 30.

1.6 Hellenic Bank

In December 2022, the Bank acquired an additional 3.2% holding in Hellenic Bank Public Company Limited ("Hellenic Bank"), a financial institution located in Cyprus, for a consideration of € 16.74 million. Following this transaction, as at 31 December 2022, the Bank holds a 15.8% participation in Hellenic Bank. The said investment is aligned with the overall strategy of the Group to further strengthen its presence in its core markets in which retains a strategic interest and thus has been designated at FVOCI.

In addition, on 1 December 2022, the Bank announced that it has entered into a share purchase agreement with Wargaming Group Limited, pursuant to which it has agreed to acquire an additional 13.41% holding in Hellenic Bank for a consideration of € 70 million.

On 4th April 2023, following the receipt of the relevant regulatory approvals, the above acquisition was completed, and its total holding in Hellenic Bank reached 29.2%. Following that, the investment in Hellenic Bank will be accounted for as a Group's associate in the consolidated financial statements as of the second quarter of 2023.

1.7 Eurobank Direktna a.d., Serbia

On 2 March 2023, the Bank announced that it has signed a binding agreement (share purchase agreement) with AIK Banka a.d. Beograd ("AIK") for the sale of its 70% shareholding in its subsidiary in Serbia, Eurobank Direktna a.d. (the "Transaction"). Consequently, the subsidiary will be classified as held for sale and its results will be presented in discontinued operations. The Transaction is consistent with Eurobank's strategy to direct capital to opportunities with more compelling RoTBV (Return on Tangible Book Value) and to further enhance its presence in its core markets. In this context, based on the agreement, 100% of Eurobank Direktna was valued at €280 million.

The Transaction is expected to contribute ca. 50 bps to Eurobank Holdings Group's CET1 ratio (based on the third quarter of 2022 ratio), reflecting mainly the release of related RWAs (Risk Weighted Assets). It is expected to be completed within year 2023, subject to customary regulatory and other approvals.

1.8 Tier 2 Capital instruments

In January 2018, Eurobank Ergasias S.A. issued Tier 2 capital instruments of face value of € 950 million, in replacement of the preference shares which had been issued in the context of the first stream of Hellenic Republic's plan to support liquidity in the Greek economy under Law 3723/2008. The aforementioned instruments have a maturity of ten years (until 17 January 2028) and pay fixed nominal interest rate of 6.41%, that shall be payable semi-annually.

On 30 November 2022, the Company announced the issuance of a € 300 million subordinated Tier II debt instrument which matures in December 2032, is callable in December 2027 offering a coupon of 10% per annum and is listed on the Luxembourg Stock Exchange's Euro MTF market. On the same date, the Bank issued a subordinated instrument of equivalent terms, held by the Company. The proceeds from the issue will support Eurobank Holding's group strategy to ensure ongoing compliance with its total capital adequacy ratio requirements and will be used for Eurobank S.A.'s general funding purposes.

1.9 Regulatory framework

The general Basel III framework is structured around three mutually reinforcing pillars:

- Pillar 1 defines the minimum regulatory capital requirements, based on principles, rules and methods specifying and measuring credit, market and operational risk. These requirements are covered by regulatory own funds, according to the rules and specifications of CRR.
- Pillar 2 addresses the internal processes for assessing overall capital and liquid asset holdings are adequate in relation to risk profile (Internal Capital Adequacy Assessment Process - ICAAP and Internal Liquidity Assessment Process - ILAAP). Moreover, Pillar 2 introduces the Supervisory Review & Evaluation Process (SREP), which assesses the risks banks face and check that banks are equipped to manage those risks properly.
- Pillar 3 intends to enhance market discipline by developing a set of quantitative and qualitative disclosure requirements, which allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes and hence the capital adequacy and the internal liquidity adequacy of credit institutions.

According to the CRD IV provisions:

- Minimum Common Equity Tier 1 (CET1) ratio: 4.5%;
- Minimum Tier 1 ratio: 6%;
- Minimum Total Capital ratio: 8%

Furthermore, banks are required to maintain in addition to the above minimum ratios, a capital conservation buffer equal to 2.5% (from 1 January 2019) of their total risk exposure amount calculated.

As a result, the minimum ratios which must be met, including the capital conservation buffer and which shall apply from 1 January 2019 are:

- Minimum CET1 capital ratio 7% and

- Total capital adequacy ratio 10.5%.

Additional capital buffers that CRD IV introduces are the following:

a) Countercyclical buffer (CCyB). The purpose of this buffer is to counteract the effects of the economic cycle on banks' lending activity, thus making the supply of credit less volatile and possibly even reduce the probability of credit bubbles or crunches. Credit institutions are required under the CRD IV to build up an additional buffer of 0 - 2.5% of CET1 during periods of excess credit growth, according to national circumstances. According to BoG Executive Committee Act No 202/1/11.03.2022, which lays down the procedure for applying the CCyB rate in Greece and the relevant calibration methodology, BoG assesses, on a quarterly basis, the intensity of cyclical systemic risk and the appropriateness of the CCyB rate, taking into account the standardised credit-to-GDP gap, the buffer guide and, in particular, additional indicators for monitoring the build-up of cyclical systemic risk. On 28 September 2022, BoG announced that would keep the countercyclical capital buffer rate for Greece unchanged at "zero percent" (0%) in the fourth quarter of 2022, with effect from 1 October 2022.

b) Global systemic institution buffer (G-SIIs). CRD IV includes a mandatory systemic risk buffer of CET1 for banks that are identified by the relevant authority as globally systemically important, which is not applicable to Greek banks.

c) Other systemically important institutions buffer (O-SIIs). On 4 July 2022, European Banking Authority (EBA) published the updated list of O-SIIs in the EU, which, together with G-SIIs, are identified as systemically important by the relevant authorities according to harmonised criteria laid down in the EBA Guidelines (the size, importance, complexity and interconnectedness). This list is based on end-2020 data and also reflects the capital buffers that the relevant authorities have set for the identified O-SIIs. The list of O-SIIs is disclosed on an annual basis, along with any CET1 capital buffer requirements, which may need to be set or reset. Higher capital requirements will become applicable in case relevant authorities decide to set institution specific buffer requirements following the O-SII identification. For each O-SIII, the list includes the overall score in terms of basis points resulting from the EBA scoring methodology.

   The EBA methodology has been applied to compute the scores for all the institutions operating in Greece using consolidated data. Based on the above scoring system, all Greek O-SIIs are classified in bucket 4, which corresponds to a capital buffer up to 1% initially to be phased in until 2022. In order to provide further flexibility to credit institutions in reaction to the coronavirus and mitigate the subsequent financial impact, the initial phasing-in period has been adjusted until 2023. According to relevant BoG Executive Committee Acts No 195/29.11.2021 and No 212/21.09.2022, the O-SII buffer for Greek institutions is set at 0.75% and 1% for the years 2022 and 2023 respectively.

d) Systemic Risk Buffer (SyRB). According to article 133 of CRD, SyRB can be used to address a broad range of systemic risks, which may also stem from exposures to specific sectors, as long as they are not already covered by the Capital Requirements Regulation or by the CCyB or the G-SII/O-SII buffers. The level of the SyRB may vary across institutions or sets of institutions as well as across subsets of exposures. There is no maximum limit for this buffer. Competent authority is in charge of setting the systemic risk buffer and of identifying the sets of institutions to which it applies. According to BoG Executive Committee Act No 197/21.12.2021, BoG decided to adopt the EBA guidelines on the appropriate subsets of exposures to which the competent authority or the designated authority may apply a systemic risk buffer based on paragraph 5 of article 133 of CRD.

1.9.1 Regulatory Developments

On 29 May 2020, EBA published its Guidelines on loan origination and monitoring that expect Banks to develop robust and prudent standards to ensure newly originated loans are assessed properly. The Guidelines set requirements for assessing the borrowers' creditworthiness together with the handling of information and data for the purposes of such assessments. In these requirements, the Guidelines bring together the EBA's prudential and consumer protection objectives. The application of the Guidelines for newly originated loans needs to be in place within Q2 2021, while gradually and until Q2 2024 the application of the Guidelines needs to be expanded to existing loans that have been renegotiated and to the stock of existing loans.

On 24 January 2022, EBA published its final draft ITS on Pillar 3 disclosures on ESG risks. The final draft ITS put forward tables, templates and associated instructions that specify the requirement in Article 449a of Regulation (EU) No 575/2013 to disclose prudential information on environmental, social and governance (ESG) risks, including transition and physical risk, addressed to large institutions with securities traded on a regulated market of any Member State. The Pillar 3 framework on prudential disclosures on ESG risks supports institutions in the public disclosure of meaningful and comparable information on how ESG-related risks and vulnerabilities, and in particular climate change, may exacerbate other risks in their balance sheet. Disclosure of information on ESG risks is a vital tool to promote market discipline, allowing stakeholders to assess banks' ESG related risks and sustainable finance strategy.

Large institutions should disclose information on ESG risks from 28 June 2022. For the first year this information must be disclosed on an annual basis and semi-annually thereinafter. Consequently, the first disclosure reference date is 31 December 2022 and the information is made publicly available during the first months of 2023. An overview of the qualitative and quantitative information is depicted below:

- Three tables are set up for qualitative information on environmental, social and governance risks. Under each risk category, the disclosure requirements target three aspects: governance, business model and strategy, and risk management. First disclosure reference date is 31.12.2022
- Ten templates are set up for quantitative disclosures, specifically:

  a. four templates on climate change transition risk that should be disclosed with reference date 31.12.2022, except for disclosures on institutions' scope 3 emissions and alignment metrics which have phase-in period until June 2024;

  b. one template on climate change physical risks with first disclosure date on 31.12.2022;

  c. five templates on the actions that institutions are putting in place to mitigate climate-change-related risks, including information on Taxonomy-aligned activities (Green Asset Ratio -GAR and Banking Book Taxonomy Alignment Ratio -BTAR) and on other mitigating actions. The disclosure of information on the GAR will start to apply on 31.12.2023, the additional and separate information on the BTAR will apply from 30.06.2024.

On 18 March 2022, EBA published its final revised Guidelines on common procedures and methodologies for Supervisory Review and Evaluation Process (SREP) and supervisory stress testing. The revisions aim at implementing the amendments to CRD V and CRR II and promoting convergence towards best supervisory practices. The revision of the SREP Guidelines, while keeping the original framework with the main SREP elements intact, reflects the amendments at Level 1, which include, among other things, the introduction of the assessment of the risk of excessive leverage and the revision of the methodology for the determination of the Pillar-2 Guidance. This revision is also aimed at aligning the text with other relevant guidelines, technical standards, as well as enhancing the guidance by incorporating identified best practices. Additional relevant changes are related to the enhancement of the principle of proportionality as well as the encouragement of cooperation among prudential supervisory authorities and AML/CFT supervisors, as well as resolution authorities.

On 25 March 2022, the three European Supervisory Authorities (EBA, EIOPA and ESMA – ESAs) updated their joint supervisory statement on the application of the Sustainable Finance Disclosure Regulation (SFDR). This includes a new timeline, expectations about the explicit quantification of the product disclosures under Article 5 and 6 of the Taxonomy Regulation, and the use of estimates. The supervisory statement aims to promote an effective and consistent application and national supervision of the SFDR, thus creating a level playing field and protecting investors. On 25 November 2021, the Commission sent a letter announcing that the application date of the RTS would be 1 January 2023. The European Commission is required to endorse the ESAs draft RTS within 3 months of the publication. Subject to the non-objection

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by the European Parliament and Council of the European Union – within 3 months following the Commission's endorsement – the RTS will be adopted by the Commission by means of a delegated regulation.

On 2 May 2022, EBA published a Discussion Paper on the role of environmental risks in the prudential framework for credit institutions and investment firms. The Paper provides an analysis of the extent to which environmental risks are already reflected in the Pillar 1 own funds requirements via internal and external ratings, valuation of financial instruments and collateral, or scenario analysis. It launches the discussion on the potential incorporation of a forward-looking perspective in the prudential framework. It also stresses the importance of collecting relevant and reliable information on environmental risks and their impact on institutions' financial losses. While the Discussion Paper focuses on Pillar 1 own funds requirements, it highlights the need for a holistic regulatory approach and should be seen as part of the EBA's broader work in the area of ESG risks, which includes transparency, risk management, Pillar 2 supervision and macroprudential capital buffers. The Paper also highlights interlinkages with the accounting framework. The consultation ran until 2 August 2022.

On 24 May 2022, EBA published an updated mapping between quantitative disclosure data points and the relevant supervisory reporting data points. The updated mapping applies to the reporting framework 3.0 and the Implementing Technical Standards (ITS) on institutions' Pillar 3 public disclosures. The amendments mainly address issues raised by competent authorities and the industry.

On 17 October 2022, EBA published an Opinion on the amendments proposed by the European Commission (EC) to the EBA final draft ITS on prudential disclosures of ESG information. EC's version of the ITS, compared to the final draft ITS submitted by the EBA on January 2022, includes two substantive changes, mainly with regard to the calculation and disclosure of the BTAR. In particular, the Commission has proposed amendments to emphasise: i) that institutions 'may' choose to disclose this information, instead of being required to do it on a 'a best effort basis' and ii) that the collection of the information from the counterparties will be on a 'voluntary basis', including that institutions need to inform the counterparties about the voluntary nature of this request of information.

On 20 October 2022, EBA published a final set of Guidelines and two final draft RTS specifying technical aspects of the revised framework capturing interest rate risks for banking book (IRRBB) positions. These regulatory products complete the onboarding into EU law of the Basel standards on IRRBB and are of crucial importance given the current interest rate environment. The EBA will also closely monitor their implementation and more generally the impact of the evolving interest rates on the management of IRRBB by EU institutions and on other related prudential aspects. The Guidelines will replace the current Guidelines on technical aspects of the management of interest rate risk arising from non-trading activities under the supervisory review process (SREP) published in 2018.

On 2 November 2022, the ECB published a report on good practices for climate-related and environmental risk management. With this report, the ECB shares observations and good practices related to strategy-setting, governance and risk appetite, as well as risk management, illustrating the different ways that significant institutions can align their practices with the supervisory expectations.

On 8 November 2022, the Council of the EU published its position (general approach) on the proposals amending

- Regulation (EU) No 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor the capital requirements directive and the capital requirements regulation. Proposed implementation date is 1 January 2025;
- Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks, and amending Directive 2014/59/EU (CRD).

Following the usual legislative procedure, the Council's general approach will be discussed together with European Parliament's final position and the European Commission's initial legislative proposal to agree on a final version of the texts. The trialogue is expected to start in 2023.

On 12 December 2022, the three European Supervisory Authorities (EBA, EIOPA and ESMA – ESAs) published a joint advice in response to the European Commission's October 2021 call for advice on the review of the securitisation prudential framework. The ESAs welcomed the current review as an opportunity to assess the performance of the current framework and support the objective of reviving the EU securitisation market. The targeted proposals in the advice aim at improving the consistency and risk sensitivity of the capital framework for banks whereas the liquidity framework for banks and the prudential framework for (re)insurers should be maintained as it currently stands. However, the ESAs believe that re-calibrating the securitisation prudential framework would not be a solution that in itself would ensure the revival of the securitisation market.

On 19 December 2022, the ECB published a report on good practices for climate stress testing. With this report, the ECB aims to give banks good examples and suggestions for improving their climate stress testing capabilities and for aligning their practices with ECB expectations. The ECB emphasises that climate and environmental risks ("C&E risks") remain key priorities and banks are expected to properly manage their C&E risks by the end of 2024.

On 31 January 2023, EBA published a consultation on draft ITS on supervisory reporting with respect to IRRBB. The consultation paper proposes new, harmonised reporting requirements for the assessment and monitoring of institutions' IRRBB across the EU. This new reporting will provide supervisors the necessary data to monitor IRRBB risks in credit institutions, taking into careful consideration the concept of proportionality. The consultation runs until 2 May 2023. EBA expects to submit this draft ITS to the European Commission in mid-2023. The expected application of the revised requirements is for 30 June 2024 reporting reference date.

On 14 February 2023, EBA published the final draft RTS setting out the conditions for the assessment of the homogeneity of the underlying exposures in a pool of a Simple Transparent and Standardised (STS) on-balance-sheet securitisation. In general, the proposed amendments consider the specificities of on-balance-sheet securitisations and aim at enabling both the originators and the investors to assess the underlying risks of the pool of the underlying exposures on the basis of common methodologies and parameters in line with the overarching objective of the homogeneity requirement. The final draft RTS will be submitted to the Commission for endorsement. Following the submission, RTS will be subject to scrutiny by the European Parliament and the Council before being published in the Official Journal of the European Union.

On 13 March 2023, ESAs together with ECB published a Joint Statement on climate-related disclosure for structured finance products. The Statement encourages the development of disclosure standards for securitised assets through harmonised climate-related data requirements. Securitisation transactions are often backed by assets that could be directly exposed to physical or transition climate-related risks, such as real estate mortgages or auto loans. Finally, the introduction of new climate change-related disclosure requirements for securitisations may become also relevant for similar funding instruments backed by the same type of underlying assets, such as covered bonds.

On 21 March 2023, EBA launched a public consultation on its draft ITS amending the ITS on specific reporting requirements on market risks (FRTB reporting), aiming at providing supervisors with the necessary tools to monitor these risks. The consultation runs until 21 June 2023. As the full implementation of the FRTB in the EU approaches proposed to be 1 January 2025, the proposals set out in the consultation paper complement the already existing reporting requirements with a comprehensive set of information on the instruments and positions to which institutions apply related to the FRTB approaches.

1.9.2 Covid-19 regulatory measures

The Covid-19 pandemic constituted an unprecedented challenge with very severe socio-economic consequences. Regulatory authorities responded to this challenge with a number of regulatory measures in 2020-2021.

On 10 February 2022, ECB announced the end of the last temporary relief measures still available to banks, hence confirming the return to normality under the initially envisaged timeline. Specifically, ECB decided that banks are expected to operate above the Pillar 2 Guidance from January 2023, while the supervisory measure that allowed banks to exclude central bank exposures from their leverage ratios ended in March 2022.

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On 17 January 2022, EBA confirmed the need to continue monitoring exposures and the credit quality of loans benefitting from various public support measures due to the uncertainty over Covid-19 developments. To facilitate such monitoring by the competent authorities, especially in the jurisdictions where loans under moratoria and public guarantee schemes remain a concern, the EBA confirms that the Guidelines on the reporting and disclosure of exposures subject to measures applied in response to the Covid-19 crisis adopted on 2 June 2020 continue to apply until further notice.

On 16 December 2022, EBA announced the repeal of the EBA Guidelines on Covid-19 reporting and disclosure from 1 January 2023, in response to the decreasing relevance of the related public support measures, and the overall EBA proportionate approach to reporting. Additionally, EBA has published its closure report of Covid-19 measures which provides an overview of the wide range of policy measures taken on the back of the pandemic, their state of play and the path out of policy support. Although the EU banking system proved overall resilient, the ample support provided does not give room to complacency, and the framework is to be further strengthened with a loyal and prompt implementation of Basel III. The conclusion of the report highlights the need to accomplish the transition out of Covid-19 and notes the risks associated to an orderly phase-out. The publication is accompanied by an update to the list of Public Guarantee Schemes and general payment moratoria schemes issued in response to the pandemic.

1.10 Single Supervisory Mechanism (SSM)

Pursuant to the proposal of the EU Commission dated 12 September 2012 as regards a Single Supervisory Mechanism (SSM), Council Regulation No 1024/2013 of 15 October 2013 was issued, which conferred specific tasks on the ECB concerning policies relating to the prudential supervision of credit institutions. Furthermore, Regulation No 1022/2013 of the European Parliament and of the Council of 22 October 2013 was also issued, amending Regulation No 1093/2010 establishing the EBA as regards the conferral of specific tasks on the ECB pursuant to Council Regulation No 1024/2013.

SSM refers to the system of banking supervision in Europe. It comprises the ECB and the national supervisory authorities of the participating members. The main aims of the SSM are to ensure the safety and soundness of the European banking system, increase financial integration and stability and ensure consistent supervision.

As of November 2014, the ECB directly supervises the largest banks, while the national supervisors continue to monitor the remaining banks. The main task of the ECB and the national supervisors, working closely together within an integrated system, is to check that banks comply with the EU banking rules and tackle problems early on.

The SSM is one of the two pillars of the EU banking union, along with the Single Resolution Mechanism.

Single Rulebook

The Single Rulebook is the foundation of the Banking Union. The term Single refers to a single set of harmonised prudential rules which institutions throughout the EU must comply with. These rules, among other things, lay down capital requirements for banks, ensure better protection for depositors and regulate the prevention and management of bank failures.

Supervisory Review and Evaluation Process (SREP)

Based on Council Regulation 1024/2013, the ECB conducts annually a Supervisory Review and Evaluation Process (SREP), in order to define the prudential requirements of the institutions under its supervision, by defining a total SREP capital requirement.
The key purpose of SREP is to ensure that institutions have adequate arrangements, strategies, processes and mechanisms as well as capital and liquidity to ensure a sound management and coverage of their risks, to which they are or might be exposed, including those revealed by stress testing and risks the institution may pose to the financial system.
The common SREP framework introduced is built around:

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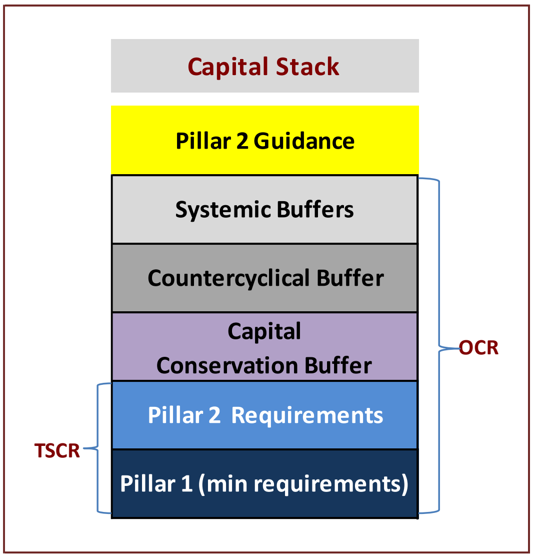
- a business model and profitability assessment;
- an internal governance and risk management assessment;
- an assessment of risks to capital on a risk-specific basis (i.e. credit risk, market risk, operational risk, interest rate risk in the banking book – IRRBB), of the institution's internal capital adequacy assessment process (ICAAP) and of capital adequacy; and
- an assessment of risks to liquidity and funding on a risk-specific basis (i.e. short-term funding, long-term funding and the institution's internally identified risks in normal scenarios and under stressed conditions), of the institution's internal liquidity adequacy assessment process (ILAAP) and of the adequacy of liquidity.

On the basis of the ECB's assessment of the institution's risk profile (through SREP), the following capital adequacy requirements apply:

- The minimum required CET1 ratio and the minimum required Total capital adequacy ratio (Total SREP Capital Requirement or TSCR) that the Group must meet at all times;
- The Overall Capital Requirement (OCR), which includes, in addition to the TSCR, the combined buffer requirement, and which in case of breach, leads to the trigger of the Maximum Distributable Amount (MDA) restrictions; and
- The Pillar 2 Guidance (P2G), which is an additional capital buffer recommended by the ECB to be kept at consolidated level over and above the OCR. The P2G indicates the level of capital that the ECB expects the Group to maintain in order to withstand stress.

Pillar 2 Requirement (P2R)

The Pillar 2 Requirement (P2R) is a capital requirement which applies in addition to and covers risks which are underestimated or not covered by the minimum capital requirements (Pillar 1). The P2R is binding and its breach can have direct legal consequences for an institution. The P2R is determined via the SREP. Unlike the P2R, the P2G is not legally binding.



Based on the completion of the SREP decision for the year 2022, the ECB notified that the Group shall meet on a consolidated basis a total SREP capital requirement (TSCR) of 11%, which includes a Pillar 2 Requirement (P2R) of 3%. This requirement must be maintained at all times in accordance with Article 16(2)(a) of Regulation (EU) No 1024/2013. On an individual basis, the Bank shall meet a TSCR of 8%.

Part of the P2R had to be held in the form of CET1 capital (1.69%), while AT1 and Tier 2 capital, where available, may be used to cover the remaining part.

1.11 Recovery and Resolution of Credit Institutions

The recovery and resolution framework in the EU is based on the Directive 2014/59 EU "*establishing a framework for the recovery and resolution of credit institutions and investment firms*" (the Bank Recovery and Resolution Directive (BRRD)) which entered into force in 2014. The BRRD, as in force, that was transposed into Greek law by virtue of Law 4335/2015, as in force, relies on a network of national authorities and resolution funds to resolve banks. Pursuant to Law 4335/2015, with respect to Greek credit institutions, the BoG has been designated as the national resolution authority and the Resolution Branch of the Hellenic Deposit and Investment Guarantee Fund (HDIGF) as the national resolution fund.

Considering that banking resolution needs to be exercised uniformly in the Banking Union, the Single Resolution Mechanism (SRM) and a Single Resolution Fund, (SRF) were established based on the Regulation No 806/2014 (the "SRM Regulation").

The SRM Regulation built on the rulebook on bank resolution set out in the BRRD and established the SRM, which complements the SSM and centralizes key competences and resources for managing the failure of any bank in the euro area and in other Member States participating in the Banking Union. The SRM Regulation also established the SRB, vested with centralised power for the application of the uniform resolution rules and procedures and the SRF, supporting the SRM. The main objective of the SRM is to ensure that potential future bank failures in the banking union are managed efficiently, with minimal costs to taxpayers and the real economy. The SRB is fully operational since January 2016.

1.11.1 Minimum Requirements for Eligible Own Funds and Eligible Liabilities (MREL)

Under the Directive 2014/59 (Bank Recovery and Resolution Directive), as in force, which was transposed into the Greek legislation pursuant to Law 4335/2015 as in force, European banks are required to meet the minimum requirement for own funds and eligible liabilities (MREL). The Single Resolution Board (SRB) has determined Eurobank S.A. as the Group's resolution entity and a Single Point of Entry (SPE) strategy for resolution purposes. Based on the latest official SRB's decision, the fully calibrated MREL (final target) to be met by Eurobank S.A. on a consolidated basis until the end of 2025 is set at 27.46% of its total risk weighted assets (RWAs), including a fully-loaded combined buffer requirement (CBR) of 3.86%. The final MREL target is updated by the SRB on an annual basis. The interim binding MREL target, which is applicable from 1 January 2022, stands at 18.21% of RWAs, including a CBR of 3.70%, while an interim non-binding MREL target of 20.48%, including a CBR of 3.70%, applies from January 2023.

In the year ended 31 December 2022, in the context of the implementation of its medium-term strategy to meet its MREL requirements, the Bank proceeded with the issuance of an MREL-eligible senior preferred bond with a nominal value of € 500 million and a Tier 2 instrument of €300 million. As at 31 December 2022, the Bank's MREL ratio at consolidated level stands at 23.07% of RWAs including profit for the year ended 31 December 2022 (30 September 2022 21.30%) which is significantly above the aforementioned interim MREL target of 20.48%.

In January 2023, the Bank successfully completed an issue of € 500 million senior preferred notes. The proceeds from the issue will support Eurobank Group's strategy to ensure ongoing compliance with its MREL requirement and will be used for Eurobank's general funding purposes.

Introduction – General Information

1.12 Implementation of Capital Adequacy framework

1.12.1 Credit risk

Eurobank Group (the "Bank" or the "Group") first applied the Basel II framework under the Standardised approach in January 2007 and included the respective risk asset ratio figures in its published financial statements. Until that date the Group had been applying the Basel I rules.

In June 2008, the Group received the approval of BoG to use the Internal Ratings Based (IRB) approach to calculate the capital requirement for credit risk. Therefore, with effect from 1 January 2008 the Group applies:

- The Foundation IRB approach to calculate risk weighted assets for the corporate loans' portfolio of the Bank in Greece;
- The Advanced IRB for the majority of the retail loans' portfolio of the Bank, i.e. mortgages, small business lending, credit cards and revolving credits in consumer lending;
- From September 2009 the Foundation IRB approach was applied for the corporate loans' portfolio of Eurobank Leasing Single Member S.A. in Greece;
- From March 2010 the Advanced IRB approach was applied for the Bank's portfolio of personal and car loans.

In October 2021, following the demerger of Eurobank Leasing Single Member S.A., the Bank acquired the majority of Leasing portfolio, without any change in the approach followed for capital requirements calculations.

As of 31.12.2022, the implementation of IRB covers 72.2% of the Group's lending portfolio excluding portfolio segments which are immaterial in terms of size and risk profile as well as, permanent exemptions.

From 1 January 2018, the equity exposures of the Group, according to article 155 of Regulation (EU) No 575/2013 (Risk weighted exposure amounts for equity exposures), are subject to the IRB treatment.

There is a permanent exemption from the IRB approach, up to a maximum of 10% of Risk Weighted Assets, for which the Standardised approach is applied. In addition to the exemption of up to a maximum of 10% of Risk Weighted Assets, permanent exemption has been granted for the following exposure classes as prescribed in the CRD:

- exposures to/or guaranteed by central governments and central banks;
- exposures to/or guaranteed by credit and financial institutions; and
- exposures to administrative bodies and non-commercial undertakings.

The Standardised approach is applied for these exposures.

On 1st of March 2023, the Group received approval from ECB to revert to the Standardized approach for all credit risk exposures. The Group’s decision to move to a less sophisticated method for capital requirements calculation was based on the fact that the historical data and performance on which Internal Ratings Based (IRB) models are calibrated is of limited representativeness taking into account that, since the years of the financial crisis, the Bank capabilities, as well as the Greek economic and legal environment have changed dramatically. The Bank intends to continue utilizing its advanced risk management capabilities for internal purposes such as credit approvals, risk adjusted pricing, IFRS9 provisions where applicable and risk monitoring.

1.12.2 Market risk

The Bank uses its own internal Value at Risk (VaR) model to calculate capital requirements for market risk in its trading book, for the Bank's activities in Greece. The Bank received the official validation of its model for market risk by the BoG in July 2005. The model is subject to periodic review by the regulator.

In 2011, the Bank updated its models and systems in order to fully comply with the BoG Governor's Act 2646/2011 for the trading book capital. The Bank calculates the capital for stressed VaR and IRC (incremental risk capital charge) since 31.12.2011.

Introduction – General Information

For the measurement of market risk exposure and the calculation of capital requirements for the Bank's subsidiaries in Greece and in International operations, the Standardised Approach (SA) is applied.

Furthermore, the Bank calculates and monitors the market risk of the banking book for its operations in Greece and international subsidiaries on a daily basis using the internal VaR model. For its operations abroad, Eurobank additionally applies sensitivity analysis.

1.12.3 Interest Rate risk in the Banking Book (IRRBB)

Interest Rate Risk in the Banking Book (IRRBB) is part of the Supervisory Review Process and refers to the current or prospective risk to the Bank's capital and to its earnings, arising from the impact of adverse movements in interest rates in its banking book. The Bank has updated its infrastructure to reflect changes in the market and supervisory practices so as to effectively manage and control such risks. This includes the implementation of a specialised software, so as to identify, measure and monitor IRRBB.

The established software tools are under continuously evolution in order to cover any part of the Bank's balance sheet. They offer a wide range of modelling capabilities for demand deposits, pre-payable loans, mortgage pipelines, revolving facilities and off-balance sheet items.

The Bank uses sensitivity analysis to monitor risk on earnings (NII) and on economic value (EVE) on a monthly basis covering both Supervisory & Internal monitoring reporting needs.

1.12.4 Operational risk

Capitalizing on the provisions of Regulation (EU) No 575/2013, the Group applies the Standardised Approach to calculate the Pillar 1 regulatory capital requirements for operational risk for its consolidated operations.

1.12.5 Climate Risk

The Group has updated its governance structure by introducing and defining the roles and responsibilities in relation to climate related and environmental risks, embedding regulatory guidelines and market practices. The updated governance structure aims to further enhance the effective oversight of climate related and environmental risks at management/ board level, both for transition and physical risks. Further information is provided in section 11 ESG Risks.

1.13 2023 EU-wide stress test

On 21 July 2022, EBA published its 2023 EU-wide stress test draft methodology, templates and template guidance. The methodology covers all risk areas and builds on the one prepared for the 2021 EU wide stress test exercise. New features in the Stress test are a) the projections on net fee and commission income (NFCI) which is based on a top-down model and b) the sample coverage has been increased compared to the 2021 exercise. This exercise is coordinated by the EBA in cooperation with the ECB and national supervisory authorities and is conducted according to the EBA's methodology. On 4 November 2022, EBA published the final methodology, draft templates and template guidance for the 2023 EU-wide stress test along with the milestone dates for the exercise.

In January 2023, EBA launched the 2023 EU-wide stress test exercise which is designed to provide valuable input for assessing the resilience of the European banking sector in the current uncertain and changing macroeconomic environment. It is carried out on the basis of year-end 2022 figures and assesses the performance of EU banks under a baseline and adverse macroeconomic scenario, covering the period of 3 years from 2023 to 2025. The baseline scenario for EU countries is based on the projections from the EU national central banks of December 2022. The adverse scenario, although unlikely to unfold, is used to assess the resilience of banks to a hypothetical severe scenario of a significant deterioration in the overall outlook for the economy and financial markets in the next three years. The narrative depicts an adverse scenario related to a hypothetical worsening of geopolitical developments leading to a severe decline in GDP with persistent inflation and high interest rates. In terms of GDP decline, the 2023 adverse scenario is the most severe used in the EU wide stress up to now. Eurobank Holdings Group is participating in the EBA-led stress test.

Introduction – General Information

In parallel, the ECB will conduct its own stress test for a number of medium sized- banks that it supervises directly and that are not included in the EBA-led stress test sample.

The EBA expects to publish the results of the exercise at the end of July 2023 on a bank-by-bank basis and in the form of aggregated analyses using EBA common disclosure templates.

The stress test results will be used to update each bank's P2G in the context of the SREP, while qualitative findings on weaknesses in banks' stress testing practices could also affect their P2R.

1.14 2022 ECB Climate Risk Stress Test

The Group participated in ECB's supervisory climate risk stress test, which was conducted in the first half of 2022. The 2022 climate risk stress test assessed how well banks are set up to deal with climate-related risks. A total of 104 significant banks participated in the test consisting of three modules, in which banks provided information on their: (i) own climate stress-testing capabilities, (ii) reliance on carbon-emitting sectors, and (iii) performance under different scenarios over several time horizons.

The test, which was part of the ECB's wider climate roadmap, was not a capital adequacy exercise but rather a learning one for banks and supervisors alike, aiming at identifying vulnerabilities and best practices and providing guidance to banks for the green transition. In this context, the Group has successfully completed the 2022 climate risk stress test exercise.

Climate Risk Stress Test Results
In July 2022, ECB published the climate risk stress test aggregated results, showing that banks must improve their focus on climate risk. Furthermore, all participating entities, including the Group, received individual feedback and are expected to take action accordingly, in line with the set of good practices for climate-related and environmental risk management that the ECB published in November 2022, along with the good practices for climate stress testing published in December 2022. The results showed that the Group has made significant progress in incorporating a climate risk stress testing framework, with an overall performance in line with the average score of European Banks. The Group continues to work in order to implement its climate risk action plan, to further integrate climate risks into its business strategy and risk management practices, and to support its clients towards climate transition and sustainable business growth.

1.15 Scope of Pillar 3

The purpose of Pillar 3 report is to provide updated information the Group's risk management practices, risk assessment processes and regulatory capital adequacy ratios.

Pillar 3 disclosures consist of both qualitative and quantitative information and are provided on a consolidated basis. They have been prepared in accordance with Part 8 of the Capital Requirements Regulation within CRD IV (Regulation 2013/575/EU) and according to the regulatory consolidation framework, which is described in the following section.

In December 2016, EBA published EBA/GL/2016/11 guidelines on revised Pillar 3 disclosures requirements to improve the consistency and comparability of institutions' regulatory disclosures. These guidelines harmonised the frequency of disclosures and updated the list of requirements to be considered for more frequent disclosures.

According to the above guidelines, for templates that require the disclosure for current and previous reporting periods, the previous reporting period is always referred to as the last data disclosed according to the frequency of the template. When the disclosure is being reported for the first time, the data of the previous period is not required.

In December 2018 EBA published EBA/GL/2018/10 guidelines, which include enhanced disclosure formats for credit institutions for disclosures related to non-performing exposures, forborne exposures and foreclosed assets. Some templates are applicable to significant credit institutions that have a gross NPL ratio of 5% or above, as is the case for the Group.

In June 2019 the European Parliament (EP) and the Council published the Regulation (EU) No 876/2019 or CRR2 amending the CRR, regarding among others the reporting and disclosure framework. The CRR 2 rules follow a phased implementation with significant elements entering into force in 2021.

In response to the Covid-19 pandemic, EBA published EBA/GL/2020/07 guidelines, which introduce additional requirements in relation to the disclosure on exposures subject to the EBA Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the Covid-19 crisis and on newly originated exposures subject to public guarantee schemes. The disclosure requirements apply semi-annually.

In addition to the CRR 'quick fix', EBA issued EBA/GL/2020/12 guidelines, which amend the EBA/GL/2018/01 on uniform disclosures under Article 473a of Regulation (EU) No 575/2013 (CRR) as regards the transitional period for mitigating the impact of the introduction of IFRS 9 on own funds, to provide clarity to institutions and users of information on the implementation of part of the disclosure requirements included in the CRR 'quick fix' and how institutions should disclose the information required.

In June 2020, EBA published new ITS on public disclosures by institutions and revised final draft ITS on supervisory reporting that implements changes introduced in the revised Capital Requirements Regulation (CRR2) and the Prudential Backstop Regulation. The two ITS aim to promote market discipline through enhanced and comparable public disclosures for stakeholders and to keep the reporting requirements in line with the evolving needs for Supervisory Authorities' risk assessments.

On 6 August 2021, EBA published an updated tool, which specifies the mapping between quantitative disclosure data points and the relevant supervisory reporting data points. This tool aims at facilitating institutions' compliance with disclosure requirements and improving the consistency and quality of the information disclosed.

On 24 May 2022, EBA published an updated mapping between quantitative disclosure data points and the relevant supervisory reporting data points. The amendments mainly address issues raised by competent authorities and the industry. The updated mapping applies to the reporting framework 3.0 and the ITS on institutions' Pillar 3 public disclosures.

On 19 December 2022, the Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022 was published in the Official Journal. The ITS amending the ITS laid down in Implementing Regulation (EU) 2021/637 as regards the uniform disclosure formats for the disclosure of ESG risks. This Implementing Regulation was entered into force on 8 January 2023. As the disclosure is being reported for the first time, the data of the previous period is not required.

1.16 Location, timing and frequency of disclosures

Pillar 3 disclosures are provided on a quarterly basis in electronic format, after taking into consideration the relevant recommendation of EBA Guidelines 2016/11, which include the list of requirements to be considered for more frequent, than annual basis, disclosures.

Pillar 3 disclosures are provided with reference date (corresponding period) the close of the previous quarter and in conjunction with the date of publication of the financial statements. Equivalent disclosures made by the Group under accounting, listing or other requirements are deemed to constitute compliance with the requirements of the aforementioned Regulation (EU) No 575/2013 (Part Eight) taking into consideration any existing relevant implementing Regulations as well as the EBA guidelines.

Pillar 3 disclosures are a standalone document that provides a readily accessible source of prudential information for users and is available on a designated location on the Company's website (https://www.eurobankholdings.gr/en/investor-relations/financial-results) in chronological order and cover both quantitative and qualitative information.

Quantitative information, which is included in the Group's Consolidated Financial Statements, is also provided at the above location. In this way, the Company secures easy access of the market participants to continuous and complete information without cross-reference to other locations or media of communication.

Regarding the timing of disclosures, CRR clarifies that disclosures shall be published on the same date as the date on which the institution publishes its financial reports or as soon as possible thereafter. The Group's Pillar 3 disclosures will be published the latest either within one month from the publication of the financial statements or within the deadline of relevant Financial statements publication, as defined in Law 3556/2007.

The information contained in the Pillar 3 Disclosures has been verified by the Audit Committee and was approved by the Board of Directors on 26 April 2023.

1.17 Compliance with Basel III Pillar 3 disclosures

The Group has issued an internal approved by the Board of Directors "Consolidated Pillar 3 Disclosures Policy" in order to ensure consistent and continuous compliance with the Pillar 3 disclosures requirements, as these have been specified in the existing regulatory framework. Within this framework, the Group operates as follows:

- Pillar 3 disclosures are provided on a consolidated basis;
- The Group includes in its disclosures all information deemed necessary to provide users with a clear, complete and accurate view of the Group's structure, capital management, risk management system, unencumbered assets and remuneration policy and corporate governance principles. During this procedure the Bank also identifies information that is material, confidential and proprietary;
- The Group has opted to present the full set of Pillar 3 disclosures in a separate document "Consolidated Pillar 3 Report", which is published at least annually on the Bank's website, in conjunction with the date of publication of its financial statements. The Remuneration and Corporate Governance disclosures are published as separate documents;
- The Group re-examines the extent and type of information provided at each disclosure date and revises its policy as necessary;
- The Group assesses the need to publish some or all disclosures more frequently than annually, taking into consideration factors such as scale of operations, range of activities, presence in different countries, involvement in different financial sectors, participation in international financial markets and payment, settlement and clearing systems and paying particular attention to information on own funds, capital requirements, risk exposure and other items prone to rapid change; and
- The Audit Committee of the Group is responsible to review and assess the process for the preparation of the Pillar 3 report, while the Board of Directors (BoD) of the Bank is responsible to approve it.

The aforementioned responsibilities are equivalent to those in respect of the Bank's Consolidated Financial Statements.

1.18 Governance arrangements

Eurobank Holdings is headed by a Board of Directors (Board or BoD) which is collectively responsible for the long-term success of the Company. The Board exercises its responsibilities effectively and in accordance with the Greek legislation, international best practices and its contractual obligations under the Tripartite Relationship Framework Agreement (TRFA) signed between the Company, the Bank and the HFSF, while its role is to provide entrepreneurial leadership to the Company and its subsidiaries (Group) within a framework of prudent and effective controls which enables risk to be assessed and managed.

Introduction – General Information

The Board is assisted in carrying out its duties by Board Committees. The Board delegates some of its responsibilities to the Board Committees, approves their composition and mandates and receives regular and ad hoc reports from them.

The Company has adopted the Board Nomination Policy which sets out the guidelines and formal process for the identification, selection and nomination of candidates for the Board and ensures that the appointments are made: (a) in accordance with legal and regulatory requirements; (b) with due regard to the expectations of the major shareholders, (c) in line with the TRFA and (d) on the basis of individual merit and ability, following a best practice process.

In addition, the Company has adopted the Directors Diversity Policy which sets out the approach to diversity on the Board and it is in accordance with international best practices and the EU and Greek banking law provisions. According to this Policy, Nomination and Corporate Governance Committee's priority is to ensure that the Board continues to have strong leadership and the right mix of skills to deliver the business strategy. Within this context and in regard to the less represented gender in the Board, Nomination and Corporate Governance Committee's target is that the percentage of the female gender representation in Board shall be at least 25% calculated on the total Board size (rounded to the nearest integer) in the next 3 years, with the aim the actual percentage to be maintained above the said minimum target at all times, also considering industry trends and best practices. As at 31 December 2022, the representation of the female gender in the Board stood at 31%.

More information concerning the Corporate Governance Arrangements is also available in the Board of Director's Report, in the 2022 Annual Financial Report https://www.eurobankholdings.gr/en/investor-relations/financial-results-pages/financial-year-2022.

1.19 Regulatory versus accounting consolidation

1.19.1 Accounting consolidation

The accounting consolidation of the Group is based on the International Financial Reporting Standards (IFRS) and specifically IFRS 10 Consolidated Financial Statements, IAS 28 Investments in Associates and Joint Ventures and IFRS 11 Joint Arrangements.

Subsidiaries are all entities controlled by the Group. The Group controls an entity when it is exposed, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The Group consolidates an entity only when all the above three elements of control are present.

Power is considered to exist when the Group's existing rights give it the current ability to direct the relevant activities of the entity, i.e. the activities that significantly affect the entity's returns and the Group has the practical ability to exercise those rights. Power over the entity may arise from voting rights granted by equity instruments such as shares or, in other cases, may result from contractual arrangements.

Where voting rights are relevant, the Group is deemed to have control where it holds, directly or indirectly, more than half of the voting rights over an entity, unless there is evidence that another investor has the practical ability to unilaterally direct the relevant activities.

The Group may have power even when it holds less than a majority of the voting rights of the entity through a contractual arrangement with other vote holders, rights arising from other contractual arrangements, substantive potential voting rights, ownership of the largest block of voting rights in a situation where the remaining rights are widely dispersed ('de facto power'), or a combination of the above. In assessing whether the Group has de facto power, it considers all relevant facts and circumstances including the relative size of the Group's holding of voting rights and dispersions of holdings of other vote holders to determine whether the Group has the practical ability to direct the relevant activities.

The Group is exposed or has rights to variable returns from its involvement with an entity when these returns have the potential to vary as a result of the entity's performance.

Introduction – General Information

In assessing whether the Group has the ability to use its power to affect the amount of returns from its involvement with an entity, the Group determines whether in exercising its decision-making rights it is acting as an agent or as a principal. The Group acts as an agent when it is engaged to act on behalf and for the benefit of another party and as a result does not control an entity. Therefore, in such cases, the Group does not consolidate the entity. In making the above assessment, the Group considers the scope of its decision-making authority over the entity, the rights held by other parties, the remuneration to which the Group is entitled from its involvement and its exposure to variability of returns from other interests in that entity.

The Group has interests in certain entities which are structured so that voting rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual rights. In determining whether the Group has control over such structured entities, it considers the following factors:

- The purpose and design of the entity;
- Whether the Group has certain rights that give it the ability to direct the relevant activities of the entity unilaterally, as a result of existing contractual arrangements that give it the power to govern the entity and direct its activities;
- In case another entity is granted decision making rights, the Group assesses whether this entity acts as an agent of the Group or another investor;
- The existence of any special relationships with the entity; and
- The extent of the Group's exposure to variability of returns from its involvement with the entity, including its exposure in the most subordinated securitised notes issued by the entity as well as subordinated loans or other credit enhancements that may be granted to the entity, and if the Group has the power to affect such variability.

The Group reassesses whether it controls an entity if facts and circumstances indicate that there are changes to one or more elements of control. This includes circumstances in which the rights held by the Group and intended to be protective in nature become substantive upon a breach of a covenant or default on payments in a borrowing arrangement and lead to the Group having power over the investee.

Subsidiaries are fully consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

Investments in joint ventures (the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control and, under which, the parties have rights to the net assets of the arrangement) and investments in associates (investments in which the Group has a significant influence, but which it does not control,) are also part of the accounting consolidation scope, but are accounted for using the equity method.

1.19.2 Regulatory consolidation

There is no difference between regulatory and accounting consolidation.

The following table provides information regarding the consolidation method applied for each entity within the accounting and the regulatory scopes of consolidation.

Introduction – General Information

Table 1: EU LI3 – Outline of the differences in the scopes of consolidation

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation	Line of business
Eurobank S.A.	Full consolidation	Full consolidation	Banking
Be Business Exchanges S.A. of Business Exchanges Networks and Accounting and Tax Services	Full consolidation	Full consolidation	Business-to-business e-commerce, accounting, tax and sundry services
Eurobank Asset Management Mutual Fund Mngt Company Single Member S.A.	Full consolidation	Full consolidation	Mutual fund and asset management
Eurobank Equities Investment Firm Single Member S.A.	Full consolidation	Full consolidation	Capital markets and advisory services
Eurobank Leasing Single Member S.A.	Full consolidation	Full consolidation	Leasing
Eurobank Factors Single Member S.A.	Full consolidation	Full consolidation	Factoring
Herald Greece Single Member Real Estate development and services S.A. 1	Full consolidation	Full consolidation	Real estate
Herald Greece Single Member Real Estate development and services S.A. 2	Full consolidation	Full consolidation	Real estate
Standard Single Member Real Estate S.A.	Full consolidation	Full consolidation	Real estate
Cloud Hellas Single Member Ktimatiki S.A.	Full consolidation	Full consolidation	Real estate
Piraeus Port Plaza 1 Single Member Development S.A.	Full consolidation	Full consolidation	Real estate
(Under liquidation) Anchor Hellenic Investment Holding Single Member S.A.	Full consolidation	Full consolidation	Real estate
Athinaiki Estate Investments Single Member S.A.	Full consolidation	Full consolidation	Real estate
Piraeus Port Plaza 2 Single Member Development S.A.	Full consolidation	Full consolidation	Real estate
Piraeus Port Plaza 3 Single Member Development S.A.	Full consolidation	Full consolidation	Real estate
Tenberco Real Estate Single Member S.A.	Full consolidation	Full consolidation	Real estate
Value Touristiki Single Member Development S.A.	Full consolidation	Full consolidation	Real estate
Eurobank Bulgaria A.D.	Full consolidation	Full consolidation	Banking
IMO Property Investments Sofia E.A.D.	Full consolidation	Full consolidation	Real estate services
ERB Hellas (Cayman Islands) Ltd	Full consolidation	Full consolidation	Special purpose financing vehicle
Berberis Investments Ltd	Full consolidation	Full consolidation	Holding company
Eurobank Cyprus Ltd	Full consolidation	Full consolidation	Banking
ERB New Europe Funding III Ltd	Full consolidation	Full consolidation	Finance company
Foramonio Ltd	Full consolidation	Full consolidation	Real estate
NEU 03 Property Holdings Ltd	Full consolidation	Full consolidation	Holding company
NEU Property Holdings Ltd	Full consolidation	Full consolidation	Holding company
Lenevino Holdings Ltd	Full consolidation	Full consolidation	Real estate
Rano Investments Ltd	Full consolidation	Full consolidation	Real estate
Neviko Ventures Ltd	Full consolidation	Full consolidation	Real estate
Zivar Investments Ltd	Full consolidation	Full consolidation	Real estate
Amvanero Ltd	Full consolidation	Full consolidation	Real estate
Revasono Holdings Ltd	Full consolidation	Full consolidation	Real estate
Volki Investments Ltd	Full consolidation	Full consolidation	Real estate
Adariano Investments Ltd	Full consolidation	Full consolidation	Real estate
Elerovio Holdings Ltd	Full consolidation	Full consolidation	Real estate
Sagiol Ltd	Full consolidation	Full consolidation	Holding company
Macoliq Holdings Ltd	Full consolidation	Full consolidation	Holding company
Senseco Trading Limited	Full consolidation	Full consolidation	Holding company
Eurobank Private Bank Luxembourg S.A.	Full consolidation	Full consolidation	Banking
Eurobank Fund Management Company (Luxembourg) S.A.	Full consolidation	Full consolidation	Fund management
ERB Lux Immo S.A.	Full consolidation	Full consolidation	Real estate

Introduction – General Information

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation	Line of business
ERB New Europe Funding B.V.	Full consolidation	Full consolidation	Finance company
ERB New Europe Funding II B.V.	Full consolidation	Full consolidation	Finance company
ERB New Europe Holding B.V.	Full consolidation	Full consolidation	Holding company
ERB IT Shared Services S.A.	Full consolidation	Full consolidation	Informatics data processing
IMO Property Investments Bucuresti S.A.	Full consolidation	Full consolidation	Real estate services
IMO-II Property Investments S.A.	Full consolidation	Full consolidation	Real estate services
Retail Development S.A.	Full consolidation	Full consolidation	Real estate
Seferco Development S.A.	Full consolidation	Full consolidation	Real estate
Eurobank Direktna a.d.	Full consolidation	Full consolidation	Banking
ERB Leasing A.D. Beograd-in Liquidation	Full consolidation	Full consolidation	Leasing
IMO Property Investments A.D. Beograd	Full consolidation	Full consolidation	Real estate services
Reco Real Property A.D. Beograd	Full consolidation	Full consolidation	Real estate
ERB Hellas Plc	Full consolidation	Full consolidation	Special purpose financing vehicle
Karta II Plc	Full consolidation	Full consolidation	Special purpose financing vehicle
Astarti Designated Activity Company	Full consolidation	Full consolidation	Special purpose financing vehicle
ERB Recovery Designated Activity Company	Full consolidation	Full consolidation	Special purpose financing vehicle
Femion Ltd	Equity consolidation	Equity consolidation	Special purpose investment vehicle
(Under liquidation) Tefin S.A.	Equity consolidation	Equity consolidation	Dealership of vehicles and machinery
Global Finance S.A.(1)	Equity consolidation	Equity consolidation	Investment financing
Rosequeens Properties Ltd(2)	Equity consolidation	Equity consolidation	Special purpose investment vehicle
Odyssey GP S.a.r.l.	Equity consolidation	Equity consolidation	Special purpose investment vehicle
Eurolife FFH Insurance Group Holdings S.A.(1)	Equity consolidation	Equity consolidation	Holding company
Alpha Investment Property Commercial Stores S.A.	Equity consolidation	Equity consolidation	Real estate
Peirga Kythnou P.C.	Equity consolidation	Equity consolidation	Real estate
doValue Greece Loans and Credits Claim Management S.A.(1)	Equity consolidation	Equity consolidation	Loans and Credits Claim Management
Perigenis Business Properties S.A.	Equity consolidation	Equity consolidation	Real estate

(1) Eurolife Insurance group (Eurolife ERB Insurance Group Holdings S.A. and its subsidiaries), Global Finance group (Global Finance S.A. and its subsidiaries) and doValue are considered as Group's associates.

(2) Rosequeens Properties Ltd (including its subsidiary Rosequeens Properties SRL until December 2022) is considered as Group's joint venture.

1.20 Impediments to the prompt transfer of capital

Subordinated loans given by Eurobank S.A. to its subsidiaries, financial institutions operating outside Greece, are subject to local regulations and subsequently restrictions set by local laws and supervisory authorities. The most common of all restrictions is minimum duration (5 to 7 years in most cases) with no possibility of prepayment without prior permission by the respective supervisory authority.

2. Capital Management

The amount and quality of the capital held by the Group is subject to certain rules and guidelines. The composition of the Group's available regulatory capital under Pillar 1 is as follows:

2.1 Regulatory capital – definition

The Pillar 1 regulatory capital of the Group at consolidated level is calculated on the basis of IFRS figures and according to the rules set by Regulation (EU) No 575/2013.

According to the CRR, the available regulatory capital is classified under two main categories: Tier 1 and Tier 2 capital. Tier 1 consists of Common Equity (CET1) and Additional Tier 1 (AT1) capital.

CET1 capital is composed of ordinary shareholders' equity, and minority interest allowed in consolidated CET1, after the following adjustments:

Addition of:

- 25% of IFRS 9 impact of 2022 (refer to par. 2.2 and 2.6);
- 75% of IFRS 9 'quick fix' impact of 2022 increases in stage 1 and stage 2 provisions (refer to par. 2.2 and 2.6);
- 40% of Sovereign investment securities at FVOCI unrealised losses for the period 1.1.2020 to 31.12.2022.

Deduction of:

- Fair value reserves related to gains or losses of cash flow hedges;
- Gains and losses on market valuation of liabilities designated as fair-value-through-profit-or-loss attributable to own credit risk;
- Goodwill and intangible assets adjusted based on the requirements for prudent valuation of software assets;
- Deferred tax assets that rely on future profitability excluding those arising from temporary differences (unused tax losses);
- Participating interests and subordinated loans (and other capital instruments qualifying as own funds) of more than 10% in not fully consolidated credit or other financial institutions, including insurance companies;
- Loan impairment allowances' shortage compared to IRB measurement of Expected Loss (EL) derived under Basel III as defined in para 4.7.4;
- Deferred tax assets arising from temporary differences, which exceed 10% threshold of CET1 capital before certain deductions;
- The sum of deferred tax asset arising from temporary differences and participating interests and subordinated loans to financial institutions of more than 10% that are less than 10% of CET 1 capital and in total exceed the 17.65% threshold of adjusted CET1 capital; and
- Value adjustments due to the requirements for prudent valuation for all fair valued financial instruments and commodities (AVA).

Tier 1 capital comprises CET1 capital plus AT1 capital including preferred securities subject to phase out.

In case deductions of Tier 1 capital exceed positive amounts of Tier 1 capital, then the difference is deducted from CET1 capital.

Tier 2 capital is composed of the following items:

- Long term subordinated liabilities that meet certain regulatory specified criteria;
- General credit risk provisions up to 1.25% of risk weighted assets calculated under standardised approach;

- Positive difference between the sum of loan impairment allowances over the IRB measurement of Expected Losses, up to 0.6% of risk weighted assets calculated under the IRB approach.

In case deductions of Tier 2 capital exceed positive amounts of Tier 2 capital, then the difference is deducted from Tier 1 capital.

2.2 Transition rules

Regarding IFRS 9 adoption from 1.1.2018 and according to Regulation (EU) 2017/2395 of the European Parliament and the Council, a five year transition period is introduced, which allows banks to add back to their CET 1 capital 95% of IFRS 9 impact in 2018 and 85%, 70%, 50% and 25% in the subsequent four years.

According to the CRR 'quick fix' relief package, the IFRS 9 transitional arrangements have been extended by two years and a new calculation has been introduced where 100% relief is applied in 2020 and 2021 for increases in stage 1 and stage 2 provisions from 1 January 2020. Accordingly, the relief applied for 2022 is 75%, for 2023 50% and for 2024 25%.

The Group has elected to apply the phase in approach for mitigating the impact of IFRS 9 transition on the regulatory capital.

In addition, the CRR 'quick fix' with the Article 468 introduces a temporary treatment that allows institutions to remove from the calculation of their CET1 items unrealised gains and losses from Sovereign investment securities measured at fair value through other comprehensive income during the period from 1 January 2020 to 31 of December 2022.

As of 31.03.2022, the Group is applying the temporary treatment specified in Article 468 of the CRR, as amended by the Regulation EU 2020/873, therefore the Group's phased in own funds, capital and leverage ratios reflect the 60% of unrealised losses accounted for as fair value changes of debt instruments measured at fair value through other comprehensive income, corresponding to Sovereign debt exposures as provided for in the said article, for 2022.

Capital Management

2.3 Key Metrics

The table below provides an overview of Group's prudential regulatory metrics.

Table 2: EU KM1 - Key Metrics template

	31 December 2022 [1] € million	31 December 2022 € million	30 September 2022 [1] € million	30 June 2022 [1] € million	31 March 2022 [1] € million	31 December 2021 € million
Available own funds (amounts)						
Common Equity Tier 1 (CET1) capital	**6,715**	6,585	6,302	6,137	5,382	5,436
Tier 1 capital	**6,715**	6,585	6,302	6,137	5,382	5,436
Total capital	**8,026**	7,897	7,345	7,163	6,395	6,386
Risk-weighted exposure amounts						
Total risk-weighted exposure amount	**41,899**	41,869	42,183	41,718	40,586	39,789
Capital ratios (as a percentage of risk-weighted exposure amount)						
Common Equity Tier 1 ratio (%)	**16.0%**	15.7%	14.9%	14.7%	13.3%	13.7%
Tier 1 ratio (%)	**16.0%**	15.7%	14.9%	14.7%	13.3%	13.7%
Total capital ratio (%)	**19.2%**	18.9%	17.4%	17.2%	15.8%	16.1%
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)						
Additional own funds requirements to address risks other than the risk of excessive leverage (%)	**3.00%**	3.00%	3.00%	3.00%	3.00%	3.00%
of which: to be made up of CET1 capital (percentage points)	**1.69%**	1.69%	1.69%	1.69%	1.69%	1.69%
of which: to be made up of Tier 1 capital (percentage points)	**2.25%**	2.25%	2.25%	2.25%	2.25%	2.25%
Total SREP own funds requirements (%)	**11.00%**	11.00%	11.00%	11.00%	11.00%	11.00%
Combined buffer requirement (as a percentage of risk-weighted exposure amount)						
Capital conservation buffer (%)	**2.50%**	2.50%	2.50%	2.50%	2.50%	2.50%
Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%
Institution specific countercyclical capital buffer (%)	**0.14%**	0.14%	0.06%	0.06%	0.06%	0.06%
Systemic risk buffer (%)	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%
Global Systemically Important Institution buffer (%)	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%
Other Systemically Important Institution buffer	**0.75%**	0.75%	0.75%	0.75%	0.75%	0.50%
Combined buffer requirement (%)	**3.39%**	3.39%	3.31%	3.31%	3.31%	3.06%
Overall capital requirements (%)	**14.39%**	14.39%	14.31%	14.31%	14.31%	14.06%
CET1 available after meeting the total SREP own funds requirements (%)	**7.78%**	7.48%	6.42%	6.17%	4.66%	5.06%
Leverage ratio [2]						
Leverage ratio total exposure measure	**84,686**	84,676	84,745	82,128	66,598	66,397
Leverage ratio	**7.9%**	7.8%	7.4%	7.5%	8.1%	8.2%
Additional own funds requirements to address risks of excessive leverage (as a percentage of leverage ratio total exposure amount)						
Additional own funds requirements to address the risk of excessive leverage (%)	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%
of which: to be made up of CET1 capital (percentage points)	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%
Total SREP leverage ratio requirements (%)	**3.00%**	3.00%	3.00%	3.00%	3.16%	3.16%
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)						
Leverage ratio buffer requirement (%)	**0.00%**	0.00%	0.00%	0.00%	0.00%	0.00%
Overall leverage ratio requirements (%)	**3.00%**	3.00%	3.00%	3.00%	3.16%	3.16%

Capital Management

	31 December 2022 € million	**31 December 2022 € million**	30 September 2022 € million	30 June 2022 € million	31 March 2022 € million	31 December 2021 € million
Liquidity Coverage Ratio						
Total high-quality liquid assets (HQLA) (Weighted value - average)	**14,012**	14,012	13,051	12,480	11,974	11,173
Cash outflows - Total weighted value	**9,626**	9,626	9,205	8,826	8,576	8,219
Cash inflows - Total weighted value	**1,118**	1,118	1,112	1,116	1,082	1,048
Total net cash outflows (adjusted value)	**8,508**	8,508	8,093	7,710	7,494	7,171
Liquidity coverage ratio (%) (adjusted value) (3)	**164.4%**	164.4%	161.3%	162.0%	160.0%	155.4%
Liquidity coverage ratio (%)	**172.9%**	172.9%	169.0%	174.3%	151.3%	152.2%
Net Stable Funding Ratio						
Total available stable funding	**59,111**	59,111	60,485	59,190	58,918	60,051
Total required stable funding	**46,181**	46,181	47,287	46,982	47,499	48,445
NSFR ratio (%)	**128.0%**	128.0%	127.9%	126.0%	124.0%	124.0%

(1) Including profits € 1,330 million for year ended 31 December 2022, €1,106 million for the 9M 2022, € 941 million for the 1H 2022 and € 270 million for the 1Q 2022.

(2) After 31.03.2022 the benefit from the temporary COVID relief measure, regarding the exclusion of certain central bank exposures from the denominator of the leverage ratio, has ceased.

(3) Average figures based on previous monthly data points.

(4) Pro-forma CET1 and Total Capital Adequacy ratios as at 31 December 2022 with the completion of Project "Solar" would be 16.0% and 19.0%, respectively.

Capital Management

2.4 Reconciliation of Balance Sheets - financial accounting to regulatory scope of consolidation

As noted in section "1.20 Regulatory versus accounting consolidation", there is no difference between regulatory and accounting consolidation. As a result, the table below presents in one column per period the Balance Sheet both as per published financial statements and regulatory consolidation broken down into different risk types. Certain assets and liabilities can be subject to multiple risk frameworks.

Table 3: EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

		31 December 2022					
			Carrying values of items				
	Ref.	Balance sheet per published financial statements and per regulatory consolidation € million	Subject to the credit risk framework € million	Subject to the CCR framework € million	Subject to the securitisation framework € million	Subject to the market risk framework € million	Not subject to capital requirements or subject to deduction from capital € million
Assets							
Cash and Balances with central banks		14,994	14,994	-	-	-	-
Due from credit institutions		1,329	1,327	2	-	-	-
Securities held for trading		134	-	-	-	134	-
Derivative financial instruments		1,185	-	1,185	-	1,185	-
Loans and advances to customers		41,677	33,583	49	7,550	-	495
Investment securities		13,261	11,724	1,000	1,537	-	-
Investments in associate and joint ventures		173	173	-	-	-	-
Property and equipment		775	775	-	-	-	-
Investment property		1,410	1,410	-	-	-	-
Goodwill and other intangible assets	*a*	297	104	-	-	-	193
Deferred tax asset		4,161	4,118	-	-	-	43
of which deferred tax assets that rely on future profitability	*b*	-	-	-	-	-	-
of which deferred tax credit		3,402	3,402	-	-	-	-
of which deferred tax assets arising from temporary differences	*c*	759	716	-	-	-	43
Other assets		1,980	1,956	-	-	-	24
Assets of disposal group classified as held for sale		84	84	-	-	-	-
Total assets		**81,460**	**70,248**	**2,236**	**9,087**	**1,319**	**755**
Liabilities							
Due to central banks		8,774	-	8,774	-	-	-
Due to credit institutions		1,814	-	763	-	-	1,051
Derivative financial instruments		1,661	-	1,017	-	1,017	644
Due to customers		57,239	-	200	-	-	57,039
Debt securities in issue		3,552	-	-	-	-	3,552
Other liabilities		1,701	31	-	-	-	1,670
Liabilities of disposal group classified as held for sale		1	-	-	-	-	1
Total liabilities		**74,742**	**31**	**10,754**	**-**	**1,017**	**63,957**
of which tier 2 instruments	*e*	1,250	-	-	-	-	1,250
Equity							
Ordinary share capital		816	-	-	-	-	816
Share premium		1,161	-	-	-	-	1,161
Reserves and retained earnings		4,645	-	-	-	-	4,645
of which cash flow hedge reserves	*d*	(12)	-	-	-	-	(12)
of which own credit risk		-	-	-	-	-	-
Preference shares		-	-	-	-	-	-
Total equity attributable to shareholders of the Bank		**6,623**	**-**	**-**	**-**	**-**	**6,623**
Preferred securities		-	-	-	-	-	-
Non controlling interests		95	-	-	-	-	95
Total equity	*f*	**6,718**	**-**	**-**	**-**	**-**	**6,718**
Total equity and liabilities		**81,460**	**31**	**10,754**	**-**	**1,017**	**70,675**

Capital Management

	31 December 2021 [3]					
		Carrying values of items				
	Balance sheet per published financial statements and per regulatory consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
	€ million	€ million	€ million	€ million	€ million	€ million
Assets						
Cash and Balances with central banks	13,515	13,515	-	-	-	-
Due from credit institutions	2,510	2,479	1,925	-	-	-
Financial instruments at fair value through profit or loss	119	-	-	-	119	-
Derivative financial instruments	1,949	-	1,949	-	1,949	-
Loans and advances to customers	38,967	32,272	59	6,636	-	-
Investment securities	11,316	10,620	915	691	-	5
Investments in associate and joint ventures	267	267	-	-		-
Property and equipment	815	815	-	-	-	-
Investment property	1,492	1,492	-	-	-	-
Intangible assets	269	78	-	-	-	191
Deferred tax asset	4,422	4,176	-	-	-	246
of which deferred tax assets that rely on future profitability excluding those arising from temporary differences	-	-	-	-	-	-
of which deferred tax credit	3,547	3,547	-	-	-	-
of which deferred tax assets arising from temporary differences	875	629	-	-	-	246
Other assets	2,065	2,045	-	-	-	20
Assets of disposal group classified as held for sale	146	146	-	-	-	-
Total assets	77,852	67,905	4,848	7,327	2,068	462
Liabilities						
Due to central banks	11,663	-	11,663	-	-	-
Due to credit institutions	973	-	270	-	-	703
Derivative financial instruments	2,394	-	2,394	-	2,394	-
Due to customers	53,168	-	200	-	-	52,968
Debt securities in issue	2,552	-	-	-	-	2,552
Other liabilities	1,358	26	-	-	-	1,332
Liabilities of disposal group classified as held for sale	109	-	-	-	-	109
Total liabilities	72,217	26	14,527	-	2,394	57,664
of which tier 2 instruments	950	-	-	-	-	950
Equity						
Ordinary share capital	816	-	-	-	-	816
Share premium [2]	8,056	-	-	-	-	8,056
Reserves and retained earnings [2]	(3,333)	-	-	-	-	(3,333)
of which cash flow hedge reserves	(12)	-	-	-	-	(12)
of which own credit risk	-	-	-	-	-	-
Preference shares	-	-	-	-	-	-
Total equity attributable to shareholders of the Bank	5,539	-	-	-	-	5,539
Preferred securities	-	-	-	-	-	-
Non controlling interests	96	-	-	-	-	96
Total equity	5,635	-	-	-	-	5,635
Total equity and liabilities	77,852	26	14,527	-	2,394	63,299

[1] The amounts shown in column "Balance sheet per published financial statements and per regulatory consolidation" do not equal to the sum of the amounts shown in the remaining columns, as some assets are subject to multiple risk frameworks.

[2] The comparative information has been adjusted due to change in the presentation of treasury shares. As a result, "Share premium" has increased by € 1 million against an equal decrease of "Reserves and retained earnings". Further information is provided in the Consolidated Financial Statements note 38.

[3] Restated following the approval of profits for the financial year 2021 from AGM on 21.07.2022.

Capital Management

The table below provides a reconciliation of the consolidated regulatory balance sheet to the Exposure at Default (EAD), allocated to different risk frameworks.

Table 4: EU LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements

		31 December 2022				
			Items subject to			
		Total [3]	**Credit risk framework**	**CCR framework**	**Securitisation framework**	**Market risk framework**
		€ million	**€ million**	**€ million**	**€ million**	**€ million**
1	**Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1) [1]**	**80,705**	**70,248**	**2,236**	**9,087**	**1,319**
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1) [1]	10,785	31	10,754	-	1,017
3	**Total net amount under the regulatory scope of consolidation**	**69,920**	**70,217**	**(8,518)**	**9,087**	**302**
4	Off-balance-sheet amounts [2]	10,413	5,390	-	-	-
5	Differences in valuations	-	-	-	-	-
6	Differences due to different netting rules, other than those already included in row 2	10,762	8	10,754	-	-
7	Differences due to consideration of provisions	1,434	1,434	-	-	-
8	Differences due to prudential filters	97	97	-	-	-
9	Differences due to collateral	11,150	-	11,150	-	-
10	Corresponding amount of credit risk mitigation techniques (CRM)	-	4,115	-	(4,115)	-
	Credit protection to the securitised exposures	324	-	-	324	-
11	**Exposure amounts considered for regulatory purposes as at 31 December 2022**	**104,100**	**81,261**	**13,386**	**5,296**	**302**

		31 December 2021 [4]				
			Items subject to			
		Total [3]	Credit risk framework	CCR framework	Securitisation framework	Market risk framework
		€ million	€ million	€ million	€ million	€ million
1	Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1) [1]	77,390	67,905	4,848	7,327	2,068
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1) [1]	14,553	26	14,527	-	2,394
3	Total net amount under the regulatory scope of consolidation	62,837	67,879	(9,679)	7,327	(326)
4	Off-balance-sheet amounts [2]	6,793	3,338	-	-	-
5	Differences in valuations	-	-	-	-	-
6	Differences due to different netting rules, other than those already included in row 2	14,543	17	14,527		-
7	Differences due to consideration of provisions	1,406	1,406	-	-	-
8	Differences due to prudential filters	170	170			
9	Differences due to collateral	13,211	-	13,211	-	-
10	Corresponding amount of credit risk mitigation techniques (CRM)	-	4,211	-	(4,211)	-
11	Credit protection to the securitised exposures	159	-	-	159	-
	Exposure amounts considered for regulatory purposes as at 31 December 2021	99,119	77,021	18,059	3,275	(326)

[1] Excludes amounts subject to deduction from capital or not subject to regulatory capital requirements.
[2] Amounts shown in the "Total" column, relates to exposures pre-CCF and do not equal to the amount shown in "Credit risk framework" as this is post-CCF.
[3] The amounts shown in column "Total" do not equal to the sum of the amounts shown in the remaining columns, as some assets are subject to multiple risk frameworks.
[4] Restated following the approval of profits for the financial year 2021 from AGM on 21.07.2022.

Capital Management

2.5 Regulatory capital

The Group has sought to maintain an actively managed capital base to cover risks inherent in the business. The adequacy of the Group's capital is monitored using, among other measures, the rules and ratios established by the Basel Committee on Banking Supervision and adopted by the European Union and the SSM in supervising the Bank.

In addition, in Appendix 1, a transitional own fund disclosure template can be found which presents the components of regulatory capital on transitional basis as at 31 December 2022 and 30 June 2022. The disclosure has been prepared using the format set out in Annex VI of the "Commission Implementing Regulation (EU) No 1423/2013 of 20 December 2013 laying down ITS with regard to disclosure of own funds requirements for institutions according to Regulation (EU) No 575/2013 of European Parliament and of the Council".

The table below shows the composition of the Group's regulatory capital as at 31 December 2022 and 30 September 2022 which is calculated according to CRD IV as amended.

Table 5: EU CC2 - Reconciliation of regulatory own funds to balance sheet in the audited financial statements

	Ref.	31 December 2022 [(1)] € million	31 December 2022 € million	30 September 2022 [(1)] € million
Total equity	*f*	6,718	6,718	6,426
Regulatory adjustments				
Interim or year-end profit not eligible [(2)]		-	(120)	-
Minority interest not allowed in CET1		(27)	(27)	(38)
Cash flow hedge reserves	*d*	12	12	11
Adjustments due to IFRS 9 transitional arrangements		279	279	271
Temporary treatment of unrealised losses measured at FVTOCI in accordance with Article 468 of the CRR		85	85	92
Intangible assets	*a*	(193)	(193)	(196)
of which Goodwill		(2)	(2)	(2)
IRB shortfall of credit risk adjustments to expected losses		(61)	(61)	(101)
Deferred tax assets that rely on future profitability (unused tax losses)	*b*	-	-	-
Deferred tax assets arising from temporary differences (amount above 10% threshold)	*c*	(33)	(43)	(111)
Prudent Valuation Adjustments [(3)]		(6)	(6)	(8)
Other regulatory adjustments		(59)	(59)	(44)
Amount exceeding the 17.65% threshold		-	-	-
Common Equity Tier I capital		**6,715**	**6,585**	6,302
Regulatory adjustments		-	-	-
Total Tier I capital		**6,715**	**6,585**	6,302
Tier II capital - subordinated debt	*e*	1,250	1,250	950
IRB Excess of impairment allowances over expected losses eligible		61	61	93
Total Regulatory Capital		**8,026**	**7,897**	7,345
Risk Weighted Assets		**41,899**	**41,869**	42,183
Ratios				
Common Equity Tier I		**16.0%**	**15.7%**	14.9%
Tier I		**16.0%**	**15.7%**	14.9%
Total Capital Adequacy Ratio		**19.2%**	**18.9%**	17.4%

[(1)] Including profits €1,330 million for year ended 31 December 2022 and €1,106 million for the 9M 2022.

[(2)] Includes FY 2022 maximum dividend according to the dividend policy, approved by the Board of Directors, according to requirements of Decision ECB/2015/6561 for permission of profits inclusion in regulatory capital.

[(3)] The AVA calculation is based on the simplified approach according to Commission Delegated Regulation (EU) No 101/2016. The total AVAs are deducted from CET1 capital, in accordance with Article 34 of the CRR.

[(4)] The Group's CET1 ratio as at 31 December 2022 based on the full implementation of the Basel III rules in 2025 (fully loaded CET1), would be 15.2% including profit for year ended 31 December 2022 (30 September 2022 including 9M profits: 14.2%).

[(5)] The pro-forma CET1 and Total Capital Adequacy ratios as at 31 December 2022 with the completion of Project "Solar" would be 16.0% and 19.0%, respectively.

Capital Management

As depicted in table above, CET1 ratio was strengthened by the quarterly organic profitability as well as the completion of "Wave III" transaction partly offset by the mark down of investment securities at FVOCI. Total Capital ratio has further increased by the Tier 2 capital issuance of € 300 million.

The CET1 ratio is defined as CET1 capital divided by RWAs, the Tier 1 ratio is defined as Tier 1 capital divided by RWAs and Total Capital Adequacy ratio is defined as Total Regulatory Capital divided by RWAs.

As at 31 December 2022, pursuant to the Law 4172/2013, as in force, the Bank's eligible DTAs/deferred tax credits (DTCs) against the Greek State amounted to € 3,402 million (30 September 2022 € 3,438 million). DTCs are accounted for on: (a) the unamortised losses from the Private Sector Involvement (PSI) and the Greek State Debt Buyback Program, which are subject to amortization over a thirty-year period and (b) on the sum of (i) the unamortised part of the DTC eligible crystallized tax losses arising from write-offs and disposals of loans, which are subject to amortization over a twenty-year period, (ii) the accounting debt write-offs and (iii) the remaining accumulated provisions and other losses in general due to credit risk recorded up to 30 June 2015. The DTCs will be converted into directly enforceable claims (tax credit) against the Greek State provided that the Bank's after tax accounting result for the year is a loss.

For further details, please refer to Consolidated Financial Statements, Note 13.

According to Regulation (EU) No. 575/2013, article 39, deferred tax assets that can be replaced with a tax credit, shall not be deducted from CET1, but instead be risk weighted by 100%.

2.6 IFRS 9 and temporary measures capital impact

Regarding IFRS 9 adoption from 1.1.2018 and according to Regulation (EU) 2017/2395 of the European Parliament and the Council, a five year transition period is introduced, which allows banks to add back to their CET 1 capital 95% of IFRS 9 impact in 2018 and 85%, 70%, 50% and 25% in the subsequent four years. The full impact is expected as of 1 January 2023.

According to the CRR 'quick fix' relief package, the IFRS 9 transitional arrangements have been extended by two years and a new calculation has been introduced where 100% relief is applied in 2020 and 2021 for increases in stage 1 and stage 2 provisions from 1 January 2020. Accordingly, the relief applied for 2022 is 75%, for 2023 50% and for 2024 25%.

The Group has elected to apply the phase in approach for mitigating the impact of IFRS 9 transition on the regulatory capital.

In addition, the CRR 'quick fix' with the Article 468 introduces a temporary treatment that allows institutions to remove from the calculation of their CET1 items unrealised gains and losses from Sovereign investment securities measured at fair value through other comprehensive income during the period from 1 January 2020 to 31 December 2022.

As of 31.03.2022, the Group is applying the temporary treatment specified in Article 468 of the CRR, as amended by the Regulation EU 2020/873, therefore the Group's phased in own funds, capital and leverage ratios reflect the 60% of unrealised losses accounted for as fair value changes of debt instruments measured at fair value through other comprehensive income, corresponding to specific debt exposures as provided for in the said article, for 2022.

Capital Management

Table 6: EU IFRS - FL - Template on the comparison of Institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs

Available capital	31 December 2022 [(1)] € million	31 December 2022 € million	30 September 2022 [(1)] € million	30 June 2022 [(1)] € million	31 March 2022 [(1)] € million	31 December 2021 € million
CET1 capital	**6,715**	6,585	6,302	6,137	5,382	5,436
CET1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**6,495**	6,365	6,122	5,959	5,208	5,118
CET1 capital as if the temporary treatment of unrealised gains and losses measured at fair value through OCI (other comprehensive income) in accordance with Article 468 of the CRR had not been applied	**6,606**	6,476	6,184	6,046	5,358	
Fully Loaded CET1 capital	**6,362**	6,230	5,964	5,826	5,135	5,044
Tier 1 capital	**6,715**	6,585	6,302	6,137	5,382	5,436
Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**6,495**	6,365	6,122	5,959	5,208	5,118
Tier 1 capital as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	**6,606**	6,476	6,184	6,046	5,358	
Fully Loaded Tier 1 capital	**6,362**	6,230	5,964	5,826	5,135	5,044
Total capital	**8,026**	7,897	7,345	7,163	6,395	6,386
Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**7,835**	7,705	7,167	7,001	6,246	6,152
Total capital as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	**7,917**	7,788	7,227	7,072	6,372	
Fully Loaded Total capital	**7,702**	7,570	7,009	6,869	6,173	6,077
Risk weighted assets						
Total risk-weighted assets	**41,899**	41,869	42,183	41,718	40,586	39,789
Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**41,899**	41,771	42,091	41,628	40,500	39,618
Fully Loaded Total risk-weighted assets	**41,801**	41,772	42,091	41,628	40,500	39,618
Capital ratios						
CET1 (as a percentage of risk exposure amount)	**16.0%**	15.7%	14.9%	14.7%	13.3%	13.7%
CET1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**15.5%**	15.2%	14.5%	14.3%	12.9%	12.9%
CET1 (as a percentage of risk exposure amount) as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	**15.8%**	15.5%	14.7%	14.5%	13.2%	
Fully Loaded CET1 (as a percentage of risk exposure amount)	**15.2%**	14.9%	14.2%	14.0%	12.7%	12.7%
Tier 1 (as a percentage of risk exposure amount)	**16.0%**	15.7%	14.9%	14.7%	13.3%	13.7%
Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**15.5%**	15.2%	14.5%	14.3%	12.9%	12.9%
Tier 1 (as a percentage of risk exposure amount) as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	**15.8%**	15.5%	14.7%	14.5%	13.2%	
Fully Loaded Tier 1 (as a percentage of risk exposure amount)	**15.2%**	14.9%	14.2%	14.0%	12.7%	12.7%
Total capital (as a percentage of risk exposure amount)	**19.2%**	18.9%	17.4%	17.2%	15.8%	16.1%
Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**18.7%**	18.4%	17.0%	16.8%	15.4%	15.5%
Total capital (as a percentage of risk exposure amount) as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	**18.9%**	18.6%	17.1%	17.0%	15.7%	
Fully Loaded Total capital (as a percentage of risk exposure amount)	**18.5%**	18.1%	16.7%	16.5%	15.2%	15.3%

Capital Management

Leverage ratio [2]	31 December 2022 [1] € million	31 December 2022 € million	30 September 2022 [1] € million	30 June 2022 [1] € million	31 March 2022 [1] € million	31 December 2021 € million
Leverage ratio total exposure measure	**84,686**	84,676	84,745	82,128	66,598	66,397
Leverage ratio	**7.9%**	7.8%	7.4%	7.5%	8.1%	8.2%
Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**7.7%**	7.5%	7.2%	7.3%	7.8%	7.7%
Leverage ratio as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	**7.8%**	7.7%	7.3%	7.7%	8.0%	
Fully Loaded Leverage ratio	**7.5%**	7.4%	7.0%	7.1%	7.7%	7.6%

(1) Including €1,330 million for year ended 31 December 2022, €1,106 million for 9M 2022, €941 million for the 1H 2022 and € 270 million for the 1Q 2022.

(2) After 31.03.2022 the benefit from the temporary COVID relief measure, regarding the exclusion of certain central bank exposures from the denominator of the leverage ratio, has ceased.

(3) Pro-forma CET1 and Total Capital Adequacy ratios as at 31 December 2022 with the completion of Project "Solar" would be 16.0% and 19.0%, respectively.

2.7 Countercyclical buffer

The Countercyclical buffer (CCyB) will be applied when the authorities deem that lending growth is giving rise to an unacceptable accumulation of systemic risks. This buffer is specifically calculated for each bank or group and consists of the weighted average of percentages of countercyclical buffers applied in regions in which the bank's credit exposures are located.

The following table provides the geographical distribution of the Group's credit exposures relevant for the calculation of its countercyclical capital buffer, which includes all private sector exposures according to Regulation (EU) 1152/2014.

Table 7: EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of countercyclical buffer

	31 December 2022												
	General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures		Own funds requirements						
	Exposure value under the standardised approach € million	Exposure value under the IRB approach € million	Sum of long and short positions of trading book exposures for SA € million	Value of trading book exposure for internal models € million	Exposure value for non-trading book € million	Total exposure value € million	Relevant credit risk exposures - Credit risk € million	Relevant credit exposures – Market risk € million	Relevant credit exposures – Securitisation positions in the non-trading book € million	Total € million	Risk-weighted exposure amounts € million	Own funds requirements weights (%)	Counter-cyclical capital buffer rate (%)
Breakdown by country:													
Greece	7,040	27,584	4	-	6	34,634	1,602	-	1	1,603	20,038	66%	0.00%
Romania	162	-	-	-	-	162	9	-	-	9	113	0.4%	0.50%
Bulgaria	5,610	5	1	-	-	5,616	277	-	-	277	3,463	11%	1.00%
United Kingdom	488	19	-	-	54	561	34	-	1	35	438	1%	1.00%
Cyprus	1,601	3	-	-	-	1,604	115	-	-	115	1,438	5%	0.00%
Luxemburg	91	139	-	-	411	641	30	-	3	33	413	1%	0.50%
Serbia	1,927	-	-	-	-	1,927	121	-	-	121	1,513	5%	0.00%
Other Countries	1,485	17	-	-	8,616	10,118	90	-	136	226	2,825	10%	0.00%
Total	**18,404**	**27,767**	**5**	**-**	**9,087**	**55,263**	**2,278**	**-**	**141**	**2,419**	**30,241**	**100%**	**0.14%**

	30 June 2022												
	General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures		Own funds requirements						
	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposure for internal models	Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own funds requirements weights	Counter-cyclical capital buffer rate
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	(%)	(%)
Breakdown by country:													
Greece	7,292	27,361	3	-	6	34,662	1,654	-	1	1,655	20,688	68%	0.00%
Romania	190	-	-	-	-	190	11	-	-	11	138	0.5%	0.00%
Bulgaria	5,188	6	1	-	-	5,195	260	-	-	260	3,250	11%	0.50%
United Kingdom	409	14	-	-	50	473	30	-	1	31	388	1%	0.00%
Cyprus	1,568	8	-	-	-	1,576	109	-	-	109	1,363	5%	0.00%
Luxemburg	92	130	-	-	504	726	29	-	6	35	438	1%	0.50%
Serbia	1,845	-	-	-	-	1,845	114	-	-	114	1,425	5%	0.00%
Other Countries	1,374	21	-	-	7,231	8,626	84	-	125	209	2,613	9%	0.00%
Total	17,958	27,540	4	-	7,791	53,293	2,291	-	133	2,424	30,303	100%	0.06%

(1) The increase in the securitization exposures and RWAs in Other Countries is mainly due to the synthetic securitisation of performing shipping loans (project "Wave III").

(2) The main driver for the decrease in RWAs in Greece is mainly due the synthetic securitisation of performing shipping loans (project "Wave III").

(3) The increase in the exposures and RWAs in Bulgaria is mainly due to new production of loans.

The following table provides an overview of Group's specific countercyclical capital risk exposure and buffer requirements.

Table 8: EU CCyB2 - Amount of institution-specific countercyclical capital buffer

	31 December 2022	30 June 2022
Total risk exposure amount (€ million)	41,869	41,681
Institution specific countercyclical capital buffer rate	0.14%	0.06%
Institution specific countercyclical capital buffer requirement (€ million)	59	25

2.8 Supervisory Review and Evaluation Process (SREP) capital requirements

According to the 2021 SREP decision communicated by the ECB, in 4Q 2022 Eurobank Holdings was required to meet on a consolidated basis a CET1 ratio of at least 9.58% and a Total Capital Adequacy Ratio of at least 14.39% (Overall Capital Requirements including the Capital Conservation Buffer of 2.50%, the Other Systemically Important Institution buffer of 0.75% and the applicable Countercyclical Capital Buffer of 0.14% for the fourth quarter of 2022 stemming from the exposures in Bulgaria and Luxemburg).

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The table below shows the capital requirements of the Group for 31 December 2022.

Table 9: Pillar 2 Requirements

	31 Decmeber 2022	
	CET1 Capital Requirements	Total Capital Requirements
Minimum regulatory requirement	4.50%	8.00%
Pillar 2 Requirement (P2R)	1.69%	3.00%
Total SREP Capital Requirement (TSCR)	**6.19%**	**11.00%**
Combined Buffer Requirement (CBR)		
Capital conservation buffer (CCB)	2.50%	2.50%
Countercyclical capital buffer (CCyB)	0.14%	0.14%
Other systemic institutions buffer (O-SII)	0.75%	0.75%
Overall Capital Requirement (OCR)	**9.58%**	**14.39%**

The ECB's relief measures for capital requirements to address the effects of Covid-19 ended at 31 December 2022.

At consolidated level, the Pillar 2 Requirement was set at 3% for 2022 and part of that (1.69%) had to be held in the form of CET1 capital while the Group may use AT1 and Tier 2 capital, where available, for the remaining part. The amount of additional own funds required on a consolidated basis to be met with CET1 capital was € 708 million (based on RWAs of € 41,899 million).

As at 31 December 2022, Eurobank's transitional CET1 ratio and Total Capital ratio, including 12M 2022 profit € 1.330 million, were 16.03% and 19.2% respectively, which exceeded the 2022 transitional minimum requirements of 9.56% and 14.39%.

According to the 2022 SREP decision, since January 2023 the P2R for the Group has been reduced from 3.00% to 2.75% in terms of total capital (or from 1.69% to 1.55% in terms of CET1 capital), reflecting the improved Group's financial position particularly in terms of asset quality. Thus, for Q1 2023, the Group is required to meet a Common Equity Tier 1 Ratio of at least 9.75% and a Total Capital Adequacy Ratio of at least 14.45% (Overall Capital Requirements or OCR) including Combined Buffer Requirement of 3.70% (Capital conservation buffer of 2.50%, Countercyclical capital buffer of 0.20% and Other Systemically Important Institution (O-SII) buffer of 1.00%).

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2.9 Capital requirements under Pillar 1

The table below shows the Group's risk weighted assets (RWAs) and capital requirements as at 31 December 2022 and 30 September 2022. The minimum capital requirements under Pillar 1 are calculated as 8% of RWAs.

Table 10: EU OV1 - Overview of risk weighted exposure amounts

	Risk weighted exposure amounts (RWEAs)				Total own funds requirements
	31 December 2022[(1)] € million	31 December 2022 € million	30 September 2022 [(1)] € million	30 September 2022 € million	31 December 2022 € million
Credit risk (excluding CCR)	**33,292**	**33,292**	34,166	34,166	**2,663**
Of which the standardised approach	18,440	18,440	18,334	18,334	1,475
Of which the foundation IRB (FIRB) approach	6,813	6,813	6,539	6,539	545
Of which: slotting approach	3,394	3,394	4,230	4,230	272
Of which: equities under the simple riskweighted approach	489	489	476	476	39
Of which the advanced IRB (AIRB) approach	4,156	4,156	4,587	4,587	332
Counterparty credit risk - CCR	**447**	**447**	436	436	**36**
Of which the standardised approach	137	137	151	151	11
Of which internal model method (IMM)	-	-	-	-	-
Of which exposures to a CCP	16	16	14	14	1
Of which credit valuation adjustment - CVA	132	132	118	118	11
Of which other CCR	162	162	153	153	13
Settlement risk	-	-	1	1	-
Securitisation exposures in the non-trading–book (after the cap)	**1,757**	**1,757**	1,577	1,577	**141**
Of which SEC-IRBA approach	360	360	228	228	29
Of which SEC-ERBA (including IAA)	320	320	305	305	26
Of which SEC-SA approach	1,077	1,077	1,044	1,044	86
Of which 1250%	-	-	-	-	-
Position, foreign exchange and commodities risks (Market risk)	**833**	**833**	913	913	**67**
Of which the standardised approach	249	249	284	284	20
Of which IMA	584	584	629	629	47
Large exposures	-	-	-	-	-
Operational risk	**3,323**	**3,323**	3,020	3,020	**266**
Of which basic indicator approach	-	-	-	-	-
Of which standardised approach	3,323	3,323	3,020	3,020	266
Of which advanced measurement approach	-	-	-	-	-
Amounts below the thresholds for deduction (subject to 250% risk weight)	**2,247**	**2,217**	2,070	1,992	**177**
Total	**41,899**	**41,869**	42,183	42,104	**3,350**

(1) Including € 1,330 million for year ended 31 December 2022, and €1,106 million for the 9M 2022.

(2) The decrease of the RWAs compared to 31 December2022 is mainly due to the synthetic securitisation of performing shipping loans (project "Wave III") which is counterbalanced by the new production of loans, loan commitments and Letters of Guarantee and the increase of the RWAs from Operational Risk.

Capital Management

The table below provides the Bank's significant investments in insurance holding companies which are not deducted from CET 1 because the total investment does not exceed the 10% of the aggregate amount of CET1 before certain deductions.

Table 11: INS1 – Non deducted participation in insurance undertakings

	31 December 2022		31 December 2021	
	Exposure value	Risk-weighted exposure amount	Exposure value	Risk-weighted exposure amount
	€ million	€ million	€ million	€ million
Own fund instruments held in insurance or re-insurance undertakings or insurance holding company not deducted from own funds	112	280	140	350

2.10 Internal Capital Adequacy Assessment Process (ICAAP)

ICAAP aims to identify and assess risks that are inherent in the Group's business model, determine their materiality and allocation at an entity and Group level, evaluate risk monitoring and risk mitigation processes and quantify the relevant internal capital charge where appropriate so as to ensure the ongoing capital adequacy of the Group versus its risk profile.

To accomplish these objectives, the ICAAP leverages upon and integrates the Group's well-established activities on risk, capital and performance management, including in particular planning and monitoring, while also continuously refining its approach to ensure high standards of capital assessment and management.

Oversight and ultimate responsibility for the ICAAP lies with the BoD, which has assumed a leading role in developing a risk conscious organization and maintaining the Group's risk management at high levels of sophistication. The BoD's vision and guidance are distilled in the Group's risk appetite framework, which describes the risk boundaries within which the Group is willing to operate. Prior to its approval, the BoD and the senior management discuss and challenge the ICAAP in an effective way.

Moreover, acting as an evaluation mechanism of the Group's entire risk management framework, an integral component of ICAAP is the identification, assessment and quantification of current and emerging risks in terms of their materiality at Group level, thus allowing the organization to focus its resources and management attention to those risks that could potentially threaten its business or capital standing and ensuring that all material risks are properly managed and monitored.

Material risks are evaluated qualitatively and quantitatively, as appropriate. The aggregation of the individual capital charges comprises the Group's total internal capital requirement, meaning the amount of capital the Group needs to hold for the purpose of absorbing unexpected losses deriving from its risk profile.

All categories of material risks are appropriately managed and the relevant frameworks are regularly evaluated in order to identify ways of strengthening the risk management structure, enhance existing policies, establish new mitigation techniques and improve the internal calculation of capital requirements. Risk and capital management responsibility, including compliance with regulatory requirements and corporate policies, lies with the Group's senior management.

The Group uses the regulatory capital requirements as a starting point for the internal determination of its capital requirements ("internal capital"), adjusting for additional capital where appropriate. Compared to regulatory capital requirements, "internal capital" takes into account a wider range of risks and utilizes more sophisticated calculation approaches. This approach allows the Group to leverage its advanced risk measurement infrastructure.

Regular scenario-based simulations and stress tests are also used in order to assess specific risks as well as the overall risk profile. Stress tests can be classified as follows:

- Risk specific stress tests, where particular risk factors, exposures or portfolios are stressed at a range of severities in order to assess individual risk impacts and threshold effects;
- Integrated stress tests across risks, which evaluate the resilience of the Group's capital position to adverse economic conditions, in case of a systemic deterioration of the business environment in a macroeconomic downturn;
- Reverse stress tests, which assess the resilience of the Group's capital position to specific adverse circumstances starting from the identification of a pre-defined outcome (e.g. points at which an institution business model becomes unviable, or at which the institution can be considered as failing or likely to fail in the meaning of Article 32 of Directive 2014/59/EU) and then exploring scenarios and circumstances that might cause this outcome to occur.

The Group also develops forecasts on capital consumption and availability and integrates them into the strategic planning process so as to optimize capital return and allocation, whilst maintaining adequate capital levels. The results of the stress tests are utilised during the capital planning process to ensure that the contingency plans in place are adequate if stressed conditions materialize and to produce a set of plausible action plans to mitigate the impact of the assumed stress scenario.

The Group maintains adequate pre-provision earnings in the medium term and robust risk management practices, which along with the capital actions already executed or underway, allow the Group to meet both regulatory and internal capital requirements. As a result, the Group will be in a position to support the risk profile of its balance sheet and its business operations going forward, even under further adverse conditions, should they materialize.

2.11 Internal Liquidity Adequacy Assessment Process (ILAAP)

ILAAP is the internal process for the identification, measurement, management and monitoring of liquidity risk as implemented by the institution according to Article 86 of Directive 2013/36/EU.

The Group's ILAAP covers the following areas:

- Liquidity and funding risk management framework: identification of the functions/units and management committees responsible for the policy making, management, control, monitoring and reporting of liquidity and funding risk;
- Description of the liquidity and funding risks: comprehensive description of the liquidity and funding risks that the Group faces taking into account the current macro-economic environment as long as country-specific and idiosyncratic factors;
- Liquidity risk monitoring process and stress testing: detailed description of the processes, tools and reports that the Group uses for the monitoring and the control of liquidity risk, with particular emphasis on the following: stress test analysis, liquidity buffer analysis, liquidity & funding indicators;
- Contingency funding plan and liquidity & funding strategy: description of the contingency funding plan and the liquidity and funding strategy;
- Information on strategy regarding liquidity buffers and collateral management;
- Information of cost benefit allocation mechanism;
- Information on intraday liquidity risk management.

Credit Risk

3. Risk management overview

3.1 Risk management objectives and policies

The Group acknowledges that taking risks is an integral part of its operations in order to achieve its business objectives. Therefore, the Group's management sets adequate mechanisms to identify those risks at an early stage and assesses their potential impact on the achievement of these objectives.

Due to the fact that economic, industry, regulatory and operating conditions will continue to change, risk management mechanisms are set in a manner that enables the Group to identify and deal with the risks associated with those changes. The Bank's structure, internal procedures and existing control mechanisms ensure both the independence principle and the exercise of sufficient supervision.

Group's management considers effective risk management as a top priority, as well as a major competitive advantage, for the organization. As such, the Group has allocated significant resources for upgrading its policies, methods and infrastructure, in order to ensure compliance with the regulatory requirements, as set out in the EU and Greek legislative acts, the legal acts of the ECB and the European Commission, the guidelines of the EBA and of the Basel Committee for Banking Supervision and the best international banking practices. The Group implements a well-structured credit approval process, independent credit reviews and effective risk management policies for all material risks it is exposed , both in Greece and in each country of its international operations. The risk management policies implemented by the Bank and its subsidiaries are reviewed annually.

The Group Risk and Capital Strategy, outlines the Group's overall direction regarding risk and capital management issues, the risk management mission and objectives, risk definitions, risk management principles, risk governance framework, strategic objectives and key initiatives for the improvement of the risk management framework in place.

The Board Risk Committee (BRC) is a committee of the BoD and its task is to assist the BoD in the risk-related issues regarding the Holding and its subsidiaries (the Group), including:

- to advise and support the BoD regarding the monitoring of the Group's overall actual and future risk appetite and strategy, taking into account all types of risks to ensure that they are in line with the business strategy, objectives, corporate culture and values of the Group;
- to provide the BoD with recommendations on necessary adjustments to the risk strategy;
- to assist the BoD in overseeing the implementation of the Group's risk strategy and the corresponding limits set;
- to oversee the implementation of the strategies for capital and liquidity management as well as for all other relevant risks of the Group;
- to ensure that the Group has developed an appropriate risk management framework which is embedded in the decision making process throughout the Group; and
- to define the Group risk management principles and ensure that there are the appropriate methodologies, data sources and sufficient and competent staff to identify, assess, monitor and mitigate risks.

The BRC consists of three (3) independent non-executive directors and two (2) non-executive directors, including the representative of the HFSF, and meets on a monthly basis. During 2022 the BRC of Eurobank Holdings met ten (10) times.

The Management Risk Committee (MRC) is a management committee of Eurobank S.A.. whose main responsibility is to oversee the risk management framework of the Bank. As part of its responsibilities, the MRC facilitates reporting to the BRC on the range of risk-related topics under its purview. . The MRC ensures that material risks are identified and promptly escalated to the BRC and that the necessary policies and procedures are in place to prudently manage risk and to comply with regulatory requirements.

The Group's Risk Management General Division, which is headed by the Group Chief Risk Officer (GCRO), is independent from the business units and has full responsibility for the identification and monitoring of all material financial and non-financial risks undertaken by the Group, indicatively of credit risk, market risk, liquidity risk, operational risk, climate-related and environmental (CR&E) risks, interest rate risk in the banking book (IRRBB), reputational risk, risks stemming from strategic projects.. It comprises the Group Credit General Division (GCGD), the Group Credit Control Sector (GCCS), the Group Credit Risk Capital Adequacy Control Sector (GCRCACS), the Group Market & Counterparty Risk Sector (GMCRS), the Group Operational Risk Sector (GORS), the Group Model Validation & Governance Sector (GMVGS), the Supervisory Relations & Resolution Planning Sector (SRRPS), the Group Risk Management Strategy Planning and Operations Division (GRMSPO), the Group Climate Risk Division (GCRD) and the Risk Analytics Division (RAD).

3.2 Risk appetite framework

The maximum amount of risk which the Group is willing to assume in the pursuit of its strategic and business objectives is articulated via a set of quantitative and qualitative statements for all material risk types as described in the Group's Risk Appetite Framework. The main objectives that determine the risk appetite refer to the compliance with regulatory requirements, the safeguard of the Group's ability to smoothly continue its activities, and the achievement of a balance of strong capital and liquidity adequacy with high returns on equity.

Risk appetite is clearly communicated throughout the Group, determines risk culture and forms the basis on which risk policies and risk limits are established at Group, business and regional level.

The Group's Risk Appetite Framework comprises the following components:

- Risk Profile - is defined as a point-in time assessment of the Group's net exposures to risks, monitored through qualitative and quantitative Key Performance Indicators (KPIs) and Key Risks Indicators (KRIs) based on the Group's business activities and needs. The Indicators are frequently updated, monitored and reported resulting to the effective identification of risks, as well as their prompt management and remediation by the Group;
- Risk Capacity – this reflects the maximum amount of risk the Group can assume given its current level of resources before breaching any regulatory, operating, capital base, or liquidity constraints and other;
- Risk Appetite – this reflects the maximum level of risk that the Group is willing to assume (seek, accept or tolerate) in pursuit of its strategic and business objectives.;

Early Warning threshold – are set at levels prior to reaching Risk Appetite threshold Levels in order to avoid breach and to ensure sufficient time to respond with mitigating actions. The risk appetite is structured as a series of qualitative and quantitative statements that cover the following broad risk categories:

- Capital adequacy and leverage;
- Credit risk and asset quality;
- Market risk;
- Interest Rate Risk in the Banking Book (IRRBB);
- Liquidity risk;
- Operational risk;
- Earnings risk;
- Country risk;
- Business risk;
- Strategic risk;
- Reputational risk;
- Real Estate risk;
- Climate risk.

The Risk Appetite Framework is appropriately documented and revisited at least on an annual basis. The BRC reviews and approves the risk appetite statements and thresholds at least on an annual basis to ensure compliance with the regulatory requirements and the Bank's risk appetite in the prevailing business environment. Setting risk appetite aims to ensure that risk is proactively managed to the level desired and approved by the BRC. Senior management has the responsibility to monitor and manage risk exposures in order to remain within risk appetite levels and to ensure an appropriate level of risk is assumed to achieve business objectives. In addition, appropriate arrangements have been put in place for the regular monitoring of the risk appetite indicators. The Group has established a standardised, regular flow of information, based on its Management Information Systems, that ensures the timely and accurate monitoring of the indicators' levels. Also, clear escalation requirements are in place in case of limit breaches, in order to enable appropriate actions.

3.3 Types of risk

The Group is exposed to various types of risk that are managed at various levels of the organization.

The most important types of risk are:

- credit risk;
- market and liquidity risk;
- operational risk;
- Climate/ ESG risks.

The individual risk types are defined in the subsequent sections.

The risk management functions of the BRC are performed by the GCRO and risk management sectors, which cover the following areas:

- Credit risk;
- Market, Counterparty and Liquidity risk;
- Operational risk;
- Climate/ ESG risks [1].

(1) Detailed information related to climate risk is provided in section 11 ESG Risks.

Credit Risk

Group Chief Risk Officer (GCRO)

Credit Risk

- Basel III IRB approach compliance for significant part of Group loan portfolios;
- Advanced IRB for all retail portfolios (consumer, mortgage, small business) and Foundation IRB for Corporate;
- Independent and centralised approval system;
- Systematic follow up of credits;
- Differentiated credit scoring system for consumer and small business banking, full financial and sectorial analysis for corporates based on independent credit rating;
- Disciplined provisioning policy (wholesale) and statistical portfolio behaviour (retail);
- Regular and ad hoc reporting to Senior Management (Executive Board Committee, BoD, BRC) regarding progress of portfolios and evolution of provisions.

Market, Counterparty & Liquidity Risk

- First Greek bank with complete and validated market risk management system by local regulator (BoG), which covers both trading and banking books;
- Compliance with new CRD IV rules for Trading book (stressed VaR and IRC);
- All market risks monitored daily against approved VaR limits;
- VaR methodology used for business decisions;
- Considerable stress testing development for non-normal market conditions, results monitored on a continuous basis;

Monitoring on a continuous basis the level of liquidity risk using regulatory and internal metrics and methodologies (LCR, NSFR, buffer analysis, cash flow analysis, short-term and medium-term stress test etc.);

- Daily monitoring of credit risk of derivatives' positions using PFE methodology;
- The operation and the monitoring of credit risk mitigation contracts (ISDA/CSA, GMRA) is done on a daily basis through an appropriate tool;
- Country risk, Counterparty and Issuer Risk monitored daily on a Group level through a centralised counterparty risk monitoring tool;
- CVA modelling;
- International operations: market risk for all International subsidiaries managed centrally in Greece;
- Interest rate risk in the Banking Book is monitored at least on a monthly basis;
- New regulatory framework for Counterparty Credit Risk (SA-CCR);
- New regulatory framework for Market Risk (FRTB SA).

Operational Risk

- Standardised Approach for Eurobank's consolidated operations;
- Documented and functioning operational risk framework & risk management system implemented Group-wide;
- Risk & Control Self Assessment program (RCSA);
- Operational risk events collection;
- Key Risk Indicator (KRI) set-up & monitoring;
- Operational risk scenario analysis;
- Operational risk reporting (internal & external);
- A number of operational risk mitigation programs underway throughout the Group;
- Counter–fraud activity monitoring;
- Implementing the governance framework for all products and services in Greece;
- Fostering a strong operational risk culture within the Group by increasing risk awareness;
- Managing Eurobank's insurance policies.

4. Credit Risk

4.1 Definition of credit risk

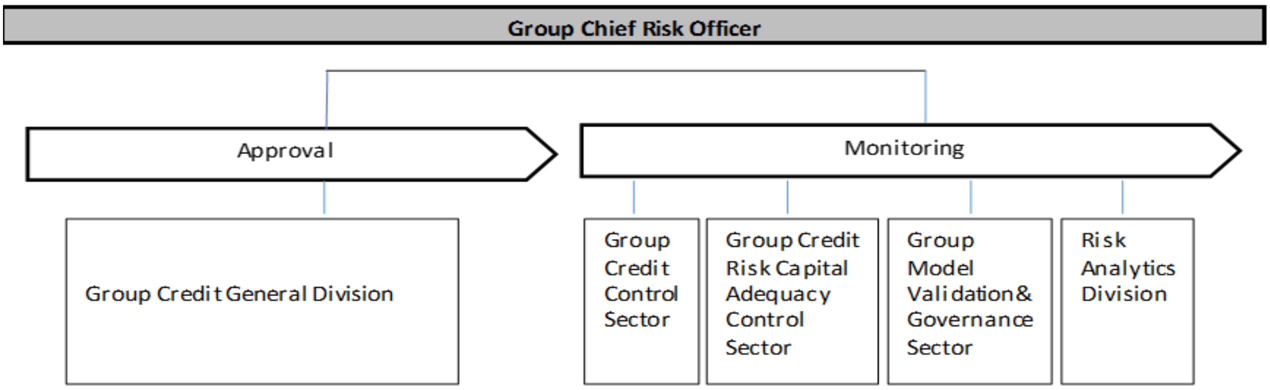
Credit risk is the risk that a counterparty will be unable to fulfill its payment obligations in full when due. Credit risk also includes country risk and settlement risk specified below:

a) Country risk is the risk of losses arising from economic difficulties or political unrest in a country, including the risk of losses following nationalization, expropriation and debt restructuring.
b) Settlement risk is the risk arising when payments are settled, for example for trades in financial instruments, including derivatives and currency transactions. The risk arises when the Group remits payments before it can ascertain that the counterparties' payments have been received.

Credit risk arises principally from the wholesale and retail lending activities of the Group, including from credit enhancement provided, such as financial guarantees and letters of credit. The Group is also exposed to credit risk arising from other activities such as investments in debt securities, trading activities, capital markets and settlement activities. Taking into account that credit risk is the principal risk the Group is exposed to, it is very closely managed and is monitored by centralised dedicated risk units, reporting to the GCRO.

4.2 Credit risk organization and processes

4.2.1 Credit risk organization



The diagram above depicts the organizational structure of credit risk of the Bank. The functions of each sector are described below.

The organization of the credit risk divisions of the Group's subsidiary banks in International operations (Bulgaria, Serbia, Cyprus, Luxembourg) also follows the model of the Bank depicted above. The Risk Executive of each subsidiary bank reports directly to GCRO.

4.2.2 Credit approval process

The credit approval and credit review processes are centralised both in Greece and in the International operations. The segregation of duties ensures independence among executives responsible for the customer relationship, the approval process and the loan disbursement, as well as monitoring of the loan during its lifecycle.

The credit approval process in Corporate Banking is centralised through establishment of Credit Committees with escalating Credit Approval Levels. Main Committees of the Bank are considered to be the following:

Credit Risk

- Credit Committees (Central and Local) authorised to approve new financing, renewals or amendments in the existing credit limits, in accordance with their approval authority level, depending on total limit amount and customer risk category (i.e. high, medium or low), as well as the value and type of security;
- Special Handling Credit Committees authorised to approve credit requests and take actions for distressed clients;
- International Credit Committees (Regional & Country) established for the wholesale borrowers of the Group's international Bank subsidiaries, authorised to approve new limits, renewals or amendments to existing limits, in accordance with their approval authority level, depending on total customer exposure and customer risk category (i.e. high, medium or low), as well as the value and type of security; and
- International Special Handling Committees established for handling distressed wholesale borrowers of the Group's international Bank subsidiaries.

The Credit Committees meet on a weekly basis or more frequently, if needed.

Group Credit General Division (GCGD)

Within an environment of increased risk requirements, Group Credit General Division (GCGD) mission is to safeguard the Banks' asset side, by evaluating credit risk and making recommendations, so that borrower's credit exposure is acceptable and within the approved Risk Appetite Framework. GCGD is headed by the Group Chief Credit Officer (GCCO) with direct reporting to the GCRO.

GCGD operations are comprised of two functions, i.e. the Corporate Credit Risk, including both the domestic and the foreign underwriting activities (the latter only for Global Clients and material exposures of International Subsidiaries), and Retail Credit Risk respectively, covering the underwriting needs of the SBB portfolio and the Individual Banking portfolio (mortgage, consumer loans, auto-moto loans and credit cards).

GCGD actively participates in the projects incorporated in the overall transformation of the Bank, with a target to automate part of the credit approval process.

Corporate Credit Risk

(a) Domestic and Greek related portfolio: the underwriting function includes the review of credit requests originating from Corporate Units handling large and medium scale corporate entities of every risk category, specialised lending units such as Shipping and Structured Finance (Commercial Real Estate, Hotel & Leisure, Project Finance, M&A Financing) and Private Banking. Major tasks of the respective workstream and involved credit units pertain to the following:
   - Evaluation of credit applications and issuance of an independent Risk Opinion, which includes:

     (i) assessment of the customer credit profile based on the qualitative and quantitative risk factors identified (market, operational, structural and financial);

     (ii) recommendations for the formulation of bankable, well-secured and well-controlled transactions (credit facilities); as well as

     (iii) review and confirmation of the ratings of each separate Borrower to reflect the risks acknowledged.

   - Participation with voting right in all credit committees as per the Credit Approval procedures;

   - Active participation in various reviews performed by Regulatory/Supervisory Authorities (e.g. asset quality reviews, stress tests, etc) and major internal projects of the Bank, providing at the same time credit related knowledge, expertise and support to other divisions;

Credit Risk

- Preparation of specialised reports to the Senior Management on a regular basis, with regards to the Top 25 largest, in terms of total exposure, Borrower Groups, statistics on the new approved financings, leveraged transactions and Risk Appetite Statements.

(b) International Subsidiaries' portfolio: The GCGD through its specialized International Credit Sector (ICS) is responsible to actively participate in the design, implementation and review of the credit underwriting function for the wholesale portfolio of the International Subsidiaries covering Bulgaria, Cyprus, Serbia, the ex-Romania portfolio (Perimeter B) and portion of the loan portfolio of Luxemburg (and London). Moreover, the respective unit's tasks and responsibilities are highlighted below:

- Participation in Country Risk Committees (CRCs) and with voting right in all International Credit Committees (Regional and Special Handling);

- Participation in the sessions of Special Handling Monitoring Committees for Bulgaria and Serbia which monitor and decide on the strategy of problematic corporate relationships with loan outstanding exceeding a certain threshold, that is jointly set by ICS and Country TAG;

- Advice on best practices to the Credit Risk Units of International Subsidiaries.

GCGD is also responsible for the preparation of all credit committees' agendas, distribution of the respective material and maintenance of the respective Credit Committees' minutes.

Retail Credit Risk

The scope of the Retail Banking Credit Risk & Underwriting Sector is the assessment of credit applications submitted by Retail Business Units in relation to Borrowers of the retail credit portfolio (SBB loans and Individual banking loans) based on thresholds, for which an assessment by GCGD is required as per the provisions of the relevant Credit Approval Procedures.

The main tasks of the Retail Credit Risk function are outlined below:

- Assess credit requests in alignment with the credit risk granting criteria and methodology provided in the relevant Credit Policy Manual;
- Analyse and evaluate risk factors depending on the type of credit request;
- Prepare an independent Credit Opinion presenting the official GCGD opinion on the credit application above a certain threshold and confirm, where required, the Borrower Rating for each Borrower in its portfolio ensuring that the risks identified are dully reflected in the Rating;
- Participate with voting rights in the credit committees as per the credit approval process, according to the Approval Levels defined in the CPM;
- Transfer of credit knowledge and expertise, as well as support to Network officers regarding credit matters.

4.2.3 Credit risk monitoring

Group Credit Control Sector

The quality of the Group's loan portfolio (corporate & retail) both in Greece and abroad is monitored and assessed by the Group Credit Control Sector (GCCS). The Sector is part of the 2nd line of defense and operates independently from all the business units of the Bank and reports directly to the GCRO.

Credit Risk

The main activities of GCCS are:

- supervise, support and maintain the credit rating and impairment systems used to assess the wholesale lending customers;
- monitor and review the performance of all of the Group's loan portfolios;
- supervise and control the foreign subsidiaries' credit risk management units;
- monitor on a regular basis and report on a quarterly basis to the Board of Directors and the BRC of risk exposures, along with accompanying analyses;
- monitor and evaluate the efficiency of adopted strategies and proposed solutions in terms of dealing with Non Performing Exposures (NPEs) and the achievement of targets for NPEs reduction, as communicated and agreed with the Supervisory Authorities;
- conduct field reviews and prepare written reports to the Management on the quality of all of the Group's loan portfolios and adherence with EBA prevailing regulations;
- monitor the proper EBA classifications in accordance with the relevant provisions and guidelines ensure that EBA classifications are made in accordance with the relevant provisions and guidelines;
- participate in the approval of new credit policies and new loan products;
- participate in the Troubled Asset Committee;
- attend meetings of Credit Committees and Special Handling Committees, without voting right;
- formulate the Group's credit impairment policy and measure the provisions of the Greek loan portfolios along with the relevant reporting to Management;
- regularly review the adequacy of provisions of all of the Group's loan portfolios;
- formulate, in collaboration with the responsible lending Units the credit policy manuals for performing borrowers;
- provide guidance and monitor the process of designing and reviewing credit policies before approved by Management;
- monitor the proper application of Real Estate collaterals' valuation, as per the Banks' Collateral Valuation policy and procedures monitor the proper technical valuation of Real Estate collaterals, as per the Banks' Collateral Valuation policy and procedures; and
- monitor the supervisory, regulatory developments, emerging trends and best practices within its purview in order to keep Management abreast and propose required actions.

Group Credit Risk Capital Adequacy Control Sector

The Group Credit Risk Capital Adequacy Control Sector's principal aim is to control, measure and monitor the capital requirements arising from the Bank's loan portfolio along with the relevant reporting to Management and Regulators (ECB/SSM); to develop and maintain the credit risk models for the Bank's loan portfolio; to measure the credit risk parameters (PD, LGD, EAD) for the loan portfolio for calculating capital requirements and IFRS9 provisions and to coordinate the stress testing exercises for the loan portfolios at Group Level. The Sector reports directly to GCRO.

The main activities of Group Credit Risk Capital Adequacy Control Sector are:

- Development, implementation and update of IRB models of Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD) for evaluating credit risk;
- Development, implementation and monitoring of forecasting models linking macroeconomic factors with credit quality (e.g. forecasted 1yr PD, lifetime PD metrics etc) for the loan portfolios of the Group for IFRS9 and Stress Testing purposes;
- Measurement and monitoring of risk parameters (PD, LGD, EAD) for the purposes of capital adequacy calculations, as well as, for provisioning purposes;

Credit Risk

- Reviewing the grouping of lending exposures and ensuring their homogeneity under IFRS standard;
- Re-assessing and re-developing the significant increase in credit risk (SICR) threshold under the IFRS9 standard;
- Monthly capital adequacy calculations (Pillar I) and preparation of relevant management, as well as, regulatory reports (COREPs, STE reports) on a quarterly basis;
- Performing stress tests, both internal and external (EBA/SSM), under the dynamic and static Balance Sheet approach, and maintaining the credit risk stress testing infrastructure;
- Preparation of credit risk analyses for the loan book of the Group for Internal Capital Adequacy Assessment (ICAAP)/ Pillar II purposes;
- Preparation of Basel Pillar III disclosures for credit risk;
- Participation in the preparation of the Bank's Business plan, the NPE TAG Plan and the Recovery plan of the Group in relation to asset quality and capital requirements for the loan book (projected impairments projected RWAs and expected losses, excess/shortfall);
- Support the Business Units in the use of credit risk models in business decisions and the development and usage of risk related metrics such as Risk Adjusted Pricing, Risk Adjusted Return on Capital (RAROC) etc;
- Participation in several TAG related projects in terms of development of the "loss budget", risk assessment/impact of various programmes and new products, sensitivity scenarios;
- Monitoring of the regulatory framework in relation to the IRB framework performing impact assessment (e.g. QIS, benchmarking etc.), initiating and managing relevant projects;
- Monitor and guide International on credit risk related ICAAP, stress testing and other regulatory credit risk related issues, based on Group standards. Review of local credit risk stress test exercises; and
- Regular reporting to the GCRO, to the Management Risk Committee and to the Board Risk Committee on the following topics: risk models performance, risk parameters (PD, LGD, EAD), updates on regulatory changes and impact assessment, credit risk analysis and stress testing.

Group Model Validation and Governance Sector

The Group Model Validation and Governance Sector was established in September 2018, with key mandates:

- the establishment of a comprehensive model governance and validation framework; and
- the independent validation of the technical and operational completeness of all models used by the Group and their parameters, as well as their compliance with the provisions of the regulatory framework.

In more detail, the tasks of the Sector are outlined as follows:

- Prepare and update the Group's Models Framework (to include model definition, roles involved per model, model classification principles and methodology, model validation principles, materiality classifications and thresholds, models' registry governance, etc.);
- Establish and update the Group's Models Registry;
- Review models' classification, in accordance with the methodology provided in the Group Models Framework;
- Prepare and update the Group Models Validation Framework, while providing support to Group's subsidiaries in its implementation;

- Monitor changes in ECB guidelines on models' validation;
- Propose and escalate for approval the quantitative thresholds, in order to assess the results of the validation tests;
- Conduct model validation tests in alignment with the Group Model Validation Framework and regulatory requirements;
- Prepare detailed reports of the model valuation results according to the specific requirements of the model validated, if any, which are communicated to BRC on an annual basis along with any related proposed remediation plan;
- Disseminate models' validation test results within the Group's BRC or MRC following reporting to Group CRO, as appropriate;
- Prepare action plan for remediation actions, if any, as a result of the model validation tests implemented, and escalate the plan for its approval by the appropriate Management Authority;
- Participate in the approval process of new models for assessing ratings' system accuracy and suitability; and
- Monitor industry practices on the development and use of models as well as related ECB guidelines and restrictions.

Risk Analytics Division

The scope of the Risk Analytics Division (RAD) is to develop and deploy advanced analytics solutions through utilising 'big-data' sources and innovative modelling techniques such as 'Machine Learning'. The underpinning objective of these solutions is to deliver risk – reward improvements across the Credit cycle: from credit origination through to account management and collections. The Risk Analytics Division also aims to improve the operational efficiency of the Credit origination process though enabling automation and digital transformation. Furthermore, the advanced analytics solutions aim to optimise Business decisions and the Product pricing.

The main functions and activities of RAD are to:

- Develop, maintain and excel a best-in-class Decision Science platform and the related modelling tools that can be leveraged by multiple units of the Bank to perform advanced analytics activities;
- Develop and maintain a set of libraries and data models to perform advanced analytics modelling;
- Provide expert support to Bank-wise projects through delivering ad hoc analytics and bespoke models;
- Develop and maintain the Bank's Early Warning System (EWS) for the respective segments (Corporate, SME/SB and Retail); and
- Develop and maintain the Bank's Cash Flow engine based on bank account transactional data and advanced analytics modelling.

4.2.4 Troubled Assets Management

Eurobank (ERB), following the strategic partnership with doValue S.p.A. and the successful transition to the new operating model for the management of NPEs, realizes the NPE Strategy Plan through its implementation by doValue Greece (dVG) for the assigned portfolio and the successful securitization transactions.

The Governance Framework between ERB and doValue is composed of the Oversight Mechanism and the Collaboration Framework, which are aiming to ensure a smooth cooperation between the two parties and the efficient servicing of the assigned portfolios.

The Collaboration Framework ensures that the relationship with doValue is managed by ERB in a structured manner. It outlines the way in which ERB and doValue cooperate in order to establish a close and in good faith collaboration. It also ensures that doValue takes into account ERB's interests in the assigned portfolio, including also relevant compliance with the SSM targets, when providing the agreed services to ERB without compromising its own interests.

The Oversight Mechanism is consisted of the Strategic Alignment Group ('SAG') and the Portfolio Review Working Group ('PRWG'), aiming at:

- Achieving strategic alignment against targets and service levels;
- Resolving any potential issue related to the servicing of the Reference Portfolio; and
- Ensuring effective liaison and coordination between the two entities.

These bodies make non-credit decisions and all final decisions remain subject to the internal approval/ decision process of each entity.

The Troubled Assets Committee (TAC) is established according to the regulatory provisions and its main purpose is to act as an independent body, closely monitoring the Bank's troubled assets portfolio and the execution of its NPE Management Strategy. it is the ERB approval body responsible to provide strategic guidance and monitor the troubled assets of ERB, ensuring independence from business and compliance with the regulatory requirements.

The main duties and responsibilities of the Troubled Assets Committee are the following:

- Review internal reports regarding troubled assets management under the regulatory provisions;
- Approve the available forbearance, resolution and closure solutions by loan sub-portfolio, and monitor their performance through Key Performance Indicators (KPIs);
- Define criteria to assess the sustainability of credit and collateral workout solutions through the design and use of "decision trees";
- Approve, monitor and assess pilot modification programs; and
- Supervise and provide guidance and know-how to the respective troubled assets units of the Bank's subsidiaries abroad.

Remedial Servicing Strategy (RSS)

ERB, established RSS with the mandate to inter alia devise the NPE reduction plan, to closely monitor the overall performance of the NPE portfolio as well as the relationship of the Bank with doValue. Furthermore, following ERB's commitments against the significant risk transfer (SRT) monitoring regulatory requirements pertaining to Bank's concluded transactions, RSS has a pivotal role in ensuring that relevant process is performed smoothly and in a timely manner and that any shortcomings are appropriately resolved, while providing any required clarifications or additional material required by the regulatory authorities. The Head of RSS reports to the General Manager of Group Strategy. In this context, RSS, inter alia, has been assigned with the following responsibilities:

- Develop and actively monitor the NPE targets and reduction plan;
- Set the strategic principles, priorities, policy framework and KPI's under which dVG is servicing the portfolio;
- Closely monitor the execution of the approved strategies, as well as all contractual provisions under the relevant contractual agreements for the ERB' s portfolio assigned to doValue including the securitized portfolio of ERB Recovery DAC;
- Monitor the performance of the senior notes of the securitizations in collaboration with Group Risk so as to ensure compliance to Significant Risk Transfer (SRT) and to the Hellenic Asset Protection Scheme (HAPS);
- Budget and monitor the Bank's expenses and revenues associated with the assigned portfolio;

- Cooperate closely with doValue on a daily basis in achieving the Group's objectives; and
- Maintain supervisory dialogue.

4.2.5 Recent developments

Greece exited the Enhanced Surveillance (ES) regime in August 2022, following the successful completion of the fourteenth quarterly review (May 2022). The total benefit between 2018 and 2023 exceeds € 6.1 billion (disbursements of € 5.1 billion and interest reductions of € 1.0 billion). The monitoring of Greece's economic, fiscal, and financial situation will continue in the context of the post-programme surveillance (PPS), a common procedure for all the Euro Area (EA) member states that completed a stabilization programme and the European Semester, a procedure common for all EA members. According to the first PPS report for Greece (November 2022) the implementation of the set of structural reforms was in line with the commitments agreed between the European institutions and Greece in the 14th ES review.

From the € 750 billion, under the EC's Next Generation EU framework aiming to the recovery and resilience of the member states' economies, ca € 30.5 billion – provisionally divided to € 17.7 billion in grants and € 12.7 billion in loans – are available for Greece up to 2026 to finance its National Recovery and Resilience Plan (NRRP). So far, a total of nearly € 15.1 billion of RRF funds (€ 8.0 billion in grants and € 7.1 billion in loans) were disbursed by January 2023 to Greece, following the successful implementation of the required NRRP milestones. The NRRP is expected to mobilize additional investment resources of € 27 billion from the private sector. Greece has been also allocated ca € 40 billion through Multiannual Financial Framework, EU's long-term budget.

According to Hellenic Statistical Authority (ELSTAT), the real GDP growth rate in 2021 registered an increase of 8.4% on an annual basis, from -9.0% in 2020 and 1.9% in 2019, mainly because of the government's support measures against the economic consequences of the Covid-19 pandemic, the reopening of the economy and the better-than-expected 2021 and 2022 tourism revenue. For 2022, according to ELSTAT's 1st estimate (07 March 2023), real GDP growth posted an increase of 5.9%, on an annual basis, significantly above the respective EC Winter forecast of 5.5% and despite the negative consequences of the energy crisis stemming from the ongoing war in Ukraine. The EA's real GDP growth rate for 2022 was at 3.5% on an annual basis. According to the EC's Winter Forecasts, the real GDP growth rate for Greece was expected at 1.2% and 2.2% for 2023 and 2024 respectively. The respective EC real GDP forecasts for the EA were at 0.9% and 1.5% for 2023 and 2024 respectively. According to the 2023 Budget (November 2022), the 2023 real GDP growth rate for Greece was expected at 1.8% on an annual basis.

According to the EC's 2022 autumn economic forecasts the unemployment rate for Greece was estimated at 12.6% for 2022 and expected at 12.6% and 12.1% for, 2023 and 2024 respectively. According to the 2023 Budget, the unemployment rate for Greece in 2022 and 2023 was expected at 12.7% and 12.6% respectively. According to ELSTAT, the 12-month average for 2022 was at 12.2% from 14.7% in 2021. The unemployment rate stood at 10.8% in January 2023 on an annual basis – the lowest rate since 2009 – from 13.2% in January 2022.

According to the EC's 2023 winter forecasts, the annual inflation rate in Greece (measured using the Harmonized Index of Consumer Prices (HICP)) was estimated at 9.3% for 2022, from 0.6% in 2021, and expected at 4.5% and 2.4% for 2023 and 2024. The HICP rate for the EA was estimated at 8.4 % for 2022 from 2.6% for 2022 and is expected at 5.6% and 2.5% in 2023 and 2024. According to ELSTAT, the HICP in Greece was at 6.1% in February 2023, improved compared to the respective January 2022 reading of 7.2%.

On the fiscal front, according to the 2023 Budget, the general government balance was to post a primary deficit of 1.6% of GDP in 2022, from a primary deficit of 5.0% in 2021. The primary balance is expected to turn positive, a primary surplus, at 0.7% in 2023. The deviation from the primary surplus targets for 2021 and 2022 was not considered a violation of the country's commitments under the Stability and Growth Pact. The EC in March 2020 activated the general escape clause, allowing for non-permanent deviations from the agreed fiscal paths of the member-states due to the extraordinary health and economic distress caused by the pandemic. According to the recent EC decisions (8 March 2023) the general escape clause will be deactivated at the end of 2023.

Credit Risk

According to the 2023 Budget, the Greek government's planned total measures aiming to address the economic effects of the Covid-19 pandemic amount to € 44.2 billion of which € 23.1 billion, € 16.7 billion and € 4.4 billion correspond to 2020, 2021 and 2022 respectively. The respective amount is expected at € 0.2 billion for 2023. The total support measures aiming to address the adverse consequences from the energy crisis for 2022 amounted to € 10.7 billion at a fiscal cost of € 4.8 billion. The 2023 Budget includes a buffer of € 1.0 billion aiming to address additional price increases in the 2023 energy bills. In addition, the 2023 Budget included a series of permanent fiscal support measures for 2022 and 2023 amount to € 0.3 billion and € 4.2 billion respectively.

According to the 2023 Budget, the gross public debt-to-GDP ratio is expected to decline to 168.9% and 159.3% in 2022 and 2023 respectively, owing to the robust economic recovery and the effect of the sharp price level increase on nominal GDP. The sovereign's credit rating is still below the investment grade. According to the Greek Public Debt Management Agency (PDMA) the funding needs for 2023 were estimated at € 5.5 billion at the end of December 2022 (2023 Budget).

DBRS, on 18 March 2023, confirmed its previous BB^{High} rating – one notch below investment grade with stable outlook – based on positive (but lower compared to previous years) expected real GDP growth, the fiscal support measures, and the expected positive contribution of the RRF funds. Fitch, on 27 January 2023, upgraded Greece's credit rating from BB to BB+ with a stable outlook – again one notch below investment grade – for similar reasons. S&P's credit rating (from 23 April 2021, BB+ with stable outlook) is also one notch below investment grade. On the other hand, Moody's credit rating (on 21 October 2020, Ba3, stable outlook) is still three notches below investment grade.

The progress made from 2018 onwards, the inclusion of the Greek sovereign to the eligible titles for the ECB's Pandemic Emergency Purchase Programme (PEPP) (March 2020) and the commitment of the ECB to continue reinvesting the principal from Greek bonds purchased under the PEPP until at least the end of 2024, led to the improvement of the yield spread between the 10-year Greek and German government bonds. The said spreads were at 1.89% on 22 March 2023 – amid global inflation pressure and policy rate hikes originating from the global supply bottlenecks and the still ongoing war in Ukraine – at 2.05% on 30 December 2022, 1.52% on 30 December 2021 and 1.20% on 30 December 2020 (from 1.65% on 31 December 2019 and 4.16% on 31 December 2018). According to the ECB, the PEPP holdings of Greek government bonds was at € 37.8 billion at the end-of-January 2023.

According to the EBA, Greek banks' NPL ratio at the group level decreased to 4.9% of total loans in the third quarter of 2022, from 5.2% in the second quarter of 2022 and 6.7% in the first quarter of 2022. The respective NPL ratio was at 7.0% at the end of 2021, 25.5% at the end of 2020 and 35.2% at the end of 2019.

According to BoG data, the private sector domestic credit balance at the end of December 2022 stood at €115.1 billion, from €109.2 billion at the end of December 2021, registering a gross annual decrease of 5.4%. A significant part of this deleveraging was due to loan restructuring, write-offs, and securitizations as a part of the banks' strategy to reduce their NPL stock through the "Hercules Asset Protection Scheme". Accounting for write-offs/write-downs, and reclassifications of loans, as well as foreign exchange valuation changes, domestic credit increased by 6.3% annually in December 2022. On the other side of the ledger, private sector domestic deposits amounted to €188.7 billion at the end of December 2022 from €180.0 billion at the end of December 2021 according to BoG, registering an annual increase of 4.9%. Compared with their pre-pandemic level (end of 2019), the private sector deposits increased by €45.6 billion or 24.2%.

According to the most recent BoG data, residential real estate prices increased by 11.1% in 2022 on an annual basis from 7.6%, 4.5%, 7.2% and 1.8% in 2021, 2020, 2019 and 2018 respectively. According to the BoG, the price of residential property (based on the apartment price index) declined by 42.0% between the end of 2007 and the end of 2017 as a result of contracting disposable income, increasing unemployment, limited access to credit and the excess supply of residential properties during the financial crisis. Based on the most recent BoG data, commercial real estate prices increased by 0.7% in the first half of 2022. According to BoG data, commercial real estate prices increased by 1.6%, 1.2%, 3.9%, 6.5% 1.8% and 0.2% in 2021, 2020, 2019, 2018, 2017, and 2016 respectively. The price of commercial real estate (based on the office price index) declined by 29.0% between 2010 (earliest available data) and the end of 2015.

Credit Risk

4.3 Credit risk reporting

Group Credit Control, Group Credit Risk Capital Adequacy and Group Model Validation & Governance Sectors regularly prepare a detailed analysis of information to quantify, monitor and evaluate risks, as well as provide support to implement the BRC risk management decisions. It has a fixed reporting cycle to ensure that the relevant management bodies and the Board Risk Committee, are updated on an ongoing basis on the developments in the credit portfolio.

The principal risk reports submitted to the relevant management bodies, on a quarterly basis, deal with the following topics:

The quality of the Group's portfolio:	Analysis of provisions for impairment and losses by business unit. Portfolio breakdowns and evolution by rating category, size, delinquency, industry, tenor, vintage and collateralization etc.
Large exposures:	- An overview of the twenty five (25) Greek largest exposures.
Forborne loans evolution	Analysis by portfolio, delinquency status; re-default statistics on a vintage basis; impairment levels and evolution over time.
The Bank's risk management models and evolution of risk parameters:	Update on the evolution of risk parameters applied (PD, LGD), default rates per product and the key results of the models' validation.
	Update on capital adequacy.
	Monitoring of Expected and Unexpected losses compared to approved limits.

In addition, there are reports which are prepared on a monthly basis, in order to inform the relevant management bodies on the evolution of each business area's balances, delinquencies and provisions (impairment charges).

Credit Risk

4.4 Credit exposures

4.4.1 Maturity analysis

The following table presents a breakdown of net exposures by residual maturity and exposure classes as at 31 December 2022 and 30 June 2022.

Table 12: EU CR1-A - Maturity analysis of exposures

	31 December 2022					
	Net exposure value					
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
	€ million	€ million	€ million	€ million	€ million	€ million
Central governments or central banks	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	2,938	3,515	4,743	57	**11,253**
Retail	-	72	1,256	7,371	1,223	**9,922**
Equity	-	-	-	-	237	**237**
Total IRB approach	**-**	**3,010**	**4,771**	**12,114**	**1,517**	**21,412**
Central governments or central banks	-	26,256	3,869	4,520	4,125	**38,770**
Regional governments or local authorities	-	1	13	11	-	**25**
Public sector entities	-	32	-	-	497	**529**
Multilateral development banks	-	12	9	25	-	**46**
International organisations	-	-	-	-	-	-
Institutions	-	3,187	599	355	68	**4,209**
Corporates	-	5,804	373	383	-	**6,560**
Retail	-	272	502	1,894	42	**2,710**
Secured by mortgages on immovable property	-	17	275	3,695	-	**3,987**
Exposures in default	-	53	33	202	1	**289**
Items associated with particularly high risk	-	259	-	-	-	**259**
Covered bonds	-	119	241	-	-	**360**
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investments undertakings	-	-	-	-	19	**19**
Equity exposures	-	-	-	-	252	**252**
Other exposures	494	86	-	-	3,703	**4,283**
Total standardised approach	**494**	**36,098**	**5,914**	**11,085**	**8,707**	**62,298**
Total	**494**	**39,108**	**10,685**	**23,199**	**10,224**	**83,710**

Credit Risk

	30 June 2022					
	Net exposure value					
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
	€ million	€ million	€ million	€ million	€ million	€ million
Central governments or central banks	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	3,679	5,689	4,106	81	13,555
Retail	-	79	1,272	7,379	1,167	9,897
Equity	-	-	-	-	225	225
Total IRB approach	-	3,758	6,961	11,485	1,473	23,677
Central governments or central banks	-	29,136	3,464	4,598	4,174	41,372
Regional governments or local authorities	-	1	15	11	-	27
Public sector entities	-	36	-	-	706	742
Multilateral development banks	-	7	14	-	-	21
International organisations	-	-	-	-	-	-
Institutions	-	2,645	289	608	63	3,605
Corporates	-	5,595	349	339	-	6,283
Retail	-	184	479	1,866	119	2,648
Secured by mortgages on immovable property	-	18	267	3,637	-	3,922
Exposures in default	-	53	35	191	12	291
Items associated with particularly high risk	-	259	-	-	-	259
Covered bonds	-	104	240	-	-	344
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investments undertakings	-	-	-	-	19	19
Equity exposures	-	-	-	-	212	212
Other exposures	484	128	-	-	3,752	4,364
Total standardised approach	484	38,166	5,152	11,250	9,057	64,109
Total	484	41,924	12,113	22,735	10,530	87,786

(1) The table above does not include securitisations and off-balance sheet items.

(2) Exposures with counterparties are included in the table.

(3) The decrease of the exposure in central government or central banks is mainly due to the decrease of liquidity received from Eurosystem Funding (TLTRO).

(4) The increase of the exposures in the institutions is mainly due to the increase of secured funding with counterparties, the increased position of debt securities and the increase on margin accounts.

(5) The decrease of the IRB Corporates exposures is mainly due to the Wave III synthetic securitization.

4.5 Credit quality of financial assets

The Group recognizes allowance for expected credit losses (ECL) that reflect changes in credit quality since initial recognition to financial assets that are measured at AC and FVOCI, including loans, securitised notes issued by special purpose vehicles established by the Group, lease receivables, debt securities, financial guarantee contracts, and loan commitments.

a. Definitions

Loans and advances to customers, including securitised notes issued by special purpose entities established by the Group, that are carried at amortised cost are classified depending on how ECL is measured.

Accordingly, loans reported as non-impaired include loans for which a ‘12-month ECL allowance’ is recognised as they exhibit no significant increase in credit risk since initial recognition and loans for which a ‘Lifetime ECL allowance’ is recognised as they exhibit a significant increase in credit risk since initial recognition but are not considered to be in default.

Credit impaired loans category includes loans that are considered to be in default, for which a loss allowance equal to ‘Lifetime ECL’ is recognised and loans classified as ’Purchased or originated credit impaired’ (POCI) which are always measured on the basis of lifetime ECL.

Credit Risk

Regulatory definitions

From 1 January 2021 onwards, the Group applies the new definition of default (DoD) for regulatory purposes, as is set in the Article 178 of Regulation (EU) No. 575/2013, the Commission Delegated Regulation (EU) 2018/171 and European Banking Authority (EBA) Guidelines (EBA/GL/2016/07). Accordingly, the perimeters of the credit impaired loans under IFRS 9, the non-performing exposures under EBA guidelines and defaulted exposures for regulatory purposes have been aligned.

b. Impairment indicators

To determine the risk of default, the Group applies a default definition for accounting purposes, which is consistent with the EBA definition for non-performing exposure and regulatory definition of default as mentioned above. The accounting definition of default is also consistent with the one used for internal credit risk management purposes.

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that exposure have occurred:

- The borrower faces a significant difficulty in meeting his financial obligations;
- There has been a breach of contract, such as a default or unpaid amounts, above specified materiality thresholds, for more than 90 consecutive days;
- The Group, for economic or contractual reasons relating to the borrower's financial difficulty, has granted to the borrower a concession(s) that the Group would not otherwise consider;
- There is a probability that the borrower will enter bankruptcy or other financial re-organization; and
- For Purchased or originated credit impaired (POCI) financial assets, a purchase or origination at a deep discount that reflects incurred credit losses is considered a detrimental event. The Group assesses the deep discount criterion following a principle -based approach with the aim to incorporate all reasonable and supportable information which reflects market conditions that exist at the time of the assessment.

For debt securities, the Group determines the risk of default using an internal credit rating scale. The Group considers debt securities as credit impaired if the internal credit rating of the issuer/counterparty corresponds to a rating equivalent to "C" (Moody's rating scale) or the external rating of the issuer/counterparty at the reporting date is equivalent to "C" (Moody's rating scale) and the internal rating is not available.

For further details, please refer to Consolidated Financial Statements, Note 2.

c. Impairment assessment

Determining whether a loss allowance should be based on 12-month expected credit losses or lifetime expected credit losses depends on whether there has been a significant increase in credit risk (SICR) of the financial assets, issued loan commitments and financial guarantee contracts, since initial recognition.

At each reporting date, the Group performs an assessment as to whether the risk of a default occurring over the remaining expected lifetime of the exposure has increased significantly from the expected risk of a default estimated at origination for that point in time. The assessment for SICR is performed using both qualitative and quantitative criteria based on reasonable and supportable information that is available without undue cost or effort including forward looking information and macroeconomic scenarios as well as historical experience. Furthermore, regardless of the outcome of the SICR assessment based on the above indicators, the credit risk of a financial asset is deemed to have increased significantly when contractual payments are more than 30 days past due.

Furthermore, Management may apply temporary collective adjustments when determining whether credit risk has increased significantly since initial recognition on exposures that share the same credit risk characteristics to reflect macro-economic or other factors which are not adequately addressed by the current credit risk models. These factors

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may depend on information such as the type of the exposure, counterparty's specific information and the characteristics of the financial instrument, while their application requires the application of significant judgment.

The assessment of loss allowance is performed either on an individual basis or on a collective basis for groups of similar items with homogeneous credit risk characteristics. The Group applies the same principles for assessing significant increase in credit risk (SICR) since initial recognition when estimating ECLs on a collective or on an individual basis.

The Group segments its lending exposures on the basis of shared credit risk characteristics for the purposes of both assessing significant increase in credit risk and measuring loan loss allowance on a collective basis. The different segments aim to capture differences in PDs and in the rates of recovery in the event of default.

The shared credit risk characteristics used for the segmentation of exposures include several elements such as: instrument type, portfolio type, asset class, product type, industry, originating entity, credit risk rating, remaining term to maturity, geographical location of the borrower, value of collateral to the financial asset, forbearance status and days in arrears.

The Group identifies individually significant exposures and performs the ECL measurement based on borrower specific information for both retail and wholesale portfolios. This measurement is performed at a borrower level, hence the criteria are defined at this level, while both qualitative and quantitative factors are taken into consideration including forward looking information.

For the remaining retail and wholesale exposures, ECL are measured on a collective basis. This incorporates borrower specific information, collective historical experience of losses and forward-looking information. For debt securities and securitised notes issued by special purpose entities established by the Group, the measurement of impairment losses is performed on an individual basis.

d. Impairment measurement

The measurement of ECL is an unbiased probability-weighted average estimate of credit losses that reflects the time value of money, determined by evaluating a range of possible outcomes. A credit loss is the difference between the cash flows that are due to the Group in accordance with the contractual terms of the instrument and the cash flows that the Group expects to receive (i.e. cash shortfalls) discounted at the original effective interest rate (EIR) of the same instrument, or the credit-adjusted EIR in case of POCI. In measuring ECL, information about past events, current conditions and reasonable and supportable forecasts of future conditions are considered. For undrawn commitments, ECLs are calculated as the present value of the difference between the contractual cash flows due if the commitment was drawn down and the expected cash flows while for financial guarantees ECLs are measured as the expected payments to reimburse the holder less any amounts that the Group expects to receive.

The Group estimates expected cash shortfalls, which reflect the cash flows expected from all possible sources, including collateral, guarantees and other credit enhancements that are part of the contractual terms and are not recognised separately. In case of a collateralized financial instrument, the estimated expected cash flows related to the collateral reflect the amount and timing of cash flows that are expected from liquidation less the discounted costs of obtaining and selling the collateral, irrespective of whether liquidation is probable.

ECL are calculated over the maximum contractual period over which the Group is exposed to credit risk, which is determined based on the substantive terms of the instrument, or in case of revolving credit facilities, by taking into consideration factors such as the Group's expected credit risk management actions to mitigate credit risk and past practice.

Receivables from customers arising from the Group's activities other than lending, are presented under Other Assets and are typically short term. Therefore, considering that usually there is no significant financing component, the loss allowance for such financial assets is measured at an amount equal to the lifetime expected credit losses under the simplified approach.

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ECL key inputs

The ECL calculations are based on the term structures of the probability of default (PD), the loss given default (LGD), the exposure at default (EAD) and other input parameters such as the credit conversion factor (CCF) and the prepayment rate. Generally, the Group derives these parameters from internally developed statistical models and observed point-in-time and historical data, or by international rating agencies, where applicable, leveraging the existing infrastructure development for the regulatory framework and risk management practices.

The PD, LGD and EAD used for accounting purposes may differ from those used for regulatory purposes. For the purposes of IFRS 9 impairment measurement, PD is a point-in-time estimate whereas for regulatory purposes PD is a 'through-the-cycle' estimate. In addition, LGD and EAD for regulatory purposes are based on loss severity experienced during economic downturn conditions, while for impairment purposes, LGD and EAD reflect unbiased and probability-weighted estimates.

The following table presents an overview of the quality forborne exposures as at 31 December 2022 and 30 June 2022.

Table 13: EU CQ1 - Credit quality of forborne exposures

	31 December 2022							
	Gross carrying amount/nominal amount with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collaterals received and financial guarantees received on forborne exposures	
	Performing forborne	Non-performing forborne			On performing forborne exposures	On non-performing forborne exposures		Of which: Collateral and financial guarantees received on non-performing exposures with forbearance measures
			Of which defaulted	Of which impaired				
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash balances at central banks and other demand deposits	-	-	-	-	-	-	-	-
Loans and advances	**1,139**	**873**	**870**	**873**	**(80)**	**(321)**	**1,409**	**512**
Central banks	-	-	-	-	-	-	-	-
General governments	-	-	-	-	-	-	-	-
Credit institutions	-	-	-	-	-	-	-	-
Other financial corporations	16	22	22	22	(1)	(12)	22	9
Non-financial corporations	516	584	584	584	(38)	(193)	795	377
Households	607	267	264	267	(41)	(116)	592	126
Debt Securities	-	-	-	-	-	-	-	-
Loan commitments given	-	-	-	-	-	-	-	-
Total	**1,139**	**873**	**870**	**873**	**(80)**	**(321)**	**1,409**	**512**

Credit Risk

	30 June 2022							
	Gross carrying amount/nominal amount with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collaterals received and financial guarantees received on forborne exposures	
		Non-performing forborne						
	Performing forborne		Of which defaulted	Of which impaired	On performing forborne exposures	On non-performing forborne exposures		Of which: Collateral and financial guarantees received on non-performing exposures with forbearance measures
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash balances at central banks and other demand deposits	-	-	-	-	-	-	-	-
Loans and advances	1,530	905	901	902	(89)	(321)	1,751	530
Central banks	-	-	-	-	-	-	-	-
General governments	-	-	-	-	-	-	-	-
Credit institutions	-	-	-	-	-	-	-	-
Other financial corporations	11	21	21	21	(1)	(11)	18	10
Non-financial corporations	618	567	567	564	(40)	(180)	884	366
Households	901	317	313	317	(48)	(130)	849	154
Debt Securities	-	-	-	-	-	-	-	-
Loan commitments given	-	-	-	-	-	-	-	-
Total	1,530	905	901	902	(89)	(321)	1,751	530

(1) *The decrease in forborne exposures in mainly due to retail portfolio.*

The following template provides an overview of credit quality of non performing exposures as at 31 December 2022 and 31 December 2021.

Table 14: **EU CQ3** - Credit quality of performing and non-performing exposures by past due days

	31 December 2022											
	Gross carrying amount/nominal amount											
	Performing exposures			**Non-performing exposures**								
		Not past due or Past due <= 30 days	**Past due >30 days <= 90 days**		**Unlikely to pay that are not past-due or past-due <=90 days**	**Past due > 90 days <=180 days**	**Past due > 180 days <=1 year**	**Past due > 1 year <=2 year**	**Past due > 2 year <=5 year**	**Past due > 5 year < = 7 year**	**Past due > 7 years**	**Of which defaulted**
	€ million	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**	**€ million**
Cash balances at central banks and other demand deposits (1)	**14,490**	14,490	-	-	-	-	-	-	-	-	-	-
Loans and advances (2)	**42,538**	**42,320**	**218**	**2,257**	**830**	**133**	**227**	**253**	**550**	**35**	**229**	**2,254**
Central banks	-	-	-	-	-	-	-	-	-	-	-	-
General governments	25	25	-	1	-	-	-	-	-	-	1	1
Credit institutions	1,205	1,205	-	-	-	-	-	-	-	-	-	-
Other financial corporations (3)	6,841	6,841	-	52	9	-	-	-	35	-	8	52
Non-financial corporations (4)	21,627	21,534	93	1,399	556	66	100	94	413	16	154	1,399
of which SMEs	8,301	8,232	70	1,177	436	53	99	86	333	16	154	1,177
Households	12,840	12,715	125	805	265	67	127	159	102	19	66	802
Debt Securities (5)	**12,926**	**12,926**	**-**	**33**	**33**	**-**	**-**	**-**	**-**	**-**	**-**	**33**
Central banks	-	-	-	-	-	-	-	-	-	-	-	-
General governments	8,872	8,872	-	-	-	-	-	-	-	-	-	-
Credit institutions	1,242	1,242	-	-	-	-	-	-	-	-	-	-
Other financial corporations	1,620	1,620	-	-	-	-	-	-	-	-	-	-
Non-financial corporations	1,192	1,192	-	33	33	-	-	-	-	-	-	33
Off-balance sheet exposures (6)	**10,659**			**53**								**53**
Central banks	-			-								-
General governments	254			19								19
Credit institutions	104			-								-
Other financial corporations	636			-								-
Non-financial corporations	7,395			33								33
Households	2,270			1								1
Total	**80,613**	**69,736**	**218**	**2,343**	**863**	**133**	**227**	**253**	**550**	**35**	**229**	**2,340**

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	31 December 2021											
	Gross carrying amount/nominal amoumt											
	Performing exposures			Non-performing exposures								
		Not past due or Past due <= 30 days	Past due >30 days <= 90 days		Unlikely to pay that are not past-due or past-due <=90 days	Past due > 90 days <=180 days	Past due > 180 days <=1 year	Past due > 1 year <=2 year	Past due > 2 year <=5 year	Past due > 5 year < = 7 year	Past due > 7 years	Of which defaulted
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash balances at central banks and other demand deposits	13,037	13,037	-	-	-	-	-	-	-	-	-	-
Loans and advances	40,571	40,427	145	2,793	979	113	228	366	757	64	286	2,790
Central banks	-	-	-	-	-	-	-	-	-	-	-	-
General governments	32	32	-	2	-	-	-	1	-	-	1	2
Credit institutions	1,344	1,344	-	-	-	-	-	-	-	-	-	-
Other financial corporations	7,581	7,581	-	50	12	-	-	12	26	-	-	50
Non-financial corporations	19,029	18,990	40	1,879	663	31	89	268	613	27	188	1,879
of which SMEs	8,374	8,337	36	1,541	476	30	89	256	476	27	187	1,541
Households	12,585	12,480	105	862	304	82	139	85	118	37	97	859
Debt Securities	11,150	11,150	-	-	-	-	-	-	-	-	-	-
Central banks	-	-	-	-	-	-	-	-	-	-	-	-
General governments	8,308	8,308	-	-	-	-	-	-	-	-	-	-
Credit institutions	986	986	-	-	-	-	-	-	-	-	-	-
Other financial corporations	786	786	-	-	-	-	-	-	-	-	-	-
Non-financial corporations	1,070	1,070	-	-	-	-	-	-	-	-	-	-
Off-balance sheet exposures	7,032			51								51
Central banks	-			-								-
General governments	247			19								19
Credit institutions	81			-								-
Other financial corporations	321			-								-
Non-financial corporations	4,227			30								30
Households	2,156			2								2
Total	71,790	64,614	145	2,844	979	113	228	366	757	64	286	2,841

(1) *The increase of the exposures in central banks is mainly due to the increase of customer deposits, EMTNs and Tier 2 issuances and the CSA collateral inflows which were counterbalanced with outflows due to the decrease of TLTRO funding.*
(2) *The decrease in Non-performing exposures is mainly due to project "Solar".*
(3) *The decrease in performing exposures of Other Financial corporations is mainly due to nostro accounts.*
(4) *The increase in performing exposures of Non-Financial Corporations is mainly due to new disbursement of corporate loans.*
(5) *The increase in debt securities is mainly due to increased position in Sovereign Bonds and in securitizations AAA CLOs.*
(6) *The increase in Off-balance sheet exposures is mainly due to new production of loan commitments and Letters of Guarantee in corporate loans.*

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The following templates provide an overview of the credit quality of performing and non-performing exposures and related impairments, provisions and valuation adjustments by portfolio and exposure class, by geography and industry as at 31 December 2022 and 30 June 2022.

Table 15: EU CR1 - Performing and non-performing exposures and related provisions

	31 December 2022														
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							Collaterals and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures - Accumulated impairment and provisions			Non-performing exposures - Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			Accumulated partial write-off	On performing exposures	On non-performing exposures
		of which: stage 1	of which: stage 2		of which: stage 2	of which: stage 3		of which: stage 1	of which: stage 2		of which: stage 2	of which: stage 3			
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash balances at central banks and other demand deposits	**14,490**	**14,490**	-	-	-	-	-	-	-	-	-	-		-	-
Loans and advances	**42,538**	**36,947**	**5,573**	**2,257**	-	**2,217**	**(505)**	**(150)**	**(355)**	**(1,122)**	-	**(1,115)**	**(1,007)**	**28,392**	**1,028**
Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General governments	25	25	-	1	-	1	-	-	-	(1)	-	(1)	-	-	-
Credit institutions	1,205	1,205	-	-	-	-	-	-	-	-	-	-	-	-	-
Other financial corporations	6,841	6,808	22	52	-	44	(3)	(2)	(1)	(26)	-	(26)	(39)	6,200	26
Non-financial corporations	21,627	19,326	2,296	1,399	-	1,374	(235)	(89)	(146)	(675)	-	(671)	(354)	13,090	688
Of which: SMEs	8,301	6,802	1,499	1,177	-	1,162	(171)	(52)	(119)	(557)	-	(556)	(305)	5,922	594
Households	12,840	9,583	3,255	805	-	798	(267)	(59)	(208)	(420)	-	(417)	(614)	9,102	314
Debt Securities	**12,926**	**12,795**	**131**	**33**	-	**33**	**(24)**	**(19)**	**(5)**	**(10)**	-	**(10)**	-	-	-
Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General governments	8,872	8,776	96	-	-	-	(11)	(9)	(3)	-	-	-	-	-	-
Credit institutions	1,242	1,235	8	-	-	-	(5)	(5)	(1)	-	-	-	-	-	-
Other financial corporations	1,620	1,620	-	-	-	-	(1)	(1)	-	-	-	-	-	-	-
Non-financial corporations	1,192	1,164	27	33	-	33	(7)	(4)	(1)	(10)	-	(10)	-	-	-
Off-balance sheet exposures	**10,659**	**10,129**	**289**	**53**	-	**53**	**(60)**	**(20)**	**(6)**	**(30)**	-	**(30)**		**1,210**	**12**
Central banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-
General governments	254	12	-	19	-	19	(33)	-	-	(19)	-	(19)		-	-
Credit institutions	104	104	-	-	-	-	-	-	-	-	-	-		-	-
Other financial corporations	636	621	15	-	-	-	(2)	-	(1)	-	-	-		66	-
Non-financial corporations	7,394	7,221	175	33	-	33	(16)	(12)	(4)	(11)	-	(11)		1,051	12
Households	2,271	2,171	99	1	-	1	(9)	(8)	(1)	-	-	-		93	-
Total	**80,613**	**74,361**	**5,993**	**2,343**	-	**2,303**	**(589)**	**(189)**	**(366)**	**(1,162)**	-	**(1,155)**	**(1,007)**	**29,602**	**1,040**

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	30 June 2022														
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write-off	Collaterals and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures - Accumulated impairment and provisions			Non-performing exposures - Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non-performing exposures
		of which: stage 1	of which: stage 2		of which: stage 2	of which: stage 3		of which: stage 1	of which: stage 2		of which: stage 2	of which: stage 3			
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash balances at central banks and other demand deposits	13,956	13,956	-	-	-	-	-	-	-	-	-	-		-	-
Loans and advances	40,864	35,117	5,728	2,501	-	2,452	(482)	(148)	(335)	(1,251)	-	(1,244)	(824)	27,992	1,093
Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General governments	29	27	2	2	-	2	(1)	(1)	-	(1)	-	(1)	-	1	-
Credit institutions	774	774	-	-	-	-	-	-	-	-	-	-	-	-	-
Other financial corporations	6,776	6,743	23	54	-	45	(5)	(4)	(1)	(26)	-	(26)	(39)	6,065	28
Non-financial corporations	20,569	18,095	2,465	1,539	-	1,507	(234)	(90)	(145)	(751)	-	(746)	(294)	12,978	727
of which SMEs	8,388	6,601	1,787	1,264	-	1,247	(164)	(57)	(106)	(611)	-	(609)	(216)	5,920	601
Households	12,716	9,478	3,238	906	-	898	(242)	(53)	(189)	(473)	-	(471)	(491)	8,948	338
Debt Securities	12,514	12,497	16	28	-	28	(21)	(19)	(1)	(7)	-	(7)	-	-	-
Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General governments	8,963	8,963	-	-	-	-	(9)	(9)	-	-	-	-	-	-	-
Credit institutions	979	979	-	-	-	-	(5)	(5)	-	-	-	-	-	-	-
Other financial corporations	1,448	1,447	-	-	-	-	(1)	(1)	-	-	-	-	-	-	-
Non-financial corporations	1,124	1,108	16	28	-	28	(6)	(4)	(1)	(7)	-	(7)	-	-	-
Off-balance sheet exposures	8,848	8,238	369	59	-	59	(58)	(18)	(5)	(29)	-	(29)		1,250	16
Central banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-
General governments	248	6	-	19	-	19	(33)	-	-	(19)	-	(19)		-	-
Credit institutions	92	92	-	-	-	-	-	-	-	-	-	-		-	-
Other financial corporations	524	500	24	-	-	-	(2)	-	(1)	-	-	-		68	-
Non-financial corporations	5,812	5,618	195	39	-	39	(17)	(13)	(4)	(10)	-	(10)		1,087	16
Households	2,172	2,022	150	1	-	1	(6)	(5)	-	-	-	-		95	-
Total	76,182	69,808	6,113	2,588	-	2,539	(561)	(185)	(341)	(1,287)	-	(1,280)	(824)	29,242	1,109

(1) *The decrease in non-performing exposures is mainly due to write-offs from merger completion of Hellenic Post Credit S.A. and Eurobank Ergasias Leasing Single Member S.A..*

(2) *The increase in Non-Financial Corporations is mainly due to new disbursements of corporate loans.*

(3) *The increase in debt securities is mainly due to increased position in Sovereign Bonds and in securitizations AAA CLOs.*

(4) *The increase in Off-balance sheet exposures is mainly due to new production of loan commitments and Letters of Guarantee in corporate loans.*

Credit Risk

Table 16: **EU CQ4 -** Quality of non-performing exposures by geography

	31 December 2022						
	Gross carrying/nominal amount				Accumulated impairment	Provisions on off-balance sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
		of which: non-performing		of which: subject to impairment			
			of which defaulted				
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
On balance sheet exposures	**57,754**	**2,290**	**2,287**	**57,739**	**(1,661)**		**-**
Greece [1]	32,105	1,835	1,835	32,105	(1,299)		-
Romania	301	9	6	301	(19)		-
Bulgaria	5,580	203	203	5,580	(181)		-
United Kingdom	788	0	0	788	(2)		-
Cyprus	2,524	88	88	2,524	(62)		-
Other countries [1]	16,455	155	155	16,441	(98)		-
Off balance sheet exposures	**10,712**	**53**	**53**			**(90)**	
Greece	7,814	48	48			(80)	
Romania	0	-	0			-	
Bulgaria	1,030	1	1			(1)	
United Kingdom	75	-	-			(1)	
Cyprus	602	2	2			(7)	
Other countries	1,191	2	2			(1)	
Total	**68,466**	**2,343**	**2,340**	**57,739**	**(1,661)**	**(90)**	**-**

	30 June 2022						
	Gross carrying/nominal amount				Accumulated impairment	Provisions on off-balance sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
		of which: non-performing		of which: subject to impairment			
			of which defaulted				
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
On balance sheet exposures	55,907	2,529	2,498	55,885	(1,761)		-
Greece	31,480	2,055	2,055	31,480	(1,411)		-
Romania	294	14	10	291	(19)		-
Bulgaria	5,031	211	211	5,031	(168)		-
United Kingdom	898	-	-	898	(2)		-
Cyprus	2,559	73	73	2,559	(64)		-
Other countries	15,645	176	149	15,626	(97)		-
Off balance sheet exposures	8,907	59	59			(88)	
Greece	6,316	53	53			(81)	
Romania	-	-	-			-	
Bulgaria	971	1	1			-	
United Kingdom	96	-	-			(1)	
Cyprus	618	1	1			(5)	
Other countries	906	4	4			(1)	
Total	64,814	2,588	2,556	55,885	(1,761)	(88)	-

[1] The increase in Off-balance sheet exposures is mainly due to new production of loan commitments and Letters of Guarantee in corporate loans.

[2] The increase in Greece gross amount is mainly due to new corporate loans while for Bulgaria due to new corporate and retail loans. The decrease in Greece non-performing and defaulted exposures is mainly due to write-offs from i) merger completion of Hellenic Post Credit S.A. and ii) Eurobank Ergasias Leasing Single Member S.A..

Credit Risk

The following table provides an overview of the credit quality of loans and advances to non-financial corporations as at 31 December 2022 and 30 June 2022.

Table 17: EU CQ5 - Credit quality of loans and advances to non-financial corporations by industry

	31 December 2022					
	Gross carrying/nominal amount					
		of which: non-performing		of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non- performing exposures
			of which defaulted			
	€ million	€ million	€ million	€ million	€ million	€ million
Agriculture, forestry and fishing	417	30	30	417	(20)	-
Mining and quarrying	49	4	4	49	(2)	-
Manufacturing	4,368	196	196	4,368	(139)	-
Electricity, gas, steam and air conditioning supply	1,659	2	2	1,659	(5)	-
Water supply	50	1	1	50	(1)	-
Construction	1,041	112	112	1,041	(70)	-
Wholesale and retail trade	4,630	413	413	4,630	(282)	-
Transport and storage	4,065	90	90	4,059	(92)	-
Accommodation and food service activities	2,427	257	257	2,427	(83)	-
Information and communication	333	10	10	333	(17)	-
Financial and insurance activities	10	2	2	10	(1)	-
Real estate activities	1,820	88	88	1,820	(54)	-
Professional, scientific and technical activities	692	114	114	692	(84)	-
Administrative and support service activities	274	18	18	274	(12)	-
Public administration and defense, compulsory social security	1	-	-	1	-	-
Education	40	7	7	40	(4)	-
Human health services and social work activities	401	9	9	401	(9)	-
Arts, entertainment and recreation	528	9	9	528	(6)	-
Other services	221	37	37	222	(29)	-
Total	**23,026**	**1,399**	**1,399**	**23,021**	**(910)**	**-**

Credit Risk

	30 June 2022					
	Gross carrying/nominal amount					
		of which: non-performing		of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non- performing exposures
			of which defaulted			
	€ million	€ million	€ million	€ million	€ million	€ million
Agriculture, forestry and fishing	376	30	30	376	(18)	-
Mining and quarrying	65	5	5	65	(3)	-
Manufacturing	4,353	186	186	4,353	(142)	-
Electricity, gas, steam and air conditioning supply	853	3	3	853	(2)	-
Water supply	66	1	1	66	(1)	-
Construction	1,178	140	140	1,178	(91)	-
Wholesale and retail trade	4,723	459	459	4,723	(315)	-
Transport and storage	3,976	109	109	3,969	(102)	-
Accommodation and food service activities	2,440	274	274	2,440	(83)	-
Information and communication	295	15	15	295	(20)	-
Financial and insurance activities	13	2	2	13	(1)	-
Real estate activities	1,540	106	106	1,536	(53)	-
Professional, scientific and technical activities	685	121	121	685	(84)	-
Administrative and support service activities	275	17	17	275	(15)	-
Public administration and defense, compulsory social security	1	-	-	1	-	-
Education	42	7	7	42	(3)	-
Human health services and social work activities	408	10	10	408	(8)	-
Arts, entertainment and recreation	572	12	12	572	(11)	-
Other services	247	42	42	248	(33)	-
Total	22,108	1,539	1,539	22,098	(985)	-

[(1)] *Increase in sectors "Electricity, gas, steam and air conditioning supply" & "Real estate activities" is mainly due to new corporate loans.*

The following table provides an overview of the credit quality of loans and advances to non-financial corporations as at 31 December 2022 and 30 June 2022.

Table 18: EU CQ2 - Quality of forbearance

	31 December 2022	30 June 2022
	Gross carrying amount of forborne exposures	Gross carrying amount of forborne exposures
	€ million	€ million
Loans and advances that have been forborne more than twice	482	571
Non-performing forborne loans and advances that failed to meet the non-performing exit criteria	423	424

Credit Risk

The following table provides an analysis of collateral valuation and other information on loans and advances as at 31 December 2022 and 30 June 2022.

Table 19: EU CQ6 - Collateral valuation - Loans and advances

	31 December 2022											
	Loans and advances											
		Performing		Non Performing								
					Unlikely to pay that are not past due or past due <=90 days	Past due > 90 days						
			of which past due > 30 days <= 90 days				of which Past due > 90 days <= 180 days	of which Past due > 180 days <= 1 year	of which Past due > 1 year <= 2 years	of which Past due > 2 years <= 5 years	of which Past due > 5 years <= 7 years	of which Past due > 7 years
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Gross carrying amount	**44,795**	**42,538**	**218**	**2,257**	**830**	**1,427**	**133**	**228**	**253**	**550**	**35**	**228**
Of which: secured	33,596	31,889	157	1,708	671	1,037	94	164	183	388	26	182
Of which: secured with immovable property	17,657	16,228	136	1,430	560	869	79	155	166	299	23	147
of which: instruments with LTV higher than 60% and lower or equal to 80%	4,013	3,777		236	69	167						
of which: instruments with LTV higher than 80% and lower or equal to 100%	3,092	2,834		258	108	151						
of which: instruments with LTV higher than 100%	4,352	3,694		658	252	406						
Accumulated impairment for secured assets	**(971)**	**(302)**	**(13)**	**(669)**	**(185)**	**(483)**	**(22)**	**(42)**	**(64)**	**(218)**	**(12)**	**(125)**
Collateral												
of which value capped at the value of exposure	23,949	22,983	135	966	456	511	68	119	117	154	10	42
of which immovable property	15,866	14,982	123	884	405	479	62	117	110	140	10	40
Of which value above the cap	22,389	20,927	142	1,462	613	849						
of which immovable property	13,238	12,086	135	1,152	417	735						
Financial guarantees received	**5,471**	**5,409**	**6**	**61**	**18**	**43**	**3**	**2**	**3**	**15**	**4**	**17**
Accumulated partial write-off	**(1,007)**	**(4)**	**(1)**	**(1,003)**	**(382)**	**(620)**	**(3)**	**(7)**	**(39)**	**(305)**	**(16)**	**(251)**

	30 June 2022											
	Loans and advances											
		Performing		Non Performing								
					Unlikely to pay that are not past due or past due <=90 days	Past due > 90 days						
			of which past due > 30 days <= 90 days				of which Past due > 90 days <= 180 days	of which Past due > 180 days <= 1 year	of which Past due > 1 year <= 2 years	of which Past due > 2 years <= 5 years	of which Past due > 5 years <= 7 years	of which Past due > 7 years
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Gross carrying amount	43,365	40,864	171	2,501	859	1,642	197	154	394	547	52	297
Of which: secured	33,043	31,262	109	1,781	696	1,086	134	93	269	363	29	198
Of which: secured with immovable property	16,772	15,402	95	1,370	537	833	125	74	218	239	25	152
of which: instruments with LTV higher than 60% and lower or equal to 80%	3,950	3,751		199	96	103						
of which: instruments with LTV higher than 80% and lower or equal to 100%	3,287	3,012		275	109	166						
of which: instruments with LTV higher than 100%	4,603	3,883		719	235	484						
Accumulated impairment for secured assets	(946)	(283)	(6)	(663)	(170)	(493)	(27)	(22)	(109)	(203)	(10)	(122)
Collateral												
of which value capped at the value of exposure	23,624	22,602	95	1,022	497	525	103	67	147	139	15	53
of which immovable property	15,452	14,548	87	905	418	487	100	58	138	125	15	51
Of which value above the cap	21,825	20,443	106	1,381	550	831						
of which immovable property	11,465	10,527	85	938	376	563						
Financial guarantees received	5,461	5,390	3	71	17	54	2	2	5	18	5	23
Accumulated partial write-off	(824)	(4)	(1)	(820)	(128)	(692)	-	(2)	(8)	(390)	(31)	(260)

[(1)] The decrease in non-performing exposures is mainly due to write-offs from merger completion of Hellenic Post Credit S.A. and Eurobank Ergasias Leasing Single Member S.A..

Credit Risk

The following table provides an overview of the movements (inflows and outflows) of non performing loans and advances as at 31 December 2022.

Table 20: EU CR2 - Changes in the stock of non-performing loans and advances

	31 December 2022
	Gross carrying amount € million
Initial stock of non-performing loans and advances	2,793
Inflows to non-performing portfolios	820
Outflows from non-performing portfolios	(1,356)
Outflows due to write-offs	(286)
Outflow due to other situations [1]	(1,070)
Final stock of non-performing loans and advances	**2,257**

[1] It represents mainly the outflow: i) to performing portfolio, mainly retail ii) due to loan repayment, partial or total iii) of loans that have been reclassified as held for sale during the year.

Table 21: EU CR2a - Changes in the stock of non-performing loans and advances and related net accumulated recoveries

	31 December 2022	
	Gross carrying amount € million	Related net acumulated recoveries € million
Initial stock of non-performing loans and advances	2,793	
Inflows to non performing portfolios	820	
Outflows from non performing portfolios	(1,356)	
Outflow to performing portfolio	(340)	
Outflow due to loan repayment, partial or total	(285)	
Outflow due to collateral liquidations	(65)	32
Outflow due to taking possession of collateral	(19)	12
Outflow due to sale of instruments	(8)	6
Outflow due to risk transfers	-	-
Outflows due to write-off	(286)	
Outflow due to Other Situations	(71)	
Outflow due to reclassification as held for sale	(282)	
Final stock of non-performing loans and advances	**2,257**	

Credit Risk

Table 22: EU CQ7 - Collateral obtained by taking possession and execution processes

	31 December 2022		30 June 2022	
	Collateral obtained by taking possession		Collateral obtained by taking possession	
	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million
Property Plant and Equipment (PP&E)	-	-	-	-
Other than PP&E	662	(91)	662	(81)
Residential immovable property	259	(44)	257	(41)
Commercial Immovable property	386	(47)	390	(39)
Movable property (auto, shipping, etc.)	2	-	1	-
Equity and debt instruments	12	-	12	-
Other collateral	3	-	3	-
Total	**662**	**(91)**	662	(81)

The following table provides an overview of collateral obtained by taking possession by type, by time since date of foreclosure as at 31 December 2022 and 30 June 2022.

Table 23: EU CQ8 - Collateral obtained by taking possession and execution processes – Vintage breakdown

	31 December 2022											
	Debt balance reduction		Total collateral obtained by taking possession									
					Foreclosed <= 2 years		Foreclosed >= 2 years <= 5 years		Foreclosed > 5 years		Of which: Non-current assets held-for-sale	
	Gross carrying amount € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million
Collateral obtained by taking possession classified as PP&E	-	-	-	-								
Collateral obtained by taking possession other than classified as PP&E	41	(24)	662	(91)	47	(13)	332	(19)	284	(59)	10	(4)
Residential immovable property	12	(6)	259	(44)	14	(4)	118	(7)	126	(33)	4	(3)
Commercial Immovable property	20	(12)	386	(47)	31	(9)	204	(12)	151	(26)	6	(1)
Movable property (auto, shipping, etc.)	-	-	2	-	2	-	-	-	-	-	-	-
Equity and debt instruments	-	-	12	-	-	-	7	-	6	-	-	-
Other collateral	9	(7)	3	-	-	-	3	-	-	-	-	-
Total	**41**	**(24)**	**662**	**(91)**	**47**	**(13)**	**332**	**(19)**	**284**	**(59)**	**10**	**(4)**

Credit Risk

	30 June 2022											
	Debt balance reduction		Total collateral obtained by taking possession									
					Foreclosed <= 2 years		Foreclosed >= 2 years <= 5 years		Foreclosed > 5 years		Of which: Non-current assets held-for-sale	
	Gross carrying amount € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million	Value at initial recognition € million	Accumulated negative changes € million
Collateral obtained by taking possession classified as PP&E	-	-	-	-								
Collateral obtained by taking possession other than classified as PP&E	40	(24)	662	(81)	46	(3)	348	(21)	268	(56)	9	(3)
Residential immovable property	12	(6)	257	(41)	18	(1)	122	(8)	117	(32)	4	(3)
Commercial Immovable property	19	(12)	390	(39)	28	(2)	217	(13)	145	(24)	5	(1)
Movable property (auto, shipping, etc.)	-	-	1	-	-	-	-	-	-	-	-	-
Equity and debt instruments	-	-	12	-	-	-	6	-	5	-	-	-
Other collateral	9	(7)	3	-	-	-	3	-	-	-	-	-
Total	40	(24)	662	(81)	46	(3)	348	(21)	268	(56)	9	(3)

In April 2020, the EBA published Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the Covid-19 crisis which clarifies a set of criteria and conditions under which such measures do not trigger forbearance classification of loans and advances and sets out their further prudential treatment in this context.

In the last two years, the Group took all appropriate actions to address liquidity difficulties of businesses and individuals caused by the limited or suspended operations of businesses due to the Covid-19 pandemic. As at 31 December 2022 and at 30 June 2022, the Group's active moratoria were zero (€ 0 billion). As at 31 December 2022, the Group's EBA compliant moratoria granted amounted to € 5.9 billion all of which have expired.

Credit Risk

The following table provides an overview of the volume of loans and advances subject to legislative and non-legislative moratoria in accordance with EBA/GL/2020/02 by residual maturity of these moratoria as at 31 December 2022 and 30 June 2022.

Table 24: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria

	31 December 2022								
	Number of obligors	Gross carrying amount							
			Of which: legislative moratoria	Of which: expired	Residual maturity of moratoria				
					<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
		€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Loans and advances for which moratorium was offered	**200,189**	**6,413**							
Loans and advances subject to moratorium (granted)	**182,978**	**5,910**	1,162	5,910	-	-	-	-	-
of which: Households		2,892	351	2,892	-	-	-	-	-
of which: Collateralised by residential immovable property		2,216	160	2,216	-	-	-	-	-
of which: Non-financial corporations		2,900	700	2,900	-	-	-	-	-
of which: Small and Medium-sized Enterprises		2,043	524	2,043	-	-	-	-	-
of which: Collateralised by commercial immovable property		1,968	577	1,968	-	-	-	-	-

	30 June 2022								
	Number of obligors	Gross carrying amount							
			Of which: legislative moratoria	Of which: expired	Residual maturity of moratoria				
					<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
		€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Loans and advances for which moratorium was offered	288,892	6,980							
Loans and advances subject to moratorium (granted)	273,656	6,447	1,330	6,447	-	-	-	-	-
of which: Households		3,043	429	3,043	-	-	-	-	-
of which: Collateralised by residential immovable property		2,237	172	2,237	-	-	-	-	-
of which: Non-financial corporations		3,271	778	3,271	-	-	-	-	-
of which: Small and Medium-sized Enterprises		2,221	582	2,221	-	-	-	-	-
of which: Collateralised by commercial immovable property		2,165	627	2,165	-	-	-	-	-

Credit Risk

The following table provide an overview of the stock of newly originated loans and advances subject to public guarantee schemes introduced in response to Covid-19 crisis as at 31 December 2022 and 30 June 2022.

Table 25: Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to Covid-19 crisis

	31 December 2022			
	Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
		of which: forborne	Public guarantees received	Inflows to non-performing exposures
	€ million	€ million	€ million	€ million
Newly originated loans and advances subject to public guarantee schemes	**1,196**	**2**	**660**	**6**
of which: Households	-			-
of which: Collateralised by residential immovable property	-			-
of which: Non-financial corporations	1,196	2	660	6
of which: Small and Medium-sized Enterprises	825			4
of which: Collateralised by commercial immovable property	63			-

	30 June 2022			
	Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
		of which: forborne	Public guarantees received	Inflows to non-performing exposures
	€ million	€ million	€ million	€ million
Newly originated loans and advances subject to public guarantee schemes	1,379	1	730	4
of which: Households	-			-
of which: Collateralised by residential immovable property	-			-
of which: Non-financial corporations	1,379	1	730	4
of which: Small and Medium-sized Enterprises	930			4
of which: Collateralised by commercial immovable property	37			-

Credit Risk

4.6 Standardised approach

The Group applies the Standardised approach for all subsidiaries exposures and for a part of the Bank's retail loans. Moreover, the Standardised approach is applied for credit exposures with sovereign and institutional counterparties, as well as with corporate bond issuers, for which a permanent exemption has been granted by the BoG.

Credit ratings are retrieved from External Credit Assessment Institutions (ECAIs), such as Moody's or Standard & Poor's or Fitch. In the cases where more than one rating is available, the second better rating is used.

ECAIs are not used for loans' portfolios directly, but only in cases when they are guaranteed by central governments or institutions (risk substitution). In such a case, the ECAIs used are the same as the ones described above.

The table below presents Standardised exposures on two different basis (before CCF and CRM and after CCF and CRM) as at 31 December 2022 and 30 June 2022.

Table 26: EU CR4 - Standardised approach – Credit risk exposure and CRM effects

	31 December 2022					
Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet exposures € million	Off-balance-sheet exposures € million	On-balance-sheet exposures € million	Off-balance-sheet amount € million	RWEA € million	RWEA density %
Central governments or central banks	27,354	-	31,366	-	5,373	17%
Regional government or local authorities	25	1	24	-	5	21%
Public sector entities	529	-	1,065	-	529	50%
Multilateral development banks	39	-	608	-	-	0%
International organisations	-	-	-	-	-	0%
Institutions	2,374	124	2,471	81	1,220	48%
Corporates	6,558	1,390	5,623	338	5,221	88%
Retail	2,710	1,070	2,524	181	1,922	71%
Secured by mortgages on immovable property	3,987	22	3,987	17	1,436	36%
Exposures in default	289	6	284	3	339	118%
Exposures associated with particularly high risk	259	102	253	14	398	149%
Covered bonds	360	-	361	-	43	12%
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	0%
Collective investment undertakings	19	-	19	-	14	74%
Equity	252	-	252	-	630	250%
Other items	4,282	-	4,282	-	3,527	82%
Total	**49,037**	**2,715**	**53,119**	**634**	**20,657**	**38%**

Credit Risk

	30 June 2022					
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
Exposure classes	On Balance sheet amount € million	Off Balance sheet amount € million	On Balance sheet amount € million	Off Balance sheet amount € million	RWEA € million	RWEA density %
Central governments or central banks	26,963	-	31,094	-	5,329	17%
Regional government or local authorities	27	1	26	-	6	23%
Public sector entities	742	-	1,666	-	742	45%
Multilateral development banks	14	-	423	-	-	0%
International organisations	-	-	-	-	-	0%
Institutions	2,018	118	2,124	76	971	44%
Corporates	6,262	1,411	5,314	332	4,969	88%
Retail	2,648	891	2,465	146	1,868	72%
Secured by mortgages on immovable property	3,921	21	3,921	16	1,410	36%
Exposures in default	292	6	286	4	321	111%
Exposures associated with particularly high risk	259	141	253	24	413	149%
Covered bonds	343	-	344	-	42	12%
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	0%
Collective investment undertakings	19	-	19	-	14	74%
Equity	212	-	212	-	530	250%
Other items	4,364	-	4,364	-	3,613	83%
Total	48,084	2,589	52,511	598	20,228	38%

(1) Exposures subject to counterparty credit risk are not included in the table.

(2) The table above does not include securitisations.

(3) The increase in the institutions is mainly due to the increased position of debt securities and the margin accounts.

(4) The decrease in the Public sector entities is mainly due to the amount of € 210 million, which was refunded to the Bank by Hellenic Deposit and Investment Guarantee Fund based to the respective law's amendments.

Credit Risk

The table below presents the credit exposures post conversion factor and post risk mitigation techniques (i.e. collaterals), broken down to different credit quality steps as at 31 December 2022 and 30 June 2022.

Table 27: EU CR5 – Standardised approach

Exposure classes	Risk weightings - 31 December 2022																
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total	Of which unrated
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Central governments or central banks	26,716	-	-	-	143	-	230	-	-	3,642	-	635	-	-	-	31,366	4,292
Regional government or local authorities	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	24	24
Public sector entities	537	-	-	-	-	-	-	-	-	528	-	-	-	-	-	1,065	529
Multilateral development banks	608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	608	-
International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	735	-	-	-	714	-	253	-	-	648	202	-	-	-	-	2,552	226
Corporates	-	-	-	-	26	-	130	-	-	5,751	54	-	-	-	-	5,961	5,045
Retail	-	-	-	-	-	-	-	-	2,705	-	-	-	-	-	-	2,705	2,570
Secured by mortgages on immovable property	-	-	-	-	-	3,396	608	-	-	-	-	-	-	-	-	4,004	3,988
Exposures in default	-	-	-	-	-	-	-	-	-	182	105	-	-	-	-	287	265
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	267	-	-	-	-	267	254
Covered bonds	-	-	-	295	66	-	-	-	-	-	-	-	-	-	-	361	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unit or shares in collective investment undertakings	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	19	-
Equity	-	-	-	-	-	-	-	-	-	-	-	252	-	-	-	252	252
Other items	729	-	-	-	33	-	-	-	-	3,520	-	-	-	-	-	4,282	4,282
TOTAL	**29,325**	**-**	**-**	**295**	**1,006**	**3,396**	**1,221**	**-**	**2,724**	**14,271**	**628**	**887**	**-**	**-**	**-**	**53,753**	**21,727**

Exposure classes	Risk weightings - 30 June 2022																
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total	Of which unrated
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Central governments or central banks	26,432	-	-	-	131	-	223	-	-	3,719	-	589	-	-	-	31,094	4,303
Regional government or local authorities	-	-	-	-	25	-	-	-	-	1	-	-	-	-	-	26	26
Public sector entities	924	-	-	-	-	-	-	-	-	742	-	-	-	-	-	1,666	742
Multilateral development banks	423	-	-	-	-	-	-	-	-	-	-	-	-	-	-	423	-
International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	625	-	-	-	720	-	252	-	-	406	197	-	-	-	-	2,200	243
Corporates	-	-	-	-	26	-	111	-	-	5,438	71	-	-	-	-	5,646	4,821
Retail	-	-	-	-	-	-	-	-	2,611	-	-	-	-	-	-	2,611	2,426
Secured by mortgages on immovable property	-	-	-	-	-	3,378	559	-	-	-	-	-	-	-	-	3,937	3,921
Exposures in default	-	-	-	-	-	-	-	-	-	229	61	-	-	-	-	290	279
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	277	-	-	-	-	277	253
Covered bonds	-	-	-	263	81	-	-	-	-	-	-	-	-	-	-	344	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unit or shares in collective investment undertakings	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	19	-
Equity	-	-	-	-	-	-	-	-	-	-	-	212	-	-	-	212	212
Other items	718	-	-	-	41	-	-	-	-	3,605	-	-	-	-	-	4,364	4,362
TOTAL	29,122	-	-	263	1,024	3,378	1,145	-	2,630	14,140	606	801	-	-	-	53,109	21,588

(1) Exposures subject to counterparty credit risk are not included in the table.
(2) Credit exposures shown in the above table do not include goodwill, intangible assets and deferred tax, which are deducted from, own funds.
(3) The decrease in the Public sector entities is mainly due to the amount of € 210 million, which was refunded to the Bank by Hellenic Deposit and Investment Guarantee Fund based to the respective law's amendments.

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4.7 Internal Ratings Based (IRB) approach

4.7.1 Exposures subject to IRB approach

Eurobank Group (the "Bank" or the "Group") first applied the Basel II framework under the Standardised approach in January 2007 and included the respective risk asset ratio figures in its published financial statements. Until that date the Group had been applying the Basel I rules.

In June 2008, the Group received the approval of BoG to use the Internal Ratings Based (IRB) approach to calculate the capital requirement for credit risk. Therefore, with effect from 1 January 2008 the Group applies:

- The Foundation IRB approach to calculate risk weighted assets for the corporate loans' portfolio of Eurobank S.A. in Greece;
- The Advanced IRB for the majority of the retail loans' portfolio of the Bank, i.e. mortgages, small business lending, credit cards and revolving credits in consumer lending;
- From September 2009 the Foundation IRB approach was applied for the corporate loans' portfolio of Eurobank Leasing S.A. in Greece;
- From March 2010, the Advanced IRB approach was applied for the Bank's portfolio of personal and car loans;
- In October 2021, following the demerger of Eurobank Leasing Single Member S.A. the Bank acquired the majority of Leasing portfolio, without any change in the approach followed for capital requirements calculations.

The implementation of IRB covers 72.2% of the Group's lending portfolio excluding portfolio segments which are immaterial in terms of size and risk profile as well as, permanent exemptions.

Table 28: Exposures subject to IRB approach

	31 December 2022 € million	30 June 2022 € million
Credit risk (pursuant IRB Approach)		
- Corporate exposures (Foundation IRB approach) and specialised lending (Slotting methodology) [1]	14,665	15,690
- Retail exposures that exceed € 1 million (Advanced IRB approach)	174	228
Retail exposures	-	-
- Secured by immovable property - non SME	5,840	5,795
- Qualifying revolving retail exposures	1,773	1,771
- SME exposures	2,329	2,313
- Other retail exposures	1,320	1,308
Equity	237	225
Credit risk total, IRB approach	**26,338**	27,330

[1] The decrease is due to Wave synthetic securitisations (€ 3 billion) counterbalanced by the increase in new originations (€ 2 billion).

4.7.2 Risk classifications

The Bank's risk classifications can be divided into the following main categories:

- rating of large corporate and medium size customers; and
- credit scores assigned to retail customers.

(a) Rating of large corporate and medium size customers

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The Bank has decided upon the differentiation of rating models for corporate banking, in order to better reflect the risk for customers with different characteristics. Hence, rating models are employed for a number of general, as well as specific customer segments:

- **Traditional corporate lending:**
  - Moody's Risk Advisor (MRA).
  - Internal credit rating for those customers that cannot be rated by MRA.

MRA is a rating system that aggregates quantitative and qualitative information on individual obligors to perform the assessment of their creditworthiness and determine the credit rating for the obligor. It takes into account the company's financial performance, its cash flows, industry sector trends, peers' performance, as well as qualitative assessment of management, the company's status, market and industry structural factors. MRA is used for the assessment of all legal entities with full accountancy tax books irrespective of their legal form and is calibrated on the Greek corporate environment.

Certain types of companies cannot be analysed with MRA due to the special characteristics of their financial statements such as insurance companies, state-owned organizations, brokerage firms and start ups. In such cases an internal credit rating system (ICR) is applied. It is a borrower rating system in the form of a statistical scorecard and, similarly to MRA, it combines quantitative and qualitative assessment criteria (such as size, years in business, credit history, industry sector etc.).

Customers are classified with respect to their credit worthiness to 11 Borrower rating categories. Categories 1 to 3 correspond to low risk customers, whereas categories 4 to 6 to customers with medium credit risk. Categories 7 to 9 apply to customers with higher risk who are monitored more closely. Categories 10 and 11 apply to non-performing exposures and write offs respectively.

The Bank has re-developed the MRA and ICR rating models and applied the new models in the calculation of own fund requirements since June 2021, following relevant ECB approval.

In addition, the Bank performs an overall assessment of corporate customers, based both on the borrower rating of the obligors (MRA or ICR) and the collaterals and guarantees referred to in its approved credit limit, using a 14 grade rating scale. Credit exposure is subject to detailed reviews by the appropriate approval level of the Bank based on the respective transactional rating (TR). Low risk corporate customers are reviewed at least once a year, whereas higher risk customers are reviewed more frequently.

- **Specialised lending (shipping, real estate and project finance):** slotting methodology

For the specialised lending portfolios i.e. the primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of the commercial enterprise, the Bank utilizes the Slotting Method by adapting and refining the CRD criteria to the Bank's risk practices. Customers falling in the specialised lending category (shipping, real estate and project finance) are classified in 5 categories: strong, good, satisfactory, weak and default. Each of the 5 categories is associated with a specific risk weight and EL percentage.

The fundamental standards underlying the Group's centralised loan approval and rating processes are to review the global exposure of the customer and to use the 'four-eyes' principle, which requires each credit limit/rating to be evaluated by more than one individual. Ratings are approved by Credit Committees according to the level of exposure involved and each committee has its own specific approval limit. Ratings of customers whose exposure exceed Credit Committees' thresholds are reviewed by the Group's Central Committee. The Credit Committees are composed of senior managers from different business units, as well as from risk management and each committee has its own independent chairman.

As a general rule, each corporate customer is rated separately. For major corporate customers – where it is customary to assign a rating based on the customer's affiliation to a group or parent company – the rating of the parent company is transferred to the subsidiaries, if the Group believes that the parent company can and will guarantee the fulfilment of the obligations of its subsidiaries.

The rating systems described above are an integral part of the Corporate Banking decision making and risk management processes:

- the credit approval process, both at the origination and review process;
- the calculation of Economic Value Added (EVA) and risk-adjusted pricing; and
- the quality assessment of issuers of cheques prior to their pledge as collateral.

(b) Credit scores assigned to retail customers

The Bank assigns credit scores to its retail customers using a number of statistically based models both at origination and an ongoing basis through behavioral scorecards. Those models have been developed to predict, on the basis of available information, the probability of default (PD), loss given default (LGD) and exposure at default (EAD). They cover the entire spectrum of retail products (Credit Cards, Consumer Lending unsecured revolving credits, Car loans, Personal loans, Mortgages and Small Business Loans).

The models were developed based on the Bank's historical data and credit bureau data. Behavioral scores are calculated automatically on a monthly basis, thus ensuring that credit risk assessments are up to date.

The models are used in the credit approval process, in credit limit management, as well as in the collections' process for the prioritization of the accounts in terms of handling. Furthermore, the models have been often used for the risk segmentation of the customers. They are also utilised for risk based pricing in particular segments or new products introduced as well as in the calculation of the Economic Value Added (EVA) and Risk Adjusted Return On Capital (RaRoC) measures.

All of the above processes are centralised and based on the 'four-eyes' principle.

Retail exposures are grouped into homogeneous pools (refer to credit risk measurement in paragraph 4.7.4(e)).

4.7.3 Rating process and models' monitoring

The Bank considers the process and periodic review of credit policy implementation to be of critical importance, as they enable both the integration of the latest market information and analysis into the decision process and ensure the necessary uniformity in the face of the customer. Accordingly, a comprehensive credit policy manual is utilised on the extension and monitoring of credit, detailing the guiding principles, as well as specific rules relating to lending policies.

The credit rating process is also monitored independently by the Group Credit Control Sector via post approval control and evaluation of all credit portfolios through field reviews (case by case) for corporate lending.

Group Credit Risk Capital Adequacy Control Sector monitors the capacity of the rating models and the associated risk parameters on PD, LGD and EAD on an on going basis.

The Group Model Validation & Governance Sector is performing independent annual validations of the IRB models. The scope of the Sector is to:

- Establish and monitor the governance framework for the models used by the Group;
- Perform an independent validation of significant models used by the Group, in order to ensure that the results produced are correct, cover fully business needs, as well as that the methodologies and tools applied are in alignment with industry standards and the corresponding regulatory requirements; and
- Maintain the Group model's registry.

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The Bank's validation policy follows a procedure that complies with international best practices and regulatory requirements. The Bank verifies the validity of the rating models and scoring systems on an annual basis and the validation includes both quantitative and qualitative aspects.

The quantitative validation includes statistical tests relating to the following:

- Model stability reports such as population stability, comparison of actual and expected score distributions and characteristic analysis;
- Discriminatory power of rating models i.e. the ability to distinguish default risk on a relative basis;
- Accuracy/backtesting, i.e. comparison of ex ante probabilities of default and other risk parameters and ex post observed default/loss/credit exposure as defined for regulatory purposes level.

The validation of risk parameters is based on historical in house data utilising confidence intervals or market data/benchmarks, where such benchmarks exist. The qualitative assessment includes the use of the models, data, model design, structures and processes underlying the rating systems. In addition to the annual validation of the models, the Bank has established a quarterly monitoring procedure to assess the significance of any changes.

Validation procedures are documented and regularly reviewed and reported to the BRC. Group Internal Audit also independently reviews the validation process annually.

4.7.4 Credit risk measurement

The credit risk framework is articulated around two measures: expected loss (EL) and unexpected loss (UL) for credit risk.

- EL is the expected annual credit loss as defined in paragraph (c) below;
- UL is defined as the volatility (or one standard deviation) of annual losses. If losses always equaled their expected levels then there would be no uncertainty. UL outlines the risk arising from volatility in loss levels and thus in earnings.

The core credit risk parameters included in the estimation of expected loss, unexpected loss and credit RWAs are: Probability of Default (PD), Loss Given Default (LGD), credit exposure as defined for regulatory purposes (EAD) and Effective Maturity (M).

(a) Probability of Default (PD)

The PD represents the probability that a customer will default on his credit obligation within the next 12 months. The definition of default used by the Bank is consistent with the requirements of the CRD and BoG.

The Bank's historical default data have been used in developing PD estimates. For each grade or pool, the long term average default rate expanding over a 10 years period is used as reference when assessing the PD values.

Under the Bank's validation framework, models are validated at least annually. This back testing is performed in order to timely identify possible misalignments of the model or possible reverse trends of the PDs. In this way, the Bank reassures that the PDs used are representative of the portfolios' quality and no underestimation underlies the information disclosed.

(b) Loss Given Default (LGD)

LGD represents the loss on an exposure after a customer defaults. It is expressed as a percentage of the exposure that the Bank expects to lose at the point of default.

The first step in the development process of behavioral LGD models or segments for the Retail portfolios of the Bank was to calculate realised (historical) LGD for a significant number of years starting before 2000. Data was collected and realised losses were calculated taking into account the concept of economic loss. To calculate historical LGD values for retail exposures, the workout LGD method was employed.

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The statistical modeling technique employed for the development of behavioral LGD models for consumer lending was Stepwise Linear Regression. This technique is used to first select the most predictive characteristics and then to determine the weights for each variable. For the remaining portfolios the segmentation approach was used for estimating the LGD, based on material loss drivers.

When determining the final parameter, the Bank allows for uncertainty in the data and also applies an additional margin for economic downturn, by reference to external data.

For corporate lending which is under Foundation IRB, the supervisory LGD parameters are applied.

(c) Credit exposure as defined for regulatory purposes (EAD)

For estimating credit exposures for regulatory purposes, future draw downs are taken into account through the use of Credit Conversion Factors (CCFs).

This is meaningful only for products with a risk of drawings that is loan commitments, credit cards and the like, as ordinary loans do not involve a risk of future drawings. Conversion factors are influenced by the Bank's ability to identify slow paying borrowers at an early stage and reduce their access to additional drawings.

CCF estimates for the retail portfolios of the Bank are based on the Bank's historical data. As in the LGD estimation, the Bank employed statistical modeling techniques for consumer lending products (credit cards and open line) and for small business revolving and overdraft facilities, based on key drivers.

It is noted that in some cases credit exposure as defined for regulatory purposes is observed to be lower than the current balance outstanding. In these cases a capping has been applied at the pool design stage and credit exposure as defined for regulatory purposes has been set to equal current balance outstanding, as stipulated by CRD, thus allowing for an additional margin of conservatism.

For corporate lending which is under Foundation IRB, the supervisory CCF parameters are applied.

(d) Effective Maturity (M)

For corporate lending which is under Foundation IRB, the supervisory parameter is applied (i.e. 2.5 years).

(e) Pools (retail asset classes)

For retail lending portfolios, after building the models, ratings have been defined for the risk parameters (PD, LGD and CCF) with the purpose of smoothing out fluctuations by score in the development sample and help the derivation of statistically reliable estimates of the relationship between the score and PD, LGD and CCF, respectively.

The functional relationship between the score and the risk parameter was used to create a harmonised rating scale of PD, LGD and CCF across all retail portfolios. For example, the harmonised PD Rating 1 corresponds to the same PD range regardless of unit, product or scorecard in use.

Rated exposures have been assigned into particular pools, each containing groups of sufficiently homogenous exposures to allow for accurate and consistent estimation of loss characteristics at pool level.

Pools' setting for the retail lending portfolios was driven by a number of segmentation variables (product, financial status, time on books, current delinquency status, etc.), as well as the score. All these provide for a meaningful differentiation of risk as the score is based on the assessment of numerous variables (borrower and transaction characteristics).

Back testing and comparison analysis with external data, where available, are conducted at least annually to validate the risk parameters' estimations and pools, as described in rating process and models' monitoring in paragraph 4.7.3.

The Group has received approval for using the internal rating models and all detailed validations of the parameters were submitted to and reviewed by the regulator, as part of the IRB approval process and also as part of the ongoing supervisory

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monitoring. Annual validation results and actions taken (redevelopment or refit of scorecards; calibration of risk parameters of PD, LGD and EAD) are also independently reviewed by Internal Audit as part of the annual recurring Basel III compliance audit in accordance with BoG Governor's Act 2577. In the context of the implementation of the new definition of default, the Bank proceeded with the calibration of all IRB models under the new definition of default and applied them in the calculation of own funds requirements since June 2021 following relevant ECB approval.

4.7.5 Exposures subject to IRB approach

The following tables present the back testing results for the PD parameter for the full spectrum of the models applied in both Retail and Corporate portfolios. The purpose of the back testing is to identify deviations between the PDs produced by the internal models and actual default rates observed. It is noted that the PDs presented below are calibrated to the long run average default rate thus they may deviate from the observed one year default rates.

Table 29: EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale)

	31 December 2022						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
	0.00 to <0.15	75,162	30	0.0%	0.1%	0.1%	0.2%
	0.00 to <0.10	74,081	30	0.0%	0.1%	0.1%	0.2%
	0.10 to <0.15	1,081	-	0.0%	0.1%	0.1%	0.1%
	0.15 to <0.25	38,908	53	0.1%	0.2%	0.2%	0.2%
	0.25 to <0.50	120,918	193	0.2%	0.4%	0.3%	0.4%
	0.50 to <0.75	3,476	9	0.3%	0.5%	0.5%	1.2%
	0.75 to <2.50	207,856	1,472	0.7%	1.3%	1.6%	1.5%
	0.75 to <1.75	94,319	717	0.8%	1.3%	1.1%	1.5%
Total A-IRB	1.75 to <2.5	113,537	755	0.7%	2.1%	2.0%	1.7%
	2.50 to <10.00	307,312	7,733	2.5%	5.5%	4.9%	4.5%
	2.5 to <5	176,716	2,553	1.4%	3.7%	3.6%	3.2%
	5 to <10	130,596	5,180	4.0%	7.4%	6.7%	6.5%
	10.00 to <100.00	84,614	14,042	16.6%	33.5%	30.0%	25.1%
	10 to <20	43,371	4,028	9.3%	15.2%	13.8%	10.7%
	20 to <30	12,111	1,733	14.3%	25.9%	25.3%	18.8%
	30.00 to <100.00	29,132	8,281	28.4%	50.8%	56.0%	41.6%
	100.00 (Default)	94,614	-	0.0%	100.0%	100.0%	0.0%

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	PD range	31 December 2022 Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historical annual default rate %
Corporates - SME with own estimates of LGD or conversion factors	0.00 to <0.15	2	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	2	-	0.0%	0.1%	0.1%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	6	-	0.0%	0.0%	0.2%	0.0%
	0.25 to <0.50	49	-	0.0%	0.3%	0.3%	0.0%
	0.50 to <0.75	5	-	0.0%	0.6%	0.5%	0.0%
	0.75 to <2.50	165	6	3.6%	1.3%	1.4%	1.8%
	0.75 to <1.75	158	6	3.8%	1.3%	1.4%	2.0%
	1.75 to <2.5	7	-	0.0%	0.0%	2.5%	1.5%
	2.50 to <10.00	307	5	1.6%	5.7%	5.7%	6.0%
	2.5 to <5	154	5	3.2%	4.2%	4.1%	2.6%
	5 to <10	153	-	0.0%	7.3%	7.3%	9.6%
	10.00 to <100.00	260	20	7.7%	27.3%	23.0%	27.7%
	10 to <20	134	12	9.0%	14.0%	14.3%	12.8%
	20 to <30	64	-	0.0%	23.9%	22.7%	18.9%
	30.00 to <100.00	62	8	12.9%	41.8%	42.3%	44.7%
	100.00 (Default)	73	-	0.0%	100.0%	100.0%	0.0%

	PD range	31 December 2022 Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historical annual default rate %
Retail - Secured by immovable property SME - with own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.00 to <0.10	-	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	-	-	0.0%	0.0%	0.0%	0.0%
	0.25 to <0.50	-	-	0.0%	0.3%	0.0%	0.0%
	0.50 to <0.75	332	2	0.6%	0.5%	0.5%	0.6%
	0.75 to <2.50	3,138	105	3.3%	1.3%	1.4%	1.2%
	0.75 to <1.75	2,900	87	3.0%	1.3%	1.3%	1.7%
	1.75 to <2.5	238	18	7.6%	2.4%	2.4%	0.6%
	2.50 to <10.00	4,920	193	3.9%	5.4%	5.4%	6.8%
	2.5 to <5	3,101	111	3.6%	4.0%	4.2%	3.3%
	5 to <10	1,819	82	4.5%	7.3%	7.5%	9.5%
	10.00 to <100.00	6,459	910	14.1%	38.2%	32.2%	29.9%
	10 to <20	1,927	134	7.0%	13.7%	13.6%	9.2%
	20 to <30	2,077	178	8.6%	24.9%	24.9%	20.6%
	30.00 to <100.00	2,455	598	24.4%	56.3%	53.0%	43.2%
	100.00 (Default)	3,643	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

Retail - Secured by immovable property non-SME - with own estimates of LGD or conversion factors

PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
31 December 2022						
			%	%	%	%
0.00 to <0.15	620	-	0.0%	0.1%	0.1%	0.0%
0.00 to <0.10	-	-	0.0%	0.0%	0.0%	0.0%
0.10 to <0.15	620	-	0.0%	0.1%	0.1%	0.0%
0.15 to <0.25	5,886	23	0.4%	0.2%	0.2%	0.4%
0.25 to <0.50	15,287	68	0.4%	0.4%	0.4%	1.2%
0.50 to <0.75	-	-	0.0%	0.0%	0.0%	0.4%
0.75 to <2.50	29,898	338	1.1%	1.3%	1.3%	2.3%
0.75 to <1.75	29,827	338	1.1%	1.3%	1.3%	2.1%
1.75 to <2.5	71	-	0.0%	1.8%	1.8%	3.2%
2.50 to <10.00	25,317	960	3.8%	6.4%	6.2%	4.4%
2.5 to <5	9,142	222	2.4%	3.6%	3.6%	4.0%
5 to <10	16,175	738	4.6%	7.8%	7.7%	5.0%
10.00 to <100.00	17,803	2,749	15.4%	32.6%	29.9%	26.4%
10 to <20	8,530	698	8.2%	16.2%	16.3%	8.4%
20 to <30	3,235	424	13.1%	27.1%	27.0%	16.2%
30.00 to <100.00	6,038	1,627	26.9%	47.9%	50.6%	42.2%
100.00 (Default)	6,690	-	0.0%	100.0%	100.0%	0.0%

Retail - Qualifying revolving - with own estimates of LGD or conversion factors

PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
31 December 2022						
			%	%	%	%
0.00 to <0.15	74,078	30	0.0%	0.1%	0.1%	0.2%
0.00 to <0.10	74,078	30	0.0%	0.1%	0.1%	0.2%
0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.1%
0.15 to <0.25	27,797	16	0.1%	0.2%	0.2%	0.2%
0.25 to <0.50	102,812	100	0.1%	0.3%	0.3%	0.5%
0.50 to <0.75	-	-	0.0%	0.0%	0.0%	1.3%
0.75 to <2.50	158,746	787	0.5%	1.6%	1.7%	2.0%
0.75 to <1.75	47,957	121	0.3%	1.0%	1.0%	1.7%
1.75 to <2.5	110,789	666	0.6%	2.0%	2.0%	3.0%
2.50 to <10.00	174,058	3,219	1.8%	4.8%	5.0%	6.7%
2.5 to <5	90,958	892	1.0%	3.6%	3.5%	4.9%
5 to <10	83,100	2,327	2.8%	6.5%	6.5%	9.8%
10.00 to <100.00	39,224	5,661	14.4%	24.2%	27.7%	29.3%
10 to <20	24,486	2,051	8.4%	13.1%	12.5%	19.1%
20 to <30	3,177	643	20.2%	23.4%	22.0%	31.0%
30.00 to <100.00	11,561	2,967	25.7%	50.1%	61.3%	57.7%
100.00 (Default)	55,210	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	31 December 2022						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Retail - Other SME - with own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.00 to <0.10	-	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	-	-	0.0%	0.0%	0.0%	0.0%
	0.25 to <0.50	5	-	0.0%	0.3%	0.3%	0.3%
	0.50 to <0.75	3,139	7	0.2%	0.5%	0.5%	0.5%
	0.75 to <2.50	11,391	129	1.1%	1.5%	1.5%	0.6%
	0.75 to <1.75	9,603	63	0.7%	1.3%	1.3%	0.8%
	1.75 to <2.5	1,788	66	3.7%	2.4%	2.4%	0.5%
	2.50 to <10.00	11,417	324	2.8%	4.9%	4.8%	2.9%
	2.5 to <5	7,137	154	2.2%	3.6%	3.7%	1.9%
	5 to <10	4,280	170	4.0%	6.6%	6.8%	3.9%
	10.00 to <100.00	6,695	979	14.6%	30.6%	26.9%	21.7%
	10 to <20	3,286	275	8.4%	14.4%	14.0%	7.6%
	20 to <30	1,535	193	12.6%	26.0%	25.9%	17.2%
	30.00 to <100.00	1,874	511	27.3%	53.1%	50.3%	37.6%
	100.00 (Default)	7,949	-	0.0%	100.0%	100.0%	0.0%

	31 December 2022						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Retail - Other non-SME - with own estimates of LGD or conversion factors	0.00 to <0.15	462	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	1	-	0.0%	0.1%	0.1%	0.0%
	0.10 to <0.15	461	-	0.0%	0.1%	0.1%	0.0%
	0.15 to <0.25	5,219	14	0.3%	0.2%	0.2%	0.3%
	0.25 to <0.50	2,765	25	0.9%	0.4%	0.4%	0.4%
	0.50 to <0.75	-	-	0.0%	0.0%	0.0%	0.8%
	0.75 to <2.50	4,518	107	2.4%	1.3%	1.4%	1.0%
	0.75 to <1.75	3,874	102	2.6%	1.3%	1.3%	0.9%
	1.75 to <2.5	644	5	0.8%	2.1%	2.1%	1.2%
	2.50 to <10.00	91,293	3,032	3.3%	4.5%	4.3%	3.2%
	2.5 to <5	66,224	1,169	1.8%	3.6%	3.6%	2.0%
	5 to <10	25,069	1,863	7.4%	6.8%	6.3%	6.1%
	10.00 to <100.00	14,173	3,723	26.3%	34.9%	36.9%	26.5%
	10 to <20	5,008	858	17.1%	16.0%	15.5%	9.1%
	20 to <30	2,023	295	14.6%	27.4%	27.7%	17.5%
	30.00 to <100.00	7,142	2,570	36.0%	49.8%	54.4%	46.2%
	100.00 (Default)	21,049	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historical annual default rate %
		31 December 2022					
Total F-IRB	0.00 to <0.15	88	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	45	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	43	-	0.0%	0.1%	0.1%	0.0%
	0.15 to <0.25	28	-	0.0%	0.2%	0.2%	0.0%
	0.25 to <0.50	13	-	0.0%	0.3%	0.3%	0.0%
	0.50 to <0.75	36	-	0.0%	0.6%	0.6%	0.8%
	0.75 to <2.50	346	-	0.0%	1.3%	1.5%	1.5%
	0.75 to <1.75	181	-	0.0%	1.1%	1.2%	1.4%
	1.75 to <2.5	165	-	0.0%	1.9%	1.9%	1.8%
	2.50 to <10.00	577	1	0.2%	4.7%	5.1%	2.8%
	2.5 to <5	345	1	0.3%	3.0%	3.7%	2.0%
	5 to <10	232	-	0.0%	6.8%	7.0%	3.9%
	10.00 to <100.00	804	24	3.0%	23.0%	26.0%	7.7%
	10 to <20	347	2	0.6%	13.3%	13.4%	6.8%
	20 to <30	115	3	2.6%	23.2%	23.0%	9.0%
	30.00 to <100.00	342	19	5.6%	40.3%	35.0%	8.2%
	100.00 (Default)	994	-	0.0%	100.0%	100.0%	0.0%

	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historical annual default rate %
		31 December 2022					
Corporates - SME without own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	0.0%	0.1%	0.0%
	0.00 to <0.10	-	-	0.0%	0.0%	0.1%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.1%	0.0%
	0.15 to <0.25	8	-	0.0%	0.2%	0.2%	0.0%
	0.25 to <0.50	-	-	0.0%	0.0%	0.4%	0.0%
	0.50 to <0.75	-	-	0.0%	0.6%	0.6%	0.8%
	0.75 to <2.50	277	-	0.0%	1.5%	1.6%	1.5%
	0.75 to <1.75	127	-	0.0%	1.1%	1.2%	1.4%
	1.75 to <2.5	150	-	0.0%	1.9%	1.9%	1.8%
	2.50 to <10.00	399	1	0.3%	4.5%	5.0%	2.8%
	2.5 to <5	240	1	0.4%	3.2%	3.7%	2.0%
	5 to <10	159	-	0.0%	6.6%	7.1%	3.9%
	10.00 to <100.00	719	19	2.6%	22.2%	25.9%	7.7%
	10 to <20	315	2	0.6%	13.4%	13.3%	6.8%
	20 to <30	95	2	2.1%	22.9%	22.9%	9.0%
	30.00 to <100.00	309	15	4.9%	38.2%	34.5%	8.2%
	100.00 (Default)	930	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

Corporates - Other without own estimates of LGD or conversion factors

31 December 2022						
PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
			%	%	%	%
0.00 to <0.15	88	-	0.0%	0.1%	0.1%	0.0%
0.00 to <0.10	45	-	0.0%	0.0%	0.0%	0.0%
0.10 to <0.15	43	-	0.0%	0.1%	0.1%	0.0%
0.15 to <0.25	20	-	0.0%	0.2%	0.2%	0.0%
0.25 to <0.50	13	-	0.0%	0.3%	0.3%	0.0%
0.50 to <0.75	36	-	0.0%	0.6%	0.6%	0.8%
0.75 to <2.50	69	-	0.0%	1.2%	1.3%	1.3%
0.75 to <1.75	54	-	0.0%	1.1%	1.1%	1.3%
1.75 to <2.5	15	-	0.0%	1.9%	1.9%	1.4%
2.50 to <10.00	178	-	0.0%	4.8%	5.7%	2.7%
2.5 to <5	105	-	0.0%	2.8%	3.5%	0.9%
5 to <10	73	-	0.0%	6.8%	6.8%	4.7%
10.00 to <100.00	85	5	5.9%	27.2%	26.9%	5.3%
10 to <20	32	-	0.0%	12.6%	13.8%	8.1%
20 to <30	20	1	5.0%	24.0%	23.8%	8.6%
30.00 to <100.00	33	4	12.1%	51.0%	46.0%	3.3%
100.00 (Default)	64	-	0.0%	100.0%	100.0%	0.0%

Total A-IRB

31 December 2021						
PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
			%	%	%	%
0.00 to <0.15	75,214	11	0.0%	0.1%	0.1%	0.0%
0.00 to <0.10	74,434	11	0.0%	0.1%	0.1%	0.0%
0.10 to <0.15	780	-	0.0%	0.1%	0.1%	0.0%
0.15 to <0.25	114,913	174	0.2%	0.2%	0.2%	0.1%
0.25 to <0.50	112,935	297	0.3%	0.4%	0.3%	0.3%
0.50 to <0.75	5,064	75	1.5%	0.5%	0.5%	1.1%
0.75 to <2.50	455,564	2,180	0.5%	1.4%	1.4%	0.6%
0.75 to <1.75	355,880	1,503	0.4%	1.3%	1.2%	0.7%
1.75 to <2.5	99,684	677	0.7%	2.1%	2.1%	0.5%
2.50 to <10.00	290,886	6,617	2.3%	5.6%	4.9%	3.3%
2.5 to <5	164,529	2,822	1.7%	3.7%	3.6%	2.3%
5 to <10	126,357	3,795	3.0%	7.5%	6.7%	4.3%
10.00 to <100.00	82,396	11,227	13.6%	31.9%	30.0%	21.5%
10 to <20	46,167	3,757	8.1%	15.2%	13.8%	11.8%
20 to <30	17,324	2,575	14.9%	25.7%	25.3%	21.6%
30.00 to <100.00	18,905	4,895	25.9%	51.2%	55.9%	39.4%
100.00 (Default)	71,842	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
	0.00 to <0.15	-	-	0.0%	0.1%	0.0%	0.0%
	0.00 to <0.10	-	-	0.0%	0.1%	0.0%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	-	-	0.0%	0.2%	0.0%	0.0%
	0.25 to <0.50	-	-	0.0%	0.3%	0.0%	0.0%
	0.50 to <0.75	127	1	0.8%	0.5%	0.5%	0.4%
	0.75 to <2.50	313	11	3.5%	1.4%	1.4%	5.5%
Corporates - SME with own estimates of LGD or conversion factors	0.75 to <1.75	248	8	3.2%	1.4%	1.4%	6.5%
	1.75 to <2.5	65	3	4.6%	2.5%	2.5%	1.5%
	2.50 to <10.00	252	14	5.6%	5.6%	5.7%	8.0%
	2.5 to <5	133	10	7.5%	4.0%	4.1%	10.3%
	5 to <10	119	4	3.4%	7.2%	7.3%	5.2%
	10.00 to <100.00	75	12	16.0%	28.3%	23.0%	25.3%
	10 to <20	29	4	13.8%	14.2%	14.3%	17.4%
	20 to <30	37	6	16.2%	22.6%	22.7%	26.0%
	30.00 to <100.00	9	2	22.2%	44.2%	42.3%	33.9%
	100.00 (Default)	84	-	0.0%	100.0%	100.0%	0.0%

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
	0.00 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.00 to <0.10	-	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	-	-	0.0%	0.0%	0.0%	0.0%
	0.25 to <0.50	-	-	0.0%	0.0%	0.0%	0.0%
	0.50 to <0.75	378	9	2.4%	0.5%	0.5%	1.1%
	0.75 to <2.50	4,125	321	7.8%	1.4%	1.4%	8.3%
Retail - Secured by immovable property SME - with own estimates of LGD or conversion factors	0.75 to <1.75	3,903	309	7.9%	1.3%	1.3%	8.9%
	1.75 to <2.5	222	12	5.4%	2.4%	2.4%	1.7%
	2.50 to <10.00	6,471	562	8.7%	5.4%	5.4%	11.5%
	2.5 to <5	4,404	373	8.5%	4.2%	4.2%	12.5%
	5 to <10	2,067	189	9.1%	7.4%	7.5%	9.9%
	10.00 to <100.00	7,707	1,179	15.3%	34.5%	32.2%	22.5%
	10 to <20	2,502	282	11.3%	13.6%	13.6%	13.4%
	20 to <30	2,997	295	9.8%	25.0%	24.9%	16.4%
	30.00 to <100.00	2,208	602	27.3%	54.2%	52.8%	35.5%
	100.00 (Default)	3,623	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Retail - Secured by immovable property non-SME - with own estimates of LGD or conversion factors	0.00 to <0.15	484	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	-	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	484	-	0.0%	0.1%	0.1%	0.0%
	0.15 to <0.25	7,483	130	1.7%	0.2%	0.2%	1.6%
	0.25 to <0.50	15,289	221	1.5%	0.4%	0.4%	1.3%
	0.50 to <0.75	-	-	0.0%	0.0%	0.0%	0.0%
	0.75 to <2.50	28,033	779	2.8%	1.3%	1.3%	3.1%
	0.75 to <1.75	27,968	779	2.8%	1.3%	1.3%	3.1%
	1.75 to <2.5	65	-	0.0%	1.8%	1.8%	1.4%
	2.50 to <10.00	34,196	1,636	4.8%	6.3%	6.2%	8.3%
	2.5 to <5	9,351	416	4.5%	3.6%	3.6%	6.4%
	5 to <10	24,845	1,220	4.9%	7.8%	7.7%	9.2%
	10.00 to <100.00	18,598	2,918	15.7%	31.4%	30.0%	26.5%
	10 to <20	10,657	1,191	11.2%	16.2%	16.3%	17.4%
	20 to <30	4,548	757	16.7%	27.1%	27.0%	25.8%
	30.00 to <100.00	3,393	970	28.6%	49.7%	50.5%	43.0%
	100.00 (Default)	6,619	-	0.0%	100.0%	100.0%	0.0%

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Retail - Qualifying revolving - with own estimates of LGD or conversion factors	0.00 to <0.15	74,433	11	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	74,433	11	0.0%	0.1%	0.1%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	101,777	12	0.0%	0.2%	0.2%	0.0%
	0.25 to <0.50	94,899	41	0.0%	0.3%	0.3%	0.1%
	0.50 to <0.75	-	-	0.0%	0.0%	0.0%	0.0%
	0.75 to <2.50	411,784	738	0.2%	1.6%	1.4%	0.4%
	0.75 to <1.75	314,305	139	0.0%	1.0%	1.1%	0.3%
	1.75 to <2.5	97,479	599	0.6%	2.0%	2.0%	0.5%
	2.50 to <10.00	166,218	1,976	1.2%	4.8%	5.0%	1.9%
	2.5 to <5	87,255	620	0.7%	3.6%	3.5%	1.2%
	5 to <10	78,963	1,356	1.7%	6.5%	6.5%	2.7%
	10.00 to <100.00	37,972	3,357	8.8%	23.5%	27.7%	15.9%
	10 to <20	24,993	1,109	4.4%	13.2%	12.5%	8.2%
	20 to <30	5,315	689	13.0%	23.7%	22.0%	15.6%
	30.00 to <100.00	7,664	1,559	20.3%	50.4%	61.3%	35.1%
	100.00 (Default)	39,832	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
		31 December 2021					
				%	%	%	%
Retail - Other SME - with own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.00 to <0.10	-	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	-	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	-	-	0.0%	0.0%	0.0%	0.0%
	0.25 to <0.50	3	-	0.0%	0.3%	0.3%	0.0%
	0.50 to <0.75	4,559	65	1.4%	0.5%	0.5%	1.2%
	0.75 to <2.50	7,506	223	3.0%	1.4%	1.5%	2.0%
	0.75 to <1.75	5,707	160	2.8%	1.3%	1.3%	2.3%
	1.75 to <2.5	1,799	63	3.5%	2.4%	2.4%	1.4%
	2.50 to <10.00	10,510	447	4.3%	4.9%	4.8%	5.7%
	2.5 to <5	5,947	228	3.8%	3.6%	3.7%	6.0%
	5 to <10	4,563	219	4.8%	6.6%	6.8%	5.5%
	10.00 to <100.00	7,561	1,260	16.7%	28.9%	26.9%	22.8%
	10 to <20	3,216	267	8.3%	14.0%	14.1%	11.4%
	20 to <30	2,002	228	11.4%	26.0%	25.9%	18.3%
	30.00 to <100.00	2,343	765	32.7%	51.5%	50.3%	42.3%
	100.00 (Default)	7,791	-	0.0%	100.0%	100.0%	0.0%

	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
		31 December 2021					
				%	%	%	%
Retail - Other non-SME - with own estimates of LGD or conversion factors	0.00 to <0.15	297	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	1	-	0.0%	0.1%	0.1%	0.0%
	0.10 to <0.15	296	-	0.0%	0.1%	0.1%	0.0%
	0.15 to <0.25	5,653	32	0.6%	0.2%	0.2%	0.3%
	0.25 to <0.50	2,744	35	1.3%	0.4%	0.4%	1.3%
	0.50 to <0.75	-	-	0.0%	0.0%	0.0%	0.0%
	0.75 to <2.50	3,803	108	2.8%	1.4%	1.4%	3.7%
	0.75 to <1.75	3,749	108	2.9%	1.4%	1.3%	3.8%
	1.75 to <2.5	54	-	0.0%	2.1%	2.1%	0.4%
	2.50 to <10.00	73,239	1,982	2.7%	4.8%	4.3%	3.4%
	2.5 to <5	57,439	1,175	2.1%	3.6%	3.6%	2.5%
	5 to <10	15,800	807	5.1%	7.1%	6.3%	5.0%
	10.00 to <100.00	10,483	2,501	23.9%	34.8%	36.9%	29.5%
	10 to <20	4,770	904	19.0%	15.9%	15.5%	17.4%
	20 to <30	2,425	600	24.7%	27.2%	27.7%	27.3%
	30.00 to <100.00	3,288	997	30.3%	52.1%	54.5%	46.9%
	100.00 (Default)	13,893	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Total F-IRB	0.00 to <0.15	90	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	50	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	40	-	0.0%	0.1%	0.1%	0.0%
	0.15 to <0.25	18	-	0.0%	0.2%	0.2%	0.0%
	0.25 to <0.50	11	-	0.0%	0.3%	0.3%	0.0%
	0.50 to <0.75	34	-	0.0%	0.6%	0.6%	1.7%
	0.75 to <2.50	347	-	0.0%	1.3%	1.5%	1.8%
	0.75 to <1.75	172	-	0.0%	1.2%	1.2%	1.5%
	1.75 to <2.5	175	-	0.0%	1.9%	1.9%	2.6%
	2.50 to <10.00	615	-	0.0%	5.9%	4.8%	4.2%
	2.5 to <5	354	-	0.0%	3.5%	3.4%	3.2%
	5 to <10	261	-	0.0%	6.8%	7.0%	5.5%
	10.00 to <100.00	1,004	24	2.4%	26.0%	25.5%	10.3%
	10 to <20	379	3	0.8%	13.7%	13.6%	9.2%
	20 to <30	134	1	0.8%	23.6%	23.1%	13.1%
	30.00 to <100.00	491	20	4.1%	39.5%	38.3%	10.5%
	100.00 (Default)	1,955	-	0.0%	100.0%	100.0%	0.0%

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Corporates - SME without own estimates of LGD or conversion factors	0.00 to <0.15	4	-	0.0%	0.0%	0.0%	0.0%
	0.00 to <0.10	3	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	1	-	0.0%	0.0%	0.0%	0.0%
	0.15 to <0.25	-	-	0.0%	0.0%	0.2%	0.0%
	0.25 to <0.50	-	-	0.0%	0.0%	0.0%	0.0%
	0.50 to <0.75	3	-	0.0%	0.0%	0.0%	5.0%
	0.75 to <2.50	299	-	0.0%	1.5%	1.6%	1.6%
	0.75 to <1.75	139	-	0.0%	1.1%	1.2%	1.3%
	1.75 to <2.5	160	-	0.0%	1.9%	1.9%	2.6%
	2.50 to <10.00	412	-	0.0%	5.4%	5.0%	4.2%
	2.5 to <5	227	-	0.0%	3.7%	3.6%	3.4%
	5 to <10	185	-	0.0%	6.6%	7.1%	5.2%
	10.00 to <100.00	912	24	2.6%	25.1%	25.2%	11.0%
	10 to <20	349	3	0.9%	14.0%	13.6%	9.1%
	20 to <30	115	1	0.9%	22.9%	22.9%	12.9%
	30.00 to <100.00	448	20	4.5%	38.0%	37.7%	13.1%
	100.00 (Default)	1,862	-	0.0%	100.0%	100.0%	0.0%

Credit Risk

	31 December 2021						
	PD range	Number of obligors at the end of the previous year	of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
				%	%	%	%
Corporates - Other without own estimates of LGD or conversion factors	0.00 to <0.15	86	-	0.0%	0.1%	0.1%	0.0%
	0.00 to <0.10	47	-	0.0%	0.0%	0.0%	0.0%
	0.10 to <0.15	39	-	0.0%	0.1%	0.1%	0.0%
	0.15 to <0.25	18	-	0.0%	0.2%	0.2%	0.0%
	0.25 to <0.50	11	-	0.0%	0.3%	0.3%	0.0%
	0.50 to <0.75	31	-	0.0%	0.6%	0.6%	1.0%
	0.75 to <2.50	48	-	0.0%	1.2%	1.3%	2.8%
	0.75 to <1.75	33	-	0.0%	1.2%	1.1%	2.9%
	1.75 to <2.5	15	-	0.0%	1.9%	1.9%	2.4%
	2.50 to <10.00	203	-	0.0%	6.2%	4.5%	4.3%
	2.5 to <5	127	-	0.0%	3.2%	2.9%	2.2%
	5 to <10	76	-	0.0%	6.9%	6.9%	6.3%
	10.00 to <100.00	92	-	0.0%	28.8%	27.6%	7.4%
	10 to <20	30	-	0.0%	12.0%	13.5%	10.7%
	20 to <30	19	-	0.0%	24.1%	24.0%	14.3%
	30.00 to <100.00	43	-	0.0%	46.0%	43.5%	4.0%
	100.00 (Default)	93	-	0.0%	100.0%	100.0%	0.0%

Tables present the backtesting results of the PD parameter calibrated under the new definition of default (in effect since January 2021).

Note: Average historical annual default rate represents the average annual default rate of the period 2018-2022 (i.e. last five years).

Overall, the weighted average PDs have been calibrated in an economic cycle spanning from early 2006 and including the performance of the distressed financial period of the Greek economy up to and including December 2019. Recent years i.e. 2020-2022 are excluded from the calculation of long run average since they are affected by the COVID19 support programs. Long average PDs are higher than the annual default rates of 2022 (as presented in the column "% Defaulted accounts in the year"), since the macro economic environment has been improved since the peak of the financial crisis.

The default rate decreased during 2022 in the most material retail asset classes, i.e. in secured by immovable property non-SME (from 5.5% in 2021 to 4.4% in 2022) and in SBB asset classes (secured by immovable property SME from 11.1% to 8.2%, retail other SME from 6.6% to 4.4% and corporate SME with own estimates from 5% to 3.9% respectively). On the other hand, the default rate of the qualifying revolving exposures increased from 1.1% in 2021 to 1.7% in 2022 on a comparable basis (i.e. excluding inactive credit cards also for 2021), partly due to the exclusion of inactive credit cards from the calculation, while the retail other non-SME default rate increased from 4.8% to 5.8% respectively. In the corporate portfolio the default rate marginally increased from 1.1% in 2021 to 1.3% in 2022.

Table 30: EU CR9.1 – IRB approach – Back-testing of PD per exposure class (only for PD estimates according to point (f) of Article 180(1) CRR)

The current table is not applicable for Eurobank IRB portfolio since the Bank uses internal estimates based on the relevant rating systems.

Credit Risk

4.7.6 Risk profile of exposures subject to IRB approach

The following table presents corporate credit exposures broken down by PD band as at 31 December 2022 and 30 June 2022.

Table 31: EU CR6 – IRB approach – Credit risk exposures by exposure class and PD range

F-IRB	31 December 2022												
	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
	0.00 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	3	-		-	-
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	3	-		-	-
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	3	-		-	-
	0.15 to <0.25	30	78	90.0%	95	0.2%	54	0.0%	3	29.68	31.2%	-	(0.02287)
	0.25 to <0.50	-	-	0.0%	-	0.0%	-	0.0%	3	-		-	-
	0.50 to <0.75	33	-	0.0%	33	0.6%	1	0.0%	3	16	48.5%	-	(0.005)
	0.75 to <2.50	363	71	75.0%	394	1.5%	311	40.7%	3	304	77.2%	2	(1)
Corporates - SME without own estimates of LGD or conversion factors	0.75 to <1.75	223	34	72.0%	240	1.1%	154	39.7%	3	158	65.8%	1	(0.6)
	1.75 to <2.5	140	37	79.0%	155	1.9%	157	42.2%	3	147	94.8%	1	(0.5)
	2.50 to <10.00	589	223	62.0%	670	4.5%	448	41.6%	3	654	97.6%	13	(6)
	2.5 to <5	344	161	57.0%	407	3.2%	277	42.0%	3	360	88.5%	5	(3)
	5 to <10	245	62	71.0%	263	6.6%	171	40.9%	3	294	111.8%	7	(3)
	10.00 to <100.00	960	50	82.0%	882	22.2%	854	39.6%	3	1,359	154.1%	77	(61)
	10 to <20	543	31	80.0%	493	13.4%	309	39.7%	3	716	145.2%	26	(19)
	20 to <30	134	6	91.0%	126	22.9%	78	40.6%	3	207	164.3%	12	(10)
	30.00 to <100.00	283	12	84.0%	263	38.2%	467	38.9%	3	436	165.8%	39	(32)
	100.00 (Default)	836	23	84.0%	813	100.0%	842	40.6%	3	-	0.0%	330	(448)
Subtotal (exposure class)		**2,811**	**445**	**72.4%**	**2,887**	**36.2%**	**2,510**	**38.7%**	**3**	**2,363**	**81.8%**	**422**	**(516)**

F-IRB	31 December 2022												
	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
	0.00 to <0.15	2,210	1,230	69.0%	2,964	0.1%	110	44.1%	3	723	24.4%	1	(1.1)
	0.00 to <0.10	1,068	981	76.0%	1,704	0.04%	65	44.8%	3	324	19.0%	0.3	(0.7)
	0.10 to <0.15	1,143	249	59.0%	1,260	0.1%	45	43.2%	3	399	31.7%	0.5	(0.4)
	0.15 to <0.25	667	200	96.0%	838	0.2%	91	44.0%	3	386	46.1%	0.7	(0.2)
	0.25 to <0.50	499	280	87.0%	692	0.3%	15	44.2%	3	405	58.5%	0.9	(1.5)
	0.50 to <0.75	405	362	82.0%	645	0.6%	32	42.7%	3	493	76.4%	2	(1)
	0.75 to <2.50	378	202	62.0%	464	1.2%	81	44.1%	3	481	103.7%	2	(1)
Corporates - Other without own estimates of LGD or conversion factors	0.75 to <1.75	369	194	62.0%	450	1.1%	61	44.0%	3	463	102.9%	2	(1)
	1.75 to <2.5	9	7	84.0%	14	1.9%	20	44.9%	3	18	128.6%	0.1	(0.06)
	2.50 to <10.00	638	709	82.0%	1,130	4.8%	95	36.6%	3	1,584	140.2%	23	(16)
	2.5 to <5	81	597	88.0%	559	2.8%	33	31.0%	3	596	106.6%	7	(1)
	5 to <10	557	112	77.0%	571	6.8%	62	42.0%	3	988	173.0%	16	(14)
	10.00 to <100.00	177	45	81.0%	175	27.2%	65	40.1%	3	378	216.0%	19	(11)
	10 to <20	78	13	78.0%	73	12.6%	28	41.6%	3	155	212.3%	4	(2)
	20 to <30	50	18	93.0%	50	24.0%	16	37.1%	3	113	226.0%	4	(3)
	30.00 to <100.00	49	14	73.0%	52	51.0%	21	40.8%	3	110	211.5%	11	(5)
	100.00 (Default)	99	7	95.0%	102	100.0%	60	41.5%	3	-	0.0%	43	(49)
Subtotal (exposure class)		**5,073**	**3,035**	**76.8%**	**7,010**	**3.1%**	**549**	**42.6%**	**3**	**4,450**	**63.5%**	**92**	**(81)**
Total (all exposures classes)		**7,884**	**3,480**	**76.2%**	**9,897**	**12.8%**	**3,059**	**41.5%**	**3**	**6,813**	**68.8%**	**514**	**(597)**

Credit Risk

31 December 2022

A-IRB	PD range	On-balance sheet exposures € million	Off-balance-sheet exposures pre-CCF € million	Exposure weighted average CCF %	Exposure post CCF and post CRM € million	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity yrs	Risk weighted exposure amount after supporting factors € million	Density of risk weighted exposure amount %	Expected loss amount € million	Value adjust-ments and provisions € million
	0.00 to <0.15	1	2	6.8%	0.5	0.1%	1	42.4%	1	0.03	6.5%	0.0001	(0.009)
	0.00 to <0.10	1	2	6.8%	0.5	0.1%	1	42.4%	1	0.03	6.5%	0.0001	(0.009)
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.15 to <0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.25 to <0.50	16	5	3.1%	7	0.3%	12	30.4%	4	2	28.6%	0.005	(0.03)
	0.50 to <0.75	1	-	3.4%	0.2	0.6%	3	30.7%	2	0.1	28.6%	0.0004	(0.0004)
	0.75 to <2.50	45	6	9.4%	32	1.3%	43	29.2%	4	16	50.0%	0.1	(1)
Corporates - SME with own estimates of LGD or conversion factors	0.75 to <1.75	45	6	9.4%	32	1.3%	43	29.2%	4	16	50.0%	0.1	(1)
	1.75 to <2.5	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	2.50 to <10.00	61	8	10.6%	35	5.7%	57	21.0%	4	16	45.7%	0.4	(0.3)
	2.5 to <5	32	4	16.8%	18	4.2%	28	20.0%	4	8	44.4%	0.2	(0.1)
	5 to <10	29	4	5.1%	16	7.3%	29	22.0%	4	9	56.3%	0.3	(0.2)
	10.00 to <100.00	87	8	12.8%	72	27.3%	97	21.7%	3	57	79.2%	4	(2)
	10 to <20	33	6	13.4%	24	14.0%	40	21.5%	3	17	70.8%	1	(0.3)
	20 to <30	24	2	9.2%	21	23.9%	23	23.3%	3	19	90.5%	1	(1)
	30.00 to <100.00	29	-	24.6%	27	41.8%	34	20.6%	4	21	77.8%	2	(1)
	100.00 (Default)	29	-	0.0%	27	100.0%	40	50.4%	5	14	51.9%	14	(14)
Subtotal (exposure class)		**240**	**29**	**9.4%**	**174**	**28.3%**	**253**	**27.8%**	**4**	**105**	**60.5%**	**19**	**(18)**

31 December 2022

A-IRB	PD range	On-balance sheet exposures € million	Off-balance-sheet exposures pre-CCF € million	Exposure weighted average CCF %	Exposure post CCF and post CRM € million	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity yrs	Risk weighted exposure amount after supporting factors € million	Density of risk weighted exposure amount %	Expected loss amount € million	Value adjust-ments and provisions € million
	0.00 to <0.15	53	9	100.0%	62	0.1%	552	2.8%	N/A	0.5	0.9%	0.002	(0.008)
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.10 to <0.15	53	9	100.0%	62	0.1%	552	2.8%	N/A	0.5	0.9%	0.002	(0.008)
	0.15 to <0.25	559	4	100.0%	562	0.2%	9,249	5.4%	N/A	11	2.0%	0.05	(5)
	0.25 to <0.50	1,014	18	100.0%	1,033	0.4%	18,110	6.1%	N/A	47	4.5%	0.27	(13)
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.75 to <2.50	1,706	17	100.0%	1,723	1.3%	28,212	8.0%	N/A	217	12.6%	2	(31)
Retail - Secured by immovable property non-SME - with own estimates of LGD or conversion factors	0.75 to <1.75	1,701	15	100.0%	1,716	1.3%	28,136	8.0%	N/A	217	12.6%	2	(31)
	1.75 to <2.5	5	2	100.0%	7	1.8%	76	5.0%	N/A	0.7	9.9%	0.006	(0.003)
	2.50 to <10.00	1,159	1	100.0%	1,160	6.4%	20,943	12.3%	N/A	559	48.2%	10	(37)
	2.5 to <5	403	1	100.0%	404	3.6%	7,430	10.5%	N/A	124	30.7%	2	(10)
	5 to <10	756	-	100.0%	756	7.8%	13,513	13.3%	N/A	435	57.5%	8	(27)
	10.00 to <100.00	976	-	100.0%	976	32.6%	17,803	16.7%	N/A	897	91.9%	57	(48)
	10 to <20	376	-	100.0%	376	16.2%	7,787	14.7%	N/A	310	82.4%	9	(14)
	20 to <30	146	-	0.0%	146	27.1%	3,208	14.8%	N/A	133	91.1%	6	(5)
	30.00 to <100.00	454	-	0.0%	454	47.9%	6,808	19.1%	N/A	453	99.8%	42	(28)
	100.00 (Default)	326	-	0.0%	324	100.0%	8,513	37.0%	N/A	205	63.3%	120	(120)
Subtotal (exposure class)		**5,793**	**49**	**100.0%**	**5,840**	**12.7%**	**103,382**	**11.3%**	**N/A**	**1,937**	**33.2%**	**189**	**(255)**

Credit Risk

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
		31 December 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Retail - Qualifying revolving - with own estimates of LGD or conversion factors	0.00 to <0.15	39	319	81.2%	298	0.1%	70,257	62.3%	N/A	11	3.7%	0.2	(2)
	0.00 to <0.10	39	319	81.2%	298	0.1%	70,257	62.3%	N/A	11	3.7%	0.2	(2)
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.15 to <0.25	23	358	83.6%	322	0.2%	135,255	62.0%	N/A	23	7.1%	0.4	(1)
	0.25 to <0.50	68	354	81.1%	355	0.3%	110,901	62.5%	N/A	37	10.4%	1	(3)
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.75 to <2.50	89	318	61.5%	284	1.6%	455,777	63.1%	N/A	103	36.3%	3	(3)
	0.75 to <1.75	23	141	74.1%	127	1.0%	339,661	63.1%	N/A	34	26.8%	1	(1)
	1.75 to <2.5	66	178	51.4%	157	2.0%	116,116	63.2%	N/A	70	44.6%	2	(2)
	2.50 to <10.00	253	180	51.6%	346	4.8%	161,666	63.0%	N/A	267	77.2%	9	(7)
	2.5 to <5	133	141	51.5%	205	3.6%	94,943	62.7%	N/A	132	64.4%	5	(4)
	5 to <10	120	40	51.8%	141	6.5%	66,723	63.4%	N/A	135	95.7%	6	(3)
	10.00 to <100.00	108	23	29.6%	115	24.2%	44,049	60.6%	N/A	171	148.7%	17	(6)
	10 to <20	68	14	36.7%	73	13.1%	25,901	61.5%	N/A	101	138.4%	6	(2)
	20 to <30	10	4	18.2%	11	23.4%	3,538	58.7%	N/A	18	163.6%	1	(0)
	30.00 to <100.00	31	5	17.3%	32	50.1%	14,610	59.2%	N/A	52	162.5%	9	(3)
	100.00 (Default)	53	-	0.0%	53	100.0%	51,320	94.7%	N/A	3	5.7%	50	(50)
Subtotal (exposure class)		**633**	**1,552**	**73.5%**	**1,773**	**5.9%**	**1,029,225**	**63.4%**	**N/A**	**615**	**34.7%**	**81**	**(72)**

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
		31 December 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Retail - Other SME - with own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.15 to <0.25	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.25 to <0.50	0.05	-	0.0%	0.05	0.3%	2	42.4%	N/A	0.01	19.6%	0.0001	(0.002)
	0.50 to <0.75	160	255	3.3%	84	0.5%	4,790	34.4%	N/A	17	20.2%	0.2	(1)
	0.75 to <2.50	556	227	14.8%	339	1.5%	12,523	31.0%	N/A	102	30.1%	2	(5)
	0.75 to <1.75	515	95	7.5%	285	1.3%	10,603	31.1%	N/A	82	28.8%	1	(4)
	1.75 to <2.5	41	132	20.0%	54	2.4%	1,920	30.5%	N/A	20	37.0%	0.4	(1)
	2.50 to <10.00	434	150	12.6%	267	4.9%	14,783	37.0%	N/A	124	46.4%	5	(6)
	2.5 to <5	285	45	13.7%	151	3.6%	10,095	36.1%	N/A	62	41.1%	2	(3)
	5 to <10	149	105	12.2%	116	6.6%	4,688	38.2%	N/A	62	53.4%	3	(2)
	10.00 to <100.00	175	42	10.1%	146	30.6%	7,164	38.4%	N/A	104	71.2%	17	(14)
	10 to <20	77	34	10.6%	62	14.4%	3,469	38.8%	N/A	40	64.5%	3	(3)
	20 to <30	37	4	11.0%	33	26.0%	1,544	38.3%	N/A	25	75.8%	3	(3)
	30.00 to <100.00	61	5	6.2%	52	53.1%	2,151	38.0%	N/A	38	73.1%	10	(8)
	100.00 (Default)	92	-	0.0%	65	100.0%	7,395	100.0%	N/A	7	10.8%	65	(73)
Subtotal (exposure class)		**1,417**	**674**	**9.7%**	**901**	**14.2%**	**46,657**	**39.3%**	**N/A**	**354**	**39.3%**	**89**	**(98)**

Credit Risk

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
	31 December 2022												
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
	0.00 to <0.15	5	-	95.1%	5	0.1%	110	9.3%	N/A	0.2	3.0%	0.0006	(0.005)
	0.00 to <0.10	0.02	0.02	0.0%	0.03	0.1%	2	34.4%	N/A	0.003	9.3%	0.00001	(0.0003)
	0.10 to <0.15	5	-	0.0%	5	0.1%	108	9.2%	N/A	0.1	2.9%	0.0006	(0.005)
	0.15 to <0.25	55	1	100.0%	57	0.2%	5,712	19.9%	N/A	4	7.0%	0.02	(1.1)
	0.25 to <0.50	83	1	100.0%	83	0.4%	2,482	11.6%	N/A	7	8.4%	0.04	(1)
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.75 to <2.50	168	1	100.0%	168	1.3%	4,170	14.9%	N/A	31	18.5%	0.4	(5)
Retail - Other non-SME - with own estimates of LGD or conversion factors	0.75 to <1.75	162	1	100.0%	162	1.3%	3,614	13.9%	N/A	27	16.7%	0.3	(5)
	1.75 to <2.5	6	-	100.0%	6	2.1%	556	40.6%	N/A	4	66.7%	0.05	(0.1)
	2.50 to <10.00	687	-	100.0%	687	4.5%	117,087	38.9%	N/A	533	77.6%	12	(23)
	2.5 to <5	478	-	100.0%	478	3.6%	89,693	40.0%	N/A	380	79.5%	7	(13)
	5 to <10	209	-	100.0%	209	6.8%	27,394	36.4%	N/A	153	73.2%	5	(10)
	10.00 to <100.00	208	-	40.3%	208	34.9%	45,790	27.7%	N/A	154	74.0%	21	(16)
	10 to <20	71	-	33.7%	71	16.0%	5,220	25.5%	N/A	43	60.6%	3	(4)
	20 to <30	31	-	0.0%	31	27.4%	2,829	26.8%	N/A	25	80.6%	2	(2)
	30.00 to <100.00	106	-	100.0%	106	49.8%	37,741	29.5%	N/A	87	82.1%	16	(10)
	100.00 (Default)	111	-	0.0%	112	100.0%	19,117	54.3%	N/A	39	34.8%	76	(73)
Subtotal (exposure class)		**1,317**	**3**	**100.0%**	**1,320**	**16.5%**	**194,468**	**32.7%**	**N/A**	**768**	**58.2%**	**109**	**(119)**

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
	31 December 2022												
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
	0.00 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.15 to <0.25	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.25 to <0.50	0.02	-	0.0%	-	0.3%	1	42.4%	N/A	0.004		0.00002	(0.001)
	0.50 to <0.75	14	17	3.8%	14	0.5%	307	9.2%	N/A	1	7.1%	0.01	(0.04)
	0.75 to <2.50	273	28	30.5%	277	1.3%	3,239	11.1%	N/A	28	10.1%	0.4	(7)
Retail - Secured by immovable property SME - with own estimates of LGD or conversion factors	0.75 to <1.75	264	14	27.7%	263	1.3%	3,018	11.0%	N/A	26	9.9%	0.4	(7)
	1.75 to <2.5	9	14	33.2%	13	2.4%	221	12.6%	N/A	2	15.4%	0.04	(0.1)
	2.50 to <10.00	352	34	15.6%	355	5.4%	4,343	12.4%	N/A	54	15.2%	2	(12)
	2.5 to <5	202	5	40.2%	202	4.0%	2,720	12.3%	N/A	29	14.4%	1	(7)
	5 to <10	150	30	11.8%	153	7.3%	1,623	12.5%	N/A	26	17.0%	1	(4)
	10.00 to <100.00	564	12	8.5%	563	38.2%	6,680	15.5%	N/A	158	28.1%	35	(35)
	10 to <20	121	8	8.3%	121	13.7%	1,735	13.0%	N/A	25	20.7%	2	(4)
	20 to <30	159	2	8.1%	159	24.9%	1,921	15.5%	N/A	48	30.2%	6	(10)
	30.00 to <100.00	283	2	9.4%	283	56.3%	3,024	16.5%	N/A	85	30.0%	27	(19)
	100.00 (Default)	242	-	0.0%	218	100.0%	4,377	46.6%	N/A	136	62.4%	103	(94)
Subtotal (exposure class)		**1,445**	**91**	**17.0%**	**1,427**	**32.0%**	**18,947**	**18.5%**	**N/A**	**377**	**26.4%**	**140**	**(148)**
Total (all exposures classes)		**10,845**	**2,398**	**53.2%**	**11,435**	**14.9%**	**1,392,932**	**25.2%**	**N/A**	**4,156**	**36.3%**	**627**	**(710)**

Credit Risk

F-IRB

	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
		30 June 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Corporates - SME without own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.15 to <0.25	-	6	98.2%	6	0.0%	44	0.0%	3	0.04	0.7%	-	(0.00004)
	0.25 to <0.50	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.75 to <2.50	486	129	77.3%	536	1.4%	243	42.0%	3	218	40.7%	2	(1)
	0.75 to <1.75	276	108	79.4%	341	1.1%	110	42.2%	3	147	43.1%	1	(0.3)
	1.75 to <2.5	210	21	73.6%	195	1.9%	133	41.6%	3	71	36.4%	1	(0.2)
	2.50 to <10.00	952	128	64.0%	924	4.7%	389	40.8%	3	620	67.1%	12	(4)
	2.5 to <5	592	78	64.3%	568	3.6%	239	40.2%	3	334	58.8%	5	(2)
	5 to <10	360	50	63.4%	356	6.5%	150	41.8%	3	287	80.6%	7	(2)
	10.00 to <100.00	1,144	107	91.9%	1,086	23.3%	696	39.2%	3	1,558	143.5%	95	(55)
	10 to <20	562	78	96.1%	559	13.5%	307	39.9%	3	709	126.8%	27	(20)
	20 to <30	174	16	79.1%	158	22.9%	112	39.9%	3	260	164.6%	14	(11)
	30.00 to <100.00	408	13	81.8%	369	38.3%	277	37.9%	3	589	159.6%	53	(23)
	100.00 (Default)	917	30	81.3%	895	100.0%	927	40.5%	3	-	0.0%	363	(482)
Subtotal (exposure class)		3,499	400	77.5%	3,447	34.8%	2,299	40.3%	3	2,396	69.5%	472	(541)

F-IRB

	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
		30 June 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Corporates - Other without own estimates of LGD or conversion factors	0.00 to <0.15	2,094	1,077	60.0%	2,635	0.1%	89	43.9%	3	647	24.6%	1	(0.7)
	0.00 to <0.10	728	508	62.8%	985	0.04%	53	44.5%	3	164	16.6%	0.2	(0.4)
	0.10 to <0.15	1,366	568	58.3%	1,651	0.1%	36	43.6%	3	483	29.3%	0.7	(0.4)
	0.15 to <0.25	858	92	91.5%	934	0.2%	85	42.0%	3	366	39.2%	0.6	(0.2)
	0.25 to <0.50	739	177	83.2%	829	0.3%	17	43.6%	3	418	50.4%	0.9	(0.6)
	0.50 to <0.75	559	77	95.3%	577	0.6%	37	42.2%	3	314	54.4%	1	(1)
	0.75 to <2.50	571	360	68.8%	748	1.2%	71	43.3%	3	642	85.8%	3	(5)
	0.75 to <1.75	539	357	68.4%	715	1.2%	53	43.3%	3	624	87.3%	3	(5)
	1.75 to <2.5	32	3	78.8%	33	1.9%	18	44.0%	3	18	54.5%	0.1	(0.04)
	2.50 to <10.00	968	656	79.5%	1,354	5.3%	100	35.2%	3	1,476	109.0%	22	(15)
	2.5 to <5	150	521	87.7%	558	3.1%	29	25.9%	3	378	67.7%	4	(1)
	5 to <10	818	135	73.7%	796	6.9%	71	41.8%	3	1,098	137.9%	18	(14)
	10.00 to <100.00	211	56	91.2%	240	29.0%	79	39.7%	3	504	210.0%	25	(26)
	10 to <20	72	23	88.2%	84	14.4%	33	43.1%	3	182	216.7%	5	(2)
	20 to <30	74	10	100.0%	79	23.9%	17	37.4%	3	167	211.4%	7	(9)
	30.00 to <100.00	64	23	85.3%	77	50.3%	29	38.2%	3	154	200.0%	15	(15)
	100.00 (Default)	99	6	93.6%	104	100.0%	63	41.5%	3	-	0.0%	44	(63)
Subtotal (exposure class)		6,099	2,501	71.0%	7,421	3.6%	541	41.7%	3	4,367	58.8%	98	(111)
Total (all exposures classes)		9,598	2,901	71.9%	10,868	13.5%	2,840	41.3%	3	6,763	62.2%	570	(652)

Credit Risk

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
	30 June 2022												
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
	0.00 to <0.15	-	3	6.2%	0.1	0.1%	1	42.6%	1	0.01	7.7%	0.00003	(0.001)
	0.00 to <0.10	-	3	6.2%	0.1	0.1%	1	42.6%	1	0.01	7.7%	0.00003	(0.001)
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.15 to <0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-		-	-
	0.25 to <0.50	14	9	6.9%	6	0.3%	13	35.5%	3	2	33.3%	0.005	(0.1)
	0.50 to <0.75	-	2	2.4%	0.1	0.5%	3	39.5%	1	0.0	20.0%	0.0001	(0.0002)
	0.75 to <2.50	45	25	16.9%	30	1.4%	65	24.5%	3	12	40.0%	0.1	(1)
Corporates - SME with own estimates of LGD or conversion factors	0.75 to <1.75	45	23	13.9%	29	1.4%	57	24.3%	3	11	37.9%	0.1	(1)
	1.75 to <2.5	-	1	64.6%	1	2.5%	8	29.5%	1	1	100.0%	0.01	(0)
	2.50 to <10.00	99	39	16.3%	69	5.4%	108	25.4%	3	40	58.0%	1	(2)
	2.5 to <5	53	21	16.8%	37	3.9%	61	25.4%	4	20	54.1%	0.4	(1)
	5 to <10	46	18	15.8%	32	7.1%	47	25.4%	3	20	62.5%	1	(1)
	10.00 to <100.00	115	23	19.3%	94	28.3%	109	21.6%	3	74	78.7%	6	(4)
	10 to <20	39	13	13.3%	25	14.2%	45	22.9%	3	19	76.0%	1	(1)
	20 to <30	36	7	28.8%	31	22.8%	33	20.7%	2	24	77.4%	1	(1)
	30.00 to <100.00	40	3	22.3%	38	42.2%	31	21.5%	4	31	81.6%	3	(2)
	100.00 (Default)	31	-	0.0%	29	100.0%	44	46.4%	5	15	51.7%	13	(14)
Subtotal (exposure class)		304	101	15.7%	228	26.2%	343	26.7%	3	143	62.7%	20	(20)

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjust-ments and provisions
	30 June 2022												
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
	0.00 to <0.15	52	9	100.0%	61	0.1%	587	2.9%	N/A	0.5	0.9%	0.002	(0.0001)
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.10 to <0.15	52	9	100.0%	61	0.1%	587	2.9%	N/A	0.5	0.9%	0.002	(0.0001)
	0.15 to <0.25	390	4	100.0%	394	0.2%	7,052	5.0%	N/A	7	1.8%	0.03	(2)
	0.25 to <0.50	901	17	100.0%	919	0.4%	16,962	5.9%	N/A	40	4.4%	0.23	(6)
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.75 to <2.50	1,839	14	100.0%	1,854	1.3%	30,292	9.9%	N/A	296	16.0%	3	(30)
Retail - Secured by immovable property non-SME - with own estimates of LGD or conversion factors	0.75 to <1.75	1,835	13	100.0%	1,848	1.3%	30,214	10.0%	N/A	295	16.0%	3	(30)
	1.75 to <2.5	4	1	100.0%	5	1.8%	78	3.5%	N/A	0.4	7.2%	0.003	(0.0005)
	2.50 to <10.00	1,235	1	100.0%	1,236	6.2%	22,251	14.5%	N/A	687	55.6%	11	(35)
	2.5 to <5	468	-	100.0%	469	3.6%	8,235	13.2%	N/A	181	38.6%	2	(11)
	5 to <10	767	-	100.0%	767	7.7%	14,016	15.3%	N/A	506	66.0%	9	(24)
	10.00 to <100.00	1,028	-	100.0%	1,028	32.0%	18,818	18.8%	N/A	1,059	103.0%	66	(43)
	10 to <20	425	-	100.0%	425	16.2%	8,419	17.1%	N/A	409	96.2%	12	(14)
	20 to <30	151	-	0.0%	151	27.1%	3,225	17.3%	N/A	161	106.6%	7	(5)
	30.00 to <100.00	452	-	100.0%	452	48.5%	7,174	21.0%	N/A	489	108.2%	48	(24)
	100.00 (Default)	306	-	0.0%	303	100.0%	8,238	28.8%	N/A	216	71.3%	88	(88)
Subtotal (exposure class)		5,751	45	100.0%	5,795	12.7%	104,200	12.4%	N/A	2,306	39.8%	168	(204)

Credit Risk

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
		30 June 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Retail - Qualifying revolving - with own estimates of LGD or conversion factors	0.00 to <0.15	36	319	81.4%	296	0.1%	71,138	62.4%	N/A	11	3.7%	0.2	(2)
	0.00 to <0.10	36	319	81.4%	296	0.1%	71,138	62.4%	N/A	11	3.7%	0.2	(2)
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.15 to <0.25	23	371	83.7%	331	0.2%	139,552	62.1%	N/A	23	6.9%	0.4	(1)
	0.25 to <0.50	62	342	81.0%	339	0.3%	106,039	62.5%	N/A	35	10.3%	1	(2)
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.75 to <2.50	85	314	60.6%	276	1.6%	451,026	63.0%	N/A	100	36.2%	3	(2)
	0.75 to <1.75	21	139	73.8%	124	1.0%	335,525	63.0%	N/A	33	26.6%	1	(1)
	1.75 to <2.5	64	175	50.2%	152	2.0%	115,501	63.1%	N/A	67	44.1%	2	(2)
	2.50 to <10.00	257	176	49.2%	344	4.8%	160,464	62.9%	N/A	265	77.0%	9	(7)
	2.5 to <5	138	137	49.5%	206	3.6%	95,849	62.7%	N/A	133	64.6%	5	(4)
	5 to <10	119	39	48.0%	138	6.5%	64,615	63.2%	N/A	132	95.7%	6	(3)
	10.00 to <100.00	112	23	27.2%	119	25.2%	42,907	60.3%	N/A	176	147.9%	18	(7)
	10 to <20	69	15	33.5%	74	13.2%	25,507	61.5%	N/A	102	137.8%	6	(2)
	20 to <30	9	4	17.5%	10	23.7%	3,145	58.3%	N/A	17	170.0%	1	(0)
	30.00 to <100.00	34	5	16.2%	35	50.9%	14,255	58.6%	N/A	57	162.9%	10	(4)
	100.00 (Default)	66	-	0.0%	66	100.0%	54,500	89.7%	N/A	9	13.6%	59	(58)
Subtotal (exposure class)		641	1,545	73.2%	1,771	6.7%	1,025,626	63.4%	N/A	619	35.0%	91	(80)

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
		30 June 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Retail - Other SME - with own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.15 to <0.25	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.25 to <0.50	0.07	-	0.0%	0.07	0.3%	3	42.4%	N/A	0.01	19.7%	0.0001	(0.004)
	0.50 to <0.75	97	180	3.2%	46	0.5%	3,381	34.2%	N/A	10	21.7%	0.1	(1)
	0.75 to <2.50	559	228	13.0%	326	1.5%	11,872	33.0%	N/A	104	31.9%	2	(6)
	0.75 to <1.75	526	101	5.8%	279	1.3%	9,999	33.1%	N/A	85	30.5%	1	(5)
	1.75 to <2.5	33	126	18.8%	47	2.4%	1,873	32.8%	N/A	19	40.4%	0.4	(1)
	2.50 to <10.00	454	154	10.1%	275	5.0%	12,899	37.0%	N/A	128	46.5%	5	(8)
	2.5 to <5	302	50	8.2%	153	3.6%	8,136	36.3%	N/A	63	41.2%	2	(4)
	5 to <10	153	104	10.9%	122	6.7%	4,763	38.0%	N/A	64	52.5%	3	(4)
	10.00 to <100.00	182	48	9.6%	157	29.7%	7,338	38.6%	N/A	112	71.3%	18	(14)
	10 to <20	80	36	10.6%	65	14.0%	3,629	38.9%	N/A	42	64.6%	4	(3)
	20 to <30	43	5	8.6%	38	26.1%	1,579	38.4%	N/A	30	78.9%	4	(3)
	30.00 to <100.00	59	7	5.8%	53	51.5%	2,130	38.4%	N/A	41	77.4%	11	(7)
	100.00 (Default)	113	-	0.0%	83	100.0%	7,579	95.7%	N/A	4	4.8%	79	(80)
Subtotal (exposure class)		1,405	610	9.1%	887	16.7%	43,072	41.2%	N/A	358	40.4%	104	(108)

Credit Risk

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
		30 June 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Retail - Other non-SME - with own estimates of LGD or conversion factors	0.00 to <0.15	6	-	100.0%	6	0.1%	212	7.1%	N/A	0.1	2.3%	0.0006	(0.01)
	0.00 to <0.10	0.01	-	0.0%	0.01	0.1%	2	25.4%	N/A	0.001	11.0%	0.000003	(0.0003)
	0.10 to <0.15	6	-	0.0%	6	0.1%	210	7.1%	N/A	0.1	2.3%	0.0006	(0.007)
	0.15 to <0.25	42	2	100.0%	44	0.2%	5,427	22.6%	N/A	4	9.1%	0.02	(0.2)
	0.25 to <0.50	79	1	100.0%	80	0.4%	2,575	12.6%	N/A	7	8.8%	0.04	(1)
	0.50 to <0.75	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.75 to <2.50	174	1	100.0%	175	1.4%	4,472	14.9%	N/A	33	18.9%	0.4	(4)
	0.75 to <1.75	167	1	100.0%	168	1.3%	3,875	13.9%	N/A	28	16.7%	0.3	(4)
	1.75 to <2.5	7	-	100.0%	7	2.1%	597	39.3%	N/A	5	71.4%	0.06	(0.1)
	2.50 to <10.00	654	-	100.0%	654	4.6%	106,800	37.5%	N/A	483	73.9%	11	(24)
	2.5 to <5	445	-	100.0%	445	3.6%	80,865	38.7%	N/A	340	76.4%	6	(14)
	5 to <10	209	-	100.0%	209	6.9%	25,935	34.9%	N/A	145	69.4%	5	(10)
	10.00 to <100.00	227	-	100.0%	227	35.9%	47,364	28.5%	N/A	174	76.7%	25	(17)
	10 to <20	72	-	100.0%	72	16.0%	5,000	25.6%	N/A	43	59.7%	3	(4)
	20 to <30	35	-	0.0%	35	27.3%	2,967	27.8%	N/A	29	82.9%	3	(2)
	30.00 to <100.00	119	-	100.0%	119	50.5%	39,397	30.4%	N/A	101	84.9%	19	(11)
	100.00 (Default)	121	1	0.0%	122	100.0%	17,075	66.0%	N/A	48	39.3%	80	(73)
Subtotal (exposure class)		1,303	5	80.0%	1,308	18.1%	183,925	33.4%	N/A	749	57.3%	116	(119)

A-IRB	PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
		30 June 2022											
		€ million	€ million	%	€ million	%		%	yrs	€ million	%	€ million	€ million
Retail - Secured by immovable property SME - with own estimates of LGD or conversion factors	0.00 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.00 to <0.10	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.10 to <0.15	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.15 to <0.25	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.25 to <0.50	-	-	0.0%	-	0.0%	-	0.0%	N/A	-		-	-
	0.50 to <0.75	12	16	3.7%	12	0.5%	294	12.7%	N/A	1	8.3%	0.01	(0.1)
	0.75 to <2.50	210	21	27.7%	213	1.4%	2,874	12.5%	N/A	25	11.7%	0.4	(6)
	0.75 to <1.75	200	9	15.7%	199	1.3%	2,647	12.5%	N/A	23	11.6%	0.3	(6)
	1.75 to <2.5	10	13	36.3%	14	2.4%	227	12.3%	N/A	2	14.3%	0.04	(0.1)
	2.50 to <10.00	371	36	19.8%	375	5.5%	4,705	12.7%	N/A	59	15.7%	3	(12)
	2.5 to <5	220	6	44.6%	221	4.1%	2,927	12.0%	N/A	31	14.0%	1	(7)
	5 to <10	151	30	14.8%	154	7.4%	1,778	13.8%	N/A	28	18.2%	2	(5)
	10.00 to <100.00	610	13	12.2%	610	37.3%	7,085	16.3%	N/A	181	29.7%	39	(34)
	10 to <20	141	9	11.9%	142	13.6%	1,924	13.2%	N/A	29	20.4%	3	(5)
	20 to <30	173	2	15.2%	173	25.0%	2,099	16.7%	N/A	57	32.9%	7	(9)
	30.00 to <100.00	295	2	11.3%	295	56.0%	3,062	17.6%	N/A	95	32.2%	30	(19)
	100.00 (Default)	237	-	0.0%	217	100.0%	4,211	38.4%	N/A	133	61.3%	84	(82)
Subtotal (exposure class)		1,440	86	17.6%	1,427	32.8%	19,169	18.1%	N/A	399	28.0%	126	(134)
Total (all exposures classes)		10,844	2,392	52.9%	11,416	15.5%	1,376,335	26.0%	N/A	4,574	40.1%	626	(665)

Notes:

(1) PD refers to the PD calibrated TtC and LGD refers to downturn LGD, both used for the calculation of RWAs.

(2) Average maturity is presented only in the exposure classes where it is required in the RWAs calculation.

Credit Risk

Table 32: EU CR6-A – Scope of the use of IRB and SA approaches

	Risk weightings - 31 December 2022				
	Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach	Percentage of total exposure value subject to the permanent partial use of the SA	Percentage of total exposure value subject to a roll-out plan	Percentage of total exposure value subject to IRB Approach
	€ million	€ million	%	%	%
Central governments or central banks	-	39,325	100%	0%	0%
Of which Regional governments or local authorities		26	100%	0%	0%
Of which Public sector entities		529	100%	0%	0%
Institutions	-	4,342	100%	0%	0%
Corporates	15,326	25,546	35%	0%	65%
Of which Corporates - Specialised lending, excluding slotting approach		435	100%	0%	0%
Of which Corporates - Specialised lending under slotting approach		5,502	0%	0%	100%
Retail	11,878	19,714	26%	12%	62%
of which Retail – Secured by real estate SMEs		1,582	12%	1%	88%
of which Retail – Secured by real estate non-SMEs		8,913	21%	17%	63%
of which Retail – Qualifying revolving		3,080	23%	8%	69%
of which Retail – Other SMEs		2,866	25%	6%	70%
of which Retail – Other non-SMEs		3,273	50%	13%	37%
Equity	237	489	100%	0%	0%
Other non-credit obligation assets	-	4,707	100%	0%	0%
Total	**27,441**	**94,123**	**67%**	**2%**	**31%**

	Risk weightings - 31 December 2021				
	Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach	Percentage of total exposure value subject to the permanent partial use of the SA	Percentage of total exposure value subject to a roll-out plan	Percentage of total exposure value subject to IRB Approach
	€ million	€ million	%	%	%
Central governments or central banks	-	42,653	100%	0%	0%
Of which Regional governments or local authorities		33	100%	0%	0%
Of which Public sector entities		743	100%	0%	0%
Institutions	-	4,827	100%	0%	0%
Corporates	14,477	22,630	36%	0%	63%
Of which Corporates - Specialised lending, excluding slotting approach		524	100%	0%	0%
Of which Corporates - Specialised lending under slotting approach		4,136	0%	0%	100%
Retail	11,749	19,121	24%	13%	63%
of which Retail – Secured by real estate SMEs		1,597	11%	1%	88%
of which Retail – Secured by real estate non-SMEs		8,880	18%	20%	63%
of which Retail – Qualifying revolving		3,103	25%	7%	68%
of which Retail – Other SMEs		2,491	23%	5%	72%
of which Retail – Other non-SMEs		3,050	47%	15%	38%
Equity	198	429	100%	0%	0%
Other non-credit obligation assets	-	4,817	100%	0%	0%
Total	26,424	**94,476**	69%	3%	28%

Credit Risk

The main developments in the IRB portfolios, during the second half of 2022, were the following:

Foundation IRB

The Corporate portfolio decreased by € 1,713 million in terms of on-balance sheet exposures and by € 971 million in terms of total EAD (including the off-balance sheet after credit conversion factors), due to the synthetic securitization exposures of € 1.7 billion which are presented and risk weighted in C13.01 - Credit Risk – Securitizations (CR SEC) as of December 2022. In a comparable basis (adding back Wave I and II securitisations), the on balance sheet exposure decreased by € 57 million, while the EAD increased by € 459 million. The corresponding increase in RWAs was € 50 million.

The weighted average through the cycle PD of the non-defaulted Corporate portfolio decreased from 4.7% in June 2022 to 3.9% in December 2022 as a result of the good quality of new originations and improved asset quality of the existing portfolio with the incorporation of the 2021 financial statements.

Advanced IRB

- The retail portfolio exposures under AIRB increased by € 2 million (On balance) and by € 22 million in EAD terms (after Credit risk mitigation), while the RWAs decreased by € 419 million mainly due to the decrease of LGDs following the increase of real estate prices and the improved asset quality.
- The weighted average through the cycle PD of the non-defaulted total retail portfolio decreased from 9.0% in June 2022 to 8.5% in December 2022, as a result of the improvement noticed in all retail segments. Specifically, the Secured by immovable property Retail SME decreased from 20.8% to 19.7%, the Retail Other non-SME from 9.7% to 8.8%, the Retail Other SME from 8.1% to 7.6%, the Secured by immovable property non-SME (Mortgages) from 7.9% to 7.6%, while the Qualifying Revolving through the cycle PD slightly decreased from 3.1% to 3.0%.

The table below presents the specialised lending credit exposures (shipping, real estate and project finance) broken down by supervisory risk categories and remaining maturities as at 31 December 2022 and 30 June 2022:

Table 33: EU CR10 - Specialised lending under the simple risk weighted approach

		31 December 2022					
		Specialised lending : Project finance (Slotting approach)					
Regulatory categories	Remaining maturity	On-balancesheet amount € million	Off-balancesheet amount € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Strong	Less than 2.5 years	0.0004	5	50%	5	3	-
	Equal to or more than 2.5 years	1,604	1,022	70%	2,114	1,480	8
Good	Less than 2.5 years	15	106	70%	51	36	0.2
	Equal to or more than 2.5 years	395	122	90%	456	411	4
Satisfactory	Less than 2.5 years	-	-	115%	-	-	-
	Equal to or more than 2.5 years	38	-	115%	38	44	1
Weak	Less than 2.5 years	-	-	250%	-	-	-
	Equal to or more than 2.5 years	-	-	250%	-	-	-
Default	Less than 2.5 years	2	-	-	2	-	1
	Equal to or more than 2.5 years	2	-	-	2	-	1
Total	**Less than 2.5 years**	**17**	**111**		**58**	**39**	**1**
	Equal to or more than 2.5 years	**2,039**	**1,144**		**2,610**	**1,935**	**14**

Credit Risk

		31 December 2022					
		Specialised lending : Income-producing real estate and high volatility commercial real estate (Slotting approach)					
Regulatory categories	Remaining maturity	On-balancesheet amount € million	Off-balancesheet amount € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Strong	Less than 2.5 years	73	6	50%	78	39	-
	Equal to or more than 2.5 years	78	-	70%	78	55	0.3
Good	Less than 2.5 years	214	2	70%	216	151	0.9
	Equal to or more than 2.5 years	330	375	90%	518	466	4
Satisfactory	Less than 2.5 years	1	1	115%	2	2	0.06
	Equal to or more than 2.5 years	20	-	115%	19	22	1
Weak	Less than 2.5 years	0.1	-	250%	0.07	-	0.01
	Equal to or more than 2.5 years	0.07	-	250%	0.07	0.2	0.01
Default	Less than 2.5 years	50	-	-	50	-	25
	Equal to or more than 2.5 years	47	-	-	47	-	23
Total	**Less than 2.5 years**	**338**	**9**		**346**	**192**	**26**
	Equal to or more than 2.5 years	**475**	**375**		**662**	**543**	**28**

		31 December 2022					
		Specialised lending : Object finance (Slotting approach)					
Regulatory categories	Remaining maturity	On-balancesheet amount € million	Off-balancesheet amount € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Strong	Less than 2.5 years	72	1	50%	74	37	-
	Equal to or more than 2.5 years	439	190	70%	534	374	2
Good	Less than 2.5 years	28	-	70%	28	20	-
	Equal to or more than 2.5 years	256	17	90%	264	238	2
Satisfactory	Less than 2.5 years	23	-	115%	23	27	0.6
	Equal to or more than 2.5 years	33	-	115%	33	38	0.9
Weak	Less than 2.5 years	-	-	250%	-	-	-
	Equal to or more than 2.5 years	-	-	250%	-	-	-
Default	Less than 2.5 years	63	-	-	63	-	32
	Equal to or more than 2.5 years	-	-	-	-	-	-
Total	**Less than 2.5 years**	**186**	**1**		**188**	**84**	**33**
	Equal to or more than 2.5 years	**728**	**207**		**831**	**650**	**5**

		30 June 2022					
		Specialised lending : Project finance (Slotting approach)					
Regulatory categories	Remaining maturity	On-balancesheet amount € million	Off-balancesheet amount € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Strong	Less than 2.5 years	12	16	50%	28	14	-
	Equal to or more than 2.5 years	831	80	70%	871	610	3
Good	Less than 2.5 years	-	126	70%	54	38	-
	Equal to or more than 2.5 years	335	65	90%	367	331	3
Satisfactory	Less than 2.5 years	-	-	115%	-	-	-
	Equal to or more than 2.5 years	46	-	115%	46	53	1
Weak	Less than 2.5 years	-	-	250%	-	-	-
	Equal to or more than 2.5 years	-	-	250%	-	-	-
Default	Less than 2.5 years	5	-	-	5	-	2
	Equal to or more than 2.5 years	-	-	-	-	-	-
Total	Less than 2.5 years	17	142		87	52	2
	Equal to or more than 2.5 years	1,212	145		1,284	994	7

Credit Risk

		30 June 2022					
		Specialised lending : Income-producing real estate and high volatility commercial real estate (Slotting approach)					
Regulatory categories	Remaining maturity	On-balancesheet amount € million	Off-balancesheet amount € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Strong	Less than 2.5 years	-	-	50%	-	-	-
	Equal to or more than 2.5 years	67	4	70%	70	49	0.3
Good	Less than 2.5 years	113	7	70%	120	84	0.5
	Equal to or more than 2.5 years	263	321	90%	423	381	3
Satisfactory	Less than 2.5 years	2	-	115%	2	2	0.1
	Equal to or more than 2.5 years	46	11	115%	52	59	1
Weak	Less than 2.5 years	-	-	250%	-	-	-
	Equal to or more than 2.5 years	9	-	250%	9	23	1
Default	Less than 2.5 years	54	-	-	54	-	27
	Equal to or more than 2.5 years	50	-	-	50	-	25
Total	Less than 2.5 years	169	7		176	86	28
	Equal to or more than 2.5 years	435	336		604	512	30

		30 June 2022					
		Specialised lending : Object finance (Slotting approach)					
Regulatory categories	Remaining maturity	On-balancesheet amount € million	Off-balancesheet amount € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Strong	Less than 2.5 years	184	1	50%	185	93	-
	Equal to or more than 2.5 years	1,060	88	70%	1,104	773	4
Good	Less than 2.5 years	229	-	70%	229	160	1
	Equal to or more than 2.5 years	893	34	90%	910	819	7
Satisfactory	Less than 2.5 years	34	-	115%	34	40	1
	Equal to or more than 2.5 years	53	-	115%	53	61	1
Weak	Less than 2.5 years	-	-	250%	-	-	-
	Equal to or more than 2.5 years	-	-	250%	-	-	-
Default	Less than 2.5 years	75	-	-	75	-	37
	Equal to or more than 2.5 years	-	-	-	-	-	-
Total	Less than 2.5 years	522	1		523	293	39
	Equal to or more than 2.5 years	2,006	122		2,067	1,653	12

The risk profile of the non-defaulted specialized lending portfolio improved within the second half of 2022 (EL 0.56% in December2022 versus 0.64% in June 2022). The On BS exposure and EAD are reduced by € 564 million and € 44 million respectively due to Wave securitization of € 1.6 billion. On a comparable basis (adding back Wave III securitization of Shipping exposures) the On BS exposure increased by € 1 billion and the EAD by € 1.5 billion during the second half of 2022.

Credit Risk

The following table shows the main changes in capital requirements of credit risk exposures under the IRB approach:

Table 34: EU CR8 - RWEA flow statements of credit risk exposures under the IRB approach

	31 December 2022 Risk weighted exposure amount € million	30 September 2022 Risk weighted exposure amount € million
Risk weighted exposure amount as at 1 October 2022	15,356	14,863
Asset size (+/-)	811	477
Asset quality (+/-)	(421)	(154)
Model updates (+/-)	-	-
Methodology and policy (+/-)	-	-
Acquisitions and disposals (+/-)	(1,190)	-
Foreign exchange movements (+/-)	(193)	172
Other (+/-)	-	(2)
Risk weighted exposure amount as at 31 December 2022	**14,363**	15,356

Asset size: *Under this item, the changes in RWAs due to the changes in EAD are reported. These changes can be due to new originations or repayments of the loans.*
Asset quality*: The changes to the RWAs due to the borrower risk (i.e. rating grade migration) are reported under this item.*
Model updates: *The changes to the RWAs due to updates in risk parameters following the annual validation process or regulatory reviews.*
Methodology and policy: *Under this item, the changes in RWAs due to regulatory framework changes are presented.*
Foreign exchange movements: The changes to the RWAs due to the foreign currency translation movements are reported.
Other: *Under this item, the changes in RWAs due to other factors that are used in the calculation of RWAs are reported. These, for example, include maturity of exposures.*

In the fourth quarter of 2022, RWAs under IRB decreased by € 993 million. The main driver for the decrease was Wave III synthetic securitization with an impact of - € 1.19 billion, followed by the improved asset quality and the FX impact. The aforementioned mitigating effects have been partly counterbalanced by the increase of the new production of the Corporate portfolio.

The following table presents the equity exposures, broken down by risk weights as at 31 December 2022 and 30 June 2022.

Table 35: EU CR10 - Equity Exposures under the simple risk weighted approach

	31 December 2022					
	Equities under the simple risk-weighted approach					
Categories	On-balancesheet exposure € million	Off-balancesheet exposure € million	Risk weight	Exposure value € million	Risk weighted exposure amount € million	Expected loss amount € million
Private equity exposures	204	-	190%	204	388	2
Exchange-traded equity exposures	27	-	290%	27	79	0.2
Other equity exposures	6	-	370%	6	22	0.2
Total	**237**	**-**		**237**	**489**	**2**

Credit Risk

	30 June 2022					
	Equities under the simple risk-weighted approach					
Categories	On-balance sheet € million	Off-balance sheet € million	Risk weight	Exposure value € million	Risk weighted € million	Expected loss € million
Private equity exposures	184	-	190%	184	349	1
Exchange-traded equity exposures	27	-	290%	27	80	0.2
Other equity exposures	13	-	370%	13	49	0.3
Total	224	-		224	478	2

4.8 Credit risk mitigation

A key component of the Group's business strategy is to reduce risk by utilizing various risk mitigating techniques. The most important risk mitigating means are collaterals' pledges, guarantees and netting arrangements in master agreements for derivatives.

4.8.1 Types of collateral commonly accepted by the Bank

The following collateral types are accepted according to the Bank's internal policies:

- Residential real estate (e.g., houses, apartments, vacation homes etc.);
- Commercial real estate (e.g., office buildings, shopping centers, shops, logistics centers etc.);
- Land (e.g., urban, agricultural, other);
- Receivables (trade debtors) and post-dated cheques;
- Financial collaterals, listed shares, listed bonds and other specific securities accepted;
- Deposits;
- Guarantees and letters of support;
- Insurance contracts; and
- Machinery and equipment, vehicles and vessels.

A specific coverage ratio is pre-requisite upon approval and on ongoing basis for each collateral type, specified in the credit policy manual.

For Treasury exposures (i.e. repos, reverse repos, derivatives, etc.) the Group accepts only cash or liquid bonds as collaterals.

4.8.2 Valuation principles of collateral

In the context of supervisory guidelines and in order to manage effectively the real estate portfolio that has been accepted as collateral, the Bank has issued the Collaterals and Valuation Policy which is approved by the Board Risk Committee and details – among other things the type of initial valuation and the frequency of revaluation for the assessment of the commercial value of real estate collaterals.

All valuations (including revaluations) should be performed by independent qualified appraisers (individuals or legal entities or employees of legal entities), who possess the necessary qualifications, ability and experience to execute a valuation. In all cases, the Bank must be the ordering party. Otherwise, the Bank needs to obtain a "duty of care" statement or a reliance letter from the valuator signed off from the Legal Unit (applicable mainly in specialized lending).

Immovable property collateral should be valued, in full adherence to European and international standards and specifically the European Valuation Standards EVS (Blue Book) and the Royal Institute of Chartered Surveyors (RICS).

The Bank has an approved list of independent and qualified appraisers which can perform valuations. The approved list of appraisers is updated on an annual basis or at shorter intervals if necessary.

All immovable properties should be valued on the basis of market value. Market value is the estimated amount for which an asset should be exchanged on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

After two sequential individual valuations (as those are defined below) of the same immovable property, the appraiser should rotate (either to a different independent valuator or to a different independent appraisal provider). The same applies after three sequential individual valuations for vessels & / yachts.

The above provision for valuators rotation may not apply for properties under construction and other investment projects where the same valuator can perform more than two sequential consecutive valuations / progress reports until the completion of the construction/project.

Regarding prenotated/mortgaged real estate properties that are located outside Greece, the following apply:

- If the property is located in a country where the Bank has a subsidiary, the valuation is performed by the locally approved appraisers;
- If the property is located in a country where there is no subsidiary, the valuation is requested from a certified First Class appraiser in that country; and
- For all properties located outside Greece, the same rules of valuation/revaluation as in Greece apply (e.g. loan balance, frequency of valuation, revaluation etc.).

On exceptional cases, in corporate banking, it is permitted to use an appraiser not included in the approved list. Such exceptions must be approved by the competent Approval Level and should refer:

- Syndicated Loans where Bank is not the arranger;
- Highly specialized cases, which they cannot be performed by any of the approved valuators; and
- Borrowers propose for specific and substantiated reasons the use of an appraiser not included in the approved list, given the fact that objectivity and independency standards are met.

The initial valuation of real estate assets for the purposes of granting a new credit facility or refinancing existing credit facilities, is being conducted in all cases through the property's physical inspection undertaken by the appraisers.

The major acceptable categories of real estate that can be used as collateral by the Bank are:

- Residential Real Estates (e.g., houses, apartments, vacation homes, urban plots with residential use etc.); and
- Commercial Real Estates (e.g., office buildings, shopping centers, shops, logistics centers, industrial structures, factories, hotels, camping sites, theaters, educational facilities, hospitals, land with agricultural use, warehouses, etc.).

For every Real Estate that will be used as collateral, prior to initial disbursement it has to be appropriately verified that the said property is in legal and technical order (also referred as legal and technical compliance).

There are two major types of property valuation: individual and indexed.

Individual Valuations

Individual property valuations (including revaluations) are defined as property-specific appraisals, which are performed by an appraiser on a specific property basis and are not based on indexation or any other automated process. There are two methods of individual valuations: through physical inspection & desktop.

Valuation with Physical Inspection

In order to conduct a property valuation with physical inspection, all supporting documentation, should be collected (such as property title, topographical plan, floor plans). The valuation is carried out with external and/or internal inspection of the property. The Current Market Value and the Final Market Value are estimated. In the case of completed properties these two values are equal, while for cases of unfinished buildings they are different (in these cases collateral coverage is calculated using the Current Market Value).

If during the inspection it is identified that the property has undergone changes (alterations) regarding its surface, the property has to be appraised after the submission of required/mandatory documents.

For every new loan origination, a physical inspection must be performed.

In cases regarding financing of building under construction with gradual disbursements, an evaluation with physical inspection should precede each disbursement to confirm the current stage of completion.

Desktop Valuation

This method is used to update an existing valuation (revaluation), is carried out without physical property inspection but it is conducted on the specific property basis and is not based on indexation or any other automated process. It is noted that for this method to be considered eligible, it is a prerequisite that the initial valuation of the property was performed via the physical inspection method. Both physical inspection and desktop valuations are performed by appraisers from the approved list.

Valuations derived from indexation or any other automated processes are defined as indexed valuations.

Index for Residential Real Estate

Eurobank is using the Residential Property Index of the Bank of Greece to revalue residential real estate properties over the loan's lifetime. The index has been created by the Real Estate Market Analysis Section of BoG using detailed information collected from all Credit Institutions and Real Estate Investment Companies (REIC) operating in Greece. It is considered as a tool used to monitor probable changes in the values of residential real estate properties but also for analyzing current market's trend. This index is updated on an annual basis.

Index for Commercial Real Estate

For commercial real estate valuations, Eurobank uses the CRE Index. This index is derived through a combination of CPS & BoG CRE indices and is provided annually by CPS. The index constitutes a tool for the statistical monitoring of changes of the values of commercial real estate property collaterals.

In case of significant Real Estate market changes, indexed valuations may be used more often than annually in order respective market changes to be incorporated in collaterals' market values.

Credit Risk

The following table summarizes the revaluation policy for the Retail lending portfolios (Individual Banking and Small SB).

EBA Status	Immovable Assets		
Performing (PE, PF & CPF)	**Loan Exposure (in € '000)**		
	<= 300	**> 300 & <=1,000**	**> 1,000**
	Index, Annually	Index, Annually	Physical inspection, Annually
Performing to Non-Performing (including denounced)	**Loan Exposure (in € '000)**		
	<=300	**> 300 & <= 1,000**	**> 1,000**
	Index	Desktop valuation is required to take place within max three (3) months from EBA reclassification unless a valuation has taken place during the last 6 months.	Physical inspection valuation is required to take place within max three (3) months from EBA reclassification unless a valuation has taken place during the last 6 months.
Non-Performing (NPE & NPF)	**Loan Exposure (in € '000)**		
	<= 300	**>300 & <= 1,000**	**> 1,000**
	Index, Annually	Desktop, Annually and for as long as the exposure is classified as non-performing.	Physical inspection, Annually

Special types of immovable assets (hotels, shopping centers (malls), refineries, quarries, marinas, clinics/hospitals/diagnostic centers, schools) should be revaluated through Desktop annually and every two years with Physical Inspection.

The following table summarizes the revaluation policy for the Wholesale & Large SB lending portfolios.

<table>
<tr><th>EBA Status</th><th colspan="5">Immovable Assets</th></tr>
<tr><td rowspan="5">Performing
(PE, PF & CPF)</td><td colspan="5">Loan Exposure (in € '000)</td></tr>
<tr><td><= 300</td><td colspan="2">> 300 & <= 1.000</td><td colspan="2">> 1.000</td></tr>
<tr><td>All types</td><td>Residential Real Estate</td><td>Commercial Real Estate</td><td>Residential Real Estate</td><td>Commercial Real Estate</td></tr>
<tr><td>• Every year with Index
• For special types[1] with Desktop annually</td><td>• Physical inspection every 3 years
• In-between years with Index</td><td>• Physical inspection every 2 years
• In-between years Index or desktop for special types [1]</td><td>• Physical inspection every 3 years
• In-between years with desktop</td><td>• Physical inspection every 2 years
• In-between years with desktop</td></tr>
<tr></tr>
<tr><td rowspan="3">Performing to Non-Performing (including denounced)</td><td colspan="5">Loan Exposure (in € '000) - All types of Immovable Assets</td></tr>
<tr><td><= 300</td><td colspan="2">> 300 & <= 1,000</td><td colspan="2">> 1,000</td></tr>
<tr><td>Index
For special types[1] a Desktop valuation is required to take place within max (3) three months from EBA reclassification unless a valuation has taken place during the last 6 months</td><td colspan="2">Desktop valuation is required to take place within max (3) three months from EBA reclassification unless a valuation has taken place during the last 6 months.</td><td colspan="2">Physical inspection valuation is required to take place within max three (3) months from EBA reclassification unless a valuation has taken place during the last 6 months.</td></tr>
<tr><td rowspan="3">Non-Performing (NPE &NPF)</td><td colspan="5">Loan Exposure (in € '000) - All types of Immovable Assets</td></tr>
<tr><td colspan="3"><= 300</td><td colspan="2">> 300</td></tr>
<tr><td colspan="3">• Every year with Index
• For special types[1] with Desktop annually</td><td colspan="2">• Physical inspection every 2 years.
• In-between years Desktop</td></tr>
</table>

[1] Special Types: Hotels, shopping centers (malls), refineries, quarries, marinas, clinics/hospitals/diagnostic centers, schools.

Credit Risk

Other collaterals:

To ensure the quality of post-dated cheques accepted as collateral, the Bank has developed a pre-screening system, which takes into account a number of criteria and risk parameters, so as to evaluate their eligibility. Furthermore, the post-dated cheques' valuation is regularly monitored through the use of advanced statistical reports and through detailed information regarding recoverability of cheques, referrals and bounced cheques, per issuer broken down by business unit (corporate and small business banking).

In case of reverse repos, the bonds received as collateral are evaluated on a daily basis by the official valuation system. All these are monitored via credit exposure measurement system that takes into account the specific characteristics of every contract.

4.8.3 Collateral policy and documentation

For loan products, Group instructions emphasize that practices followed are timely and prudent in order to ensure that collateral items are controlled by the Group's entities and that the loan and pledge agreement, as well as the collateral is legally enforceable. Therefore, the Group's entities hold the right to liquidate collateral in the event of the obligor's financial distress and can claim and control cash proceeds from a liquidation process.

The Group uses to a large extent standard loan and pledge agreements, ensuring legal enforceability.

The application of CSA (Credit Support Annex) and GMRA (Global Master Repurchase Agreements) contracts determines the cash that should be paid or received in case of derivatives and repos contracts.

4.8.4 Guarantees and credit derivatives

The guarantees used as credit risk mitigation by the Group are largely issued by central and regional governments in the countries in which it operates. The Hellenic Development Bank (HDB - EAT) and other similar institutions, banks and insurance companies are also important guarantors of credit risk.

The Bank enters into credit derivative transactions with both retail and investment banks. The lowest counterparty rating is A, whereas the average counterparty rating is AA (Standard & Poor's rating scale).

Only eligible providers of guarantees and credit derivatives can be recognised in the Standardised and Foundation IRB approach for credit risk. All central governments, regional governments and institutions are eligible. Guarantees issued by corporate entities can only be taken into account if their rating corresponds to A- (Standard & Poor's rating scale) or better.

The table below presents guarantees received broken down by primary type of guarantee as at 31 December 2022 and 2021.

Table 36: Guarantee and credit derivatives

	2022 **€ million**	2021 € million
Guarantees issued by Central Banks or Central Governments	4,012	4,223
Guarantees issued by Banks	100	116
	4,112	4,339

Credit Risk

The table below shows the impact of the credit derivatives used as mitigation techniques in RWAs as at 31 December 2022 and 30 June 2022.

Table 37: EU CR7 - IRB approach – Effect on the RWEAs of credit derivatives used as CRM techniques

		31 December 2022		30 June 2022	
		Pre-credit derivatives risk weighted exposure amount € million	Actual risk weighted exposure amount € million	Pre-credit derivatives risk weighted exposure amount € million	Actual risk weighted exposure amount € million
1	**Exposures under FIRB**	10,207	10,207	10,289	10,289
2	Central governments and central banks	-	-	-	-
3	Institutions	-	-	-	-
4	Corporates	10,207	10,207	10,289	10,289
4.1	of which Corporates - SMEs	2,363	2,363	2,396	2,396
4.2	of which Corporates - Specialised lending	3,394	3,394	3,526	3,526
6	**Exposures under AIRB**	4,156	4,156	4,574	4,574
7	Central governments and central banks	-	-	-	-
8	Institutions	-	-	-	-
8.1	Corporates	105	105	143	143
8.2	of which Corporates - SMEs	105	105	143	143
9	of which Corporates - Specialised lending	-	-	-	-
9.1	Retail	4,051	4,051	4,431	4,431
9.2	of which Retail – SMEs - Secured by immovable property collateral	376	376	399	399
9.3	of which Retail – non-SMEs - Secured by immovable property collateral	1,937	1,937	2,306	2,306
9.4	of which Retail – Qualifying revolving	615	615	619	619
9.5	of which Retail – SMEs - Other	354	354	358	358
10	of which Retail – Non-SMEs- Other	768	768	749	749
	TOTAL (including FIRB exposures and AIRB exposures)	**14,363**	**14,363**	14,863	14,863

Credit Risk

Table 38: EU CR7-A - IRB approach – Disclosure of the extent of the use of CRM techniques

A-IRB	31 December 2022													
		Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
	Total exposures	Part of exposures covered by Financial Collaterals		Part of exposures covered by Immovable property Collaterals	Part of exposures covered by Receivables	Part of exposures covered by Other physical collateral		Part of exposures covered by Cash on deposit	Part of exposures covered by Life insurance policies	Part of exposures covered by Instruments held by a third party	Part of exposures covered by Guarantees	Part of exposures covered by Credit Derivatives	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and sustitution effects)
	€ million	%	%	%	%	%	%	%	%	%	%	%	€ million	€ million
Central governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	174	9.5%	50.9%	46.9%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	160	105
Of which Corporates – SMEs	174	9.5%	50.9%	46.9%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	160	105
Of which Corporates – Specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which Corporates – Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail	11,262	1.9%	60.6%	60.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,309	4,051
Of which Retail – Immovable property SMEs	1,427	0.4%	82.9%	82.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	401	376
Of which Retail – Immovable property non-SMEs	5,840	0.2%	88.6%	88.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1,939	1,937
Of which Retail – Qualifying revolving	1,773	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	615	615
Of which Retail – Other SMEs	901	17.0%	4.2%	0.0%	3.9%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	586	354
Of which Retail – Other non-SMEs	1,320	3.2%	32.6%	32.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	768	768
Total	**11,436**	**2.0%**	**60.5%**	**60.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**4,469**	**4,156**

F-IRB	31 December 2022													
		Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
	Total exposures	Part of exposures covered by Financial Collaterals		Part of exposures covered by Immovable property Collaterals	Part of exposures covered by Receivables	Part of exposures covered by Other physical collateral		Part of exposures covered by Cash on deposit	Part of exposures covered by Life insurance policies	Part of exposures covered by Instruments held by a third party	Part of exposures covered by Guarantees	Part of exposures covered by Credit Derivatives	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and sustitution effects)
	€ million	%	%	%	%	%	%	%	%	%	%	%	€ million	€ million
Central governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	14,539	4.4%	69.1%	58.3%	4.7%	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10,696	10,206
Of which Corporates – SMEs	2,887	1.6%	51.4%	45.1%	4.3%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,604	2,363
Of which Corporates – Specialised lending	4,642	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3,394	3,394
Of which Corporates – Other	7,010	2.8%	17.8%	13.2%	0.3%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,697	4,449
Total	**14,540**	**1.7%**	**18.8%**	**15.3%**	**1.0%**	**2.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**10,696**	**10,207**

Credit Risk

A-IRB	30 June 2022													
		Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
	Total exposures	Part of exposures covered by Financial Collaterals		Part of exposures covered by Immovable property Collaterals	Part of exposures covered by Receivables	Part of exposures covered by Other physical collateral		Part of exposures covered by Cash on deposit	Part of exposures covered by Life insurance policies	Part of exposures covered by Instruments held by a third party	Part of exposures covered by Guarantees	Part of exposures covered by Credit Derivatives	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and sustitution effects)
	€ million	%	%	%	%	%	%	%	%	%	%	%	€ million	€ million
Central governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	228	13.4%	49.6%	46.3%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	235	143
Of which Corporates – SMEs	228	13.4%	49.6%	46.3%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	235	143
Of which Corporates – Specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Of which Corporates – Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail	11,187	2.8%	62.6%	62.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,743	4,431
Of which Retail – Immovable property SMEs	1,427	0.5%	87.4%	87.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	423	399
Of which Retail – Immovable property non-SMEs	5,795	0.3%	90.5%	90.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,307	2,306
Of which Retail – Qualifying revolving	1,771	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	619	619
Of which Retail – Other SMEs	887	25.5%	3.6%	0.0%	3.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	646	358
Of which Retail – Other non-SMEs	1,308	4.9%	36.4%	36.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	749	749
Total	11,414	3.0%	62.3%	62.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,978	4,574

F-IRB	30 June 2022													
		Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
		Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
			Part of exposures covered by Other eligible collaterals (%)				Part of exposures covered by Other funded credit protection (%)							
	Total exposures	Part of exposures covered by Financial Collaterals		Part of exposures covered by Immovable property Collaterals	Part of exposures covered by Receivables	Part of exposures covered by Other physical collateral		Part of exposures covered by Cash on deposit	Part of exposures covered by Life insurance policies	Part of exposures covered by Instruments held by a third party	Part of exposures covered by Guarantees	Part of exposures covered by Credit Derivatives	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and sustitution effects)
	€ million	%	%	%	%	%	%	%	%	%	%	%	€ million	€ million
Central governments and central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	15,540	8.7%	59.0%	50.2%	6.6%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10,702	10,289
Of which Corporates – SMEs	3,447	3.7%	43.7%	35.9%	6.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,644	2,396
Of which Corporates – Specialised lending	4,672	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3,526	3,526
Of which Corporates – Other	7,421	5.0%	15.3%	14.3%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,531	4,367
Total	15,541	3.2%	17.0%	14.8%	1.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10,702	10,289

Credit Risk

4.8.5 Netting agreements

To reduce the exposure towards single counterparties, risk mitigation techniques are used. The most common is the use of closeout netting agreements (usually based on standardised ISDA contracts), which allow the bank to net positive and negative replacement values in the event of default of the counterparty.

Furthermore, the Bank also applies margin agreements (CSAs) in case of counterparties. Thus, collateral is paid or received on a daily basis to cover current exposure. In case of repos and reverse repos the Bank applies netting and daily margining using standardised GMRA contracts.

The Bank already implements the framework for clearing transactions through central counterparty (CCP). Additionally, the Bank is in a position to apply the regulatory framework for transactions not cleared through central counterparty.

4.8.6 Concentration risk on collaterals

For credit exposures, the most commonly accepted collaterals for credit risk mitigation purposes are real estate assets. Consumer loans are not collateralised, except for car loans where the Bank retains ownership until full loan repayment. Mortgage loans are fully collateralised with residential real estate properties.

The Bank does not undertake significant market or credit risk on collaterals of Treasury transactions. In case of cash collateral in foreign currency transactions, the Bank manages the respective foreign exchange exposure accordingly.

Furthermore, since the Bank uses GMRAs for the risk mitigation of repos and reverse repos, the market risk exposure is minimal. In case of reverse repo transactions, the Bank generally accepts high quality government issues as collaterals. The collateral amount on corporate bonds is immaterial.

Credit Risk

4.8.7 Analysis of collaterals

The following table shows the volume of unsecured and secured exposures including all collateral, financial guarantees and credit derivatives used as credit risk mitigants and are eligible under the respective regulatory approach.

Table 39: EU CR3 - CRM techniques – Overview: Disclosure of the use of credit risk mitigation techniques

	31 December 2022				
	Unsecured carrying amount € million	Secured carrying amount € million	Of which secured by collateral € million	Of which secured by financial guarantees € million	Of which secured by credit derivatives € million
Loans and advances	28,239	29,419	23,949	5,471	-
Debt securities	12,960	-	-	-	-
Total	**41,199**	**29,419**	**23,949**	**5,471**	**-**
Of which non-performing exposures	1,263	1,028	966	61	-
Of which defaulted	1,263	1,027			

	30 June 2022				
	Unsecured carrying amount € million	Secured carrying amount € million	Of which secured by collateral € million	Of which secured by financial guarantees € million	Of which secured by credit derivatives € million
Loans and advances	26,502	29,085	23,624	5,461	-
Debt securities	12,542	-	-	-	-
Total	39,044	29,085	23,624	5,461	-
Of which non-performing exposures	1,436	1,093	1,022	71	-
Of which defaulted	1,436	1,093			

(1) The increase in debt securities is mainly due to increased position in Financial Bonds and in securitizations AAA CLOs.
(2) The value of collaterals and the amount of financial guarantees shown above are the allocated values after regulatory haircuts.
(3) For real estate properties the lower between the market value and the pledged amount is considered.

4.9 Asset Backed Securities

4.9.1 Bank's objectives and role

The Group, as part of its funding activity, enters into securitisation transactions of various classes of loans (corporate, small and medium enterprise, mortgage, consumer loans, credit card and bond loans), which generally result in the transfer of the above assets to structured entities (securitisation vehicles), which, in turn issue debt securities held by investors and the Group's entities. The Group monitors the credit quality of the securitisations' underlying loans, as well as the credit ratings of the debt instruments issued, when applicable, and provides either credit enhancements to the securitisation vehicles and/or transfers new loans to the pool of their underlying assets, whenever necessary, in accordance with the terms of the relevant contractual arrangements in force.

Moreover, the Group in the context of its non-performing loans (NPEs) reduction acceleration plan entered into the securitisation of various classes of NPEs through the issue of senior, mezzanine and junior notes.

4.9.2 Methodology for risk weightings

The framework concerning the Capital Adequacy calculations for securitizations that institution acts as investor was amended by the Regulation 2017/2401. Following the hierarchy of these methods, the Bank has adopted the SEC-ERBA method for the calculations of the risk – weighted exposure amounts of this portfolio. According to this method the STS/non STS status, rating, maturity and seniority of the security are taken into account in determining the appropriate risk weight factor.

Credit Risk

4.9.3 Accounting policies

Consolidation of Structured Entities

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. A structured entity often has restricted activities, a narrow well-defined objective, insufficient equity to permit it to finance its activities without subordinated financial support and financing in the form of multiple contractually linked instruments to investors that create concentrations of credit or other risks.

An interest in a structured entity refers to contractual and non-contractual involvement that exposes the Group to variability of returns from the performance of the structured entity.

Structured entities may be established by the Group or by a third party and are consolidated when the substance of the relationship is such that the structured entities are controlled by the Group. In determining whether the Group has control over such structured entities, it considers the following factors:

- The purpose and design of the entity;
- Whether the Group has certain rights that give it the ability to direct the relevant activities of the entity unilaterally, as a result of existing contractual arrangements that give it the power to govern the entity and direct its activities; In case another entity is granted decision making rights, the Group assesses whether this entity acts as an agent of the Group or another investor;
- The existence of any special relationships with the entity; and
- The extent of the Group's exposure to variability of returns from its involvement with the entity, including its exposure in the most subordinated securitised notes issued by the entity as well as subordinated loans or other credit enhancements that may be granted to the entity, and if the Group has the power to affect such variability.

As a result of the consolidation assessment performed, the Group has involvement with both consolidated and unconsolidated structured entities.

Derecognition of financial assets

The Group derecognizes a financial asset when its contractual cash flows expire, or the rights to receive those cash flows are transferred in an outright sale in which substantially all risks and rewards of ownership have been transferred. In addition, a financial asset is derecognized even if rights to receive cash flows are retained but at the same time the Group assumes an obligation to pay the received cash flows without a material delay (pass through agreement) or when substantially all the risks and rewards are neither transferred nor retained but the Group has transferred control of the asset. Control is transferred if, and only if, the transferee has the practical ability to sell the asset in its entirety to unrelated third party and is able to exercise that ability unilaterally and without imposing additional restrictions on the transfer.

In the case of securitisation transactions established by the Group, in order to assess the application of the above mentioned de-recognition principles, the Group considers the structure of each securitisation transaction including its exposure to the more subordinated tranches of the notes issued and/or credit enhancements provided to the structured entities, as well as the securitisation's contractual terms that may indicate that the Group retains control of the underlying assets.

Credit Risk

4.9.4 Securitised exposures

The following table presents the risk weights of the purchased securitised exposures of the Group, as at 31 December 2022 and 30 June 2022:

Table 40: EU SEC1 - Securitisation exposures in the non-trading book

	31 December 2022														
	Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
	Traditional				Synthetic		Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
	STS		Non-STS					STS	Non-STS			STS	Non-STS		
		of which SRT		of which SRT		of which SRT									
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	-	-	1,024	1,024	2,736	2,736	3,760	-	-	-	-	-	1,537	-	1,537
Retail (total)	-	-	1,019	1,019	-	-	1,019	-	-	-	-	-	42	-	42
residential mortgage	-	-	-	-	-	-	-	-	-	-	-	-	42	-	42
credit card	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
other retail exposures	-	-	1,019	1,019	-	-	1,019	-	-	-	-	-	-	-	-
re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale (total)	-	-	5	5	2,736	2,736	2,741	-	-	-	-	-	1,495	-	1,495
loans to corporates	-	-	5	5	2,736	2,736	2,741	-	-	-	-	-	1,495	-	1,495
commercial mortgage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
lease and receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
other wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	30 June 2022														
	Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
	Traditional				Synthetic		Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
	STS		Non-STS					STS	Non-STS			STS	Non-STS		
		of which SRT		of which SRT		of which SRT									
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	-	-	1,053	1,053	1,436	1,436	2,489	-	-	-	-	-	1,370	-	1,370
Retail (total)	-	-	1,048	1,048	-	-	1,048	-	-	-	-	-	46	-	46
residential mortgage	-	-	-	-	-	-	-	-	-	-	-	-	46	-	46
credit card	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
other retail exposures	-	-	1,048	1,048	-	-	1,048	-	-	-	-	-	-	-	-
re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale (total)	-	-	5	5	1,436	1,436	1,441	-	-	-	-	-	1,324	-	1,324
loans to corporates	-	-	5	5	1,436	1,436	1,441	-	-	-	-	-	1,324	-	1,324
commercial mortgage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
lease and receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
other wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

[1] *The increase in the securitizations that the institution acts as investor is due to increased position in AAA CLOs.*
[2] *The increase in the synthetic securitisation is due to performing shipping loans (project "Wave III").*

Credit Risk

Table 41: EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements – institution acting as originator or as sponsor

	31 December 2022																
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	2,734	-	1,014	12	-	2,736	-	1,024	-	360	-	1,077	-	29	-	86	-
Traditional-transactions	-	-	1,014	10	-	-	-	1,024	-	1	-	1,077	-	-	-	86	-
Securitisation	-	-	1,014	10	-	-	-	1,024	-	1	-	1,077	-	-	-	86	-
Retail underlying	-	-	1,014	5	-	-	-	1,019	-	1	-	1,022	-	-	-	82	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale	-	-	-	5	-	-	-	5	-	-	-	55	-	-	-	4	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Synthetic transactions	2,734	-	-	2	-	2,736	-	-	-	359	-	-	-	29	-	-	-
Securitisation	2,734	-	-	2	-	2,736	-	-	-	359	-	-	-	29	-	-	-
Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale	2,734	-	-	2	-	2,736	-	-	-	359	-	-	-	29	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	30 June 2022																
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	484	952	1,047	6	-	1,436	-	1,053	-	309	-	1,059	-	25	-	85	-
Traditional-transactions	-	-	1,047	6	-	-	-	1,053	-	1	-	1,059	-	-	-	85	-
Securitisation	-	-	1,047	6	-	-	-	1,053	-	1	-	1,059	-	-	-	85	-
Retail underlying	-	-	1,047	1	-	-	-	1,048	-	1	-	1,003	-	-	-	81	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale	-	-	-	5	-	-	-	5	-	-	-	56	-	-	-	4	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Synthetic transactions	484	952	-	-	-	1,436	-	-	-	308	-	-	-	25	-	-	-
Securitisation	484	952	-	-	-	1,436	-	-	-	308	-	-	-	25	-	-	-
Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale	484	952	-	-	-	1,436	-	-	-	308	-	-	-	25	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) *The increase in the below 20% band is due to the new synthetic securitization of the shipping portfolio (Wave III) and the fact that the other two synthetic securitizations Wave I and Wave II received approval for being characterized as STS (Simple, Transparent and Standardized) resulting in a lower risk weight.*

(2) *The increase of the Exposure values (by regulatory approach) is mainly due to the synthetic securitisation of performing shipping loans (project "Wave III").*

Credit Risk

Table 42: EU SEC4 - Securitisation exposures in the non-trading book and associated capital requirements - institution acting as investor

	31 December 2022																
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	1,495	36	6	-	-	-	1,537	-	-	-	320	-	-	-	26	-	-
Traditional securitisation	1,495	36	6	-	-	-	1,537	-	-	-	320	-	-	-	26	-	-
Securitisation	1,495	36	6	-	-	-	1,537	-	-	-	320	-	-	-	26	-	-
Retail underlying	-	36	6	-	-	-	42	-	-	-	21	-	-	-	2	-	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale	1,495	-	-	-	-	-	1,495	-	-	-	299	-	-	-	24	-	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	30 June 2022																
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	1,324	39	6	1	-	-	1,370	-	-	-	288	-	-	-	23	-	-
Traditional securitisation	1,324	39	6	1	-	-	1,370	-	-	-	288	-	-	-	23	-	-
Securitisation	1,324	39	6	1	-	-	1,370	-	-	-	288	-	-	-	23	-	-
Retail underlying	-	39	6	1	-	-	46	-	-	-	23	-	-	-	2	-	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wholesale	1,324	-	-	-	-	-	1,324	-	-	-	265	-	-	-	21	-	-
Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

[1] The increase in the wholesale securitizations is due to the new positions in AAA CLOs.

Credit Risk

Table 43: EU-SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments

	31 December 2022			30 June 2022		
	Exposures securitised by the institution - Institution acts as originator or as sponsor			Exposures securitised by the institution - Institution acts as originator or as sponsor		
	Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period	Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period
		Of which exposures in default			Of which exposures in default	
	€ million	€ million	€ million	€ million	€ million	€ million
Total exposures	14,995	10,501	-	13,558	10,692	-
Retail (total)	6,586	5,749	-	6,605	5,796	-
residential mortgage	3,787	3,255	-	3,806	3,281	-
credit card	-	-	-	-	-	-
other retail exposures	2,799	2,494	-	2,799	2,515	-
re-securitisation	-	-	-	-	-	-
Wholesale (total)	8,409	4,752	-	6,953	4,896	-
loans to corporates	8,409	4,752	-	6,953	4,896	-
commercial mortgage	-	-	-	-	-	-
lease and receivables	-	-	-	-	-	-
other wholesale	-	-	-	-	-	-
re-securitisation	-	-	-	-	-	-

[(1)] The increase is mainly due to the synthetic securitisation of performing shipping loans (project "Wave III").

For securitization exposures the Group uses one or more of the following external rating agencies: Moody's, Standard & Poor's and Fitch.

5. Market Risk

5.1 Definition and policies

5.1.1 Risk strategy

Objectives for market and counterparty risk control and supervision

Risk is at the core of the Eurobank's business. The objectives for the Bank's market and counterparty risk control and supervision are to:

- protect the Bank against unforeseen market and counterparty related losses and contribute to earnings stability through the independent identification, assessment and understanding of the market risks inherent in the business;
- align the Bank organisational structure and management processes with regulatory requirements and international best practices;
- set minimum standards for controlling market and counterparty risks;
- develop transparent, objective and consistent market and counterparty risk information as the basis for sound decision-making;
- establish a structure that will allow the Bank to link business strategy and operations with the objectives for risk control and supervision;
- safeguard adherence to the Group's Risk Appetite limits.

The Bank is developing processes to measure performance on a risk-adjusted basis and allocate capital accordingly with the objectives to maximise earnings potential.

Risk Definitions

Sources of market and counterparty risks

Market risk is the risk of potential financial loss due to an adverse change in market variables. As noted elsewhere in the document, the Bank is exposed to five types of market risk:

- Interest-rate and credit spreads' risk;
- Equity price risk;
- Foreign exchange risk;
- Commodities price risk; and
- Implied Volatilities of the above.

Counterparty risk is the risk of potential financial loss stemming from a counterparty's inability to meet his financial obligations in the context of a market instrument. It includes:

- Issuer risk for debt securities traded in the financial markets;
- Counterparty credit risk for derivatives (interbank and corporate);
- Counterparty credit risk for on balance sheet interbank activities (placings, repos, etc).

Effects of market and counterparty Risks

The Bank is potentially exposed to market risks through all of its assets, liabilities and off-balance sheet positions, in both Treasury and all other portfolios.

Market Risk

Changes in market variables can affect the ERB financial condition in three ways:

- the earnings effect - the impact of changes in market rates on cash flow;
- the economic value, or net worth, of ERB, which is equal to the present value of all of its expected net future cash flows discounted to their present value to reflect market rates. Changes in market variables will impact the economic value of ERB assets, liabilities and off-balance sheet positions and therefore its economic value;
- the Potential Future Exposure (PFE) effect – the impact of changes in market risk variables to counterparty exposure and subsequent increase of counterparty credit risk faced by the Bank.

The purpose of the Bank's market risk control and supervision structure is to control and monitor the effect of market risks on earnings, economic value and potential future exposure.

Similarly, the Bank is potentially exposed to counterparty risks through all of its assets and off-balance sheet positions, in both Treasury and all other portfolios. Counterparty credit-worthiness affects the economic value, or net worth, of ERB, which is equal to the present value of all of its expected net future cash flows discounted to their present value to reflect market rates.

5.1.2 Market and Counterparty Risk Governance Structure

Board Risk Committee (BRC)

The Board Risk Committee (BRC) of Eurobank Ergasias S.A. and its subsidiaries (the Group) is a committee of the Board of Directors (BoD) and its purpose is to assist the BoD in discharging its oversight responsibility relating Credit, Market, Operational and other non-financial risks.

In the context of market and counterparty Risks, the BRC:

- Ensures that the Group has a well-defined market and counterparty Risk strategy and risk appetite in line with its business/restructuring plan and that the risk appetite in question is articulated in a set of qualitative and quantitative statements, limits and an appropriate measurement methodology;
- Ensures that the Group has developed an appropriate market and counterparty Risk management framework which is embedded in the decision making process (e.g. new products introduction, risk adjusted pricing, risk adjusted performance measures and capital allocation) throughout the organization and its subsidiaries;
- Reviews relevant policies and procedures;
- Ensures that the Group has the appropriate modeling tools, data sources and sufficient and competent staff needed to identify, assess, monitor and mitigate risks;
- Reviews on a regular basis the adequacy of relevant measures and controls;
- Reviews and assesses, through regular reporting by the Group Market and Counterparty Risk Sector (GMCRS), the Bank's and Group's risk profile and effectiveness of its risk management policies;
- Monitor Business Units' implementation of and compliance with Group market and counterparty Risk Policies and Procedures;
- Ensures that appropriate stress tests are performed, at least on an annual basis, in relation to all major Group risks;
- Provides a point of escalation in case of relevant limit breaches.

Group Chief Risk Officer (GCRO)

In the context of market risks, the GCRO oversees the implementation of the market risk policies approves and signs off:

- Sources and assumptions underlying the valuation of all securities and derivatives;
- Credit Valuation Adjustment (CVA) calculation methodologies;
- Assumptions underlying the VaR calculation implementation.

Market Risk

Group Market and Counterparty Risk Sector (GMCRS)

GMCRS is an independent unit of the Bank under the Group Chief Risk Officer. In the context of market and counterparty risks, the GMCRS performs two key functions within the Group:

- The sole, independent valuation of all derivatives and debt securities held in Eurobank Ergasias S.A. and its subsidiary Banks;
- The identification, measurement and reporting of all market and counterparty risks within the Group.

The pricing and risk measurement methodologies of GMCRS are approved by the CRO and are audited by internal and external auditors on a regular basis.

In the context of market and counterparty risks, the Bank's GMCRS is responsible for:

- Maintaining market and counterparty Risk policies (including policies for the management and monitoring of the Interest Rate Risk in the Banking Book) and procedures appropriate to the chosen business and risk profile;
- Identifying and assessing all market and counterparty Risks on the ERB Group balance sheet;
- Monitoring Global Markets and other key Business Unit activities from a market risk perspective;
- Evaluating all Treasury securities and derivatives;
- Ensuring compliance with regulatory requirements as they relate to market and counterparty risk;
- Calculating Capital Adequacy requirements for market and counterparty risk (following the approval of the internal model from BoG in July 2005) and conducting regular reporting to the SSM;
- Ensuring compliance with the risk limits and appetite set by the Management;
- Monitoring and reporting the limit utilization to the Management and the BRC. This includes escalation of limit breaches or significant market risk issues;
- Reviewing new products (Loans, Deposits and investment products) from a market and counterparty risk perspective;
- Expanding market and counterparty risk infrastructure and processes to conform to international best practices;
- Reviewing market and counterparty risk policies on an annual basis.

Country Risk Committees (CRCs)

Country Risk Committees are risk committees held individually for each of our subsidiary banks in Bulgaria, Serbia and Cyprus. Participation includes both local bank and Head Office representation, including the GCRO; the committees are chaired by senior staff of the Head Office Risk Management Division.

In the context of market risks, the committees examine limit utilizations and grant approvals for limit modifications in the Interest Rate Gap and FX notional equivalent measures.

Global Markets Credit Committee (GMCC)

The Global Markets Credit Committee, jointly held by Group Risk and Global Markets, is the body responsible for the review of the Group's debt securities positions.

The Committee examines all debt securities, regardless of issuer, held in any Business Unit within the ERB Group (including both the Global Markets and Treasury General Division and the International Subsidiaries) and proceeds to decide on the following matters:

- To retain or discard corporate debt securities rated below investment grade;
- To place debt securities on watch list, classified by currency of denomination, country, ownership, tenor, degree of liquidity, sector, issuer, issuer type (Corporate or State), rating or any combination chosen. Criteria for this action may include, but are not limited to, sudden or significant economic, political, structural force major changes or increasing price volatility and credit rating changes.

5.1.3 Risk Measurement and Reporting

Market and counterparty risk measurement

This section defines the scope of the risk measurement system, in terms of positions and risk factors and sets out the standards by which market and counterparty risks are measured.

Scope of risk measurement system

All positions within the Group that are exposed to market and counterparty risks must be included within the risk measurement system. The scope of the application encompasses all units of the Group with significant market risk exposure. This includes, but is not limited to:

(2) ERB Athens and its subsidiaries (Equities, ERB Factoring, etc.);

(3) All banking businesses of our international operations;

(4) Associated SPVs;

Regarding market risk, the risk measurement system measures risk in the valuation of all Group's positions (securities, derivatives, core banking items) regardless of accounting treatment, arising from exposure to the following market risk factors:

- FX rates;
- interest rates - including credit spreads;
- equity prices;
- commodity prices;
- market implied volatilities of the above.

Regarding counterparty risk, the risk measurement system compares notional amounts for each counterparty classification with the established limits and aggregation rules.

Risk measures

The Bank

- uses risk measures that enable them to monitor compliance with limits agreed at Group level;
- assesses the validity of assumptions used and exactness of the underlying methodologies in terms of the usefulness of the resulting risk measures for risk control and ultimately performance measurement;
- documents the methodologies and assumptions used.

The Bank has in place a number of market and counterparty risk measures, to ensure that it is protected in both "normal" and "stressed" market conditions. These measures are monitored by GMCRS.

The list of applicable risk measures, monitored by GMCRS is as follows:

- Value at Risk (VaR) and Expected Shortfall;
- Interest rate gap;
- Net Interest Income (NII) and EVE sensitivity;
- Foreign Exchange equivalent positions;
- Potential Future Exposure;

- Exposure to the Greek Sovereign State;
- Total Country exposure;
- Exposure to Financial Institutions;
- Exposure to non-financial corporates (international) and ABSs;
- Exposure to non-financial corporates (domestic).

5.2 Internal model - Value at Risk (VaR) model & Credit Risk (IRC)

Since 2005 the Bank is validated by the Competent Authorities to employ the internal model approach (IMA) in the calculation of regulatory capital for the trading positions of its activities in Greece. As a general rule, the trading book definition for regulatory purposes follows the respective positions' accounting treatment – i.e. the booking of a position with a Fair Value through P&L (FVPL) accounting treatment automatically signifies that the position is included in the trading book. It should be noted that all FX exposure, whether it resides in the Bank's trading or banking book, or is associated with the Bank's participations in its international subsidiaries (structural FX position), is also treated under the internal model framework.

The validation extends to the following risk types:

- General market risk (i.e. the risk associated with the movements of FX rates, interest rates, equity indices and implied volatilities);
- Specific market risk (i.e. the risk associated with the movements of credit spreads & individual equities); and
- Credit migration and default event risk; the capital associated with this type of risk in the trading book is called "Incremental Risk Charge" (IRC).

The key metric monitored by the Bank's internal models of market risk is that of Value at Risk (VaR). VaR is a statistical risk measure of the maximum loss that the Bank may, under normal market conditions, incur over a certain period of time with a certain confidence level. For example, a 99% 1 day VaR of € 1 million means that there is a 99% probability that the Bank will not lose more than € 1 million within the next day.

VaR calculation is carried out via Monte Carlo simulation, centered around the Bank's core risk engine (MSCI Risk Manager). On a daily basis, through an, automated and closely monitored process, the risk engine retrieves both the Bank's positions and the relevant market data. Volatilities and correlations are estimated from historical data time series, using an Exponentially Weighted Moving Average (EWMA) methodology. The key parameters of the EWMA (i.e. the length of observation period and the value of the decay constant λ) are specified by the user. The Monte Carlo run produces simulated scenarios of market parameters with the desired statistical properties. For each scenario, each position is fully repriced, enabling the simulation to cover all types of nonlinear and option risks. The pricing model diversifies general and specific risk and each separate risk type is being estimated on a standalone basis; however, the total VaR figure equals their diversified aggregate. As described above, the internal model covers the following risk types:

- Interest rate risk: the risk of losses because of changes in interest rates;
- Foreign exchange risk: the risk of losses on foreign currency positions because of changes in exchange rates;
- Equity risk: the risk of losses because of changes in equity prices, equity indices and mutual funds;
- Commodity risk: the risk of losses because of changes in commodity prices;
- Volatility risk: the risk of losses on option positions because of changes in implied volatility levels;
- Inflation risk: the risk of losses of inflation linked positions because of changes in the break-even inflation levels.

Market Risk

The Bank employs internal models both for regulatory reporting and capital requirement calculation and for internal monitoring and management reporting of market risks. The principles underlying the two applications are similar; however, differences in the implementation exist, as shown by the summary table below:

Internal Model implementation for regulatory purposes:

Scope:	Greece, Trading book & FX
Metric monitored:	Value at Risk (VaR)
Confidence level:	99%
Holding period:	10 days (scaled up by the square root of 10 from 1 day primary VaR calculation)
Methodology:	Monte Carlo
Observation parameters:	1 year, unweighted observations
Number of scenarios:	5000

Internal Model implementation for Management reporting purposes:

Scope:	Group, Portfolios including fair valued positions
Metric monitored:	Value at Risk (VaR)
Confidence level:	99%
Holding period:	10 days (scaled up by the square root of 10 at the risk factor level)
Methodology:	Monte Carlo
Observation parameters:	6 months, EWMA, decay factor λ = 0.94
Number of scenarios:	2000

Since VaR constitutes an integral part of the Group's market risk control regime, VaR limits have been established for all (trading and investment portfolios, including fair valued positions) operations and actual exposure is reviewed daily by management.

Since 31.12.2011 the Bank has additionally implemented the Stressed VaR (SVaR) and Incremental Risk Charge (IRC), using the internal model as requested by Basel 2.5 framework.

Stressed VaR (SVaR) is calculated under the same assumptions as VaR (same positions / portfolios, same pricing functions, same methodology, same number of MC scenarios (5,000), same decay factor for the volatility estimate) with the only difference being the time window ("stressed period") that is used to provide the relevant volatilities. The stressed period is defined as the period for which the total VaR of the portfolio is being maximized; it should be noted that this does not mean that the stressed period also maximizes each separate risk type. The stressed period is currently re-estimated on a quarterly basis, but in case of material changes in the portfolio's composition, the calculation might be performed on an ad hoc basis.

The Bank's exposure to implied volatilities is limited. Furthermore, the bank does not carry any proprietary positions on commodities.

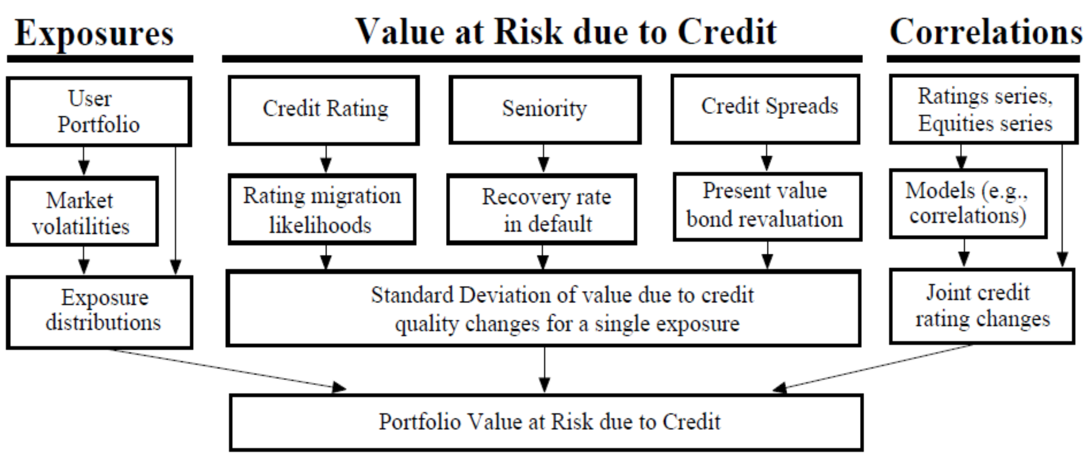
IRC is computed on all fixed income positions in Bank's trading activities in Greece, including CDS and bond futures. It estimates the default & migration risk of the trading book portfolio, using Monte Carlo simulation, to a 99.9% confidence level over a one year holding period. The model was approved by BoG on 17.5.2012.

Market Risk

For the calculation of IRC the Bank uses the CreditMetrics (MSCI) methodology. CreditMetrics is a methodology for assessing portfolio risk due to changes in market value caused by changes in obligor credit quality (rating migrations) or default. The methodology provides the framework for the calculation of expected losses and unexpected losses (the economic capital) which is the capital charge for credit risk in the trading book (or the incremental risk charge, IRC). CreditMetrics assesses risk within the full context of a portfolio. It addresses the correlation between default and migration events across obligors. This allows to directly calculate the diversification benefits and the effect of over-concentrations across the portfolio.

CreditMetrics looks at a horizon which is user defined and constructs a distribution of the portfolio values which are based on a user defined number of simulated credit outcomes (rating migrations and defaults). Each credit quality migration is weighted by its likelihood (which is derived from a transition matrix). Each outcome has an estimate of change in value (given by either credit spreads in case of migrations or assumptions which are based on historical studies for the recovery rates in case of default).

The framework can be summarised in the diagram below:



The modelling approach is based on a transition matrix based model.

Transition matrices are downloaded into Credit Metrics automatically and consist of the matrices as provided by Moody's, S&P & Fitch.

The Gaussian copula distribution is used as the model for the estimation of correlations between the obligors.

The Bank applies a 1 year Liquidity Horizon for IRC calculations.

This decision is based on the following criteria:

- the trading book portfolio remains limited in size during all the years after the approval of the IRC model;
- the trading book portfolio remains concentrated on GGBs and Greek / International corporates.

The Bank applies a validation procedure for the Market Risk Internal Models and the IRC.

The following list represents the main tasks of the established validation process for the Market Risk Internal Model:

A1) general review of regulatory capital, positions and asset dynamics;

A2) confirmation that the appropriate scaling laws are employed in the calculations;

A3) confirmation that the correct models of asset dynamics are employed in the Interest Rate simulation;

Market Risk

A4) qualitative analysis on backtesting results to confirm that number of exceptions is within the limits of statistical tolerance.

The following list represents the main tasks of the established validation process for the IRC model:

A1) confirmation that the appropriate set of input market data is used;

A2) confirmation that the input market data are correct, relevant and up to date;

A3) confirmation that unrated obligors are handled correctly;

A4) confirmation that the set of position data is correct and reconciled with other sources;

A5) confirmation that the set of assumptions is reasonable and it is based on supportive analysis;

A6) confirmation that the results are reasonable and can be approximated or be explained through reasonability tests;

A7) confirmation of the PD assumptions;

A8) confirmation of the RR assumptions;

A9) review and confirmation of the approach that is used for risks not in the IRC model;

A10) review of the results of the sensitivity analysis on critical variables (PD, RR, R2, correlation).

The following two tables summarize the components of the capital requirement, under the IMA approach applied by the Bank as at 31 December 2022 and 30 June 2022.

Table 44: EU MR2-A - Market risk under Internal Model Approach (IMA)

		31 December 2022		30 June 2022	
		RWEAs € million	Own funds requirements € million	RWEAs € million	Own funds requirements € million
1	**VaR** (higher of values a and b)	159	13	128	10
(a)	Previous day's VaR (VaRt-1)		3		3
(b)	Multiplication factor (mc) x average of previous 60 working days (VaRavg)		13		10
2	**SVaR** (higher of values a and b)	383	31	477	38
(a)	Latest available SVaR (SVaRt-1))		6		9
(b)	Multiplication factor (ms) x average of previous 60 working days (sVaRavg)		31		38
3	**IRC** (higher of values a and b)	42	3	156	13
(a)	Most recent IRC measure		3		11
(b)	12 weeks average IRC measure		3		13
4	**Comprehensive risk measure** (higher of values a, b and c)	-	-	-	-
(a)	Most recent risk measure of comprehensive risk measure		-		-
(b)	12 weeks average of comprehensive risk measure		-		-
(c)	Comprehensive risk measure Floor		-		-
5	**Other**	-	-	-	-
6	**Total**	**584**	**47**	761	61

[1] The decrease observed in the H2 2022 RWAs is mainly stemming from the reduced trading activity, mostly associated with items contributing to the Incremental Risk Charge (IRC), i.e. fixed income securities.

Market Risk

Table 45: EU MR2-B - RWA flow of market risk exposures under IMA

	31 December 2022						
	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total own funds requirements
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
1 RWAs at 1 October 2022[1]	187	405	36	-	-	629	50
1a Regulatory adjustment[2]	(151)	(305)	(5)	-	-	(461)	(37)
1b RWAs at the previous quarter-end (end of the day)[3]	36	100	31	-	-	167	13
2 Movement in risk levels	(28)	(23)	5	-	-	(45)	(4)
3 Model updates/changes	-	-	-	-	-	-	-
4 Methodology and policy	-	-	-	-	-	-	-
5 Acquisitions and disposals	-	-	-	-	-	-	-
6 Foreign exchange movements	-	-	-	-	-	-	-
7 Other	-	-	-	-	-	-	-
8a RWAs at the end of the reporting period (end of the day)[3]	32	79	42	-	-	153	12
8b Regulatory adjustment[2]	127	304	-	-	-	431	35
8 RWAs at 31 December 2022[1]	**159**	**383**	**42**	**-**	**-**	**584**	**47**

(1) RWA at previous and current reporting period (quarter end).
(2) Regulatory Adjustment indicates the difference between RWA and RWA (end of day) at previous and current reporting period.
(3) RWA that would be estimated on the basis of the previous or current quarter end figure (instead of the max of it and the 60-day average).

Market Risk

The table below shows the values resulting from the different types of internal models approved to use for computing the regulatory capital charge as at 31 December 2022 and 30 June 2022.

Table 46: EU MR3 – IMA values for trading portfolios

	31 December 2022 € million	30 June 2022 € million
VaR (10 day 99%)		
Maximum value	4	3
Average value	3	2
Minimum value	2	1
Period end	3	3
SVaR (10 day 99%)		
Maximum value	8	13
Average value	7	9
Minimum value	6	6
Period end	6	8
IRC (99.9%)		
Maximum value	15	17
Average value	4	12
Minimum value	-	10
Period end	3	11
Comprehensive risk capital charge (99.9%)		
Maximum value	-	-
Average value	-	-
Minimum value	-	-
Period end	-	-

5.2.1 Stress testing

VaR models are designed to measure market risk under normal market environment. It is assumed that any changes in the risk factors follow a normal distribution. Given that the VaR approach does not cover extreme market conditions, the Group has been applying stress tests, to simulate the effect of many standard deviation movements of risk factors and the breakdown of historical correlations.

The main types of stress tests performed are historical stress tests and subjective stress tests, where the portfolios are exposed to scenarios for risk factors that are deemed particularly relevant (depreciation of foreign currencies, yield curves parallel shifts, long term steepening, long term flattening, 10σ upward shift, credit spread increase, equities prices reduction and implied volatilities adverse moves).

Stress tests that are applied to the IRC modelling parameters consist of:

- Sensitivity on the percentage on systematic factor;
- Sensitivity on pair-wise obligor correlation;
- Sensitivity on PDs;
- Sensitivity on LGDs.

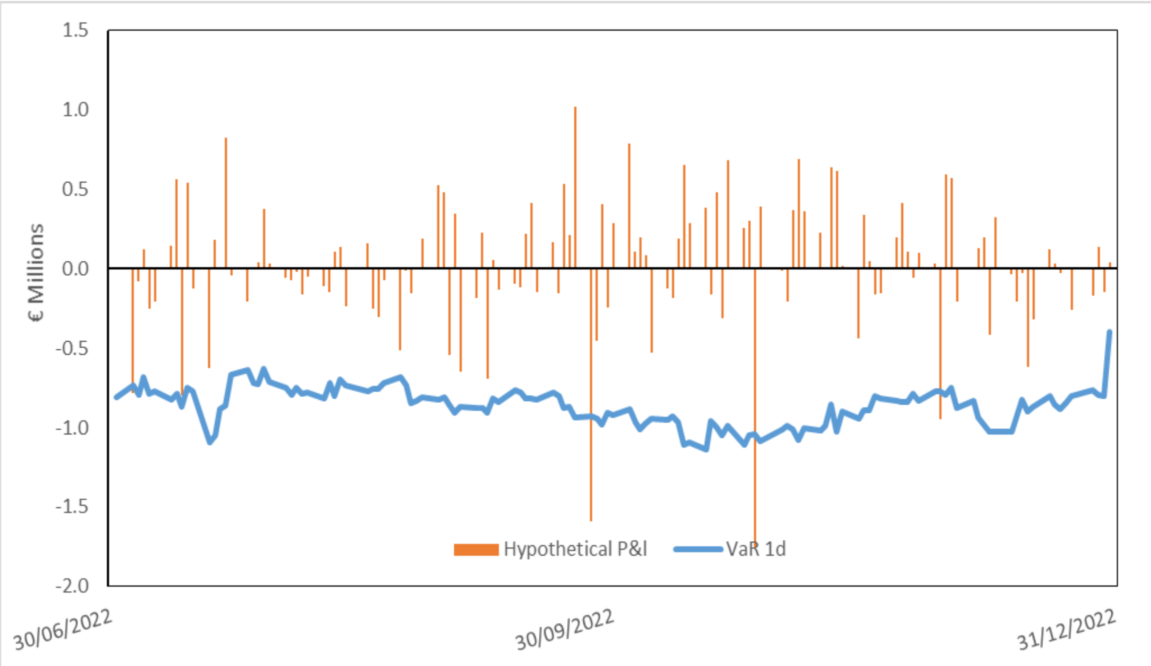
Market Risk

5.2.2 Back testing

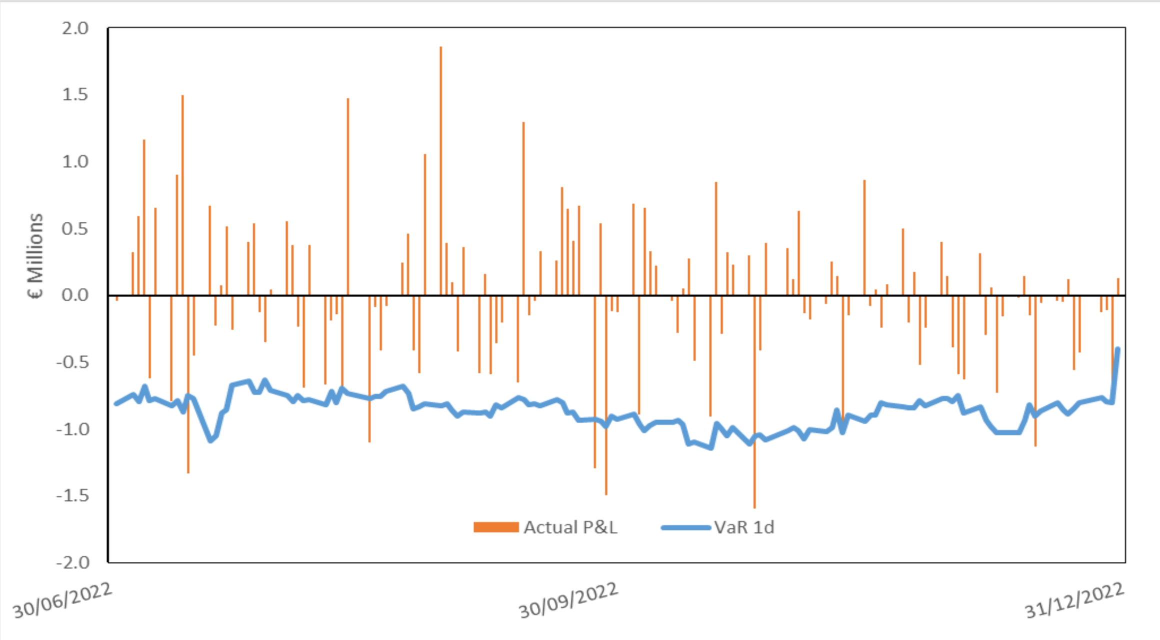
Back testing for H2 2022 has revealed, as shown in the graphs below, four (4) overshootings out of a total of 128 working days, when comparing the VaR forecast to the Hypothetical Profit and Loss Statement (P&L) and seven (7) overshootings when comparing the VaR forecast to the Actual P&L. According to the regulatory framework, which takes into account a 250 working days period, the multiplier is equal to 4.00 (currently in the red zone, with fourteen (14) overshooting when comparing the VaR forecast to Hypothetical P&L and seventeen (17) when comparing to Actual P&L), for capital adequacy calculations for market risk. The calculation for RWAs (VaR, SVaR) takes into account the amended multiplication factor (4.25), following the ECB's Decision on the additional supervisory measures, regarding the use of the internal models approach for calculating own fund requirements for market risk.

New overshootings continued to appear during H2 2022, both in Hypothetical and Actual P&L, due to the continuation of the geopolitical tensions (i.e. war in Ukraine), the uncertainty regarding the energy costs, along with the prolonged interest rates and credit spreads' volatility, stemming from the markets' reaction to the inflationary pressures and the impact of the Central Banks' monetary policy. ECB is well-aware of the aforementioned market conditions and the relevant increased number of back testing overshootings, that affect the vast majority of the European Banks applying the Internal Model Approach (IMA).

Table 47: EU MR4 – Comparison of VaR estimates with gains/losses



Market Risk



5.3 Standardised approach for market risk

The Bank uses the Standardised approach for the measurement of market risk exposure and capital requirements of its subsidiaries in Greece and in International operations. The following table summarises the capital requirements for market risk per risk factor, based on the Standardised approach, as at 31 December 2022 and 30 June 2022.

Table 48: EU MR1 – Market risk under the standardised approach

	31 December 2022 RWEAs € million	30 June 2022 RWEAs € million
Outright products		
Interest rate risk (general and specific)	4	4
Equity risk (general and specific)	9	7
Foreign exchange risk	237	264
Commodity risk	-	-
Options		
Simplified approach	-	-
Delta-plus method	-	-
Scenario approach	-	-
Securitisation (specific risk)	-	-
Total	**249**	275

5.4 Equity exposures not included in the trading book

The Group may make an irrevocable election to designate an equity instrument at fair value through other comprehensive income (FVOCI). This designation, if elected, is made at initial recognition and on an instrument by instrument basis. Gains and losses on these instruments, including when de-recognised, are recorded in other comprehensive income (OCI) and are not subsequently reclassified to the income statement. Dividends received are recorded in the income statement.

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Equity instruments measured at fair value through profit or loss (FVTPL) are initially recorded at fair value and any unrealized gains or losses arising due to changes in fair value are included in the income statement.

The following table presents equity holdings of non trading book portfolio and included in regulatory exposures as at 31 December 2022 and 2021:

Table 49: Equity exposures not included in the trading book

	2022 € million	2021 € million
Held for:		
Strategic investments	235	30
Equity investments for capital appreciation	101	155
Total	**336**	185
Listed	103	54
Non-listed	156	59
Other (MF & other type of funds)	77	72
Total	**336**	185

[1] The increase in strategic investments is mainly due to the acquisition of Hellenic Bank Public Company Limited equities.

5.5 Interest rate risk in the Banking Book

With regards to the estimation of the Interest Rate Risk in the Banking Book (IRRBB), the Bank uses methodologies for the estimation of risk from positions at fair value (VaR approach), along with methodologies for the estimation of risk on EVE (Economic Value of Equity) and on NII (Net Interest Income), taking into account all Banking Book positions (including AC portfolios).

Regarding positions at fair value, the Bank calculates and monitors the interest rate risk for the Bank's operations in Greece, and for its Subsidiary Banks on a daily basis, using the internal VaR model. The perimeter of the calculation includes the FVOCI portfolio; VaR provides an estimation of the potential losses from FVOCI positions measured at fair value, that will directly affect the Bank's Capital (income statement or equity).

The VaR that the Group measures for positions measured at fair value is based on a 99% confidence level and a holding period of 1 day. The methodology used for the calculation is Monte Carlo simulation (full re-pricing approach).

The following table presents the EOY and averages of 2022 and 2021 interest rate VaR estimation of the FVOCI portfolio.

Interest Rate Risk measured using the VaR methodology, Greece and International Subsidiaries[1]

Table 50: Interest Rate VaR (FVOCI)

	2022 (Average) € million	**2022 € million**	2021 (Average) € million	2021 € million
Interest Rate Risk	22	9	14	14

[1] Includes FVOCI portfolio measured at fair value.

The largest portion of the Group's Interest Rate VaR is attributable to the risk associated with interest rate and credit spread sensitive debt securities and derivatives. The average VaR of 2022 is materially increased, as compared to the average VaR of 2021, due to the continuation of the geopolitical tensions (i.e. war in Ukraine), the uncertainty regarding

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the energy costs, the significantly increased volatility observed in the markets (reaching its peak levels between March and May) due to markets' reaction to the inflationary pressures and the impact of the Central Banks' monetary policy.

In addition to the VaR estimation, the Bank uses internal reports for the monitoring of the Interest Rate Risk in the Banking Book (IRRBB) taking into account FVOCI and AC portfolios (loans, deposits debt securities and derivatives), including: Interest rate repricing analysis, sensitivity of NII and sensitivity of Bank's EVE (Economic Value of Equity) on multiple scenarios of interest rates. For the calculation of these sensitivities, specific assumptions are made regarding the applicable duration (for EVE delta calculations) and pass-through rate (for NII delta calculations) on specific parts of the Group's Balance Sheet (for example for sight deposits and other Non-Maturing Deposits, NMDs). These assumptions are based on historical observations processed using statistical analysis or are based on studies that summarize the IRRBB practices in the European level.

The disclosure has been prepared using the information referred to in Article 448(1), points (a) and (b), of Regulation (EU) No 575/2013 by using template EU IRRBB1 set out in Annex XXXVII of Regulation (EU) No 631/2022 of 13 April 2022 and by following the instructions set out in Annex XXXVIII to the same Regulation.

The analysis takes into account all assets, liabilities and off-balance sheet items, which are sensitive to interest rates.

The following table summarizes the most important and meaningful metrics that are used internally by the Group for the monitoring of IRRBB.

Table 51: NII Sensitivity impact (± 200 bps)

	31 December 2022	31 December 2021
	€ million	€ million
NII sensitivity	**1 year impact**	1 year impact
Scenario		
Parallel Up	177	237
Parallel Down	(590)	(84)

The impact on NII is calculated under the scenario of an instantaneous parallel shift of all interest rates and under the assumption of change of mix between sight/savings and term deposits when this is applicable.

Table 52: EVE Sensitivity

EVE sensitivity	**31 December 2022**				
Scenario	**Total**	**EUR**	**USD**	**CHF**	**OTHER**
	€ million	**€ million**	**€ million**	**€ million**	**€ million**
Parallel Up	363	452	(49)	(15)	(26)
Steepener	(324)	(305)	(16)	5	(9)
Flattener	368	367	4	(8)	5

EVE sensitivity	31 December 2021				
Scenario	Total	EUR	USD	CHF	OTHER
	€ million	€ million	€ million	€ million	€ million
Parallel Up	924	920	30	(17)	(9)
Steepener	(309)	(283)	(12)	(12)	(1)
Flattener	535	510	20	5	-

The scenarios defined as per EBA/GL/2018/02 are used.

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Table 53: EU IRRBB1 - Interest rate risks of non-trading book activities

Supervisory shock scenarios	31 December 2022			
	Changes of the economic value of equity		Changes of the net interest income	
	Current period	Last period	Current period	Last period
	€ million	€ million	€ million	€ million
Parallel up	137	185	177	265
Parallel down	(420)	(653)	(590)	(117)
Steepener	(327)	42		
Flattener	183	(106)		
Short rates up	205	22		
Short rates down	(501)	(154)		

Supervisory shock scenarios	30 June 2022			
	Changes of the economic value of equity		Changes of the net interest income	
	Current period	Last period	Current period	Last period
	€ million	€ million	€ million	€ million
Parallel up	185	449	265	237
Parallel down	(653)	(288)	(117)	(84)
Steepener	42	(309)		
Flattener	(106)	267		
Short rates up	22	356		
Short rates down	(154)	(461)		

The final sensitivity of the Supervisory Shock scenarios, in Table 53, is calculated as defined in EBA/GL/2018/02, while the EVE sensitivity in Table 52 reflects the sum of the sensitivity in each currency.

The measurement of EVE under the standard EVE outlier test is based on "Annex III – The standardized interest rate shock scenarios" of EBA/GL/2018/02. These scenarios are applied to IRRBB exposures in each currency separately for which the institution has material positions. Specifically for the Bank's material currency - EUR, the curve shifts per scenario are the following:

Parallel up : + 200 bps

Parallel down : - 200 bps

Short rates up : +250 bps (1 month) to 0 bps (above 20 years)

Short rates down : -250 bps (1 month) to 0 bps (above 20 years)

Steepener : -162 bps (1 month) to 90 bps (above 20 years)

Flattener : +200 bps (1 month) to -59 bps (above 20 years)

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Table 54: EU IRRBBA - Qualitative information on interest rate risks of non-trading book activities

Row number	Qualitative information - free format		Legal basis
(a)	A description of how the institution defines IRRBB for purposes of risk control and measurement	The definition of IRRBB that the Bank uses is in line with the EBA's definition. IRRBB is the current and future risk to both the earnings and the economic value of an institution arising from adverse movements in interest rates that affect interest rate sensitive instruments. For the Bank these risks include: gap, option and basis risk taking into account always the material exposure. The Bank also monitors the Credit spread risk from non-trading book activities, for example the MTM movements of its positions booked in OCI that affect its equity position especially due to the movements of credit spreads.	Article 448(1), point (e)
(b)	A description of the institution's overall IRRBB management and mitigation strategies	For the management of IRRBB the Bank established the following principles: -Maintain a well-structured framework for the management of IRRBB with clear roles and responsibilities for the IRRBB management unit (Treasury), the monitoring and control units (Risk Unit and Internal Audit) and for the Management Committees (BRC and G-ALCO) -Establish the policies, guidelines and internal framework for the monitoring, measurement and management of IRRBB including special references on the hedging framework -Measure the IRRBB exposure, the utilization of limits and monitors the exposure for any excess on limits -Establish and maintain appropriate tools for IRRBB measurement and reporting -Identify and set the appropriate stress testing framework for the assessment of IRRBB -Conduct modelling with the required supporting analysis regarding assumptions that are essential for the measurement and management of IRRBB (i.e. behavioral assumptions etc.). -Monitor the regulatory environment and potential changes in order to be consistently up to date on the methodologies and reporting	Article 448(1), point (f)
(c)	The periodicity of the calculation of the institution's IRRBB measures, and a description of the specific measures that the institution uses to gauge its sensitivity to IRRBB	The Bank calculates IRRBB measures on a monthly basis. These measures are the sensitivity on NII and on EVE. This sensitivity is calculated by applying spesific scenarios on the relevant portfolio or on part of Bank's balance sheet. Furthermore the Bank monitors on a daily basis through sensitivity analysis and VaR measures the interest rate and spread risks from its positions booked in OCI that affect equity.	Article 448(1), points (e) (i) and (v); Article 448(2)
(d)	A description of the interest rate shock and stress scenarios that the institution uses to estimate changes in the economic value and in net interest income (if applicable)	For EVE sensitivity, the Bank uses the outlier tests and a number of internal scenarios after the re-calculation of the shocks as defined in ANNEX III of EBA/GL/2018/02 "Guidelines on the management of interest rate risk arising from non-trading book activities" using historical data from 2006-2021. For NII sensitivity, the Bank uses the standard regulatory outlier tests (+200 bps / - 200 bps) including any applicable floor as per regulatory guidelines.	Article 448(1), point (e) (iii); Article 448(2)
(e)	A description of the key modelling and parametric assumptions different from those used for disclosure of template EU IRRBB1 (if applicable)	No further assumptions are used.	Article 448(1), point (e) (ii); Article 448(2)
(f)	A high-level description of how the bank hedges its IRRBB, as well as the associated accounting treatment (if applicable)	The Bank uses derivative transactions for the hedging of IRRBB, fair value hedging, cash flow hedging and economic hedging are the associated accounting treatments used. Depending of the conditions the Bank hedges the interest rate risk from assets (for example from fixed loand and securities), liabilities (deposits) aiming to mitigate any risk due to the volatility of market prices (impact on P/L and on OCI) or due to the movements of short term rates (impact on NII)	Article 448(1), point (e) (iv); Article 448(2)
(g)	A description of key modelling and parametric assumptions used for the IRRBB measures in template EU IRRBB1 (if applicable)	The key modeling assumption the Bank uses in template EU IRRBB1 is related to the runoff profile of the NMDs. The longest repricing maturity is applied for NMDs from retail clients while the shortest maturity profile is applied for deposits from wholesale clients and FIs.	Article 448(1), point (c); Article 448(2)
(h)	Explanation of the significance of the IRRBB measures and of their significant variations since previous disclosures	The most significant development that contributed mostly on the variations of IRRBB measures since previous disclosures is mainly due to the increase of hedging of the Bank's position on long term instruments (loans, debt securities)	Article 448(1), point (d)
(i)	Any other relevant information regarding the IRRBB measures disclosed in template EU IRRBB1 (optional)		
(1) (2)	Disclosure of the average and longest repricing maturity assigned to non-maturity deposits	The longest repricing maturity assigned to NMDs is 2 years and the average one is 1.5 years	Article 448(1), point (g)

6. Counterparty risk

6.1 Definition

Counterparty risk is the risk that a counterparty in an off balance sheet transaction (i.e. derivative transaction) defaults prior to maturity and the Bank has a claim over the counterparty (the market value of the contract is positive for the Bank). The governance and the policies for the counterparty risk are described in one section (section 5.1) that provides details for the governance and policies that the Bank applies together for the market and the counterparty risk.

6.2 Mitigation of counterparty risk

To reduce the exposure towards single counterparties, risk mitigation techniques are used. The most common is the use of closeout netting agreements (usually based on standardised ISDA contracts), which allow the bank to net positive and negative replacement values in the event of default of the counterparty.

Furthermore, the Bank also applies margin agreements (CSAs) in case of counterparties. Thus, collateral is paid or received on a daily basis to cover current exposure. In case of repos and reverse repos, the Bank applies netting and daily margining using standardised GMRA contracts.

6.3 Counterparty risk monitoring

The Bank monitors the counterparty risk arising from derivatives and secured financing transactions and assess the impact of netting and collateral on current exposures and own funds requirements. Monitoring includes, among other things, breakdown of exposures per counterparty type and exposure class, analysis of collateral quality and composition and review of counterparty credit-worthiness. Additionally, to the netting agreements, the Bank uses clearing though CCPs and other forms of mitigation, including CDS, to reduce, or eliminate, the counterparty risk.

6.4 Wrong way risk

The Bank prevents the initiation of derivative transactions in cases that the value of the underlying instrument is highly correlated with the credit quality of the counterparty.

6.5 Implications under rating downgrade

The Bank's financial collateral agreements (CSAs covering derivative transactions) with other banks contain in some cases rating triggers. For these agreements, the minimum exposure level (threshold amount) for further posting of collateral will be lowered in case of a downgrading. Given the Bank's current rating, the additional effect is immaterial.

6.6 Credit derivatives

As of 31 December 2022, the Group had no outstanding positions on CDS.

As of 30 of June 2022, the Group held a small position on single name CDS (protection bought € 6 million) and CDS Indices (protection bought € 15 million, protection sold € 125 million), as well as options on CDS Indices (short payer € 200 million).

The Bank does not have any brokerage activity in this market. Furthermore, the Bank does not hedge its loan portfolio with CDSs as this market in Greece is not developed.

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Table 55: EU CCR6 – Credit derivatives exposures

	31 December 2022		30 June 2022	
	Protection bought € million	Protection sold € million	Protection bought € million	Protection sold € million
Notionals				
Single-name credit default swaps	-	-	6	-
Index credit default swaps	-	-	15	125
Total return swaps	-	-	-	-
Credit options	-	-	-	200
Other credit derivatives	-	-	-	-
Total notionals	**-**	**-**	21	325
Fair values				
Positive fair value (asset)	-	-	-	-
Negative fair value (liability)	-	-	-	(1)

6.7 Counterparty risk based on the calculation methodology employed

The following table shows the exposure to counterparty risk based on the calculation methodology employed as at 31 December 2022 and 30 June 2022.

Table 56: EU CCR1 – Analysis of CCR exposure by approach

	31 December 2022							
	Replacement cost (RC) € million	Potential future exposure (PFE) € million	EEPE € million	Alpha used for computing regulatory exposure value	Exposure value pre-CRM € million	Exposure value post-CRM € million	Exposure value € million	RWEA € million
EU - Original Exposure Method (for derivatives)	-	-		1.4	-	-	-	-
EU - Simplified SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
SA-CCR (for derivatives)	132	146		1.4	737	390	390	137
IMM (for derivatives and SFTs)			-	1.2	-	-	-	-
Of which securities financing transactions netting sets			-		-	-	-	-
Of which derivatives and long settlement transactions netting sets			-		-	-	-	-
Of which from contractual cross-product netting sets			-		-	-	-	-
Financial collateral simple method (for SFTs)					-	-	-	-
Financial collateral comprehensive method (for SFTs)					3,464	3,437	3,437	162
VaR for SFTs					-	-	-	-
Total					**4,201**	**3,827**	**3,827**	**299**

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	30 June 2022							
	Replacement cost (RC) € million	Potential future exposure (PFE) € million	EEPE € million	Alpha used for computing regulatory exposure value	Exposure value pre-CRM € million	Exposure value post-CRM € million	Exposure value € million	RWEA € million
EU - Original Exposure Method (for derivatives)	-	-		1.4	-	-	-	-
EU - Simplified SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
SA-CCR (for derivatives)	173	154		1.4	858	459	459	157
IMM (for derivatives and SFTs)			-	1.2	-	-	-	-
Of which securities financing transactions netting sets			-		-	-	-	-
Of which derivatives and long settlement transactions netting sets			-		-	-	-	-
Of which from contractual cross-product netting sets			-		-	-	-	-
Financial collateral simple method (for SFTs)					-	-	-	-
Financial collateral comprehensive method (for SFTs)					3,603	3,367	3,367	136
VaR for SFTs					-	-	-	-
Total					4,461	3,826	3,826	293

(1) The decrease of the exposures in the SFTs is mainly due to encumbered collateral release as a result of decrease of TLTRO funding through Eurosystem (Targeted Longer-Term Refinancing Operations - TLTRO).
(2) The decrease in the derivatives replacement cost and exposure value is due to MtM movements during the period, mainly on IRS transactions (indicatively: EuroSwap 5 year +145 bps, EuroSwap 10 year +104 bps).

6.8 CVA capital charge

The following table shows the CVA capital charge, which is, calculated through the Standardised approach as at 31 December 2022 and 30 June 2022.

Table 57: EU CCR2 - Transactions subject to own funds requirements for CVA risk

	31 December 2022		30 June 2022	
	Exposure value € million	**RWEA € million**	Exposure value € million	RWEA € million
Total transactions subject to the Advanced method	-	-	-	-
(i) VaR component (including the 3× multiplier)		-		-
(ii) stressed VaR component (including the 3× multiplier)		-		-
Transactions subject to the Standardised method	143	132	121	91
Transactions subject to the Alternative approach (Based on the Original Exposure Method)	-	-	-	-
Total transactions subject to own funds requirements for CVA risk	**143**	**132**	121	91

Counterparty Risk

6.9 Exposures to CCPs

The following table shows the exposures to CCPs and the corresponding RWAs as at 31 December 2022 and 30 June 2022.

Table 58: EU CCR8 – Exposures to CCPs

	31 December 2022		30 June 2022	
	Exposure value € million	RWEA € million	Exposure value € million	RWEA € million
Exposures to QCCPs (total)		**16**		15
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	347	7	239	5
(i) OTC derivatives	347	7	239	5
(ii) Exchange-traded derivatives	-	-	-	-
(iii) SFTs	-	-	-	-
(iv) Netting sets where cross-product netting has been approved	-	-	-	-
Segregated initial margin	-		-	
Non-segregated initial margin	458	9	506	10
Prefunded default fund contributions	-	-	-	-
Alternative calculation of own funds requirements for exposures	-	-	-	-
Exposures to non-QCCPs (total)		-		-
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-	-	-
(i) OTC derivatives	-	-	-	-
(ii) Exchange-traded derivatives	-	-	-	-
(iii) SFTs	-	-	-	-
(iv) Netting sets where cross-product netting has been approved	-	-	-	-
Segregated initial margin	-		-	
Non-segregated initial margin	-	-	-	-
Prefunded default fund contributions	-	-	-	-
Unfunded default fund contributions	-	-	-	-

Counterparty Risk

6.10 Standardised approach – CCR exposures by regulatory portfolio and risk

The following table shows the CCR exposures by regulatory portfolio and risk as at 31 December 2022 and 30 June 2022.

Table 59: EU CCR3 - Standardised approach – CCR exposures by regulatory exposure class and risk weights

Exposure classes	31 December 2022											
	Risk weight											Total exposure value
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	€ million
Central governments or central banks	2,662	-	-	-	-	-	-	-	-	-	-	2,662
Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks	7	-	-	-	-	-	-	-	-	-	-	7
International organisations	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	805	-	-	1,028	2	-	-	-	-	-	1,835
Corporates	-	-	-	-	-	-	-	-	3	-	-	3
Retail	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-	-	-	-
Total exposure value	**2,669**	**805**	**-**	**-**	**1,028**	**2**	**-**	**-**	**3**	**-**	**-**	**4,507**

Exposure classes	30 June 2022											
	Risk weight											Total exposure value
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	€ million
Central governments or central banks	2,805	-	-	-	-	-	-	-	-	-	-	2,805
Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks	7	-	-	-	-	-	-	-	-	-	-	7
International organisations	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	736	8	-	838	2	-	-	-	2	-	1,587
Corporates	-	-	-	-	-	-	-	-	21	-	-	22
Retail	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-	-	-	-
Total exposure value	2,812	736	8	-	838	2	-	-	21	2	-	4,421

(1) *The decrease of the exposure in the line Central Governments or Central Banks (RWF 0%) is mainly due to the decrease of liquidity received from Eurosystem Funding (TLTRO).*

(2) *The increase of the exposure in the line Institutions (RWF 20%) is mainly due to the increase of the outstanding transactions with interbank counterparties.*

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6.11 IRB approach – CCR exposures by portfolio and PD scale

The following table shows the CCR exposures by portfolio and PD scale as at 31 December 2022 and 30 June 2022.

Table 60: EU CCR4 – IRB approach – CCR exposures by portfolio and PD scale

		31 December 2022						
	PD scale	Exposure value € million	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years) yrs	RWEA € million	Density of risk weighted exposure amount %
IRB Foundation	0.00 to <0.15	37	0.0%	18	45.0%	3	7	20.1%
Exposures to Corporates	0.15 to <0.25	1	0.2%	4	45.0%	3	0.5	46.1%
	0.25 to <0.50	2	0.3%	4	45.0%	3	1	59.5%
	0.50 to <0.75	17	0.6%	6	45.0%	3	14	80.9%
	0.75 to <2.50	1	1.1%	4	45.0%	3	1	103.7%
	2.50 to <10.00	5	6.3%	16	45.0%	3	9	176.3%
	10.00 to <100.00	-	21.0%	3	45.0%	3	0.1	271.1%
	100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%
	Subtotal	**63**	**1.0%**	**55**	**45.0%**	**3**	**33**	**52.4%**
	Total all Foundation IRB	**63**	**1.0%**	**55**	**45.0%**	**3**	**33**	**52.4%**

		June 2022						
	PD scale	Exposure value € million	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years) yrs	RWEA € million	Density of risk weighted exposure amount %
IRB Foundation	0.00 to <0.15	63	0.1%	13	45.0%	3	14	22.0%
Exposures to Corporates	0.15 to <0.25	-	0.2%	2	45.0%	3	0.14	46.1%
	0.25 to <0.50	2	0.3%	4	45.0%	3	1	59.5%
	0.50 to <0.75	-	0.0%	-	0.0%	-	-	0.0%
	0.75 to <2.50	3	0.9%	6	45.0%	3	3	100.0%
	2.50 to <10.00	6	6.0%	17	45.0%	3	10	176.0%
	10.00 to <100.00	-	21.0%	3	45.0%	3	1.0	273.3%
	100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%
	Subtotal	**75**	**0.7%**	**45**	**45.0%**	**3**	**29**	**39.5%**
	Total all Foundation IRB	**75**	**0.7%**	**45**	**45.0%**	**3**	**29**	**39.5%**

Counterparty Risk

6.12 RWA flow statements of CCR exposures under IMM

Table 61: EU CCR7 - RWEA flow statements of CCR exposures under the IMM is not included as the Bank does not use an internal model for the calculation of the RWAs of CCR exposures.

6.13 Composition of collateral for exposures to CCR

The following table shows the composition of collateral for exposures to CCR, as at 31 December 2022 and 30 June 2022.

Table 62: EU CCR5 - Composition of collateral for CCR exposures

	31 December 2022							
Collateral type	Collateral used in derivative transactions				Collateral used in SFTs			
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash – domestic currency	-	1,264	-	581	-	4	-	4
Cash – other currencies	-	2	-	33	-	-	-	1
Domestic sovereign debt	-	-	-	-	-	110	-	594
Other sovereign debt	-	-	-	-	-	-	-	1,040
Government agency debt	-	-	-	-	-	-	-	-
Corporate bonds	-	-	-	-	-	65	-	4,370
Equity securities	-	-	-	-	-	-	-	-
Other collateral	-	-	-	-	-	-	-	6,369
Total	**-**	**1,266**	**-**	**614**	**-**	**179**	**-**	**12,378**

	30 June 2022							
	Collateral used in derivative transactions				Collateral used in SFTs			
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cash – domestic currency	-	649	-	779	-	9	-	11
Cash – other currencies	-	1	-	38	-	-	-	-
Domestic sovereign debt	-	-	-	-	-	231	-	3,711
Other sovereign debt	-	-	-	-	-	10	-	826
Government agency debt	-	-	-	-	-	-	-	-
Corporate bonds	-	-	-	-	-	132	-	3,816
Equity securities	-	-	-	-	-	-	-	-
Other collateral	-	-	-	-	-	-	-	6,517
Total	-	650	-	817	-	382	-	14,881

(1) The movement in the collateral used in derivatives transactions is mainly due to the increase in the EuroSwap rates during the period (indicatively: EuroSwap 5 year +145 bps, EuroSwap 10 year +104 bps). Amounts posted as Independent Amounts and Initial Margins under the CSA contracts are included in the above tables.

(2) The decrease of the collaterals posted/received in SFTs is mainly due to the decrease of the posted collateral in Eurosystem (TLTRO).

(3) The decrease of the collaterals received in SFTs is mainly due to the decrease of outstanding transactions with interbank counterparties.

7. Operational Risk

7.1 Governance

Operational risk is embedded in every business activity undertaken by the Group. The primary goal of operational risk management is to ensure the integrity of the Group's operations and its reputation by mitigating its impact. However, by nature, it cannot be fully eliminated. To best manage operational risk, the Group has established a formal Operational Risk Management Framework to define its approach to identifying, assessing, managing, monitoring and reporting operational risk.

Governance responsibility for operational risk management stems from the Board of Directors (BoD) through the Executive Board and Senior Management to the Heads and staff of every business unit. The BoD establishes the mechanisms by which the Group manages operational risk by setting the tone and expectations from the top and delegating authority. The Board Risk Committee (BRC) and the Audit Committee (AC) monitor the operational risk level and profile of the Group including the level of operational losses, their frequency and severity.

The Group Chief Risk Officer is responsible for the operational risk related initiative and ensures implementation of the Operational Risk Management Framework. The Group Chief Risk Officer has the overall responsibility and oversight of the Operational Risk Units in the countries that the Bank operates.

The Operational Risk Committee is a management committee that assesses the operational risks arising from the activities of the Group, ensures that each business entity has appropriate policies and procedures for the control of its operational risk and that prompt corrective action is taken whenever a high risk area is identified.

Group Operational Risk Sector (GORS) is responsible for establishing and maintaining the Group's Operational Risk Management Framework and for operational risk oversight. An Operational Risk Unit operates in every subsidiary of the Group and is responsible for implementing the Group's operational risk framework. GORS is responsible for:

- Defining the methodology for the identification, assessment and reporting of operational risk;
- Implementing regulatory requirements and Group guidelines;
- Monitoring the operational risk level and profile and reporting thereon to the BRC; and
- Defining and applying the methodology for the calculation of the regulatory capital requirements for operational risk.

The Group applies the elements of the Three Lines of Defense Model for the management of operational risk. The Three Lines of Defense Model enhances risk management and control by clarifying roles and responsibilities within the organization. Under the oversight and direction of the Management Body, three separate groups within the organization are necessary for effective management of all types of operational risk. The responsibilities of each of these groups or lines of defense are:

- Line 1 - Own and manage risk and controls. The front line business and operations are accountable for this responsibility as they own the rewards and are the primary risk generators.
- Line 2 - Monitor risk and controls in support of Executive Management, providing oversight, challenge, advice and group-wide direction. These mainly include the Risk and Compliance Units
- Line 3 - Provide independent assurance to the Board and Executive Management concerning the effectiveness of risk and control management. This refers to Internal Audit.

The Heads of each business and functional unit (risk owners) have the primary responsibility for the day-to-day management of operational risk arising in their units and for the adherence to relevant controls. To this end, every business unit:

- Identifies, evaluates and monitors its operational risks and implements risk mitigation controls and techniques;

- Assesses the efficiency of control mechanism;
- Reports all relevant issues; and
- Has access to and uses the common methods and tools introduced by the GORS, to facilitate in identifying, evaluating and monitoring operational risk.

Each Business Unit has appointed an Operational Risk Partner (OpRisk Partner) or an Operational Risk Management Unit (ORMU), depending on the size of the Business Unit, who is responsible for coordinating the internal operational risk management efforts of the Business Unit. OpRisk Partners and ORMUs form the link between Line 1 and Line 2 for all operational risk matters. In addition, OpRisk Partners also exist at Units that are part of Line 2 and Line 3 to ensure the appropriate operational risk oversight in those functions.

7.2 Operational risk management framework

The Group Operational Risk Framework is built on four elements:

- Principles
- Governance and Organization
- Processes
- Infrastructure

The operational risk management framework and related policies are designed to:

- To align Bank's organization and processes with best international banking practices;
- Introduce risk identification quantification and monitoring processes such as risk and control self-assessment, key risk indicators, historic risk events collection and scenario analysis;
- Establish a common definition and consistent approach for operational risk to enable common identification and aggregation of operational risk across the Bank;
- Establish a proactive operational risk management culture across our business, linking business operations with the objectives of risk control;
- Establish comprehensive and integrated operational risk reporting;
- Adhere to the Group guidelines and meet local regulatory requirements and practices relating to operational risk of the jurisdictions in which Eurobank operates;
- Achieve a competitive advantage in terms of operational risk management through risk-based decision making; and
- Leverage international knowledge and good practices on operational risk management.

The operational risk management processes consist of risk identification, assessment (including measurement and valuation), control management, risk mitigation, risk reporting and performance improvement. These processes are supported by and implemented with the operational risk tools/methods, which are the following:

- **Risk & Control Self-Assessment (RCSA)**
  RCSA is a team-based technique aiming to identify, assess and ultimately mitigate operational risk. Its outcome is a portfolio of operational risks per business unit, summarised into operational risk profiles. Business units assess operational risks, evaluate the effectiveness of controls in place, assess whether identified risks are within business risk appetite tolerance levels and establish specific action plans to mitigate the assessed exposure.
- **Key Risk Indicators (KRIs)**
  KRIs are metrics based on historical data and are relevant to specific and measurable activities indicating operational risk exposures. KRIs are quantifiable and expressed as an amount, a percentage or a ratio, assigned to specific operational risks and linked with risk tolerance.
- **Operational Risk Events**

Operational Risk

Operational Risk Events are identified and reported with the purpose of populating the internal operational risk events database. Operational risk events are classified according to their owner, cause, risk category, impact, business function and business line.

- **Operational Risk Scenario Analysis**
  Operational Risk Scenario analysis assesses the exposure to a range of significant operational risks through the examination of severe yet plausible future events. Scenarios take into account the current and projected business, economic, social and geopolitical environment.
- **Operational Risk Reporting**
  Operational risk reports are produced for internal and regulatory purposes.
- **Operational Risk Management and Mitigation**
  The primary strategy utilised by the Group to control its exposure to operational risk is the maintenance of an effective control environment. In addition, the Group implements specific risk mitigation activities for key operational risks, including fraud, outsourcing, cyber risk and business disruption risks. Finally, risk transfer mechanisms are in place in the form of the Group's insurance policies, bought through the London Market, covering its operations.
- **Operational Risk Culture**
  Operational risk culture encompasses employee risk awareness as well as the attitude and behaviour of employees to the taking of appropriate risk and the adherence to controls. A strong Operational Risk Culture underpins all operational risk management activity. The Group continuously seeks to improve its operational risk culture.
- **Product Governance**
  Product governance safeguards the implementation of the governance framework for all products and services in Greece, throughout their lifecycle, according to which, financial and non-financial risks are assessed, taking also into account their financial performance.
- **Fraud Risk Management**
  Fraud risk management constitutes a major commitment of the Group to mitigate fraud risk and reduce fraud losses.
- **Operational Risk Capital Management**
  Eurobank Group maintains a level of capital in reserve to protect itself from the manifestation of operational risks on the business. In addition, Eurobank Group is required, both at Group level and within various subsidiaries both in Greece and abroad, to hold a level of regulatory capital to satisfy national and regional regulators and supervisors that the Eurobank Group is able to withstand certain levels of operational risk manifestation, amongst other risk types.
- **Risk Appetite Statements**
  Risk appetite for operational risk is expressed in quantitative and qualitative terms, and represents the exposure which Eurobank Group is prepared to accept in the execution of its business activity and the achievement of its business plans. Risk appetite for operational risk is set at various levels and is further cascaded as required by the OpRisk Appetite Framework.

In order to strengthen further the existing Operational Risk Framework according to increased regulatory expectations as defined in the: i) EBA Guidelines on Internal Governance (2021) under Directive 2013/36/EU, (ii) BCBS Revisions to the Principles for the Sound Management of Operational Risk (2021), (iii) BCBS Principles for Operational Resilience, and (iv) EBA Guidelines on ICT and security risk management EBA/GL/2019/04, the Group had decided to move towards managing Non-Financial Risks (NFRs) holistically, whereas Non-financial Risks (NFR) include all operational risks as well as specific additional risks such as strategic and reputational risk.

NFR management comprises risk identification, assessment, and mitigation while employing independent oversight and an effective risk culture to ensure that business objectives are met within the NFR appetite that is reflected in the Group's Policies and Guidelines.

Operational Risk

Group Operational Risk Sector (GORS) has been positioned as an overlaying framework coordinator for all Non-Financial Risks (NFRs). The GORS overlaying responsibilities aim to harmonize 2LoD activities across the Group and to holistically ensure the effective, consistent application of the NFR Framework. 2LoD Units maintain their responsibilities for specific Risk Theme(s) owned. NFR management comprises risk identification, assessment, and mitigation while employing independent oversight and an effective risk culture to ensure that business objectives are met within the NFR appetite that is reflected in the Group's Policies and Guidelines. The update and implementation of the NFR Management Framework is in progress.

7.3 Operational risk capital requirements calculation

As required by the provisions of Regulation (EU) No 575/2013 for the use of the Standardised Approach, the Group's business activities have been divided into eight business lines and the annualised gross operating income for 2020, 2021 and 2022 is calculated for each business line. The required business line beta factors are then applied to the relevant business line gross operating income, to establish the required regulatory capital per business line; with these numbers summed together to establish the overall Pillar 1 regulatory capital requirements for operational risk.

Table 63: EU OR1 - Operational risk own funds requirements and risk-weighted exposure amounts

Banking activities	31 December 2022				
	Relevant indicator			Own funds requirements	Risk weighted exposure amount
	Year-3	Year-2	Last year		
	€ million	€ million	€ million	€ million	€ million
Banking activities subject to basic indicator approach (BIA)	-	-	-	-	-
Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	1,740	1,767	2,100	266	3,323
Subject to TSA:	1,740	1,767	2,100		
Subject to ASA:	-	-	-		
Banking activities subject to advanced measurement approaches AMA	-	-	-	-	-

Banking activities	31 December 2021				
	Relevant indicator			Own funds requirements	Risk weighted exposure amount
	Year-3	Year-2	Last year		
	€ million	€ million	€ million	€ million	€ million
Banking activities subject to basic indicator approach (BIA)	-	-	-	-	-
Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	1,668	1,740	1,767	242	3,020
Subject to TSA:	1,668	1,740	1,767		
Subject to ASA:	-	-	-		
Banking activities subject to advanced measurement approaches AMA	-	-	-	-	-

8. Asset Encumbrance

8.1 Information on importance of encumbrance

The Bank uses the following main types of encumbrance:

i) secured funding through Eurosystem (ECB's Main Refinancing Operations (MRO)/Targeted Long Term Refinancing Operations (TLTRO)), for this funding the Bank mainly uses as collateral: own issued retained Covered Bonds, eligible loans and other eligible debt securities;

ii) secured funding with interbank counterparties backed with retained own covered bonds, GGBs, Greek Corporate & foreign sovereign bonds and own securitisations (the senior tranches);

iii) covered bonds issuance backed with mortgage loans, sold to international and domestic investors; and

iv) securitisations issuance backed with loans sold to international and domestic investors.

As at end of year 2022 the Group's secured funding from Eurosystem sources (ECB's MRO/TLTRO) decreased by €2.9 billion versus December 2021, from € 11.8 billion in December 2021 to € 8.9 billion in December 2022.

The encumbrance of assets and the encumbrance of assets received by the group as collateral is a centralised function and it is implemented by Eurobank, Greece.

The level of secured funding (repos with foreign counterparties) in subsidiaries is immaterial.

As of end of year 2022 the over-collateralization ((market value over funding value) in case of secured funding through repos and ECB was 12% and 24% respectively.

For the interbank secured funding (repos), the Bank uses the standard terms of the GMRA (Global Master Repurchase Agreement). According to this contract, the exposure between the Bank and its counterparty is calculated on a daily basis and collateral is posted to or received by the counterparty so that the exposure remains almost zero.

8.2 Assets

Table 64: EU AE1 – Encumbered and unencumbered assets

	31 December 2022							
	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Assets of the reporting institution	18,021	5,337			63,429	3,949		
Equity instruments	-	-	-	-	291	-	-	-
Debt securities	6,026	5,337	5,858	5,161	6,537	3,949	5,715	3,240
of which: covered bonds	153	151	151	151	197	197	194	192
of which: securitisations	347	1	335	1	952	1	932	1
of which: issued by general governments	5,315	5,076	5,063	4,901	3,745	2,940	3,038	2,866
of which: issued by financial corporations	542	81	523	80	1,943	236	1,882	233
of which: issued by non-financial corporations	301	154	297	152	866	147	843	146
Other assets	12,315	-			41,344	-		

Asset Encumbrance

	31 December 2021							
	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA (1)		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Assets of the reporting institution	15,968	4,831			56,182	3,295		
Equity instruments	-	-	-	-	194	-	-	-
Debt securities	5,036	4,831	5,392	5,186	4,572	3,295	4,049	2,654
of which: covered bonds	136	136	136	136	239	239	257	253
of which: securitisations	4	1	4	1	204	19	210	19
of which: issued by general governments	4,537	4,528	4,892	4,883	2,958	2,102	2,248	1,952
of which: issued by financial corporations	245	131	246	131	952	290	1,025	302
of which: issued by non-financial corporations	249	162	249	162	648	153	648	154
Other assets	11,040	-			41,047	-		

[(1)] *The values in these tables are the median of quarterly data points in the year.*

8.3 Collateral received

Table 65: EU AE2 - Collateral received and own debt securities issued

	31 December 2022			
			Unencumbered	
	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
	€ million	€ million	€ million	€ million
Collateral received by the disclosing institution	139	117	129	103
Loans on demand	-	-	-	-
Equity instruments	-	-	-	-
Debt securities	139	117	129	103
of which: covered bonds	-	-	-	-
of which: securitisations	-	-	-	-
of which: issued by general governments	117	117	75	103
of which: issued by financial corporations	-	-	34	-
of which: issued by non-financial corporations	2	-	21	-
Loans and advances other than loans on demand	-	-	-	-
Other collateral received	-	-	-	-
Own debt securities issued other than own covered bonds or securitisations	-	-	-	-
Own covered bonds and securitisation issued and not yet pledged			-	-
TOTAL COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	18,361	5,655		

Asset Encumbrance

	31 December 2021			
			Unencumbered	
	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
	€ million	€ million	€ million	€ million
Collateral received by the disclosing institution	479	478	1,538	1,406
Loans on demand	-	-	-	-
Equity instruments	-	-	-	-
Debt securities	479	478	1,538	1,406
of which: covered bonds	-	-	-	-
of which: securitisations	-	-	-	-
of which: issued by general governments	478	478	1,448	1,406
of which: issued by financial corporations	-	-	49	-
of which: issued by non-financial corporations	-	-	37	-
Loans and advances other than loans on demand	-	-	-	-
Other collateral received	-	-	-	-
Own covered bonds and securitisation issued and not yet pledged			-	-
TOTAL COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	16,606	5,366		

[(1)] *The values in these tables are the median of quarterly data points in the year.*

8.4 Encumbered assets/collateral received and associated liabilities

Table 66: EU AE3 - Sources of encumbrance

	31 December 2022	
	Matching liabilities, contingent liabilities or securities lent	**Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered**
Carrying amount of selected financial liabilities	13,368	17,336

	31 December 2021	
	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
Carrying amount of selected financial liabilities	11,959	15,533

[(1)] *The values in these tables are the median of quarterly data points in the year.*

9. Leverage Ratio

The new regulatory framework has introduced the leverage ratio as a non-risk based measure which is intended to restrict the build-up of excessive leverage from on and off balance sheet items in the banking sector.

The leverage ratio is defined as Tier 1 capital divided by the total exposure measure.

The Bank submits to the regulatory authorities the leverage ratio on quarterly basis and monitors the level of the ratio and the factors that affect it.

The level of the leverage ratio with reference date 31 December 2022, including profits, was at 7,93% (30 June 2022: 7.5%), according to the transitional definition of Tier 1 capital, significantly over the proposed minimum threshold of 3%.

The below table includes the summary of the Group's leverage ratio with reference dates 31 December 2022 and 30 June 2022.

Table 67: EU LR1 - LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

Summary reconciliation of accountng assets and leverage ratio exposures

	31 December 2022 (1)	31 December 2022	30 June 2022 (1)	30 June 2022
	€ million	€ million	€ million	€ million
Total assets as per published financial statements	81,460	81,460	80,180	80,180
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	-	-	-	-
(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	-	-	-	-
(Adjustment for temporary exemption of exposures to central bank (if applicable))	-	-	-	-
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) CRR)	-	-	-	-
Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	-	-	-	-
Adjustment for eligible cash pooling transactions	-	-	-	-
Adjustments for derivative financial instruments	(367)	(367)	(528)	(528)
Adjustment for securities financing transactions (SFTs)	793	793	707	707
Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	3,240	3,240	2,512	2,512
(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	-	-	-	-
(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-	-	-	-
(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) CRR)	-	-	-	-
Other adjustments	(441)	(450)	(741)	(753)
Total exposure measure	**84,686**	**84,676**	82,128	82,116

(1) *Including profits € 1,330 million for year ended 31 December 2022 and € 941 million for the 1H 2022.*

Leverage Ratio

Table 68: EU LR2 - LRCom: Leverage ratio common disclosure

	31 December 2022 [1] CRR leverage ratio exposures € million	31 December 2022 CRR leverage ratio exposures € million	30 June 2022 [1] CRR leverage ratio exposures € million	30 June 2022 CRR leverage ratio exposures € million
On - balance sheet exposures (excluding derivatives and SFT's)				
On-balance sheet items (excluding derivatives, SFTs, but including collateral)	80,237	80,237	78,236	78,236
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-	-	-
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(234)	(234)	(402)	(402)
Adjustment for securities received under securities financing transactions that are recognised as an asset	-	-	-	-
(General credit risk adjustments to on-balance sheet items)	-	-	-	-
(Asset amounts deducted in determining Tier 1 capital)	(220)	(229)	(383)	(395)
Total on-balance sheet exposures (excluding derivatives and SFTs)	**79,783**	**79,774**	77,451	77,439
Derivative exposures	-	-	-	-
Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	272	272	843	843
Derogation for derivatives: replacement costs contribution under the simplified standardised approach	-	-	-	-
Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	546	546	509	509
Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	-	-	-	-
Exposure determined under Original Exposure Method	-	-	-	-
(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	-	-	-	-
(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-	-	-
(Exempted CCP leg of client-cleared trade exposures) (original Exposure Method)	-	-	-	-
Adjusted effective notional amount of written credit derivatives	-	-	-	-
(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-	-	-
Total derivatives exposures	**818**	**818**	1,351	1,351
Securities financing transaction exposures				
Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	165	165	278	278
(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-	-	-
Counterparty credit risk exposure for SFT assets	679	679	536	536
Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	-	-	-	-
Agent transaction exposures	-	-	-	-
(Exempted CCP leg of client-cleared SFT exposure)	-	-	-	-
Total securities financing transaction exposures	**844**	**844**	814	814
Other off-balance sheet exposures				
Off-balance sheet exposures of gross notional amount	10,251	10,251	8,464	8,464
(Adjustments for conversion to credit equivalent amounts)	(7,010)	(7,010)	(5,952)	(5,952)
(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	-	-	-	-
Off-balance sheet exposures	**3,240**	**3,240**	2,512	2,512
Excluded exposures				
(Total exempted exposures)	-	-	-	-
Capital and total exposurenmeasure	-	-	-	-
Tier 1 capital	6,715	6,585	6,137	5,973
Total exposure measure	84,686	84,676	82,128	82,116
Leverage ratio				
Leverage ratio	**7.9%**	**7.8%**	7.5%	7.3%
Leverage ratio excluding the impact of the exemption of public sector investments and promotional loans) (%)	**7.9%**	**7.8%**	7.5%	7.3%
Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	**7.9%**	**7.8%**	7.5%	7.3%
Regulatory minimum leverage ratio requirement (%)	**3.00%**	**3.00%**	3.00%	3.00%
Additional own funds requirements to address the risk of excessive leverage (%)	**0.00%**	**0.00%**	0.00%	0.00%
of which: to be made up of CET1 capital (percentage points)	**0.00%**	**0.00%**	0.00%	0.00%
Leverage ratio buffer requirement (%)	**0.00%**	**0.00%**	0.00%	0.00%
Overall leverage ratio requirement (%)	**3.00%**	**3.00%**	3.00%	3.00%
Choise on transitional arrangements and relevant exposures				
Choice on transitional arrangements for the definition of capital measure	**Transitional**	**Transitional**	Transitional	Transitional
Disclosure of mean values				
Mean value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	**158**	**158**		
Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	**165**	**165**		
Total exposure measures (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	**84,679**	**84,670**		
Total exposure measures (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	**84,679**	**84,670**		
Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	**7.9%**	**7.8%**		
Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	**7.9%**	**7.8%**		

(1) Including profits € 1,330 million for year ended 31 December 2022 and € 941 million for the 1H 2022.

(2) The increase in the leverage ratio compared to 30 June 2022 is mainly due to the increase in the on and off balance sheet exposures, partially offsetted by the increase in Tier 1 capital.

(3) Total off-balance sheet items exposures presented in accordance with Article 111 (1) of Regulation (EU) No 575/2013 (standardised approach).

Leverage Ratio

Table 69: EU LR3 - LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

	31 December 2022 [1]	31 December 2022	30 June 2022 [1]	30 June 2022
	CRR leverage ratio exposures	CRR leverage ratio exposures	CRR leverage ratio exposures	CRR leverage ratio exposures
	€ million	€ million	€ million	€ million
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	80,003	80,003	77,834	77,834
Trading book exposures	134	134	-	-
Banking book exposures, of which:	79,869	79,869	77,834	77,834
Covered bonds	360	360	343	343
Exposures treated as sovereigns	33,138	33,138	33,355	33,355
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	-	-	-	-
Institutions	2,237	2,237	1,721	1,721
Secured by mortgages of immovable properties	10,459	10,459	10,394	10,394
Retail exposures	5,097	5,097	4,985	4,985
Corporates	16,832	16,832	18,357	18,357
Exposures in default	1,110	1,110	1,200	1,200
Other exposures (eg equity, securitisations, and other non-credit obligation assets)	10,634	10,634	7,479	7,479

[1] *Including profits € 1,330 million for year ended 31 December 2022 and € 941 million for the 1H 2022.*

10. Liquidity Risk

The Group is exposed to daily calls on its available cash resources due to deposits withdrawals, maturity of medium or long-term notes and maturity of secured or unsecured funding (interbank repos and money market takings), loan drawdowns and forfeiture of guarantees. Furthermore, margin calls on secured funding transactions (with ECB and the market) and on risk mitigation, contracts (CSAs, GMRAs) and on centrally cleared transactions (CCPs) result in liquidity exposure. The Group maintains cash resources to meet all of these needs. The BRC sets liquidity limits to ensure that sufficient funds are available to meet such contingencies.

Past experience shows that liquidity requirements to support calls under guarantees and standby letters of credit are considerably less than the amount of the commitment. This is also the case with credit commitments where the outstanding contractual amount to extend credit does not necessarily represent future cash requirements, as many of these commitments will expire or terminate without being funded.

The matching and controlled mismatching of the maturities and interest rates of assets and liabilities is fundamental to the management of the Group. It is unusual for banks to be completely matched, as transacted business is often of uncertain term and of different types. An unmatched position potentially enhances profitability, but also increases the risk of losses.

The maturities of assets and liabilities and the ability to replace, at an acceptable cost, interest bearing liabilities as they mature, are important factors in assessing the liquidity of the Group.

10.1 Liquidity Risk Management Framework

The Group's Liquidity Risk Policy defines the following supervisory and control structure:

(a) BRC's role is to approve all strategic liquidity risk management decisions and monitor the quantitative and qualitative aspects of liquidity risk;
(b) Group Assets and Liabilities Committee has the mandate to form and implement the liquidity policies and guidelines in conformity with Group's risk appetite and to review at least monthly the overall liquidity position of the Group;
(c) Group Treasury is responsible for the implementation of the Group's liquidity strategy, taking into account the latest funding plan and for the daily management of the Group's liquidity.
(d) Group Market and Counterparty Risk Sector is responsible for the measuring, controlling, monitoring and reporting the liquidity risk of the Group.

The Bank as per ECB, EBA & BoG directives applies risk management policies, processes and controls regarding, Asset Encumbrance / Liquidity Buffers and Collateral Management, Contingency Funding Plan (CFP), Intraday Liquidity Risk Management and Liquidity Stress Tests. These policies, processes and controls along with the liquidity risk governance are described in the ILAAP (Internal Liquidity Adequacy Assessment Process).

These policies, processes and controls are applicable in the specific Greek macro-economic environment, Banks' business model and market conditions on wholesale funding.

10.2 Liquidity Buffer

The Group holds a diversified portfolio of cash and high liquid assets to support payment obligations and contingent deposit withdrawals in a stressed market environment. The Group's assets held for managing liquidity risk comprise of:

(a) Cash and balances with central banks;

(b) Eligible bonds and other financial assets for collateral purposes;

(c) Current accounts with banks and Interbank placings maturing within one month.

Liquidity Risk

The unutilised assets, containing highly liquid and central banks eligible assets, provide a contingent liquidity reserve of € 20.1 billion as at 31 December 2022 (2021: € 16.9 billion). This increase is attributed mainly to: i) a large inflow of customer deposits (y-o-y Δ € 4 billion) and ii) new own debt issuances (y-o-y Δ € 1.1 billion). In addition, the Group holds other types of highly liquid assets, as defined by the regulator, amounting to € 7.5 billion (cash value) (2021: € 7.5 billion). It should be noted that a part of ECB's available collateral of € 3.8 billion (cash value) (2021: € 1.3 billion) is held by Group's subsidiaries for which temporary local regulatory restrictions are applied and currently limit the level of its transferability between group entities.

The Group in 2022 decreased the long-term funding from the ECB through TLTRO III funding (ECB funding decreased from € 11.7 billion as of December 2021 to € 8.8 billion as of December 2022, which consists entirely of TLTRO funding). On the other hand, inflows mainly from deposits (+ € 4.0billion in 2022), along with the successful issuance of a preferred senior note (MREL-eligible) of € 500 million and a Tier 2 instrument of € 300 million, significantly contributed to the formation of High-Quality Liquid Assets (HQLAs) buffer and to the further increase of the Liquidity Coverage Ratio (LCR) both at solo and group level. . More recently, in January 2023, the Bank successfully completed the issue of a € 500 million senior preferred note.

10.3 Liquidity Coverage Ratio (LCR) calculations

LCR as of 31 December 2022 is equal to 173.0% (30 September 2022: 169.0%). The corresponding HQLA as of 31 December 2022 as defined by the regulation for the calculation of LCR are € 16,814 million.

The next table presents the key components of group's LCR, as per the respective guidelines on LCR disclosure (EBA/GL/2017/01). According to the guideline, 12 monthly data points are used in the calculations below, thus in this table the average of 2022 is presented.

The increase of LCR ratio compared to 30 September 2022 is mainly due to the rise in high quality liquid assets of the Group.

Liquidity Risk

The table below shows the level and components of the Liquidity Coverage Ratio.

Table 70: LIQ1 - Quantitative information of LCR

		Total unweighted value					Total weighted value				
	Quarter ending on	**31 December 2022**	30 September 2022	30 June 2022	31 March 2022	31 December 2021	**31 December 2022**	30 September 2022	30 June 2022	31 March 2022	31 December 2021
		€ million	€ million	€ million	€ million	€ million	**€ million**	€ million	€ million	€ million	€ million
	Number of data points used in the calculation of averages	**12**	12	12	12	12	**12**	12	12	12	12
	HIGH-QUALITY LIQUID ASSETS										
1	**Total high-quality liquid assets (HQLA)**						**14,012**	13,051	12,480	11,974	11,173
	CASH-OUTFLOWS										
2	**Retail deposits and deposits from small business customers, of which:**	**32,235**	31,545	30,767	30,055	29,397	**2,041**	1,985	1,920	1,857	1,806
3	Stable deposits	24,647	24,323	23,981	23,665	23,311	1,232	1,216	1,199	1,183	1,166
4	Less stable deposits	7,587	7,221	6,785	6,389	6,085	807	768	720	673	640
5	**Unsecured wholesale funding**	**14,119**	13,573	13,120	12,684	12,078	**6,032**	5,796	5,632	5,458	5,179
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	1,931	1,919	1,851	1,783	1,652	474	471	454	437	404
7	Non-operational deposits (all counterparties)	12,187	11,654	11,270	10,901	10,426	5,558	5,325	5,178	5,021	4,775
8	Unsecured debt	-	-	-	0	0	-	-	-	0	0
9	**Secured wholesale funding**						**120**	117	102	90	83
10	Additional requirements	**3,186**	2,821	2,648	2,595	2,541	1,088	960	846	856	853
11	Outflows related to derivative exposures and other collateral requirements	874	771	663	679	684	874	771	663	679	684
12	Outflows related to loss of funding on debt products	-	-	-	-	-	-	-	-	-	-
13	Credit and liquidity facilities	2,313	2,050	1,985	1,915	1,857	214	189	183	177	169
14	**Other contractual funding obligations**	**115**	121	105	103	94	**104**	110	94	92	84
15	**Other contingent funding obligations**	**3,435**	3,362	3,261	3,144	3,023	**241**	237	231	222	214
16	TOTAL CASH OUTFLOWS						**9,626**	9,205	8,826	8,576	8,219
	CASH-INFLOWS										
17	Secured lending (eg reverse repos)	224	342	433	446	509	20	27	30	21	12
18	Inflows from fully performing exposures	874	867	879	896	886	736	737	756	766	748
19	Other cash inflows	1,589	1,533	1,449	1,372	1,314	362	348	330	295	287
20	TOTAL CASH INFLOWS	**2,688**	2,742	2,761	2,715	2,709	**1,118**	1,112	1,116	1,082	1,048
EU-20a	*Fully exempt inflows*	-	-	-	-	-	-	-	-	-	-
EU-20b	*Inflows Subject to 90% Cap*	-	-	-	-	-	-	-	-	-	-
EU-20c	*Inflows Subject to 75% Cap*	***2,688***	*2,742*	*2,761*	*2,715*	*2,709*	***1,118***	*1,112*	*1,116*	*1,082*	*1,048*
							TOTAL ADJUSTED VALUE				
21	LIQUIDITY BUFFER						14,012	13,051	12,480	11,974	11,173
22	TOTAL NET CASH OUTFLOWS						8,508	8,093	7,710	7,494	7,171
23	LIQUIDITY COVERAGE RATIO (%)						164.4%	161.3%	162.0%	160.0%	155.4%

Liquidity Risk

10.4 Net Stable Funding Ratio (NSFR) calculations

NSFR as of 31 December 2022 is equal to 128.0% (30 June 2022: 125.7%). The minimum regulatory threshold for NSFR is set at 100%. The increase of NSFR compared to 30 June 2022 is mainly due to the increase in retail and corporate deposits and to the higher capital stemming from profit accumulation.

Table 71: LIQ2 - Net Stable Funding Ratio

	31 December 2022				
	Unweighted value by residual maturity				Weighted value
Available stable funding (ASF) Items	No maturity[1] € million	< 6 months € million	6 months to < 1yr € million	≥ 1yr € million	€ million
Capital items and instruments	**6,718**	**-**	**-**	**1,259**	**7,977**
Own funds	6,718	-	-	1,259	7,977
Other capital instruments		-	-	-	-
Retail deposits		**35,129**	**1,465**	**236**	**34,543**
Stable deposits		26,451	1,004	156	26,238
Less stable deposits		8,678	461	79	8,304
Wholesale funding:		**26,503**	**710**	**4,272**	**14,303**
Operational deposits		1,956	-	-	978
Other wholesale funding		24,547	710	4,272	13,325
Interdependent liabilities		-	-	-	-
Other liabilities:	**581**	**1,705**	**5**	**2,286**	**2,288**
NSFR derivative liabilities	581				
All other liabilities and capital instruments not included in the above categories		1,705	5	2,286	2,288
Total available stable funding (ASF)					**59,111**

	31 December 2022				
	Unweighted value by residual maturity				Weighted value
Required stable funding (RSF) Items	No maturity[1] € million	< 6 months € million	6 months to < 1yr € million	≥ 1yr € million	€ million
Total high-quality liquid assets (HQLA)					**337**
Assets encumbered for a residual maturity of one year or more in a cover pool		**146**	**123**	**3,962**	**3,597**
Deposits held at other financial institutions for operational purposes		**108**	**-**	**-**	**54**
Performing loans and securities:		**4,724**	**2,709**	**33,394**	**31,816**
Performing securities financing transactions with financial customerscollateralised by Level 1 HQLA subject to 0% haircut		-	-	-	-
Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		451	18	170	222
Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		3,983	2,408	24,317	28,172
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		222	95	226	1,431
Performing residential mortgages, of which:		145	159	5,015	-
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		61	50	1,645	-
Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		145	124	3,891	3,421
Interdependent assets		-	-	-	-
Other assets:		**2,529**	**7**	**9,883**	**9,982**
Physical traded commodities				-	-
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		-	-	383	325
NSFR derivative assets		-			-
NSFR derivative liabilities before deduction of variation margin posted		946			47
All other assets not included in the above categories		1,583	7	9,500	9,610
Off-balance sheet items		**6,489**	**342**	**802**	**394**
Total RSF					**46,181**

NSFR	31 December 2022
Net Stable Funding Ratio (%)	128.00%

Liquidity Risk

Available stable funding (ASF) Items	No maturity[1] € million	< 6 months € million	6 months to < 1yr € million	≥ 1yr € million	Weighted value € million
	30 June 2022				
	Unweighted value by residual maturity				
Capital items and instruments	6,123	-	-	950	7,073
Own funds	6,123	-	-	950	7,073
Other capital instruments		-	-	-	-
Retail deposits		34,295	1,251	248	33,585
Stable deposits		26,076	846	132	25,707
Less stable deposits		8,219	405	116	7,878
Wholesale funding:		20,406	6,309	4,556	16,231
Operational deposits		1,853	-	-	927
Other wholesale funding		18,553	6,309	4,556	15,304
Interdependent liabilities		-	-	-	-
Other liabilities:	-	2,145	2	2,149	2,150
NSFR derivative liabilities	-				
All other liabilities and capital instruments not included in the above categories		2,145	2	2,149	2,150
Total available stable funding (ASF)					59,038

Required stable funding (RSF) Items	No maturity[1] € million	< 6 months € million	6 months to < 1yr € million	≥ 1yr € million	Weighted value € million
	30 June 2022				
	Unweighted value by residual maturity				
Total high-quality liquid assets (HQLA)					1,252
Assets encumbered for a residual maturity of one year or more in a cover pool		158	146	3,996	3,655
Deposits held at other financial institutions for operational purposes		96	-	-	48
Performing loans and securities:		5,194	2,937	31,173	30,887
Performing securities financing transactions with financial customerscollateralised by Level 1 HQLA subject to 0% haircut		-	-	-	-
Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		558	13	135	195
Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		4,266	2,708	22,624	27,563
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		199	124	556	1,529
Performing residential mortgages, of which:		179	167	4,845	-
With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		63	48	1,461	-
Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		191	49	3,569	3,129
Interdependent assets		-	-	-	-
Other assets:		2,395	3	10,603	10,864
Physical traded commodities				-	-
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		-	-	414	352
NSFR derivative assets		167			167
NSFR derivative liabilities before deduction of variation margin posted		708			35
All other assets not included in the above categories		1,520	3	10,189	10,310
Off-balance sheet items		4,087	518	730	277
Total RSF					46,982

NSFR	30 June 2022
Net Stable Funding Ratio (%)	125.66%

11. Environmental, Social and Governance (ESG) Risks

11.1 Qualitative Information on Environmental Risks

11.1.1 Business strategy and processes

Alignment of Our Business Strategy with Environmental Risk Management Expectations

Business Strategy & Business Model

Eurobank has designed and approved its ESG Strategy related to its financing and other products, its internal environment and the way it is organised and operates.

The ESG Strategy includes targets and commitments along two key dimensions:

- Operational Impact Strategy: targets related to the ESG operational footprint of the Bank; and
- Financed Impact Strategy: targets and commitments related to financed impact resulting from lending and investing activities to specific sectors and clients.

A. Operational Impact Strategy

Eurobank's Operational Impact Strategy focuses on three strategic axes:

- Environmental impact (operational net zero, paperless banking, circular economy);
- Social and business impact (sustainable procurement, socio-economic effect, transparency); and
- Employer impact (diversity and inclusion, wellbeing culture, innovative environment).

B. Financed Impact Strategy

The Bank's Financed Impact Strategy focuses on:

- Clients' engagement and awareness to adapt their business so as to address climate change challenges;
- Actions for supporting customers in their transition efforts towards a more ESG-friendly economic environment;
- Enablers and tools such as frameworks and products to underpin Sustainable Financing; and
- The risk assessment of climate-related material exposures.

The ESG Strategy, through a set of actions with measurable targets, reflects the Bank's vision in the short, medium and long term in relation to the environment, its social footprint, with focus on its people, and the ESG impact in the market and its portfolio.

The Operational and Financed elements of the ESG Strategy are combined for addressing Eurobank's path towards Net Zero by 2050. In line with Eurobank's commitment to the UNEP FI Principles for Responsible Banking (and the 2022 UNEP-FI individual feedback report), development of the ESG Strategy is aligned with the requirements for identifying the most significant positive and negative impacts on the societies and environment where it operates.

In 2022, in line with good practices identified by the ECB, the Financed Impact Strategy of the Bank focused on sustainable financing targets / commitments. In particular, the Bank identified total portfolio and sectoral targets with regards to financing the green transition of its clients.

Moreover, the Bank's Green Bond Framework supports its ESG strategy and vision and underpins the financing capabilities. In particular, the Eurobank Green Bond Framework:

- Outlines the principles under which Eurobank issues Green Bonds;
- Describes how the Eurobank Green Bond supports and contributes to achieving the UN Sustainable Development Goals (SDGs); and
- Aligns with the International Capital Markets Association (ICMA) Green Bond Principles, the draft EU Green Bond Standard, and the Regulation (EU) 2020/852 (EU Taxonomy Regulation), on a best effort basis.

Environmental, Social and Governance (ESG) Risks

For additional information, please refer to the Eurobank Green Bond Framework (https://www.eurobank.gr/-/media/eurobank/omilos/enimerosi-ependuton/enimerosi-metoxon-eurobank/pistotikoi-titloi/green-bond-framework/green-bond-framework.pdf)

As part of Sustainable Financing operationalization, Eurobank performed the roll-out of the Sustainable Finance Framework and approved the Sustainable Investment Framework. More information on Sustainable Financing operationalization is provided in next sections.

Business Environment & Financial Planning

In 2021, the Group launched a bank wide initiative, namely "Program Field", with an aim to develop and implement its sustainability strategy, integrate climate risks in risk assessment, fulfil its UNEP FI signatory commitments, as well as to ensure readiness to comply with upcoming sustainability-related regulations (i.e. "EU Green Deal", ECB Guide on climate-related and environmental risks, EU Taxonomy Regulation, etc.). Through this initiative, the Group has identified, assessed and is in the process of implementing action plans addressing CR&E risks within the three Lines of Defense. In addition, with regards to Group's business environment the following actions have been taken:

- The Bank performed a market practice-peer review exercise to assess the competitive landscape, identifying best practices adopted by domestic and international peer banks for CR&E risk management. The results of the assessment showed that the Bank is broadly aligned with good practices in all relevant areas;
- The Business Units, the Group Climate Risk Division and the ESG Division have been assigned the responsibility to monitor the external ESG business environment of the Bank (e.g., monitoring of climate-related and environmental laws, regulations, international agreements, voluntary agreements, ESG regulatory and disclosures developments, ESG partnerships, net zero initiatives), providing important input for the assessment of the risks and developments that may affect the Bank; and
- Environmental risk considerations have been integrated in the process for the formulation of the Bank's Business Plan, while pertinent factors are also taken into account in the budgeting process for the Bank's Business Units. For the purposes of target-setting as regards the Bank's financed impact strategy, the Bank's senior management defines the level of the Bank's Risk Appetite for the following years, taking into account historical experience, identified risks and opportunities, market maturity level as well as best market practices and regulatory requirements. This is a dynamic process, given the rapid evolution of the supervisory expectations and the needs of market participants in the area of environmental risk management.

Evolution of Our Business Strategy

The Bank's strategy as regards environmental risk management is continuously updated, taking into account, inter alia, market, regulatory as well as technological developments. In particular, the Bank's approach with respect to the financing of clients' green transition takes into account the ever-changing technological environment and the transition risk that borrowers are subject to.

In this context, the applicable provisions defined by the Bank in this respect, as well as its relevant documents/policies/frameworks are updated periodically, accounting for emerging best market practices in environmental risk management. In addition, stakeholders' (e.g., consumers', borrowers' and issuers') sustainability priorities and targets are accounted for in the Sustainable Finance Framework and Sustainable Investment Framework, allowing the Bank to conduct its relevant financing/investment activities while ensuring compliance with regulatory expectations.

Additionally, the Bank monitors the implications from changes in the physical environment itself and is prepared to adjust its business strategy through the establishment of additional safeguards to mitigate the risks deriving from physical risk events (e.g., consider additional types of insurance for collateral received from clients, mitigating actions defined in the context of the Bank's Climate Risk Scorecard, remediation actions included in the clients' Environmental & Social Action Plan as part of Bank's Environmental and Social Management System processes).

Moreover, the Group has performed a forward-looking sensitivity analysis through targeted Climate Stress Test scenarios in order to assess its vulnerabilities towards climate-related risks to credit risk impact on its Greek lending portfolio in the context of the 2023 ICAAP exercise, capturing both transition and physical risks, the results of which shall be included in the Bank's future business strategy with respect to the management of environmental risks. It is noted that the impact has been incorporated under economic perspective, as an indicative internal capital requirement.

The Bank complies with the requirements of the Greek Climate Law 4936/2022 with respect to measuring, certifying and reporting Greenhouse Gas emissions.

To better understand how environmental risks affect its business environment so as to update its business strategy and processes, the Bank plans to implement the below initiatives in the following years:

- Performance of Net Zero targets/commitments gap analysis, based on Science Based Targets (SBTi) or other alternative requirements;
- Preparation of a detailed Net Zero action plan, to ensure Science Based Targets (SBTi) or other alternative metric readiness;
- Preparation of the Bank's financed emissions action plan per sector / transition pathways;
- Performance of perimeter analysis of Taxonomy-related sectors and counterparties affecting the Green Asset Ratio;
- Development of an approach and definition of data requirements / tools required for the assessment of portfolio alignment with respect to transition pathways;
- Specification of short, medium and long-term targets for portfolio alignment with respect to transition pathways and in line with the Bank's ESG and Business Strategy and portfolio composition and characteristics;
- Further integration of ESG and climate risk considerations in the business planning process (e.g. project budgeting and prioritization), to reflect the Bank's business strategy and relevant targets; and
- Definition and incorporation of other environmental risks.

Green Financing – Objectives, Current Activities & Targets

Objectives

The Bank understands that sustainable development is key to prosperity. To this end, it is committed to support the transition to a greener economy by offering financing solutions that foster growth and sustainable development.

As a signatory of the Principles for Responsible Banking (PRB), the Bank has been working on developing targets that will enable it to mitigate the negative and amplify the positive impacts arising from its financing activities. The Bank will continue working with its current and future clientele and will support them with financing in their transition efforts. Leveraging on tools, and enablers such as the climate risk assessment exercises and the Sustainable Finance Framework, the Bank's strategic approach is to support the achievement of the climate and environmental objectives, through financing and advisory solutions to current and potential clientele.

The Bank sets and refines its targets, and is in the process of establishing comprehensive management mechanisms, KPIs and milestones to better implement and monitor these. Aligning the Bank's activities with the Paris Agreement on climate change, the EU Sustainable Finance Action Plan and the UN SDGs will be a key aspect of setting its targets.

In order to enhance its ESG approach, the Bank participates, inter alia, in the following national and international associations, organizations, and initiatives:

- Climate Action in Financial Institutions: Participant in the Climate Action in Financial Institutions initiative for mainstreaming climate change considerations throughout FI operations;
- Corporate Social Responsibility (CSR) Hellas: Member of the CSR Hellas network since 2003;
- Energy Efficiency Financial Institutions Group (EEFIG): Member of the EC's EEFIG since 2013;
- Priceless Planet Coalition: The only Greek Bank participating in the Priceless Planet Coalition since 2020;
- ICMA: Member of the ICMA since 2020;

- Hellenic Bank Association (HBA): Founding member and coordinator of the Sustainable Development Committee of the HBA;
- Eco-Management and Audit Scheme (EMAS): Participant in the Eco-Management and Audit Scheme register for following the EC Regulation on eco-management. The annual EMAS Report is a comprehensive record of the Bank's operational environmental performance and is submitted to the Ministry of Environment;
- UN Environment Programme Finance Initiative (UNEP FI): UNEP FI participant since 2005; founding signatory to the Principles for Responsible Banking since 2019;
- UN Global Compact: Signatory to the 10 Principles of the UN Global Compact since 2008. Member of the Global Compact Network Greece;
- UN Principles for Responsible Investment (PRI): Eurobank Asset Management subsidiary a signatory to the UN PRI since 2018;
- UN SDGs: Active supporter of the UN SDGs (in line with the UN Global Compact signatory commitment above); and
- Global Sustain: A member of Global Sustain since 2011, we have been offering innovative services linked to sustainability and corporate responsibility.

Current Financing and Investment Activities

The Bank is revamping its ESG approach, while its financial and operational objectives include investing in sustainable development:

<u>Sustainable financing and investments for corporate clients</u>: Having a leading role in the largest, most prominent projects in the Greek economy, the Bank finances robust business plans, growth strategies, investment programmes and export activities in strategic sectors.

<u>Sustainable financing for individuals and businesses:</u> The Bank currently offers several consumer and small business financing solutions that are compliant with the EU Taxonomy Regulation.

<u>Asset and wealth management with ESG criteria:</u> In 2018 the Bank launched the (LF) Fund of Funds – ESG Focus, a mutual fund that invests in shares and bonds factoring in the ESG criteria. The Fund has a diversified portfolio of equities and bonds that adopt ESG (environmental, social and governance) criteria.

<u>Deposit solutions with ESG criteria:</u> In 2021, the Bank acted as a pioneer in the Greek banking sector by launching the ESG Deposits to its corporate clients. The ESG deposits provide an innovative deposit solution that supports clients' sustainability agenda, by investing liquidity in sustainable projects and allowing them to demonstrate their commitment towards a low-carbon and sustainable environment. The Bank uses the funds raised to provide wholesale lending that meet the criteria set out in the Eurobank Sustainable Finance Framework.

For more details please refer to https://www.eurobank.gr/en/group/esg-environment-society-governance/sustainable-financing.

Sustainable Finance Framework (SFF)

Through its Sustainable Finance Framework (SFF), the Group is able to classify sustainable lending solutions offered to its customers, specifying the applied classification approach and the activities defined as eligible to access sustainable financing (eligible green and social assets). The Sustainable Finance Framework scope encompasses a wide range of sustainable lending products covering both Wholesale and Retail banking portfolios.

The purpose of establishing the SFF Framework is to provide a clear and comprehensive methodology for classifying, monitoring, and reporting sustainable financial products. Eurobank has drawn on internationally recognized industry guidelines and principles for the development of the Framework and is fully committed to being transparent about its ESG approach. Specifically, the Framework has been informed by the following standards and principles:

- Green Bond Principles (2021), published by the ICMA;

- Green Loan Principles (2021) published by the Loan Market Association (LMA);
- Social Bond Principles (2020), published by ICMA;
- Sustainability-Linked Bond Principles (2020), published by ICMA;
- Sustainability-Linked Loan Principles (2021), published by LMA; and
- EU Taxonomy Climate delegated act published in April 2021 and formally adopted on 4 June 2021.

Currently, the Sustainable Finance Framework follows the EU Taxonomy eligibility criteria on a best effort basis; the Bank aims to further align the Framework with the EU Taxonomy requirements. Along the same lines, Eurobank will monitor closely the developments of the EU Taxonomy in order to update its Framework and embed the relevant requirements to the extent possible.

In its Sustainable Finance Framework, Eurobank has defined four classification approaches:

1. Dedicated-purpose – Green/Social Loans;
2. General-purpose – Company Business Mix;
3. General-purpose – Sustainability-linked Loans/Facilities; and
4. Recovery and Resilience Facility-based Approach.

The Bank's SFF sets out the eligible assets to be financed, presented separately for the portfolios of Wholesale and Retail (i.e. presentation of the scope, the sustainable financing classification, and the applicable regulatory frameworks). Furthermore, datasets with explanatory information are demonstrated per sector (pillar) for the eligible assets, as well as SPTs and their respective KPIs per sector. If a potentially eligible financing fulfils the criteria outlined for each classification category, then, upon following the necessary verification process of evaluation and approval, it can be characterized as sustainable financing. For more details on SFF operationalization please refer to the next section.

2022 Sustainable Financing Targets & Performance Assessment

The Group had committed to specific ESG Financed Impact targets which included both quantitative and qualitative elements. Specifically, the relevant targets included the following:

1. to operationalise the SFF in terms of policies, procedures, and processes;
2. to expand data collection capabilities for climate risk related data;
3. to increase penetration of ESG products; and
4. to assure at least 20% of the annual gross new corporate disbursements as green / environmentally sustainable.

Based on actual performance the Group has successfully managed to accomplish all 2022 Impact targets. Specifically:

1. <u>Operationalisation of the Sustainable Finance Framework</u>

   In particular:

   - Eurobank has completed the roll-out of the SFF as part of its loan origination process for the CIB portfolio and is working towards the operationalization of the Retail portfolio, while the SFF is currently being localized to material international subsidiaries;
   - Eurobank has developed a web-based SFF Assessment Tool for the Corporate Portfolio, to underpin the classification and evaluation of sustainable/ green financing opportunities in a structural manner. The SFF Assessment Tool automates the process of assessing the Bank's financings against the criteria defined in the SFF;
   - Eurobank is assessing a series of new proposed Retail SFF-aligned products, also taking into account upcoming Greek Government Initiatives (ongoing / recurring initiatives); and
   - Solutions for converting other climate mitigation products into SFF-eligible products, are currently under examination by the Bank.

Environmental, Social and Governance (ESG) Risks

2. Enhanced its capabilities for the collection of climate risk data

   The Bank is continuously enhancing its capabilities for the collection of climate-related and environmental risk data, through integration of additional information requirements in the credit process as well as cooperating with third party data providers. For additional details, please refer to the "Risk Management" Section.

3. Increased ESG products

   Eurobank has developed multiple products that promote sustainable growth, including RES investments, energy saving programmes for residential buildings, and debt restructuring programmes for vulnerable groups, while it received the Silver Awards for Sustainable Financing for Tourism in the Green Awards 2022. Going forward, it aims to develop additional ESG dedicated products for the Retail portfolio.

4. Achieved its target for over 20% of the annual gross new corporate disbursements to be classified as green/ environmentally sustainable

   As regards Sustainable Financing Targets in the Corporate Portfolio, for 2022, new green SFF-aligned disbursements in the CIB portfolio constituted more than 20% of the total disbursements in the CIB portfolio, indicating the Bank's dedication to the support of green transition of its clients' operations. The total outstanding balance of existing green exposures exceeded € 1,5 billion as of 31.12.2022, indicating a year-on-year growth in green financing of over 60%. Specifically, more than € 900 million are attributed to Renewable Energy Sources (RES) projects, while over € 400 million have been allocated to Sustainability Linked Loans, supporting clients' sustainable transition.

The Bank has set the following targets for sustainable disbursements in the following years:

- New Disbursements: € 2 billion new green disbursements to businesses until 2025 or 20% of the annual new corporate disbursements to be classified as Green/ Environmentally sustainable;
- Renewable Energy: 35% of new disbursements in Energy sector will be directed to RES financing;
- Green Buildings: c. 80% of disbursements related to construction of new buildings will be allocated to green buildings;
- RRF: € 2,25 billion Total Green RRF funds contribution in the Greek economy until 2026;
- Green Stock / Exposure evolution: 20% stock of green exposures in CIB by 2027 (up from 11% in 2022); and
- Double Retail Green Gross Disbursements within 2023 compared to 2022.

The Bank plans to revisit and update its Financed Impact Strategy on an annual basis, in line with best market practices. Aiming to continuous improvement, we intend during 2023 to:

- Align our loan portfolio and investments with a net zero carbon footprint until 2050 by developing a robust roadmap;
- Actively support our clients to climate transition with an ambition to increase our sustainable financing going forward;
- Further integrate climate risk regulatory requirements into our business strategy and risk management framework, levering on key initiatives:
  - Governance, policies and control framework;
  - Climate risk modelling & data management;
  - Commercial strategies/sector policies.
- Align with Task force on Climate Related Financial Disclosures (TCFD) recommendations and publish a dedicated climate report along with our annual business and sustainability report ;
- Disclose our Financed Emissions ; and
- Actively participate in Hellenic Bank Association initiative in cooperation with Teiresias S.A. for the creation of an ESG data repository to support sustainable financing, in line with the regulatory requirements.

Engagement with Our Counterparties for Environmental Risk Mitigation

The Bank engages with its counterparties, both in the context of its credit granting and asset management activities, in order to understand their strategies to mitigate and reduce their exposure to environmental risks.

Environmental, Social and Governance (ESG) Risks

Engagement in the context of Credit-Granting Activities

Given the relatively low level of maturity of the market and in order to facilitate the green transition of its clients, the Bank has developed a dedicated approach to increase clients' engagement and awareness on environmental risks. The Bank's strategic approach is to support green transition efforts, through financing and advisory solutions to current and potential clientele. Towards this end, the Bank has launched initiatives aiming to build ESG literacy and capacity among its clients. Such initiatives include the following:

- Enterprise Greece and Eurobank co-organized the online event "ESG: A Growing Opportunity for Greek Businesses International Expansion";
- Articles and webinar on sustainable development and ESG criteria and why adapting to the ESG model will make businesses more competitive and more economically viable; and
- Digital academy for businesses actively supports Greek businesses in their transition to the ESG model, through a series of Digital Academy articles and webinars.

Along with its service and product offerings, the Bank implements an Environmental and Social Management System (ESMS), aiming to mitigate potential credit risks arising from the operation of businesses that are financed by the Bank. In this context, the Bank also includes non-financial covenants in the contractual documentation at the point of loan origination, aiming to influence the clients' strategies to mitigate/reduce environmental and social risks.

Moreover, the Bank engages with its clients through the use of the web-based tool for the SFF assessment in the context of the CIB Portfolio (e.g. identification of opportunities via dialogue with the client to incorporate green characteristics into the provided financing).

Engagement in the context of Asset Management Activities

For Eurobank Asset Management M.F.M.C., engagement and dialogue are an integral and crucial part of sustainable investing. In this context, as per its Sustainability Risk Policy the Company is committed at two levels, as regards the environmental risk assessment of the companies in which the Company's Funds and Portfolios invest:

1. Company engagement: The aim is to encourage companies to achieve the highest possible standards in terms of environmental responsibility and to support them in this process.
2. Voting engagement: The use of voting rights at general meetings is one of the cornerstones of the strategy of continuous dialogue with the companies concerned implemented by Eurobank Asset Management M.F.M.C. It is also an integral part of its investment process.

For more details please refer to http://www.eurobankam.gr/sites/default/files/downloads/175_sustainability_risk_policy_for_eurobank_asset_management_m.f.m_0.pdf.

Additionally, according to the Responsible Investment Policy of Eurobank Asset Management M.F.M.C., as regards Corporate Engagement, it supports the European Fund and Asset Management Association (EFAM) "Stewardship Code", which provides a series of best practices for asset managers to be followed when they engage with the companies in which they invest on behalf of their clients.

For more details please refer to http://www.eurobankam.gr/sites/default/files/downloads/responsible_investment_policy_final_0.pdf.

11.1.2 Governance

Responsibilities Of the Management Body and Internal Governance Arrangements Across the Three Lines of Defense for Environmental Risk Management

Governance Structure and Committees

The Group has updated its governance structure by introducing and defining the roles and responsibilities in relation to CR&E risks, embedding regulatory guidelines and market practices. The updated governance structure aims to further enhance the effective oversight of ESG and CR&E risks at management/board level, as follows:

Board of Directors ("BoD")

Operates guided by Group's vision, values and standards; sets the strategic aims of the Group, assesses the potential risks and manages them sensibly and efficiently; ensures that robust processes are in place to monitor organizational compliance with the agreed strategy and risk appetite and with all applicable laws and regulations. The HoldCo/ Bank's BoD have assigned an executive member as the responsible BoD member for CR&E risks. As part of its duties, the member responsible updates the Board Risk Committee, in alignment with the BRC's, and of the BoD of Eurobank Holdings and of the Bank Terms of Reference on climate change and environmental related risks at least on a semi-annual basis. Effective Board oversight with respect to the Group's ESG strategy is also safeguarded through the inclusion of ESG items in the agendas of Board Meetings, as per international best practices.

Board Risk Committee ("BRC")

Oversees the implementation and adherence to the Bank's risk policies, including climate-related and environmental risks, in order to assess their adequacy against the approved risk appetite and strategy; determines the principles which govern climate-related and environmental risk management across the Bank and the Group in terms of the identification, measurement, monitoring, control, and mitigation of risks; approves risk principles, policies, procedures and methodologies.

Additionally, the Group has established two Committees that supplement the governance arrangements in the area of ESG/Climate risk as presented below:

Environmental, Social & Governance Management Committee ("ESG ManCo")

Provides strategic direction on ESG initiatives; reviews the ESG Strategy prior to approval; integrates the elements of the ESG Strategy into the Bank's business model and operations; regularly measures and analyses the progress of the ESG goals and performance targets; ensures the proper implementation of ESG-related policies and procedures, reviews and approves ESG-related reports and ensures that they are in accordance with related Standards and Guidelines. It is chaired by the BoD member responsible for climate-related and environmental risks.

For more details please refer to

https://www.eurobank.gr/en/group/about-eurobank/corporate-governance/committees-formed-by-the-ceo/esg-management-committee

Climate Risk Stress Test Committee ("CRSTC")

Responsible for the design and execution of the Group's CRST Programme; coordinates all activities relating to Climate Risk Stress Testing including risk identification, scenario design and stress test execution; reviews and challenges the output at each stage of the process prior to escalating to the Executive Board.

Going forward, the Bank aims to enhance the CR&E risk oversight responsibilities for the management body by introducing climate risk related aspects in the Bank's fit and proper criteria, considering relevant ECB consultation. Additionally, the Bank plans to provide dedicated trainings on CR&E risks to the management body members and to further update the

Terms of Reference (ToRs) of Board and Management Committees to incorporate and allocate additional responsibilities for the oversight of the CR&E risks.

Internal and external ESG Risks awareness and capacity building

Eurobank is placing great emphasis in building capacity among its employees to be able to support its clients on their sustainability journey and their green transition. To this end, Eurobank, in addition to launching ESG initiatives for its clients, implements an ESG upskilling plan for its employees. Eurobank's internal awareness sessions regarding ESG and CR&E matters cover both members of the management body and other stakeholders across the Bank (e.g. Business Units). Additionally, the Bank has offered trainings to stakeholders from all Three Lines of Defense (i.e., Business Units, Risk Management Units, Internal Audit) regarding the Sustainable Finance Framework in order to enhance their understanding.

Integration of CR&E Risk Management across the Three Lines of Defense

The role of the Three Lines of Defense in CR&E risk management

The Bank addresses short-term, medium-term and long-term effects of CR&E risks for the purposes of risk management by integrating of them in its business environment and strategy.

The Bank has defined climate-related time horizons as follows:

- Short term: <3 years aligned with budget;
- Medium term: 3-10 years aligned with business planning;
- Long term: >10 years aligned with strategic planning.

The CR&E Risk Governance involves various key stakeholders (i.e. Business functions, Units, and Committees). The Group applies a model of defined roles and responsibilities regarding the management of CR&E risks across the three Lines of Defense, considering all relevant guidelines and regulatory requirements as follows:

- **1st Line of Defense:** Business Units (CIB and Retail Banking) are responsible for assessing, managing and monitoring their risk levels in all risk categories, including CR&E risks. In order to effectively manage ESG and sustainable financing related matters, a dedicated function of the Sustainability Center of Excellence has been developed within the CIB with the responsibility of overseeing ESG and sustainable financing activities. Regarding the Retail Banking Division, the Bank has introduced two ESG coordinators who are responsible for the organization and provision of support on ESG related activities. In addition, the role of the ESG Division in the 1st Line of Defense has been revisited to include the responsibility for the Operational Impact Strategy as well as Sustainability Reporting, Environmental & Energy Reporting (EMAS Report, Greenhouse Gases Emissions Report per ISO14064) and ESG ratings.
- **2nd Line of Defense:** The Group Risk Management General Division (GRMGD) is independent from the Business Units and has full responsibility in setting the Risk Strategy and Risk Appetite Framework including CR&E risks. Within the GRMGD, a dedicated Division for Climate Risk (Group Climate Risk Division) has been established with the overall responsibility for overseeing, monitoring, and managing CR&E risks, in cooperation with the other GRMGD sectors/ divisions as well as the Group Compliance General Division.
- **3rd Line of Defense:** Internal Audit Group (IAG) independently reviews the adequacy and effectiveness of the internal control framework in place regarding CR&E risk management, following a risk-based approach.

Group Climate Risk Division (GCRD)

The Group Climate Risk Division (GCRD) has the overall responsibility for overseeing, monitoring, and managing CR&E risks. Specifically, the GCRD operates as Project office responsible for the implementation of the Climate Related and Environmental risks roadmap ("Program Field"), with a coordinating and supervisory role on all related project streams to ensure alignment with the Bank's business strategy and the regulatory authorities' expectations. In this context, GCRD ensures the implementation of environmental and sustainability corresponding initiatives (frameworks, policies, procedures and products) and compliance with existing and upcoming related regulations, under an ongoing bank-wide program, in alignment with the supervisory agreed roadmap, which is accelerated where possible. Also, GCRD is responsible for the co-ordination with Business and Risk Units, the preparation and submission for approval of the Financed Impact Strategy, as well as for monitoring its implementation. Furthermore, the GCRD leads the 2nd Line of Defense independent sustainable lending re-assessment process. Specifically, in the context of implementing the approved SFF, the Division is responsible to assess the sustainability features of new loans and products according to the criteria set within the SFF. Going forward the role of GCRD will be expanded, covering the management of ESG risks.

Group Compliance General Division

The Group Compliance General Division monitors compliance with ESG/ Climate-related regulations and standards. The following provide a high level overview of the Group Compliance General Division key roles and responsibilities to be performed around ESG/ Climate risks:

Regulatory Compliance

- Monitors the regulatory environment and emerging trends around sustainable financing, informs the 1st and 2nd lines of defense and may propose required changes / enhancements for the relevant policies and documents regarding sustainable financing offerings;
- To that end, issues a regulatory bulletin which refers to regulatory developments and their impact on the Bank's operation in terms of ESG risks; and
- Complements the risk management framework and monitors the alignment of institutions' activities with applicable laws, rules, regulations and standards, including ESG regulatory aspects.

Compliance Risk Assessment

- Assesses conduct risk in relation to ESG; and
- Performs compliance checks with regard to greenwashing and other, ESG related conduct risk.

Policies' Update

- Maintains the Bank's conduct related policies (e.g., AML & Sanctions, Anti-Bribery and Corruption, etc.), including their ESG elements.

Product offering monitoring

- Via its participation in the Products Services Committee and process, provides advice and checks on Bank's ESG product offerings including that promotional statements do not misrepresent products or services to customers.

Internal Audit Group (IAG)

The role of the third line of defense within Eurobank governance and organizational structure is allocated to the Internal Audit Group (IAG,) for the internal control framework concerning all processes, risks, and mechanisms, and for all business lines and internal units.

IAG is an independent, objective assurance and consulting function, designed and aiming to add value and improve the operations of Eurobank. A direct reporting line to the Audit Committee (AC) strengthens IAG's functioning and safeguards its independence. The primary role of IAG is to assist the Board and the AC by providing reasonable assurance, in the form of an independent opinion, as to the adequacy, efficiency and effectiveness of the internal control framework of the Bank and its subsidiaries. The areas within IAG's scope include all activities and risks of the Bank and its subsidiaries in Greece and abroad.

IAG follows a risk-based methodology for the determination of its audit plan(s) (AP), ensuring focus on high-risk areas, aiming at the strengthening of the Bank's internal control framework. The risk assessment is implemented across all units, functions, processes and systems of the Bank and its subsidiaries (i.e., the "Audit Universe"). It considers current developments in both internal and external environment, as well as changes in the regulatory framework.

In recent years, IAG recognising Environmental, Social and Governance (ESG) internal controls and risk management framework, as an area of focus and has taken several initiatives and actions within its strategy. These aim to ensure adequate coverage of the area, in line with the Bank's strategy as well as industry and regulatory developments.

Specifically, IAG strategically focuses on the ESG risks, building on the following pillars:

- **Methodology/Infrastructure:** The Management of ESG risks and the Bank' initiatives are recognized as a separate auditable area, subject to risk-assessment. Furthermore, climate risk was recently recognized as a separate risk category assessed in all relevant areas of the audit universe, in line with the Bank's risk taxonomy. This category will be extended to cover the whole spectrum of ESG risks in line with respective developments in the Bank's risk definitions. Climate risk definition of the Bank currently covers both physical and transition risk drivers of the C&E risk. IAG is in the process to operationalise the change and reflect it in IAG's risk assessment, audit planning and audit reports, with an aim to monitor IAG's coverage in terms of timing and findings, assisting in appropriate future planning and monitoring in the area, including more focused monitoring of relevant issues by the Bank's Board and the AC. Due to timing considerations, the assessment of the C&E risk per AU line will be reflected in the 2023 risk assessment which informs the 2024 AP.
- **Resources:** IAG conforms with the standards of the Institute of Internal Auditors (IIA) International Professional Practices Framework (IPPF), ensuring among others the "appropriateness and sufficiency" of IAG Resources. "Appropriateness and sufficiency" of resources engaged in all audit assignments is key for IAG. Appropriateness refers to the right mix of knowledge, skills, and other competencies, and sufficiency refers to the quantity of resources needed to accomplish the IAG role with due professional care. Traditionally, the majority of IAG staff possess professional qualifications/certifications from internationally recognised professional bodies, such as ICAEW, ACCA, CIA and CISA. IAG has extended its pool of professional qualifications/certificates to the area of ESG, with one staff member certified in Sustainability and Climate Risk, and with more auditors to commence relevant certifications from 2023 onwards. IAG intends to experiment with the available industry professional body offers, such as GARP's Sustainability and Climate Risk (SCR®) Certificate, CFA's Certificate in ESG Investing, ICAEW Sustainability Certificate, etc. This comes in parallel with other initiatives aimed at upskilling through dedicated training sessions (e.g. Bank internal, Moody's, webinars), "on-the-job" upskilling (participation and consultation in the Bank's projects and initiatives around ESG) and increased awareness (e.g. establishment of IAG's ESG Focus Group, sharing knowledge on ESG practice and regulatory initiatives, targeted presentation to AC members). At this stage, IAG has opted to embed the right mix of skills and knowledge within its existing organizational structure, given the multifaceted nature of ESG risks, affecting all businesses and operations of the Bank, to a siloed approach, aiming at a holistic consideration of the Bank's ESG risks. This approach will be revisited in the future.
- **ESG – Audit Universe Coverage and Audit Planning**: Following the infrastructure steps described above, since 2021 IAG has carried out several assignments around ESG, in parallel with the monitoring of the Bank's initiatives in this area. Specifically, the 2021 annual audit plan (AAP) included participation in the Bank's ESG Program Field, and a consulting assignment on ESG reporting. The 2022 AAP included a consulting assignment on the Climate Risk Stress Test 2022 and the commencement of audit assurance work around the operationalization of the C&E Risk Management Framework within targeted areas of the Bank (e.g. Transformation Project; Investments). A similar approach has been planned for the 2023 AAP, with a focus on ESG matters in targeted reviews, taking into account the ECB's 2022 report on "Good practices for C&E risk management" (e.g. Risk Management and Governance), complemented by a consulting assignment around the Pillar 3 ESG Disclosures. Finally, IAG has considered the supervisory requirements and specifically the ECB's report on "Good practices for C&E risk management", to develop its three-year audit plan around ESG risk, which will be completed within the 2023 risk assessment and audit planning exercise, to be approved by the AC by year-end (indicative areas of focus are governance, regulatory compliance, risk management and disclosures). Key areas of focus include risk materiality, governance and strategy, C&E risk

management framework, products design and offering, disclosures, etc. These initiatives come in addition to the existing coverage by IA in ESG-related areas, such as consideration of AML-perspectives in loan origination (governance-social financing practices), review of compliance with code of conduct or market practice codes (governance operational and financing practices) and relevant non-recurring and forensic audit work.

The outcome of IAG assignments is reflected In the audit reports, which are distributed to Management, the AC and the external auditors. IAG meets frequently with Senior Management to discuss audit findings and the progress made in resolving them. It also prepares quarterly reports for the Audit Committee.

IAG is also dedicated to integrating ESG friendly practices into its operations, by increasing staff awareness, taking actions to reduce its environmental footprint and positively impact the environment and contribute to society (e.g. charity work and/or contributions), in parallel with the implementation of good governance and human capital management practices.

In sum, IAG is placing significant focus to ensure that adequate coverage is provided in the field of ESG risks, as well as that its operations integrate ESG aligned and impact practices. Overall, IAG is committed towards the mindset shift that ESG requires. It recognises the crucial role of ESG factors in business operations and decision-making, aiming at a proactive and gradual integration of an ESG mindset into audit processes. The aim is to drive positive impact and promote sustainable practices.

Bank's key Pillars considered under the Three Lines of Defense

In line with the Basel Committee's "Principles for the effective management and supervision of climate-related financial risks", the Bank assesses the potential impacts of climate-related risk drivers on its individual business model and assesses the financial materiality of these risks, proportionate to the nature, scale, and complexity of its activities. In this context, the Bank ensures the consideration of CR&E risks in short, medium, and long term in all applicable steps relating to its main pillars, as presented below:

1. Risk Identification and Materiality Assessment;
2. Loan Origination and Credit Decisioning;
3. Internal Reporting and Monitoring;
4. Scenario Analysis & Stress Testing;
5. ICAAP & ILAAP;
6. Risk Appetite; and
7. Disclosures.

In the context of the above pillars, indicative activities integrated across the Bank's three Lines of Defense are presented below.

The Role of the 1st Line of Defense

- Contributes to the identification of CR&E risks and the recognition of materiality changes of such risk (e.g. through the update of a policy document, monitoring market, risk exposures etc.);
- Ensures credit granting is in line with relevant CR&E thresholds as per the Risk Appetite Framework and Credit Policy Manuals;
- Engages with clients in the context of ESG/Climate Risk Assessment and Sustainable Finance Assessment;
- Establishes and monitors the CR&E risk KRIs/KPIs to ensure alignment with risk limits/strategy;
- Manages CR&E risks in line with the approved Risk Appetite Framework and the development of strategic business planning and budgeting; and
- Provides required data for CR&E risks for internal reporting, Pillar III/EU Taxonomy disclosures and regulatory exercises (e.g. Climate Risk Stress Testing) as mandated by the 2nd Line of Defense.

Environmental, Social and Governance (ESG) Risks

The Role of the 2nd Line of Defense

- Initiates the risk identification processes and concludes the outcome of the materiality assessment and updates accordingly the risk taxonomy;
- Reviews relevant credit proposals and considers sustainable finance and CR&E elements in credit decisioning for the creditworthiness assessment;
- Is responsible for the generation of CR&E risk reports, escalation of significant issues to management and proposition of mitigation actions;
- Is responsible for the Scenario Analysis and the development and validation of the CRST models;
- Defines the risk quantification methodology and performs the assessment regarding CR&E risks;
- Monitors compliance with Risk Appetite Framework and escalates significant issues when required;
- Coordinates with Business Units and prepares CR&E risk disclosures (i.e. Pillar III, EU taxonomy) and regulatory exercises (e.g. Climate Risk Stress Testing); and
- Ensures compliance with ESG/ Climate-related regulations and standards.

The Role of the 3rd Line of Defense

- Governance and CR&E risk management processes, including the climate risk stress testing framework and integration with the ICAAP/ILAAP, the risk-appetite and strategic planning;
- Sustainable finance framework (e.g. governance and offering of sustainable products and services, and the related internal policies) audit assessment and related reporting;
- Sustainable investment framework (e.g. sustainability criteria) audit assessment and related reporting; and
- Sustainability disclosures in respect of assessing compliance with regulatory requirements and the underlying methodologies adopted by the Bank.

Lines of Reporting and Frequency of Reporting relating to Environmental and Social Risk

The Bank has adequate monitoring and reporting mechanisms in place to ensure appropriate management of the CR&E risks generated by its activities. For this purpose, the Bank has developed appropriate Key Performance Indicators (KPIs) that are reported to the management body in order to effectively oversee CR&E risks across the Bank, leveraging on the insights gained from the 2022 ECB Climate Risk Stress Test, as well as from the Bank's internal exercises and materiality assessment (for transition and physical risk).

Indicative climate risk indicators to be reported to the BRC at least quarterly are the following:

- Regarding **Transition Risk**, the monitoring indicators include (i) concentration of exposures to sectors with high transition risk in the Bank's Corporate and Small Business portfolios; (ii) concentration of exposures to counterparty sectors with high transition risk in Bank's trading and banking portfolios, and (iii) percentage of exposures in debt securities to the top 20 most carbon intensive counterparties globally.
- Regarding **Physical Risk,** the monitoring indicators include total and individual concentration of exposures collateralized with immovable property located in areas subject to flood risk (Corporate & Retail Portfolios)
- Regarding **Liability Risk,** the Bank monitors its conduct risk exposure for the risk of failing to act in accordance with customers' or investors' best interests, fair market practices, and codes of conduct excluding internal fraud cases (e.g. mis-selling risk, climate-related legal claims, and litigation/liability risk arising from legal proceedings or other actions related to misconduct, other than fraud). Also, as per its qualitative Risk Appetite Statements**,** the Bank has a low

appetite for any negligent behavior that negatively affects its customers, staff, the Group itself or any third-party, including "Greenwashing". Accordingly, every case of greenwashing should be addressed quickly and fairly.

Furthermore, the Bank plans to proceed with the definition and operationalization of additional CR&E Risk Appetite Statements and Business Line Statements (i.e. sustainable financing targets, targets/limits at sectoral level etc.) by the end of 2023.

Additionally, the Bank's Business Units maintain and update appropriate templates and mechanisms in order to monitor respective sustainable financing disbursement amounts (e.g. regarding Green and Social Loans), in line with the provisions of the Bank's SFF. The ongoing and timely monitoring of sustainable loans allows Senior Management to assess the evolution of sustainable financing volumes and trends, taking into account Bank's relevant targets, as well as facilitates internal reporting. Going forward, the Bank aims to implement further systemic enhancements in its IT and data infrastructure, to support the standardization of the monitoring of pertinent information, as well as safeguard data availability and accuracy.

Alignment of the Remuneration Policy with Institution's Environmental and Social Risk-Related Objectives

The Bank promotes the integration of sustainability risks related factors into its remuneration policies. The Bank's Remuneration Policy that is applicable to all Bank employees and covers their total remuneration, forms an integral part of the Bank's corporate governance practice. It promotes sound and effective risk management and is consistent with the objectives of the Bank's business and risk strategy, corporate culture and values, risk culture, including environmental, social and governance risk factors, as well as long-term interests of the Bank, and should not encourage excessive risk-taking on behalf of the Bank.

The Bank aims to integrate climate and environmental risk aspects into its Remuneration Policy. In particular, within 2023, the Remuneration Policy will be linked to specific sustainability performance indicators/KPIs to monitor progress towards the achievement of Bank's targets in terms of climate risk management, financed and operational impact.

11.1.3 Risk Management

Integration of Environmental Factors in Our Risk Management Framework

The Bank has incorporated environmental risk aspects across all pillars of its risk management framework, through the establishment of comprehensive policies and processes. It is among Bank's priorities to identify, assess, manage, and mitigate relevant risks, with a view to ensuring alignment with its business strategy.

A detailed presentation of the Bank's practices, as well as a description regarding the applicable definitions, methodologies, and standards taken into account by the Bank, are presented below.

Group Risk Management Framework (RMF) and CR&E Risk Management Framework

The Group Risk Management Framework defines the duties of Group Risk Management General Division (GRMGD), which is independent from the Business Units as a 2nd Line of Defense, having full responsibility for the establishment of the Group's Risk Strategy and Risk Appetite Framework, as well as for the monitoring of credit, market, liquidity, operational and climate-related and environmental risks undertaken by the Eurobank Group.

In accordance with relevant supervisory expectations and the Group's enhanced governance operating model for the incorporation of CR&E risks across the three Lines of Defense, new roles and responsibilities regarding climate risk management have been embedded in the Group Risk Management Framework.

The Bank is in the process of finalizing its CR&E Risk Management Framework, to evaluate the effects of climate-related and environmental risks on its business, as well as support the risk management decision-making. The document presents, inter alia, the general principles applied by the Bank for CR&E risk management, the governance framework for the oversight of CR&E risks and broader ESG risks, Bank's CR&E risk definition and its approaches for CR&E risk assessment, monitoring, and mitigation, and finally reporting and disclosures requirements.

Risk Appetite

The Bank has updated its Risk Appetite Statements Document, to reflect climate risk considerations. Indicatively, as mentioned above, the Bank's Risk Appetite was for at least 20% of the annual new CIB disbursements within 2022 to be classified as Green/Environmentally sustainable loans by applying the criteria set in Bank's Sustainable Finance Framework, which also includes RRF green tagging classification. As indicated previously, this target was exceeded, showing the Bank's commitment towards green transition.

The Bank's approach for the management and mitigation of climate risk in its investment and financing activities, is as follows:

With respect to the transition risk of which credit risk, the Group will continue working with companies, and will support them with financing and advisory in their transition effort. Leveraging on the climate risk assessment exercises and the Sustainable Finance Framework, the Group's strategic approach is to support green transition efforts, through financing and advisory (including capital raising) solutions to current and potential clientele.

With respect to the transition risk of which market risk, the Bank's exposure concentration to sectors with high transition risk (i.e. industries which could be materially impacted by societal and economic shifts toward a climate-friendly future) is regularly monitored in the context of Bank's trading and banking portfolios.

The Bank has initiated the monitoring and reporting of a list of climate risk monitoring indicators within 2022 and will explore setting respective thresholds for pertinent metrics within 2023, in line with the Bank's Financed Impact Strategy and regulatory expectations for CR&E risks.

Materiality Assessment Approach and Risk Identification & Materiality Assessment Process

The Bank has established respective definitions of climate-related risks and has performed a materiality assessment exercise regarding the impacts derived from relevant risks, the results of which are included in the Group's Risk Identification & Materiality Assessment (RIMA) Report, Risk Library and Risk Inventory.

Climate Risk Definition

Climate risk: The risk deriving from potential loss or negative impact to the Group, including loss/damage to physical assets, disruption of business or system failures, from the adverse effects of climate change and natural disasters.

Climate risk also includes the following risks:

Climate related physical risk: Physical risk, which refers to the financial impact of a changing climate, including more frequent extreme weather events and gradual changes in climate, as well as of environmental degradation, such as air, water and land pollution, water stress, biodiversity loss and deforestation. Climate related physical risk is considered within credit (lending & counterparty) risk assessments.

- **Physical risk of which credit risk**: Risk of damage to counterparties' physical capital (i.e. reduction of clients' asset values) due to extreme weather events, that could impact collateral valuations.

Climate related transition risk: Transition risk, which refers to an institution's financial loss that can result, directly or indirectly, from the process of adjustment towards a lower- carbon and more environmentally sustainable economy. Climate related transition risk is considered within both credit (lending & counterparty) and market risk assessments.

- **Transition risk of which credit risk**: Risk of lower profitability and lower collateral values for Bank's counterparties, triggered due to substantial adaptation costs deriving from energy efficiency standards.
- **Transition risk of which market risk**: Risk of a reduction in financial asset values (including the potential to trigger large, sudden, and negative price adjustments, where climate risk is not yet incorporated into prices).

Environmental, Social and Governance (ESG) Risks

The relevant transmission channels regarding the impact of climate risk on the Bank's operational risk (incl. liability risk), reputational risk, liquidity risk and strategic/business model risk will be assessed in line with the Bank's initiative to develop materiality assessment approaches for the evaluation of pertinent impacts within 2023.

The methodological approaches used by the Bank for the assessment of the climate risk impact on its credit, market and operational risk exposures, are presented below, along with the outcomes of the respective analyses.

(i) Credit Risk

Materiality assessment of Transition Risk impact: The Bank identified its exposure to sectors more likely to be impacted by transition risk, based on the **Climate Policy Related Sectors (CPRS) classification of activities**. The CPRS methodology was also applied by the European Banking Authority (EBA) in the context of a pilot stress test performed for European Banks and considers as key criteria for the classification of sectors as relevant for transition risk (i) their GHG emissions, (ii) their role in the energy supply chain, (iii) the existence in most countries of traditional policy institutions. Based on pertinent classification, the six economic activities considered as high transition risk are as follows:

1. **Fossil Fuels**: Mining of coal, refined petroleum products, transport via pipelines
2. **Utility**: Production/ transmission/ distribution of electricity, collection/ treatment/ supply of water
3. **Energy Intensive**: Manufacture of food products/ textiles/ chemicals/ pharmaceutical products/ electronic products/ furniture
4. **Buildings**: Construction, real estate
5. **Transportation**: Land/ water/ air transport, warehousing
6. **Agriculture**: Crop/ animal production, forestry, logging

Given the above, the Bank was able to identify its NFC exposure to high transition risk sectors, based on its counterparties' sector of operation (top-down assessment).

Also, the Bank evaluated its NFC portfolio clients that are allocated in NACE sectors with high transition risk, using the **short-term disorderly transition scenario** defined by the ECB for the purposes of the 2022 ECB Climate Risk Stress Test exercise. The scenario assumed the implementation of strict climate policies on 1 January 2022 with respect to an increase in carbon prices (3-year horizon).

Materiality assessment of Physical Risk impact: Leveraging on the guidance provided by the ECB in the context of the 2022 Climate Risk Stress Test, the Bank evaluated its exposure to geographies subject to physical risk, using the relevant short-term flood risk scenario and the NUTS3 level map provided by the ECB. The scenario assumed a severe flood occurring in EU countries on 1 January 2022 (1-year projection horizon). In particular, the real estate collaterals of the secured portfolio of the Bank were mapped against the NUTS3 level codes included in the flood risk map of the ECB, and the corresponding on balance exposures were assigned to different flood risk categories (i.e. minor, low, medium, or high).

Additionally, the Bank used the short-term scenario of the ECB regarding the occurrence of a severe drought and heatwave in Europe (1-year projection horizon). The Bank assessed the concentration of its CIB and SB exposures in the 22 NACE sectors most relevant to climate risk, as identified by the ECB for the purposes of the 2022 Climate Risk Stress Test.

The results of the above exercises showed that the climate risk impact (both from transition and physical risk) on Bank's credit risk in terms of exposure concentration, is material.

(ii) Market Risk

Materiality assessment of Transition Risk impact: The Bank performed a concentration analysis on its trading portfolio exposures, using the Climate Policy Relevant Sectors (CPRS) methodology, as well as the short-term disorderly transition scenario defined by the ECB for the purposes of the 2022 Climate Risk Stress Test exercise, as mentioned above.

The results of the above exercise showed that the climate risk impact (from transition risk) on Bank's market risk in terms of exposure concentration, is not material.

(iii) Operational Risk

Materiality assessment of Transition Risk impact: The Bank assessed and quantified the operational risk and reputational risk impacts deriving from climate risk through scenario analysis, as part of the 2022 ICAAP.

- Reputational risk deriving from climate risk: When assessing Conduct Risk, which includes liability risk, the relevant scenario included climate-related drivers, among other types of conduct-related issues. In particular, the Bank's scenario referred to inappropriate product and service sales practices (e.g. failure to adhere to lawful practices, including misleading statements about products or services, or failure to disclose information, greenwashing); and
- Operational risk deriving from climate risk: The Bank's scenario referred to the Bank's property, business premises, facilities or IT infrastructure being damaged or destroyed by extreme weather events, such as droughts, floods, cyclones and storms.

It is noted that the quantification was carried out within operational risk sub-types and reputational risk and not separately for climate risk.

The results of the above exercise showed that the climate risk impact (from transition risk) on the Group's operational risk in terms of the conduct-related scenario, was generally assessed as medium/high risk, while reputational risk for this scenario was in the medium risk range.

The Bank is currently in the process of developing an **enhanced materiality assessment approach for credit risk and market risk**, incorporating a heatmapping exercise, also taking into account the impact of **other environmental risks** on pertinent risk types. Through the comprehensive inclusion of CR&E risk in its assessment of materiality for its main business areas in the short, medium, and long term, the Bank aims to better understand the impact of CR&E risks on the business environment in which it operates, in order to be able to make informed strategic and business decisions.

The heatmapping exercise shall determine which CR&E risk drivers could potentially have a material adverse effect on sectors to which the Bank is exposed, and subsequently on the overall Bank's risk profile and operations in terms of financial losses, business disruptions, legal claims and/or reputational damages. The process is expected to take place annually and its outcome will be taken into consideration in the Bank's follow-up actions in terms of measuring the materiality of the risks and allocating relevant resources within the organization.

In particular, the Group recognizes that climate risks may impact traditional economic variables (e.g. change in demand, prices and productivity) bringing additional stress into the economy through a decrease in profitability and asset valuation. This in turn results in losses for the financial sector, which then feed back into the overall economic deterioration through market losses and credit tightening. Lower corporate profitability and lower commercial and residential property/asset values are identified as the major transmission channels for climate risk.

Climate Risk Monitoring Indicators

The Bank has established a **climate risk reporting dashboard** with appropriate climate risk KPIs that will be reported to the management body on a periodic basis, in order to effectively oversee CR&E risks across the Bank.

Environmental, Social and Governance (ESG) Risks

For these purposes, the Bank took into account best market practices and leveraged on the insights gained from the 2022 ECB Climate Risk Stress Test (i.e. use of methodological assumptions made for the calculation of climate risk metrics), as well as on the Bank's internal exercises and materiality assessment process (for transition and physical risk). For the selection and the definition of the climate risk monitoring indicators, the below were also taken into account:

1. Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01);
2. Task Force on Climate-related Financial Disclosures – Guidance on Metrics, Targets, and Transition Plans; and
3. Development of Tools and Mechanisms for the Integration of ESG Factors into the EU Banking Prudential Framework and into Banks' Business Strategies and Investment Policies – Study by BlackRock on behalf of the European Commission

A non-exhaustive list of climate risk monitoring indicators used by the Bank is included in Section 11.1.2 "Lines of Reporting and Frequency of Reporting relating to Environmental and Social Risk".

Credit Risk Management Policies & Processes

The Bank is in the process of the incorporation of the ECB's "Good practices for climate-related and environmental risk management – Observations from 2022 thematic review" in its loan origination process, through enhancements to Lending criteria, Data collection & risk assessment, Risk classification, Client engagement and Transition plan assessment. The Bank has already integrated environmental risk considerations in its practices in different stages of the credit granting and monitoring process, as presented below.

A) Collateral Insurance Requirements

At the point of loan origination, the Bank requires from the borrowers the provision of insurance policies for real estate properties accepted as collateral. All prenoted (mortgaged) real estate properties must be insured (plots of land are excluded). The insurance coverages are classified in compulsory, which concern coverage from fire, earthquake and flood (for Corporates and on a voluntary basis for Retail). Desirable coverages are differentiated in relation to the type of the real estate and the particular circumstances (e.g. examination of whether the real estate property is under construction). Insurance contracts are assigned to the Bank.

The Bank recognizes that the value of collateral located in geographies vulnerable to physical risk may be negatively impacted, for example, as a result of increased flood risk. Therefore, going forward, the Bank plans to incorporate climate related risks in its Collateral Valuation Policy and relevant procedures by the end of 2023.

B) Incorporation of Environmental Risk Factors in the Creditworthiness Assessment

(i) Moody's Risk Analyst (MRA) model

The Bank's Moody's Risk Analyst (MRA) model includes environmental related factors in order to determine borrower's credit rating such as Risk of Adverse Events – Environmental Risk and Effect from Environment Issues.

(ii) Specialized Lending – Information Requirements & Assessment

Creditworthiness assessment takes into account the borrowers' compliance with safety and environmental regulations, including those relating to environmental liability.

C) Environmental & Social Management System (ESMS)

For the integration of Environmental and Social (E&S) issues into its business model, the Group implements an ESMS in accordance with the certified Environmental Management System (ISO 14001) and the requirements to assess direct and indirect environmental aspects, and in line with the requirements and expectations of Group's institutional investors, shareholders, and other stakeholders. In this context, the purpose of the Group Environmental & Social Policy is to set the framework of general principles and requirements for the management of Environmental & Social Affairs in the Group, in order to achieve and maintain compliance with existing applicable legislation and regulations as well as with commitments to its shareholders, stakeholders, and the society, through a uniform approach to be followed by the Bank and its Key Subsidiaries, domestic and international, Banking and Non-Banking. Furthermore, the objective of the Policy is, inter alia, to ensure timely and accurate reporting to the European Bank for Reconstruction & Development (EBRD) concerning the management of the Group ESMS. As part of its Environmental & Social Policy, the Group applies a list of activities that are excluded from financing by the Eurobank Group in line with the Exclusion lists of the EBRD and IFC. The Group also has in place the Group Category A List, which is a list of indicative types of projects that could result in potentially significant adverse future environmental and/or social impacts and therefore require an environmental and social impact assessment. The Policy also incorporates key steps of the methodology, in accordance with International Organization's Guidelines (i.e. EBRD Performance Requirements, applicable IFC and EBRD Exclusion Lists) and Initiatives, as well as for compliance with applicable local, national, and international environmental and social legislation.

D) Climate Risk Scorecard

In line with best market practices as well as taking into account supervisory requirements/expectations regarding the establishment of an approach for further assessing clients with higher climate risk exposure, the Bank is in the process of developing a Climate Risk Scorecard for the consideration of climate-related and environmental risks.

The Climate Risk Scorecard will be initially applied to the Bank's Corporate & Investment Banking (CIB) and Large SBB portfolios. An assessment based on the Climate Risk Scorecard is planned to be performed for all new financing transactions and limit increases (existing and new clients) based on the predefined application perimeter for the above portfolios.

The Climate Risk Scorecard shall comprise a modular questionnaire which will include targeted climate risk questions, capturing dimensions relating to physical and transition risk, as well as client's awareness. The Climate Risk Scorecard full integration into the creditworthiness assessment process will be performed by the end of 2023.

E) ESG Risk Assessment Questionnaire

In the recent years, increased regulatory focus has been placed on ESG aspects in the banking sector. Institutions are expected to enhance their credit risk classification procedures in order to identify and evaluate climate-related and environmental risks, as well as integrate ESG aspects in the creditworthiness assessment process.

In this context, an interbank initiative in the Greek banking market pertains to the design of an ESG Risk Assessment Questionnaire, which TEIRESIAS S.A. (Greek Credit Bureau) is conducting in collaboration with the major Greek banks as well as the HBA. The objective is to develop a comprehensive ESG Risk Assessment Questionnaire to be used by all the banks, ensuring a harmonized assessment approach and a level-playing field, in order to incorporate a holistic assessment of borrowers' ESG factors.

The ESG Risk Assessment Questionnaire shall ensure alignment with supervisory expectations/requirements (e.g. meeting obligations regarding the EBA Guidelines on Loan Origination and Monitoring and the ECB Guide on Climate-Related and Environmental Risks), applicable international standards and guidelines (e.g. Task Force on Climate-related Financial Disclosures) and banks' operational needs, while also taking into account best market practices.

The common ESG Questionnaire and the respective ESG scoring will be integrated into Eurobank's processes and will serve as a tool to help Eurobank in assessing clients' ESG maturity. The Bank's target is to unify the ESG risk assessment under a common questionnaire fully aligned with the regulatory requirements, leveraging on the interbank ESG questionnaire.

Investment & Asset Management Activities

A) Sustainable Investment Framework

The Bank has approved its Sustainable Investment Framework (SIF), for the classification of investments as sustainable based on criteria observed in international market practices.

Eurobank intends to invest in sustainable development with the aim of improving its impact on environmental sustainability, social responsibility, and corporate governance. The Bank is gradually integrating ESG practices and aspects within its operations and services.

Eurobank's Sustainable Investment Framework (SIF) outlines the Bank's potential sustainable investment approaches/strategies, the process for the selection of eligible investments, as well as the monitoring frequency regarding the sustainable portfolio (part of the Bank's investment portfolio). It is noted that the sustainability assessment based on the criteria of the SIF, irrespective of eligibility outcome, does not prevent the Bank from considering non-eligible investments for its portfolio.

<u>**Overview of Classification Approaches**</u>

The Classification Approaches used by the Bank in the context of its Sustainable Investment Framework (SIF), are as follows:

- **Values-based Exclusions and AML**: Exclusion of companies, sectors, or countries whose behaviors do not align with basic societal values and Anti-Money Laundering (AML) exclusions;
- **Norms-based Exclusions**: Exclusion of issuers that do not comply with basic standards of business and international norms;
- **Avoid Harm**: A combination of Values-based and Norms-based exclusions, with additional activities with negative impacts excluded; and
- **Sustainable Bonds**: Selection of bonds that follow Sustainable, Green or Social standards (i.e., selection of Green or Social bonds, or Green and Social bonds, or Sustainability-linked bonds).

As regards Sustainable Bonds, the use of proceeds or any sustainability related target of such issuances should be articulated in a relevant Bond Framework (Green, Social, Sustainable, Sustainability-linked, etc.). This Bond Framework must have been reviewed by an independent and reputable third-party reviewer, against criteria included in standards such as the ones mentioned below (indicatively):

• Green Bond Principles (2021), published by ICMA;
• Social Bond Principles (2020), published by ICMA;
• Sustainability-Linked Bond Principles (2020), published by ICMA;
• Sustainability Bond Guidelines (2021), published by ICMA;
• Climate Bonds Initiative; and
• EU Green Bond Standard.

- **Best-in-class**: Selection of bonds from issuers that make the most effort to adhere to ESG practices among their peers.

- **Thematic Investments**: Selection of bonds from issuers whose business activity focuses on selected ESG thematic areas.

As part of its Thematic Approach, the Bank invests in companies that address one or more of the United Nations' SDGs.

Following their inclusion in the Bank's sustainable bond portfolio, the bonds selected are monitored at least annually to safeguard their alignment with the sustainable investment criteria of each respective sustainable approach. The Bank monitors the ESG scores of the issuers in the Sustainable Bond Portfolio through the Sustainalytics platform, in order to identify relevant trends in the green transition of pertinent issuers (e.g. certain issuers that may currently have low ESG scores might make significant efforts to accelerate their green transition, therefore they could be eligible for an upgrade in their ESG scores). The Bank also tracks the overall ESG score of its portfolio, in order to assess its positioning, based on a best-in-class outlook. According to the periodic monitoring performed, bonds that cease to fulfil the criteria of the Sustainable Investment Framework are removed from the Sustainable Bond Portfolio. The Bank also disinvests in any bonds from issuers that should be excluded based on the Bank's exclusion list.

B) Asset Management Activities

The Bank has outsourced investment advice and portfolio management services to Eurobank Asset Management M.F.M.C., which is the investment arm of the Eurobank Group. Thus, due diligence, research and investment decision processes when selecting or recommending financial instruments are conducted based on the applicable policies of Eurobank Asset Management M.F.M.C.

Eurobank Asset Management M.F.M.C. was the first asset management company in Greece to join the global Principles for Responsible Investment (PRI) initiative. The Responsible Investment Policy of the Company is also in line with the requirements set by Regulations (EU) 2019/2088 and (EU) 2020/852 on sustainability-related disclosures in the financial services sector and on the establishment of a framework to facilitate sustainable investment.

ESG factors relate, among other things, to:

(i) The 10 principles of the United Nations Global Compact; and

(ii) The sectoral policies of the Company's Investment Management & Corporate Strategy Division.

<u>Overview of Approaches & Processes</u>

As per the Sustainability Risk Policy document of Eurobank Asset Management M.F.M.C. (the "Company"), the Company integrates sustainability risk factors into the investment process. In particular, the ESG analysis includes the assessment of environmental criteria (e.g., energy efficiency, reduction of emission of greenhouse gases and waste treatment) at the level of the companies in which the Funds and Portfolios invest. The events or conditions that may be responsible for a negative impact on the return of the Fund/Portfolio include environmental aspects (e.g. carbon emissions, the sustainable use and protection of water and marine resources). The specific sustainability factors considered may vary, as they depend on the specific investment strategy followed by each Fund/Portfolio.

The Investment Management & Corporate Strategy Division pays close attention to investments in sensitive sectors. The sectors concerned include, but are not limited to, palm oil, wood pulp, mining activities, oil sands extraction, coal-fired power generation, tobacco, controversial weapons, unconventional oil and gas and asbestos. Companies from these sensitive sectors may be excluded from the Investment Management & Corporate Strategy Division.

The effect of sustainability factors on the investments of a Fund/Portfolio is considered throughout the whole investment lifecycle and may occasionally lead to disinvestment.

Also, the Responsible Investment Policy of Eurobank Asset Management M.F.M.C. provides a description of the integration of ESG information into the investment processes, as well as outlines the foundation, ownership and oversight mechanisms which support the relevant approach. In this context, the Company has delineated specific procedures for selecting and monitoring financial instruments according to Principle 1 of the PRI and in line with the requirements of Regulation (EU) 2019/2088.

Eurobank Asset Management uses the Sustainable Investment Strategies described below:

1. **ESG Integrated**: Integration of ESG metrics in the analysis, selection, and composition of managed portfolios. Securities of issuers with high sustainability risks and/or principal adverse impacts may be purchased and retained in the portfolio.

2. **Best in Class**: Preferences towards securities with low or medium sustainability risks and/or decreases the weight of securities with high sustainability risks, as defined by ESG scores, without excluding entire industries.
3. **Best in Class Plus**: Seeks to invest in securities of issuers with low sustainability risks compared to their peers within the respective industry/sector, while:

   a) Excluding those with high sustainability risks (ESG risk classified as "severe")

   b) In addition, a negative screen is used to exclude the 20% worst ESG scoring stocks from the investable universe.
4. **Sustainable Investing**: Seeks to invest mainly in issuers that contribute to making a positive environmental and/or social impact, as measured by third party ESG vendors, UN SGD contribution and PAI consideration and address. In addition, the Best in Class Plus process as above is applied in this strategy.

The Responsible Investment Policy also presents the applicable Company Exclusions based on Controversial Activities and Revenue Thresholds. Relevant activities relate to Fossil Fuels (e.g. oil and gas production) and Weapons (e.g. production of controversial weapons).

Also, the Policy sets out Company Exclusions based on breaches of International Norms. Pertinent criteria assessed include:

a) **Company exclusions**: Companies in severe breach of UN Global Compact Principles on human rights, labor standards, environmental protection, and anti-corruption.

b) **Country exclusions**: Countries subject to hard sanctions imposed by the European Union, the US Office of Foreign Assets Control (OFAC) and Switzerland.

Scenario Analysis & Stress Testing

A) Climate Stress Test Scenario/ Sensitivity Analysis in the 2023 ICAAP

As part of ICAAP 2023, a forward-looking sensitivity analysis through targeted Climate Stress Test scenarios has been performed, for the quantification of climate-related risk impacts on Bank's credit risk exposures. The impact has been incorporated under economic perspective, as an indicative internal capital requirement The full scenario analysis approach will be implemented until the end of 2023.

In particular, the Group assessed its vulnerabilities towards climate-related risks and the transmission channels to credit risk impact through targeted Climate Stress Test scenario analysis. To this end, the Group designed and developed a relevant Climate Stress Test scenario analysis capturing transition risks as well as physical risks and quantified the credit risk impact in the Bank's loan portfolios by analyzing two sensitivity scenarios:

1. **Transition Risk:** Assessment of the Bank's Top 20 Clients (for the sectors identified as most sensitive to transition risk) under a short-term disorderly climate scenario, in line with Network for Greening the Financial System (NGFS) scenarios. The analysis reflected the effects at macroeconomic, sectoral and counterparty level through a dedicated climate scenario model, developed by an external provider.
2. **Physical Risk:** Application of a sensitivity shock on the real estate collateral values resulting from flood risk, in line with the ECB's flood risk scenario examined as part of 2022 ECB Climate Risk Stress Test.

Both the short-term disorderly climate transition risk scenario, as well as the physical risk-flood risk shock on RE properties are very severe and imply a frontloaded impact that is not expected to occur for that short horizon under assessment.

Transition risk

The short-term disorderly transition risk scenario assesses the impact in the Bank's loan portfolio triggered by an abrupt increase in the price of carbon emission. The scenario aims to capture tail risks and should thus be considered as a severe but plausible representation of a disorderly transition.

The scenario of the sensitivity analysis is based on the Network for Greening the Financial System (NGFS) disorderly transition scenario with a 3-year time horizon, in line with the typical capital planning horizon (the original NGFS scenario extends up to 2050). The generation and evolution of the scenario was conducted by an external provider employing a dedicated climate scenario analysis model in order to introduce the transition risk shocks on the ICAAP Baseline scenario and translate them into macroeconomic and sectoral level impact.

The results of the transition risk analysis showed that the impact across the economic sectors and counterparties is highly diversified depending on the type of activity. Clients in sectors most sensitive to transition risk, would present deteriorating financials, under a severe short-term disorderly transition risk scenario with a frontloaded impact. Despite the severity of the scenario, the results outlined the resilience of the Bank's counterparties.

Physical – flood risk scenario

The flood risk scenario aims to assess the credit impact from damages in collaterals as a result of flood events. To this end, the shock on the Commercial Real Estate (CRE) and Residential Real Estate (RRE) price indices described in ECB's 2022 Climate Risk Stress Test flood risk scenario were used to estimate collateral value shocks that were applied on the entire Greek collaterals portfolio to quantify the ECL impact for the mortgages and SBB/ Corporate portfolios.

Specifically, the collaterals of the Greek loan portfolios were categorized in one of the four flood risk categories of the scenario (minor, low, medium, or high risk) based on geographical location (in NUTS3 level) and a value shock was assigned in accordance with the collateral type (i.e. RRE or CRE).

The impact on physical risk refers to a maximum hit on ECL, at an upper bound level, that assumes simultaneous flood events across Greek territory, a scenario that is considered as extremely severe. In addition, it does not take into account specificities of certain collateral type (e.g., block of apartments in the same building), which are expected to incur lower damages.

It is noted that the materialization of concurrent significant flood events across multiple regions in Greece has been assessed as very low.

B) Group Climate Risk Stress Test (CRST) Framework

The Group Climate Risk Stress Test (CRST) Framework accommodates a dedicated governance structure and defines the minimum requirements for designing, executing, approving, and applying the climate risk stress test. The Framework provides a transparent and repeatable process for designing and executing the climate risk stress test, as well as for reporting and evaluating stress test outcomes and determining management actions.

The CRST Framework has been developed as per the overall Stress Testing Policy of the Group, also taking into account the provisions of the ECB Guide on climate-related and environmental risks and the requirements of the 2022 ECB Climate Risk Stress Test. Additionally, the Framework complies with other best practices and supervisory requirements, such as the EBA Guidelines on institutions' stress testing (EBA/GL/2018/04).

Going forward, the Bank aims to further enhance its Climate Risk Stress Testing capabilities and integrate climate scenarios into its overall risk management framework by developing a methodological approach for the incorporation of the impact of these scenarios in the Bank's credit risk and market risk models.

Operational Risk Management Policies & Processes

The Bank has implemented policies and processes to evaluate and manage its exposure to operational risk events arising from ESG risk. In particular, the Bank considers how its business continuity could be adversely impacted due to ESG events, as well as whether its activities could bring reputational damage and liability risks (e.g. as a consequence of cooperation with counterparties associated with environmental controversies and/or owing to inappropriate business practices such as "greenwashing").

Environmental, Social and Governance (ESG) Risks

The Bank aims to safeguard business continuity, and to assess the risks undertaken in the context of outsourcing services and IT activities (e.g. exposure of service providers to environmental vulnerabilities).

In this context, in the direction of embedding/integrating ESG drivers into the operational risk management framework, the following are applied at Group level:

- **Operational Risk Management Framework**

  The Bank has identified climate risk (physical risk and transition risk) drivers affecting each of its 12 Operational Risk Themes. Risk Themes are bespoke risk classification structures under the Operational Risk Taxonomy that represent a thematic view of the operational risk sub-types.

  In this context, operational risk events are classified according to the Operational Risk Taxonomy's Risk Themes. Detailed instructions have been prepared for the relevant staff, regarding the determination of the scope and the rules for capturing ESG-driven operational risk events. The Group's Operational Risk Events Management Guideline, describes the approach and methodology for the classification and the ongoing management, until final closure, of operational risk events (including those driven by ESG drivers), as well as their analysis and the initiation of corrective actions where necessary. Such events arise from both physical and transition risk drivers and may include damages to Bank's premises, disruption in telecommunications infrastructure causing disruptions in systems and utility outage/disruptions, conduct-related issues (such as alleged greenwashing), regulatory non-compliance, significant deterioration in services provided by vendors, etc. The effects of adverse events on the Bank are captured, including their relevant financial (e.g. damages to assets, restitutions), efficiency (e.g. business disruption) or reputational impact. Eurobank has established the appropriate infrastructure in the Internal Events Database (within the Group's operational risk management platform) to identify, record and report on operational risk events deriving from ESG risk-related drivers.

  For the purposes of risk measurement, certain climate-related and environmental drivers are included in the standard operational risk scenarios. The approach and process applied by the Group for the materiality assessment of Risk Themes, the determination of appropriate scenarios, the assessment and the quantification of its exposures is described in the Operational Risk Scenario Assessment Guideline, Risk Identification & Materiality Assessment (RIMA) Report and Operational Risk Capital Management Guideline among others. As part of ICAAP 2022 and 2023, CR&E drivers were incorporated in the scenario assessment process, relevant scenarios were established and were quantified accordingly, also taking into account the relevant reputational risk impact.

  For the purposes of risk identification and mitigation, operational risks connected with ESG drivers which are identified through the Risk & Control Self-Assessment (RCSA) process are flagged accordingly in the Risk Register (within the Group's operational risk management platform) are classified according to the Operational Risk Taxonomy. The Operational Risk & Control Self-Assessment (RCSA) Policy illustrates the internal recurring risk and control self-assessment conducted across the Group for the identification and assessment of operational risks faced under typical conditions during the normal course of business, so as to adopt corrective measures where necessary. Pertinent mechanism considers environmental and social criteria, among others, in all business areas of the Bank.

  Moreover, under the directions of its Operational Risk – Risk Appetite Framework and Operational Risk KRI Policy, the Bank identifies the circumstances where risk, performance and control effectiveness metrics are required, selects and sets up the appropriate KRIs, establishes reporting triggers and escalation thresholds on each KRI and collects KRI data across the Group. Relevant metrics are also linked to the Operational Risk Taxonomy and will gradually cover CR&E risk factors.

  In the event of an emergency, including environmental incidents, the Bank implements a Business Continuity Plan, which includes planning and preparations to ensure that the Bank can continue to operate in the event of a serious incident or disaster, and that it will be in a position to restore normal operations within a reasonably short time when responding to typical disastrous events involved in ongoing business activity (natural disasters such as fires or flooding, accidents, server crashes or virus infections, insolvent key suppliers, negative media campaigns, market disruptions and others). The plan includes organizational and technical measures to ensure the continuation of key business operations, and progressively all business operations.

It is noted that the Bank is already progressively enhancing management reports with information relating to ESG-driven operational risks. Additionally, third party ESG-driven operational risk events and significant regulatory developments are included in the monthly newsletters sent to Operational Risk Partners as well as to other parties involved in Bank's operational risk management framework.

- **Reputational Risk Management Framework**

  The Group Reputational Risk Management Framework embodies the Group's governance structure and approach for the identification, assessment, proactive mitigation, avoidance, management, and reporting of the key sources and causes of reputational risk for the Group. In this context, the Group identifies various internal and external sources of reputational risk, including environmental and social issues. In addition, when a reputational crisis situation is identified, it is immediately escalated in accordance with the Group's Crisis Management Policy. In order to strengthen its underlying operational risk management practices for the purposes of climate risk assessment and mitigation, the Bank has prescribed several actions to be performed until the end of 2024 including inter-alia:

  - Development of climate-related and environmental scenarios for the assessment of the financial, liability, reputational and business continuity impacts;
  - Inclusion of climate risk considerations in the Business Continuity Framework documentation;
  - Establishment of comprehensive and effective methodologies to identify and assess the reputational and litigation risk; and
  - Setting up of relevant qualitative and quantitative KRIs, in line with the Bank's Operational Risk Appetite Framework.

Data Availability for Environmental Risk Management

As part of the "Program Field", the Bank aims to develop a holistic approach to environmental risk data collection, to facilitate timely, accurate, and meaningful reporting and disclosures. Having performed an assessment of data availability in its internal systems against regulatory requirements/ expectations, the Bank shall enhance its environmental risk data aggregation capabilities and IT infrastructure, in order to be able to effectively monitor, manage and mitigate their environmental risk exposures.

The Bank seeks to improve environmental risk data accuracy and granularity, through the implementation of the following actions:

- It has established a dedicated ESG/Climate Risk Data Initiative and has initiated the design of an approach/ methodology for the remediation of identified data gaps (i.e., engagement with external data providers, development of methodological approaches for the estimation of required information);
- In the context of 2022 ECB Climate Risk Stress Test, the Bank engaged a third party for the provision of Scope 1/2/3 emissions data for its top corporate clients. In addition, for the purposes of allocating an Energy Performance class to its real estate collateral, the Bank cooperated with a third party for modelling the Energy Performance Certificate (EPC) rating;
- The Bank is currently performing a holistic internal exercise for its entire banking book, aiming to calculate its Scope 3 emissions, in cooperation with an external data provider. In particular, when available, relevant information is being collected based on clients' sustainability reports, while in cases where the data is not readily available, the third party employed by the Bank has undertaken the estimation of the borrowers' Scope ½/3 emissions using a well-structured

methodology. Specifically, the approach used by the data provider takes into account, inter alia, the size of the company (e.g., assets, turnover), the borrower's sector of economic activity, and the country where it operates; and

- The Bank has integrated the collection of the EPC rating of its real estate collateral in its credit process (i.e., the recording of the construction year in the Bank's systems and the request for the EPC for the real estate collateral have been made mandatory for all new loan disbursements). With respect to the stock of collaterals, the Bank will liaise at industry level, in order to further examine the possibility of retrieving the EPC rating from governmental data repositories and/or to further enhance and calibrate the existing modelling approach. Additionally, for future exercises and for improving the output results from the statistical model, the Bank is considering the possibility of retrieving information about whether a building was renovated.

It is noted that for the purposes of the completion of the quantitative templates regarding required data in the context of its 1st Pillar III on ESG Risks Disclosures Report, the Bank cooperated with a third party data provider in order to calculate the EPC ratings and the level of energy efficiency (energy performance score per kWh/m²) of its real estate collateral at Group level (i.e. Greece and international subsidiaries).

Within 2023, the Bank plans to further define appropriate data sources for the remediation of environmental risk data gaps and to proceed with the implementation of an approach and process for the collection of relevant data as well as for the performance of required enhancements in its data systems/infrastructure. Also, the Bank will allocate internally roles and responsibilities for the purposes of CR&E data management.

11.2 Qualitative Information on Social Risks

11.2.1 Business strategy and processes

Adjustment of Our Business Strategy to Integrate Social Factors and Risks

The Bank understands that social risk management is crucial to ensure an effective and sustainable business model and has therefore performed actions to adjust its business model, strategy, and processes, as well as financial planning to account for risks rising from social matters, planning to further enhance such activities in the foreseeable future.

As previously mentioned, the Bank's Operational Impact Strategy focuses, among others on social and business impact (sustainable procurement, socio-economic effect, transparency), while the Financed Impact Strategy focuses on actions for financing and supporting customers in their transition efforts and the circular economy towards a more ESG friendly economic environment.

For the identification of ESG topics relevant to its business model and strategy, the Bank has taken into consideration the following:

- ESG-related EU and national regulatory context
- ESG-related sectoral and Eurobank-specific priorities as identified through:
  - UNEP FI Principles for Responsible Banking;
  - International and sectoral ESG disclosure standards, frameworks and initiatives, such as the Sustainability Accounting Standards Board (SASB), the GRI Standards for Sustainability Reporting and the Athens Stock Exchange ESG Reporting Guide;
  - ESG indices and ratings, such as the MSCI, Sustainalytics, S&P, Moody's, Refinitiv, FTSE4Good, ISS ESG and CDP; and
  - ESG best practices and ESG topics addressed by peer banks in Greece and abroad.
- ESG cross sector megatrends and global accords, such as the UN SDGs and the Paris Agreement and the EU Green Deal.

Environmental, Social and Governance (ESG) Risks

Sustainable Products and Services

The Bank offers products and services tailored to specific sectors and client segments, promoting sustainable practices among its clients, aiming to alleviate the social risk stemming from its operations. The Bank's products/initiatives demonstrate that the Bank has effectively integrated social risk considerations in the way it does its business.

For more details please refer to Annual Report 2021 Business & Sustainability and https://www.eurobank.gr/en/group/esg-environment-society-governance/sustainable-financing

Sustainable Finance Framework (SFF)

The Bank has developed a Sustainable Finance Framework, which defines which activities are eligible to access sustainable financing (green and social assets).

Social risk considerations are integrated in the SFF as follows:

- Wholesale Portfolio: Dedicated-purpose – Green/Social Loans

  Eligible social assets are organized per eligible areas:

  - Employment generation and access to financing
  - Equitable access to and control over assets, services, resources, and opportunities
  - Road Networks
  - Transportation Infrastructure
  - Community inclusion
  - Energy
  - Healthcare
  - Education

- Wholesale Portfolio: General-purpose – Sustainability-linked Loans & Facilities

  For Social Risk, overarching SPTs relate, inter alia, to**:**

  (i) Diversity: Promotion of gender diversity throughout the organization

  (ii) Link of ESG target to compensation: Incorporation of ESG targets in performance management/LTIP (Long Term Incentive Program)

  (iii) Community support: Reinforcement of local community through Corporate Social Responsibility initiatives

  For Social Risk, industry-specific SPTs relate, inter alia, to:

  (i) Health & Safety

  (ii) Labor Management

  (iii) Privacy & Data Security

  (iv) Access to communications

  (v) Product Safety & Quality

  (vi) Supply Chain Labor Standards

- Retail Portfolio: Dedicated-purpose – Green/Social Loans:

  i) Individuals' products:

Environmental, Social and Governance (ESG) Risks

Eligible social assets are organized per eligible areas:

- Access to essential services (Education)
- Affordable housing

ii) Small Business (SB):

Eligible social assets are organized per eligible areas:

- Employment generation & Access to financing
- Agricultural productivity and promote sustainable land use

It is noted that the Bank's approach for addressing borrowers' compliance with social risk mitigation requirements for loans that integrate social factors, is aligned with the process followed as regards green lending.

Green Bond Framework

As per its Green Bond Framework, Eurobank gives priority to managing and mitigating underlying economic, environmental, and social risks, as well as to complying with all relevant legislation and regulations.

The eligible green projects to be financed with the net proceeds raised from any Eurobank Green Bond shall contribute to the UN SDGs, while EU Taxonomy Do No Significant Harm (DNSH) principles and minimum social safeguards shall be taken into consideration in specific projects where relevant information can be provided by the clients.

As part of the due diligence performed to assess whether eligible assets meet the criteria set out in the Eurobank Green Bond Framework, the Bank's policies, frameworks, and guidelines are taken into account (e.g., E&S Exclusion List), along with local laws and regulations (i.e. applicable environmental and social requirements).

Objectives, Targets and Limits to Assess and Address Social Risk

Bank's approach towards Sustainable Development:

The Bank is constantly committed to investing in sustainable development and to consistently designing its actions to improve its environmental performance, social responsibility and corporate governance. Its strategic objective is to adapt its business and operation in a way that addresses climate change challenges, to accommodate social needs within its banking business model, and to safeguard prudent governance for itself and its counterparties, in accordance with supervisory initiatives and following international standards/ best practices.

Committed to actively contributing to the achievement of the United Nations SDGs and the 2030 Agenda goals, the Bank is a signatory of the UN Global Compact since 2008. According to the commitment to the UNEP FI PRB since 2019, in line with the SDGs and the Paris Agreement on Climate Change, the Bank issued its 2nd Progress Report which was incorporated in the Annual Report 2021 – Business & Sustainability.

For 2023, the Bank has identified Social Impact Financing focus areas. Social impact financing relates to activities such as education, upskilling health care, financial inclusion, social cohesion and gender equality.

The Bank recognizes the importance of managing social risk and has ensured that its lending activities do not support activities that harm the society. In parallel, through the implementation of existing policies (e.g. Group Environmental & Social Policy) and the establishment of new processes and tools (e.g. ESG Risk Assessment Questionnaire), the Bank continues to strengthen its capacity to identify and manage social risk stemming from clients' operations, also determining relevant mitigating actions, if deemed necessary.

Environmental, Social and Governance (ESG) Risks

The Bank's efforts have led to a significant reduction in social risk incidents relating to its cooperation with the clients as well as to significant positive impacts to society, through the development of a range of sustainable products and the adoption of socially responsible practices.

As new social issues arise, the strategy of the Bank will be frequently updated to incorporate new developments, taking into account stakeholder expectations, as well as regulatory requirements and best practices in the market landscape. Also, going forward, as ESG awareness with regards to the financial landscape increases, the Bank will set more concrete targets, directly related to social lending.

Engagement with Our counterparties for Social Risk Mitigation

The following policies and processes facilitate the Bank’s engagement with its clients, with a view to mitigate their social risks:

1. **Sustainable Finance Framework**

   The Bank aspires to play a key role in the financing of landmark projects that are necessary for pursuing economic growth in line with ESG criteria. The Sustainable Finance Framework encompasses a wide range of sustainable lending activities, including social financing. The operationalization of the SFF assessment for the CIB Portfolio is carried out through the web-based tool, which facilitates, inter alia, client engagement.

   Responsible Relationship Managers leverage the results of the above evaluation process to understand the integration of ESG considerations in the business model and strategy of the client, aiming to identify social financing opportunities.

2. **Environmental and Social Management System (ESMS)**

   The Bank is incorporating environmental and social risk management mechanisms into its financing and investment evaluation process. In this context, the Bank implements an ESMS, in order to mitigate potential credit risk arising from the operations of businesses that it finances. The Bank defines particular measures to mitigate/reduce clients’ risks associated with social factors, as part of an Action Plan agreed with the borrowers at the point of loan origination, as per the provisions of the Bank’s Environmental & Social (E&S) Policy.

3. **ESG Risk Assessment Questionnaire**

   The Bank plans to incorporate an interbank ESG Risk Assessment Questionnaire in its credit granting process. The social risk dimensions that will be embedded in the ESG Risk Assessment Questionnaire will be assessed by the Bank and will inform Bank’s dedicated discussions with its clients regarding potential measures for the mitigation of their social risk exposures.

11.2.2 Governance

Eurobank has given priority to managing and mitigating any underlying social risks arising as an integral part of developing products and services, while complying with the applicable regulatory framework. Furthermore, it develops and improves mechanisms to identify, measure and communicate impact, across the entire range of its activities.

In this context, the assessment of counterparty’s social risk is embedded in the risk management process as provided in the next section.

The BoD and the relevant Board Committees are responsible of the approval of the policies and strategies of the Group, and the supervision of their application, including strategy and policies on social matters and corporate sustainability policies. For more details on governance arrangements please refer to Section 11.1.2.

11.2.3 Risk Management

Integration of Social Risk in Our Risk Management Framework

Social matters have been integrated in the Bank’s risk management framework through the following policies and processes:

Environmental, Social and Governance (ESG) Risks

1. Environmental and Social Management System (ESMS)

The ESMS has been fully integrated into the approval and monitoring processes that the Bank applies in its financing operations and is fully supported by the Bank's Management. For more details please refer above (11.2.1 Business strategy and processes).

2. ESG Risk Assessment Questionnaire

Social Risk Assessment will be enhanced following the roll out of the ESG Questionnaire that will be used for assessing client's ESG risk profile capturing among others Occupational Health & Safety, Community relations and Diversity & inclusion

Subsequently to the completion of the development of a scoring mechanism and the integration of the ESG Risk Assessment Questionnaire in Bank's systems and processes, appropriate limits will be assigned, in order to proceed with mitigating actions, in cases where the social risk of the client is not considered acceptable.

3. Know-Your-Customer (KYC) and Anti-Money Laundering/Terrorist Financing (AML/TF) Policies & Processes

The Group has established Know-Your-Customer (KYC) and Anti-Money Laundering/Terrorist Financing (AML/TF) policies for each business segment. As part of the relevant procedures, the Bank communicates with the clients to perform checks regarding the existence of adverse information on their activities, deriving from Name Screening and from other reliable sources.

Within the scope of Customer KYC Profiling, Eurobank must apply Enhanced Due Diligence (EDD) measures and restrictions in establishing a Business Relationship or carrying out transactions with natural or legal persons/entities whose activities are considered as "High Risk" as per Eurobank's Customer Risk Assessment and Rating methodology.

4. Moody's Risk Analyst (MRA) model

The Bank uses the MRA Borrower Rating System, where client risks that arise from social matters are evaluated in terms of the following:

- Risk of Adverse Events including social issues (health and safety of customers)
- Reputation: The Bank assesses the client's reputation with customers, employees, vendors.

11.3 Qualitative Information on Governance Risks

Integration of Governance Factors in Our Governance and Risk Management Framework

Eurobank assesses its exposure to governance risk on an ongoing basis, given that poor governance practices of its counterparties could adversely impact its operations. To this end, the Bank has established effective internal governance arrangements to manage such risks, and processes in order to evaluate better the governance performance of its clients.

The Group has placed great emphasis in strengthening its risk management processes to evaluate its clients' ESG performance. Specifically, the borrowers' exposure to governance risk is assessed as follows:

Moody's Risk Analyst (MRA) Model

The Bank's credit rating model for Corporate clients takes into account borrowers' management quality and governance, which are evaluated in terms of the following:

- Management character: The Bank assesses the integrity of the senior management of the client
- Management organization: The Bank evaluates elements including information quality, leadership, planning and structure
- Management skill: The Bank examines the financial, marketing and operations skills of the client's management.

- Management succession: The Bank takes into account the clients' succession plan and the preparation of successors.

Know-Your-Customer (KYC) and Anti-Money Laundering/Terrorist Financing (AML/TF) Policies & Processes

The Bank implements Know-Your-Customer (KYC) and Anti-Money Laundering/Terrorist Financing (AML/TF) standards which are designed to provide safeguards against, inter alia, identity fraud and cooperation with clients with increased risk of bribery, corruption and/or involvement in money laundering and terrorist financing. In the context of the KYC and AML/TF processes, during the onboarding of the clients, the Bank performs a preliminary assessment of the ESG profile ("ESG Overview") of the client, using targeted questions (i.e., measurement and reporting of the borrower's performance as regarding elements relating to diversity, equity, and inclusion).

Sustainable Finance Framework – Sustainability Performance Targets (SPTs)

In the context of the Group's Sustainable Finance Framework, for Sustainability-Linked Loans, the Group performs an assessment on clients assuming specific incentives to achieve defined measurable ESG targets, based on predefined and pre-agreed Sustainability Performance Targets (SPTs). SPTs constitute environmental I, social (S), and governance (G) targets which the clients aim to meet by utilizing respective KPIs to quantify their performance.

ESG Risk Assessment Questionnaire

The Group, in collaboration with the Greek banking sector and the HBA, is currently developing an interbank tool that will be used to assess the clients' ESG maturity and relevant risks. Through this scorecard, a wide variety of governance matters will be examined, to evaluate whether the counterparty could potentially adversely impact the Bank's profitability by conducting practices regarded as sensitive to governance risk.

Indicative themes incorporated in the "Governance Risk Assessment" section of the ESG Risk Assessment Questionnaire include Policies, ESG Governance, Accountability, reporting & transparency, Corporate governance, Remuneration, Business Ethics & Anti-corruption and Sustainable procurement.

Through the aforementioned processes, the Group captures the following governance risk aspects of its clients:

- **Ethical considerations,** with the assessment of whether the practices of the client are morally unacceptable i.e., involving any illegal or unethical activities, the evaluation of the management character of the borrower, in terms of both commitment and integrity, as well as the existence of policies related to topics such as human rights, code of conduct and business ethics.

- **Strategy and risk management,** with the assessment of whether the counterparty has a sustainability/ESG strategy and integrates ESG factors in its remuneration policy, as well as the examination of the existence of adequate oversight/planning to address relevant risks.

- **Inclusiveness,** with the assessment of borrower's practices around board's composition, gender pay gap and the inclusiveness of women across the organization.

- **Transparency,** with the assessment of the borrower's sustainability reporting, as well as management's organization in terms of information quality.

- **Management of conflict of interest,** with the assessment of the borrower's management quality and skills, the Bank can draw results regarding the management of potential events involving conflict of interest.

- **Internal communication on critical concerns,** with the assessment of the borrower's internal mechanisms for reporting ethical considerations.

Aiming to ensure effective supervision, the Group has integrated ESG risks in its Three Lines Of Defense. Importantly, in the context of the loan origination and monitoring process, the Group examines the governance risk assumed through an established framework.

Going forward, also taking into account the requirements of the Corporate Sustainability Reporting Directive (CSRD), the Group will further update its risk management procedures, as well as its governance arrangements, to address and capture additional governance risk aspects of its counterparties.

11.4 Quantitative Information on ESG Risks

11.4.1 Banking book – Indicators of potential climate change transition risk

The objective of this template is to present information about the Group's banking book exposure towards non-financial corporates operating in carbon-related sectors, and on the quality of those exposures including non-performing status, stage 2 classification, the corresponding provisions, and exposures' maturity.

Regarding the disclosures in column b ("of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation"), as per Article 12.1 and Article 12.2 of Commission Delegated Regulation (EU) 2020/1818 the counterparties are identified based on the following criteria:

- companies that derive 1% or more of their revenues from exploration, mining, extraction, distribution or refining of hard coal and lignite;
- companies that derive 10% or more of their revenues from exploration, extraction, distribution or refining of oil fuels;
- companies that derive 50% or more of their revenues from the exploration, extraction, manufacturing or distribution of gaseous fuels; and
- companies that derive 50% or more of their revenues from electricity generation with a GHG intensity of more that 100g CO2 e/kWh.

The identification of counterparties subject to the aforementioned exclusion criteria was conducted on a best-effort basis by mapping the relevant counterparties' activities based on NACE and other internally available information. The Group is in the process of collecting and storing relevant information per counterparty in order to improve the quality of the disclosure going forward.

Environmental, Social and Governance (ESG) Risks

Table 72: Banking book – Climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity

Sector/subsector	31 December 2022							
	Gross carrying amount					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM) (2)	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Exposures towards sectors that highly contribute to climate change (1)	**21,569**	**1,755**	-	**1,980**	**1,228**	**(764)**	(115)	(569)
A - Agriculture, forestry and fishing	**417**	-	-	160	30	**(20)**	(3)	(15)
B - Mining and quarrying	**130**	41	-	2	24	**(8)**	-	(8)
B.05 - Mining of coal and lignite	**-**	-	-	-	-	-	-	-
B.06 - Extraction of crude petroleum and natural gas	**41**	41	-	-	20	**(6)**	-	(6)
B.07 - Mining of metal ores	**37**	-	-	-	1	**(1)**	-	(1)
B.08 - Other mining and quarrying	**45**	-	-	1	3	**(1)**	-	(1)
B.09 - Mining support service activities	**7**	1	-	1	-	-	-	-
C - Manufacturing	**4,822**	959	-	290	209	**(146)**	(30)	(96)
C.10 - Manufacture of food products	**1,145**	-	-	139	67	**(47)**	(10)	(30)
C.11 - Manufacture of beverages	**109**	-	-	9	2	**(5)**	(3)	(1)
C.12 - Manufacture of tobacco products	**16**	-	-	1	-	-	-	-
C.13 - Manufacture of textiles	**85**	-	-	2	4	**(4)**	-	(3)
C.14 - Manufacture of wearing apparel	**60**	-	-	9	23	**(12)**	(1)	(11)
C.15 - Manufacture of leather and related products	**15**	-	-	4	2	**(1)**	-	(1)
C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting	**40**	-	-	6	5	**(4)**	(1)	(3)
C.17 - Manufacture of pulp, paper and paperboard	**237**	-	-	4	13	**(4)**	-	(2)
C.18 - Printing and service activities related to printing	**40**	-	-	5	6	**(4)**	(1)	(3)
C.19 - Manufacture of coke oven products	**958**	954	-	-	6	**(2)**	-	(2)
C.20 - Production of chemicals	**375**	5	-	16	9	**(8)**	(4)	(2)
C.21 - Manufacture of pharmaceutical preparations	**151**	-	-	-	-	**(1)**	-	-
C.22 - Manufacture of rubber products	**156**	-	-	28	3	**(5)**	(3)	(1)
C.23 - Manufacture of other non-metallic mineral products	**172**	-	-	**6**	**7**	**(5)**	(1)	(3)
C.24 - Manufacture of basic metals	**413**	-	-	2	10	**(6)**	-	(5)
C.25 - Manufacture of fabricated metal products, except machinery and equipment	**154**	-	-	14	17	**(13)**	(2)	(10)
C.26 - Manufacture of computer, electronic and optical products	**73**	-	-	2	2	**(2)**	-	(1)
C.27 - Manufacture of electrical equipment	**236**	-	-	3	7	**(4)**	-	(3)
C.28 - Manufacture of machinery and equipment n.e.c.	**90**	-	-	10	13	**(8)**	(1)	(6)
C.29 - Manufacture of motor vehicles, trailers and semi-trailers	**120**	-	-	-	-	**(1)**	-	-
C.30 - Manufacture of other transport equipment	**35**	-	-	2	2	**(2)**	-	(1)
C.31 - Manufacture of furniture	**51**	-	-	13	7	**(4)**	(1)	(3)
C.32 - Other manufacturing	**39**	-	-	11	2	**(2)**	(1)	(1)
C.33 - Repair and installation of machinery and equipment	**52**	-	-	3	1	**(1)**	-	(1)

Environmental, Social and Governance (ESG) Risks

	31 December 2022							
	Gross carrying amount					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM) [2]	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
D - Electricity, gas, steam and air conditioning supply	1,940	170	-	7	2	(5)	-	(1)
D35.1 - Electric power generation, transmission and distribution	1,767	-	-	6	2	(5)	-	(1)
D35.11 - Production of electricity	962	-	-	5	2	(3)	-	(1)
D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	170	170	-	-	-	-	-	-
D35.3 - Steam and air conditioning supply	3	-	-	-	-	-	-	-
E - Water supply; sewerage, waste management and remediation activities	63	-	-	2	1	(2)	-	(1)
F - Construction	1,082	-	-	136	112	(71)	(9)	(58)
F.41 - Construction of buildings	395	-	-	51	54	(28)	(3)	(23)
F.42 - Civil engineering	517	-	-	55	39	(28)	(3)	(24)
F.43 - Specialised construction activities	170	-	-	30	19	(14)	(3)	(11)
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	4,679	-	-	507	413	(283)	(44)	(215)
H - Transportation and storage	4,142	585	-	84	90	(94)	(7)	(77)
H.49 - Land transport and transport via pipelines	246	44	-	39	19	(16)	(3)	(11)
H.50 - Water transport	2,183	541	-	18	68	(68)	(1)	(65)
H.51 - Air transport	89	-	-	5	-	(1)	-	-
H.52 - Warehousing and support activities for transportation	1,606	-	-	11	4	(8)	(2)	(1)
H.53 - Postal and courier activities	18	-	-	12	-	-	-	-
I - Accommodation and food service activities	2,439	-	-	581	257	(83)	(18)	(59)
L - Real estate activities	1,856	-	-	210	88	(54)	(3)	(40)
Exposures towards sectors other than those that highly contribute to climate change [1]	2,797	-	-	343	204	(163)	(33)	(117)
K - Financial and insurance activities	134	-	-	3	2	(1)	-	(1)
Exposures to other sectors (NACE codes J, M - U)	2,663	-	-	340	202	(162)	(32)	(116)
TOTAL	24,366	1,755	-	2,323	1,432	(927)	(148)	(685)

[1] In accordance with the Commission delegated regulation EU) 2020/1818 supplementing regulation (EU) 2016/1011 as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks -Climate Benchmark Standards Regulation – Recital 6: Sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006.

[2] Column "of which environmentally sustainable (CCM)" will be disclosed starting from December 2023.

Environmental, Social and Governance (ESG) Risks

Sector/subsector	GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) [2] (in tons of CO2 equivalent)		GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting [2]	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
		Of which Scope 3 financed emissions						
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	
Exposures towards sectors that highly contribute to climate change [1]	-	-	-	9,664	5,253	2,232	4,421	5.4
A - Agriculture, forestry and fishing	-	-	-	120	131	15	150	4.3
B - Mining and quarrying	-	-	-	72	50	1	7	4.5
B.05 - Mining of coal and lignite	-	-	-	-	-	-	-	6.3
B.06 - Extraction of crude petroleum and natural gas	-	-	-	16	24	-	-	4.9
B.07 - Mining of metal ores	-	-	-	13	23	-	1	4.5
B.08 - Other mining and quarrying	-	-	-	37	2	1	5	4.7
B.09 - Mining support service activities	-	-	-	6	-	-	1	1.4
C - Manufacturing	-	-	-	2,444	901	132	1,345	3.5
C.10 - Manufacture of food products	-	-	-	599	191	17	337	3.2
C.11 - Manufacture of beverages	-	-	-	48	29	1	32	3.5
C.12 - Manufacture of tobacco products	-	-	-	-	-	1	15	2.2
C.13 - Manufacture of textiles	-	-	-	29	3	38	15	8.5
C.14 - Manufacture of wearing apparel	-	-	-	25	5	4	26	4.9
C.15 - Manufacture of leather and related products	-	-	-	8	1	1	5	5.9
C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting	-	-	-	13	12	3	12	7.3
C.17 - Manufacture of pulp, paper and paperboard	-	-	-	102	35	1	99	2.8
C.18 - Printing and service activities related to printing	-	-	-	16	7	2	15	4.1
C.19 - Manufacture of coke oven products	-	-	-	712	164	-	83	3.1
C.20 - Production of chemicals	-	-	-	170	15	1	188	1.6
C.21 - Manufacture of pharmaceutical preparations	-	-	-	59	49	-	42	3.9
C.22 - Manufacture of rubber products	-	-	-	66	43	6	41	4.4
C.23 - Manufacture of other non-metallic mineral products	-	-	-	100	27	17	28	4.6
C.24 - Manufacture of basic metals	-	-	-	151	133	10	119	3.9
C.25 - Manufacture of fabricated metal products, except machinery and equipment	-	-	-	**54**	**19**	**7**	**74**	**3.7**
C.26 - Manufacture of computer, electronic and optical products	-	-	-	14	37	1	21	5.3
C.27 - Manufacture of electrical equipment	-	-	-	81	40	6	109	2.6
C.28 - Manufacture of machinery and equipment n.e.c.	-	-	-	45	29	1	15	4.2
C.29 - Manufacture of motor vehicles, trailers and semi-trailers	-	-	-	78	37	1	5	3.6
C.30 - Manufacture of other transport equipment	-	-	-	25	3	2	5	3.7
C.31 - Manufacture of furniture	-	-	-	17	5	6	23	10.6
C.32 - Other manufacturing	-	-	-	9	8	5	16	8.5
C.33 - Repair and installation of machinery and equipment	-	-	-	24	8	1	20	2.5

Environmental, Social and Governance (ESG) Risks

	GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent) [(2)]		GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting [(2)]	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
		Of which Scope 3 financed emissions						
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	
D - Electricity, gas, steam and air conditioning supply	-	-	-	**626**	**406**	**872**	**37**	**8.6**
D35.1 - Electric power generation, transmission and distribution	-	-	-	624	405	706	32	8.3
D35.11 - Production of electricity	-	-	-	81	258	601	22	11.6
D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	-	-	-	-	-	166	3	11.8
D35.3 - Steam and air conditioning supply	-	-	-	2	-	-	1	3
E - Water supply; sewerage, waste management and remediation activities	-	-	-	35	16	1	10	3.7
F - Construction	-	-	-	306	368	82	326	5.8
F.41 - Construction of buildings	-	-	-	173	92	13	118	4.6
F.42 - Civil engineering	-	-	-	80	239	53	145	6.4
F.43 - Specialised construction activities	-	-	-	54	37	16	63	6.8
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	-	-	-	2,033	604	297	1,746	4.4
H - Transportation and storage	-	-	-	2,286	983	423	450	6.4
H.49 - Land transport and transport via pipelines	-	-	-	128	28	17	72	6.8
H.50 - Water transport	-	-	-	1,599	510	-	73	3.8
H.51 - Air transport	-	-	-	**34**	**24**	**-**	**30**	**10.5**
H.52 - Warehousing and support activities for transportation	-	-	-	**511**	419	405	272	9.8
H.53 - Postal and courier activities	-	-	-	**15**	2	-	2	3.6
I - Accommodation and food service activities	-	-	-	**575**	1,286	269	310	7.1
L - Real estate activities	-	-	-	**1,167**	509	139	41	4.9
Exposures towards sectors other than those that highly contribute to climate change [(1)]				**1,518**	**432**	**234**	**613**	**6.1**
K - Financial and insurance activities				**7**	19	2	106	17.7
Exposures to other sectors (NACE codes J, M - U)				**1,511**	413	232	507	5.5
TOTAL	-	-	-	**11,182**	**5,685**	**2,465**	**5,035**	**5.2**

[(1)] In accordance with the Commission delegated regulation EU) 2020/1818 supplementing regulation (EU) 2016/1011 as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks -Climate Benchmark Standards Regulation – Recital 6: Sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006Columns "GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)," and "GHG emissions gross carrying amount percentage of the portfolio derived from company-specific reporting" will be disclosed within 2023. The Group has already developed its capabilities to collect publicly available data, as well as estimate and monitor the counterparties' GHG emissions. The approach adopted for the estimation of financed emissions is in accordance with the PCAF guidance and relies on a revenue-based approach with emission factors estimated for each sector and country through a multiregional input-output analysis framework.

11.4.2 Banking book – Indicators of potential climate change transition risk: Loans collateralised by immovable property – Energy efficiency of the collateral

This template reports the gross carrying amount of loans collateralised by immovable property and of collaterals obtained by taking possession along with information about the energy efficiency of the immovable property in terms of kWh/m2 energy consumption and EPC.

The reporting perimeter is collaterals that are eligible for EPC and a breakdown between EU area and non-EU area based on collateral's location is presented. The Group's immovable property collaterals are located mainly in EU-area and specifically Greece, Cyprus, Bulgaria and Romania, while a relatively smaller proportion is located United Kingdom and Serbia.

As per the Directive 2010/31/EU, energy performance certificate is defined as a certificate recognised by a Member State or by a legal person designated by it, which indicates the energy performance of a building or building unit, calculated according to a methodology adopted in accordance with Article 3 of the Directive.

For the purposes of the present template, the Group considered only actual EPC labels based on internally available information, while for energy consumption (kWh/m2) both actual and estimated consumption are reported. For collaterals that real consumption information was not available, the Group proceeded with the estimation of consumption in collaboration with an independent external provider. The methodological approach that was followed is a model-based estimation of consumption based on the collateral's characteristics.

The gross carrying amount of exposures that are linked to more than one collateral are allocated and disclosed separately under energy efficiency levels based on the collateral value.

Table 73: Banking book - Climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral

Counterparty sector	Total gross carrying amount amount															
		Level of energy efficiency (EP score in kWh/m² of						Level of energy efficiency (EPC label of collateral)							Without EPC label of collateral	
		0; <= 100	> 100; <= 200	> 200; <= 300	> 300; <= 400	> 400; <= 500	> 500	A	B	C	D	E	F	G		Of which level of energy efficiency (EP score in kWh/m² of collateral) estimated
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Total EU area	**15,865**	**813**	**6,174**	**3,556**	**1,714**	**1,990**	**1,618**	**28**	**40**	**109**	**164**	**53**	**17**	**19**	**15,435**	**100%**
Of which Loans collateralised by commercial immovable property	**5,000**	37	71	650	933	1,751	1,558	**28**	38	90	109	10	2	1	**4,722**	100%
Of which Loans collateralised by residential immovable property	**10,426**	764	5,952	2,815	653	202	40	-	-	-	-	-	-	-	**10,426**	100%
Of which Collateral obtained by taking possession: residential and commercial immovable properties	**439**	12	151	91	128	37	20	-	2	19	55	42	15	18	**287**	100%
Of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	**15,586**	784	6,105	3,442	1,660	1,985	1,611								**15,435**	100%
Total non-EU area	**895**	**156**	**417**	**83**	**38**	**16**	**186**	**-**	**19**	**51**	**47**	**29**	**2**	**8**	**740**	**100%**
Of which Loans collateralised by commercial immovable property	**505**	15	239	45	9	15	183	-	12	12	14	18	-	8	**440**	100%
Of which Loans collateralised by residential immovable property	**390**	141	177	38	29	1	3	-	7	39	32	10	2	-	**300**	100%
Of which Collateral obtained by taking possession: residential and commercial immovable properties	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**	100%
Of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	**895**	**156**	**417**	**83**	**38**	**16**	**186**								**740**	**100%**

11.4.3 Banking book – Climate change transition risk: Exposure to top 20 carbon-intensive firms

The template presents aggregated and anonymised information on the Group's exposure towards the top 20 most carbon-intensive counterparties globally. The identification of the top 20 most carbon-intensive corporates in the world is based on Carbon Majors Database.

Table 74: Banking book - Climate change transition risk: Exposures to top 20 carbon-intensive firms

31 December 2022				
Gross carrying amount (aggregate)	Gross carrying amount towards the counterparties compared to total gross carrying amount (aggregate) (1)	Of which environmentally sustainable (CCM) (2)	Weighted average maturity	Number of top 20 polluting firms included
€ million	€ million	€ million		
44	0.08%	-	4.9	4

(1) *For counterparties among the top 20 carbon emitting companies in the world.*

(2) Column "of which environmentally sustainable (CCM)" will be disclosed starting from December 2023 in line with the reporting requirements.

11.4.4 Banking book – Indicators of potential climate change physical risk: Exposures subject to physical risk

This template reports information on exposures in the banking book, including loans and advances, debt securities and equity instruments not held-for-trading and not held-for-sale, towards non-financial corporates, on loans collateralized with immovable property and on repossessed real estate collaterals, exposed to chronic and acute climate-related hazards.

The geographical breakdown of the present template is aggregated (Greece and Rest of the World) in line with the Group's main activities' location. It should be noted that Group's exposure is mainly concentrated in counterparties operating/residing in Southeast Europe and specifically Greece, Cyprus, Bulgaria, Romania and Serbia.

The Group considers as chronic physical risk events those that arise from a progressive shift in climate conditions and their effect is long lasting, while acute events are defined as those that originate from extreme events in a short period of time.

For the identification of geographies sensitive to specific climate-related hazards, the Group utilised the GFDRR – ThinkHazard! in order to obtain information on the characteristics of locations sensitive to climate-change events. The climate-related hazards that are considered are drought, heatwave, wildfire and flood (urban, coastal and river) and the selected time horizon of the analysis spans from short to medium-term, in line with the average maturity of the Group's portfolio.

Considering that the majority of counterparties operate in multiple locations within a country, the analysis of counterparty's sensitivity to physical risk events was conducted on country-level based on its NACE sector and main country of operations. On the contrary, collaterals' sensitivity to physical risk events was assessed in NUTS 3 level considering also the characteristics of the collateral.

It should be noted that the reported gross carrying amount sensitive to climate-related hazards does not take into account mitigating measures, such as insurance coverages, that are in place. A considerable proportion of the Group's collateralised exposures is secured by insurance contracts and as such it is expected that the impact of physical risk events on the Group's portfolio is reduced.

Environmental, Social and Governance (ESG) Risks

Table 75: Banking book - Climate change physical risk: Exposures subject to physical risk

Greece	31 December 2022													
	Gross carrying amount													
		of which exposures sensitive to impact from climate change physical events												
		Breakdown by maturity bucket					of which exposures sensitive to impact from chronic climate change events	of which exposures sensitive to impact from acute climate change events	of which exposures sensitive to impact both from chronic and acute climate change events	Of which Stage 2 exposures	Of which non-performing exposures	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity							of which Stage 2 exposures	Of which non-performing exposures
	€ million	€ million	€ million	€ million	€ million		€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
A - Agriculture, forestry and fishing	**291**	**76**	**96**	**15**	**104**	**5**	**291**	**-**	**-**	**141**	**21**	**(15)**	**(2)**	**(12)**
B - Mining and quarrying	**55**	31	17	1	5	5	55	-	-	1	3	(2)	-	(1)
C - Manufacturing	**3,371**	3	-	-	-	2	-	3	-	-	3	-	-	-
D - Electricity, gas, steam and air conditioning supply	**1,684**	-	-	-	-	-	-	-	-	-	-	-	-	-
E - Water supply; sewerage, waste management and remediation activities	**19**	-	-	-	-	-	-	-	-	-	-	-	-	-
F - Construction	**725**	130	255	81	258	7	720	-	5	90	82	(54)	(7)	(44)
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	**3,520**	3	2	-	-	3	-	5	-	1	1	(1)	-	(1)
H - Transportation and storage	**1,033**	-	-	-	-	-	-	-	-	-	-	-	-	-
L - Real estate activities	**834**	-	-	-	-	-	-	-	-	-	-	-	-	-
Loans collateralised by residential immovable property [(1)]	**8,140**	80	76	187	239	17	88	481	12	212	69	(42)	(13)	(28)
Loans collateralised by commercial immovable property [(1)]	**5,127**	497	439	148	73	7	231	867	59	273	102	(48)	(8)	(37)
Repossessed colalterals	**622**	-	-	-	39	-	-	39	-	-	-	(6)	-	-
Other relevant sectors (breakdown below where relevant)	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-

Other Countries	31 December 2022													
	Gross carrying amount													
		of which exposures sensitive to impact from climate change physical events												
		Breakdown by maturity bucket					of which exposures sensitive to impact from chronic climate change events	of which exposures sensitive to impact from acute climate change events	of which exposures sensitive to impact both from chronic and acute climate change events	Of which Stage 2 exposures	Of which non-performing exposures	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity							of which Stage 2 exposures	Of which non-performing exposures
	€ million	€ million	€ million	€ million	€ million		€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
A - Agriculture, forestry and fishing	**126**	**44**	**35**	**-**	**46**	**3**	**71**	**-**	**55**	**19**	**10**	**(5)**	**(1)**	**(3)**
B - Mining and quarrying	**76**	31	28	-	2	4	59	-	2	1	21	(6)	-	(6)
C - Manufacturing	**1,451**	66	107	6	84	4	-	263	-	27	9	(4)	(1)	(3)
D - Electricity, gas, steam and air conditioning supply	**257**	5	1	50	3	12	-	60	-	2	-	-	-	-
E - Water supply; sewerage, waste management and remediation activities	**44**	16	1	-	1	3	-	18	-	-	-	-	-	-
F - Construction	**357**	176	113	1	67	4	274	11	72	47	31	(17)	(1)	(14)
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	**1,159**	104	118	7	98	4	-	327	-	24	13	(10)	(1)	(8)
H - Transportation and storage	**3,108**	7	16		8	5	-	31	-	3	-	-	-	-
L - Real estate activities	**1,021**	248	153	60	1	6	-	463	-	54	6	(5)	-	(4)
Loans collateralised by residential immovable property [(1)]	**2,680**	58	80	119	92	12	58	279	12	53	22	(21)	(4)	(13)
Loans collateralised by commercial immovable property [(1)]	**2,895**	264	376	158	83	7	218	646	17	178	42	(19)	(2)	(15)
Repossessed colalterals	**26**	-	-	-	11	-	-	11	-	-	-	(1)	-	-
Other relevant sectors (breakdown below where relevant)	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-

[(1)] The gross carrying amount of exposures that are collateralised by both residential and commercial immovable properties is disclosed proportionally in rows "Loans collateralised by residential immovable property" and "Loans collateralised by commercial immovable property" based on the collateral value.

11.4.5 Other climate change mitigating actions that are not covered in Regulation (EU) 2020/852

The purpose of this template is to report exposures that aim to support counterparties in the transition and adaptation process for the objectives of climate change mitigation and climate change adaptation and which are not taxonomy-aligned as referred to in Regulation (EU) 2020/852.

The Group plans to assess the EU taxonomy-alignment of its portfolio within 2023 – in line with the GAR and BTAR reporting requirements for December 2023 and June 2024, respectively – and at this point does not distinguish between taxonomy-aligned or non-aligned activities. As such, the template reports fundings of the following categories, irrespective of the taxonomy-alignment assessment:

- Loans to both corporate and household clients classified as sustainable based on the Group's SFF. These loans finance activities related to inter-alia:
  - Corporates: Renewable Energy Sources, green buildings and investments underpinned by the Recovery and Resilience Fund (RRF);
  - Households: improvement of residential buildings' energy efficiency
- Bonds characterized as "green" based on the ICMA Green Bond Principles (GBP);
- Sustainability Linked Bonds with Sustainability Performance Targets (SPT) related to GHG emissions reduction.

More information about the Group's SFF is available in the Environmental Risks section of the present document.

Table 76: Other climate change mitigating actions that are not covered in the EU Taxonomy

		31 December 2022			
Type of financial instrument	Type of counterparty	Gross carrying amount € million	Type of risk mitigated (Climate change transition risk)	Type of risk mitigated (Climate change physical risk)	Qualitative information on the nature of the mitigating actions
Bonds (e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Financial corporations	151	Yes	No	Includes Green bonds
	Non-financial corporations	303	Yes	Yes	Includes Green bonds and Sustainability Linked Bonds with climate-related Sustainability Performance Targets (SPT)
	Of which Loans collateralised by commercial immovable property	-	-	-	-
	Households	-	-	-	-
	Of which Loans collateralised by residential immovable property	-	-	-	-
	Of which building renovation loans	-	-	-	-
	Other counterparties	11	Yes	Yes	Includes Green bonds
Loans (e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Financial corporations	131	Yes	No	Financing activities that contribute to green transition (inter-alia RES, energy renovation, green buildings, green transportation, etc.)
	Non-financial corporations	1,558	Yes	Yes	Financing activities that contribute to green transition (inter-alia RES, energy renovation, green buildings, green transportation, etc.)
	Of which Loans collateralised by commercial immovable property	381	Yes	Yes	Financing activities that contribute to green transition (inter-alia RES, energy renovation, green buildings, green transportation, etc.)
	Households	14	Yes	Yes	Mainly includes financing for building renovation that leads in an upgrade of the building's EPC by at least 3 grades
	Of which Loans collateralised by residential immovable property	-	-	-	-
	Of which building renovation loans	14	Yes	Yes	Mainly includes financing for building renovation that leads in an upgrade of the building's EPC by at least 3 grades
	Other counterparties	-	-	-	-

Appendix 1: Composition of regulatory own funds

Appendix 1: EU CC1 - Composition of regulatory own funds

		31 December 2022 [1] Current period € million	31 December 2022 Current period € million	30 June 2022 [1] Current period € million	30 June 2022 Current period € million
Common Equity Tier 1 (CET1) capital: instruments and reserves					
1	Capital instruments and the related share premium accounts	1,978	1,978	8,872	8,872
2	Retained earnings	178	178	(13,373)	(13,373)
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	3,138	3,138	9,780	9,780
5	Minority interests (amount allowed in consolidated CET1)	68	68	55	55
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	1,330	1,210	941	789
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**6,692**	**6,572**	6,275	6,123
Common Equity Tier 1 (CET1) capital: regulatory adjustments					
7	Additional value adjustments due to the prudent valuation (negative amount)	(6)	(6)	(8)	(8)
8	Intangible assets (net of related tax liability) (negative amount)	(193)	(193)	(191)	(191)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	-	-	-	-
11	Fair value reserves related to gains or losses on cash flow hedges	12	12	13	13
12	Negative amounts resulting from the calculation of expected loss amounts	(2)	(2)	(28)	(28)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-		-	
15	Defined-benefit pension fund assets (negative amount)	-	-	-	-
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	-	-	(1)	(1)
18	Direct and indirect holding by the institution of the CET 1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-
19	Direct , indirect and synthetic holding by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-
EU-20a	Exposure amount of the following items which qualify for a RW of 1250% where the institution opts for the deduction alternative	(34)	(34)	(18)	(18)
EU-20c	of which: securitisation positions (negative amount)	(34)	(34)	(18)	(18)
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in art. 38 (3) are met) (negative amount)	(81)	(93)	(192)	(207)
22	Amount exceeding the 17.65% threshold (negative amount)	-	-	-	-
23	of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	-	-	-	-
25	of which: deferred tax assets arising from temporary differences	-	-	-	-
EU-25a	Losses for the current financial year (negative amount)	-	-	-	-
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	-	-	-	-
27a	Other regulatory adjusments [2]	327	329	287	290
28	**Total regulatory adjustments to Common equity Tier 1 (CET1)**	**23**	**13**	(138)	(150)
29	**Common Equity Tier 1 (CET1) capital**	**6,715**	**6,585**	6,137	5,973
Additional Tier 1 (AT1) capital: instruments					
30	Capital instruments and the related share premium accounts	-	-	-	-
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1 as described in Article 486(3) of CRR	-	-	-	-
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	-	-	-	-
Additional Tier 1 (AT1) capital: regulatory adjustments					
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	-	-	-	-
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	-	-	-	-
44	**Additional Tier 1 (AT1) capital**	-	-	-	-
45	**Tier 1 capital (T1 = CET1 + AT1)**	**6,715**	**6,585**	6,137	5,973
Tier 2 (T2) capital: instruments					
46	Capital instruments and the related share premium accounts	1,250	1,250	950	950
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	-	-	-	-
50	Credit risk adjustments	89	89	93	93
51	**Tier 2 (T2) capital before regulatory adjustments**	**1,339**	**1,339**	1,043	1,043
Tier 2 (T2) capital: regulatory adjustments					
56b	Other regulatory adjustments to T2 capital	(28)	(28)	(17)	(17)
57	**Total regulatory adjustments to Tier 2 (T2) capital**	-	-	-	-
58	**Tier 2 (T2) capital**	**1,311**	**1,311**	1,026	1,026
59	**Total Capital (TC = T1 + T2)**	**8,026**	**7,897**	7,163	6,999
60	**Total risk weighted assets**	**41,899**	**41,869**	41,718	41,681

Appendix 1: Composition of regulatory own funds

		31 December 2022 [(1)] Current period € million	31 December 2022 Current period € million	30 June 2022 [(1)] Current period € million	30 June 2022 Current period € million
Capital ratios and requirements including buffers					
61	Common Equity Tier 1	**16.0%**	**15.7%**	14.7%	14.3%
62	Tier 1	**16.0%**	**15.7%**	14.7%	14.3%
63	Total capital	**19.2%**	**18.9%**	17.2%	16.8%
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with Article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104(1) CRD, plus combined buffer requirement in accordance with Article 128(6) CRD) expressed as a percentage of risk exposure amount)	9.58%	9.58%	9.50%	9.50%
65	of which: capital conservation buffer requirement	2.50%	2.50%	2.50%	2.50%
66	of which: countercyclical buffer requirement	0.14%	0.14%	0.06%	0.06%
67	of which: systemic risk buffer requirement	0.00%	0.00%	0.00%	0.00%
EU-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	0.75%	0.75%	0.75%	0.75%
68	Common Equity Tier 1 available to meet buffer (as a percentage of risk exposure amount)	**7.78%**	**7.48%**	6.17%	5.79%
Amounts below the thresholds for deduction (before risk weighting)					
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions	65	65	76	76
73	Direct and indirect holdings by the institution of CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	252	252	212	212
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in 38 (3) are met)	647	635	604	589
Applicable caps on the inclusion of provisions in Tier 2					
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	-	-	-	-
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	261	261	255	255
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	185	185	164	164
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	90	90	93	93

[(1)] Including profits € 1,330 million for year ended 2022 and € 941 million for 1H 2022.
[(2)] Includes mainly the IFRS 9 transitional adjustments.

Appendix 2: Capital instruments' main features disclosure

Appendix 2: Capital instruments' main features disclosure

1	Issuer	**Eurobank Ergasias Services and Holdings S.A**	**Eurobank Ergasias Services and Holdings S.A**	**Eurobank Ergasias Services and Holdings S.A**
2	Unique identifier	GRS323003012	ISIN Code: XS1752439411	ISIN Code: XS2562543442
3	Governing law(s) of the instrument	Greek	English law, with the exception of Condition 3B *(Status-Subordinated Instruments)* and Condition 22 *(Bank Holders' Agent)* which are governed by the laws of the Hellenic Republic and Regulation No.575/2013 (CRR) and Condition 23 (Acknowledgement of Statutory Loss Absorption Powers).	The Instruments and any non-contractual obligations arising out of or in connection with the Instruments shall be governed by, and construed in accordance with, English law, save for Condition 3, Condition 17 and Condition 18, which shall be governed by, and construed in accordance with, the laws of the Hellenic Republic
	Regulatory treatment			
4	Transitional CRR rules	Common Equity Tier 1	Tier2	Tier2
5	Post- transitional CRR rules	Common Equity Tier 1	Tier2	Tier2
6	Eligible at solo/(sub-) consolidated/solo & (sub-) consolidated	Solo & Consolidated	Solo & Consolidated	Solo & Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares	Tier 2 Subordinated Capital Instrument (Art.63 of the CRR)	Tier 2 Subordinated Capital Instrument (Art.63 of the CRR)
8	Amount recognised in regulatory capital as at 31 December 2022	€ 815 million	N/A - The instruments were Issued in January 2018	N/A - The instruments were Issued in December 2022
9	Nominal amount of instrument	€ 0.22 per ordinary share (at date) / € 816 million	950,000,000	300,000,000
9a	Issue price	-	100%	99.058%
9b	Redemption price	-	Redemption at par (100 per cent of nominal amount) together with interest accrued up to (but excluding) the date of redemption	Redemption at par (100 per cent of nominal amount) together with interest accrued up to (but excluding) the date of redemption
10	Accounting classification	Shareholders Equity	Liability - amortised cost	
11	Original date of issuance	Various	17 January 2018	6 December 2022
12	Perpetual or dated	Perpetual	Dated	Dated
13	Original maturity date	-	17 January 2028	6 December 2032
14	Issuer call subject to prior supervisory approval	NA	Yes	Yes
15	Optional call date, contingent call dates and redemption amount	NA	First date of call: 17 January 2023. The instruments have also a Tax and Capital Disqualification Event call (Art.78(4) of CRR).In both cases, the instruments may be redeemed in whole but not in part. Redemption at par together with interest accrued.	6 December 2027. The instruments have also a Tax and Capital Disqualification Event call (Art.78(4) of CRR).In both cases, the instruments may be redeemed in whole but not in part. Redemption at par together with interest accrued, subject to the prior permission of the Relevant Regulator (to the extent then required).
16	Subsequent call dates, if applicable	NA	Optional subsequent call dates: Any day after 17 January 2023.Tax and Capital Disqualification Event call : at any time	n/a
	Coupon / dividends			
17	Fixed or floating dividend/coupon	NA	Fixed	Fixed rate of 10.00% payable until (but excluding) the 6th December 2027; reset from (and including) the 6th December 2027 to a fixed rate equal to the 5-year Mid-Swap rate prevailing at the Reset Determination Date plus 7.588 per cent. per annum (no step-up); subject to Benchmark Replacement provisions
18	Coupon rate and any related index	NA	6.41%	Fixed rate of 10.00% payable until (but excluding) the 6th December 2027; reset from (and including) the 6th December 2027 to a fixed rate equal to the 5-year Mid-Swap rate prevailing at the Reset Determination Date plus 7.588 per cent. per annum (no step-up); subject to Benchmark Replacement provisions
19	Existence of a dividend stopper	NA	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Partially discretionary	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Partially discretionary	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No
22	Noncumulative or cumulative	Non cumulative	Noncumulative	Cumulative
23	Convertible or non-convertible	Non convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	NA	N/A	N/A
25	If convertible, fully or partially	NA	N/A	N/A
26	If convertible, conversion rate	NA	N/A	N/A
27	If convertible, mandatory or optional conversion	NA	N/A	N/A
28	If convertible, specify instrument type convertible into	NA	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	NA	N/A	N/A
30	Write-down features	No	Yes	Yes
31	If write-down, write-down trigger(s)	NA	Statutory & Condition 23 (Acknowledgement of Statutory Loss Absorption Powers) , Bank of Greece	Statutory & Condition 17 (Acknowledgement of Statutory Loss Absorption Powers) , Bank of Greece
32	If write-down, full or partial	NA	Fully or partially	Fully or partially
33	If write-down, permanent or temporary	NA	Permanent	as defined in Statutory & Condition 17
34	If temporary write-down, description of write-up mechanism	NA	N/A	as defined in Statutory & Condition 17
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier I	Immediately subordinate to the claims of Senior Creditors (as defined in Condition 3B)	junior to any present and future claims of the Senior Creditors (as defined in Condition 3E)
36	Non-compliant transitioned features	No	No	No
37	If yes, specify non-compliant features	N/A	N/A	N/A

Appendix 3: List of Abbreviations

Abbreviation	Definition
ABSs	Asset Backed Securities
A-IRB	Advanced Internal Rating Based Approach
AML/TF	Anti-Money Laundering/Terrorist Financing
AQR	Asset Quality Review
AT1	Additional Tier 1
BoD	Board of Directors
BoG	Bank of Greece
BRC	Board Risk Committee
BRRD	Bank Recovery and Resolution Directive
BTAR	Banking Book Taxonomy Alignment Ratio
CBR	Combined Buffer Requirement
CCB	Capital Conservation Buffer
CCyB	Counter Cyclical Buffer
CCF	Credit Conversion Factor
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CET1	Common equity Tier 1
COREPs	Common Reports
CRD IV	Capital Requirements Directive IV
CR&E	Climate-Related and Environmental
CRR	Capital Requirements Regulation
CRST	Climate Risk Stress Test
CSR	Corporate Social Responsibility
CSA	Credit Support Annex
CVA	Credit Value Adjustment
DoD	Definition of Default
EAD	Exposure At Default
EBA	European Banking Authority
EC	European Commission
ECAIs	External Credit Assessment Institutions
ECB	European Central Bank
ECL	Expected Credit Loss
ESG	Enviromental, Social and Governance
EEFIG	Energy Efficiency Financial Institutions Group
EFAM	European Fund and Asset Management Association
EMAS	Eco-Management and Audit Scheme
EPC	Energy Performance Certificate
ESMS	Environmental and Social Management System
F-IRB	Foundation Internal Rating Based Approach
GAR	Green Asset Ratio
GGBs	Greek Government Bonds
GMRA	Global Master Repurchase Agreement
G-SIIs	Global Systemic Institution Buffer
HAPS	Hellenic Asset Protection Scheme
HBA	Hellenic Bank Association
HDIGF	Hellenic Deposit and Investment Guarantee Fund
HQLA	High Quality Liquid Assets.
ICAAP	Internal Capital Adequacy Assessment Process
ICMA	International Capital Markets Association
ILAAP	Internal Liquidity Adequacy Assessment Process
IMA	Internal Model Approach
IRB	Internal Ratings Based Approach
IRR	IRR Interest Rate Risk
IRRBB	Interest Rate risk in the Banking Book
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
ITS	Implementing Technical Standards

Appendix 3: Abbreviations

Abbreviation	Definition
KYC	Know-Your-Customer
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
MDA	Maximum Distributable Amount
MRA	Moody's Risk Advice
MREL	Minimum Requirement for own funds and Eligible Liabilities
MRO	Main Refinancing Operations
NPV	Net Present Value
NSFR	Net Stable Funding Ratio
OCR	Overall Capital Requirement
O-SIIs	Other Systemically Important Institution
PD	Probability of Default
P2G	Pillar 2 Guidance
P2R	Pillar 2 Requirement
PRB	Principles for Responsible Banking
RBA	Ratings Based Approach
RCSA	Risk & Control Self-Assessment
RES	Renewable Energy Sources
RSS	Remedial & Servicing Strategy Sector
RTS	Regulatory Technical Standards
RWAs	Risk Weighted Assets
SA	Standard Approach
SDGs	Sustainable Development Goals
SEC-ERBA	Securitisation-External Ratings Based Approach
SFDR	Sustainable Finance Disclosure Regulation
SFF	Sustainable Finance Framework
SFTs	Securities Financing Transactions
SPE	Single Point of Entry
SPV	Special Purpose Vehicle
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRF	Single Resolution Fund
SRM	Single Resolution Mechanism
SRT	Significant Risk Transfer
SSM	Single Supervisory Mechanism
SSM	Single Supervisory Fees
ST	Stress Test
SyRB	Systemic Risk Buffer
TLTRO	Targeted Long Term Refinancing Operations
ToRs	Terms of Reference
TSCR	Total SREP Capital Requirement
TTC	Through The Cycle
VAR	Value at Risk

Appendix 4: Guidelines and Regulations mapping on Disclosures Requirements

	EBA/GL/2016/11	
LI1	Differences between accounting and regulatory scopes of consolidation and mapping of financial statements categories with regulatory risk categories	*Table 3*
LI2	Main sources of differences between regulatory exposure amounts and carrying amounts in financial statements	*Table 4*
LI3	Outline of the differences in the scopes of consolidation (entity by entity)	*Table 1*
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OV1	Overview of risk weighted exposure amounts	*Table 10*
CR1-A	Maturity analysis of exposures	*Table 12*
CR3	CRM techniques – Overview: Disclosure of the use of credit risk mitigation techniques	*Table 39*
CR4	Standardised approach – Credit risk exposure and CRM effects	*Table 26*
CR5	Standardised approach	*Table 27*
CR6	IRB approach – Credit risk exposures by exposure class and PD range	*Table 31*
CR6-A	Scope of the use of IRB and SA approaches	*Table 32*
CR7	IRB approach – Effect on the RWEAs of credit derivatives used as CRM techniques	*Table 37*
CR7-A	IRB approach – Disclosure of the extent of the use of CRM techniques	*Table 38*
CR8	RWEA flow statements of credit risk exposures under the IRB approach	*Table 34*
CR9	IRB approach – Back-testing of PD per exposure class (fixed PD scale)	*Table 29*
CR9.1	IRB approach – Back-testing of PD per exposure class (only for PD estimates according to point (f) of Article 180(1) CRR)	*Table 30*
CR10	Specialised lending under the simple risk weighted approach	*Table 33*
CR10	Equity Exposures under the simple risk weighted approach	*Table 35*
CCR1	Analysis of CCR exposure by approach	*Table 56*
CCR2	Transactions subject to own funds requirements for CVA risk	*Table 57*
CCR3	Standardised approach – CCR exposures by regulatory exposure class and risk weights	*Table 59*
CCR4	IRB approach – CCR exposures by exposure class and PD scale	*Table 60*
CCR5	Composition of collateral for CCR exposures	*Table 62*
CCR6	Credit derivatives exposures	*Table 55*
CCR7	RWEA flow statements of CCR exposures under the IMM	*Table 61*
CCR8	Exposures to CCPs	*Table 58*
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MR2-A	Market risk under Internal Model Approach (IMA)	*Table 44*
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	REVISED PILLAR 3 DISCLOSURES REQUIREMENTS - BCBS	
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	SECURITISATION EXPOSURES - REGULATION (EU) 2017/2402 & BCBS Pillar 3 standards	
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SEC3	Securitisation exposures in the non-trading book and associated regulatory capital requirements –	*Table 41*
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SEC5	Exposures securitised by the institution - Exposures in default and specific credit risk adjustments	*Table 43*

	OPERATIONAL RISK - application of Articles 435(1), 446 and 454 of Regulation (EU) 575/2013 (“CRR”).	
OR1	Operational risk own funds requirements and risk-weighted exposure amounts	*Table 63*

	IRRBB - EBA/CP/2021/20	
IRRBB1	Interest rate risks of non-trading book activities	*Table 53*
IRRBBA	Qualitative information on interest rate risks for Banking Book	*Table 54*

	GUIDELINES ON LCR DISCLOSURE - EBA/GL/2017/01	
LIQ1	Quantitative information of LCR	*Table 70*

Appendix 4: Guidelines and Regulations mapping on Disclosures Requirements

	LEVERAGE RATIO - COMMISSION IMPLEMENTING REGULATION (EU) 2016/200	
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	GUIDELINES ON UNIFORM DISCLOSURES UNDER ARTICLE 473A OF REGULATION (EU) NO 575/2013 AS REGARDS THE TRANSITIONAL PERIOD FOR MITIGATING THE IMPACT OF THE INTRODUCTION OF IFRS 9 ON OWN FUNDS - EBA/GL/2018/01	
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