Pillar III Disclosures on a consolidated basis

December 2020

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1 INTRODUCTION & GENERAL INFORMATION

National Bank of Greece (the "Bank" or "NBG") is a financial institution subject to Greek and EU banking legislation. It was founded in 1841 and operated both as a commercial bank and as the official state currency issuer until 1928, when Bank of Greece was established. NBG has been listed on the Athens Stock Exchange since 1880.

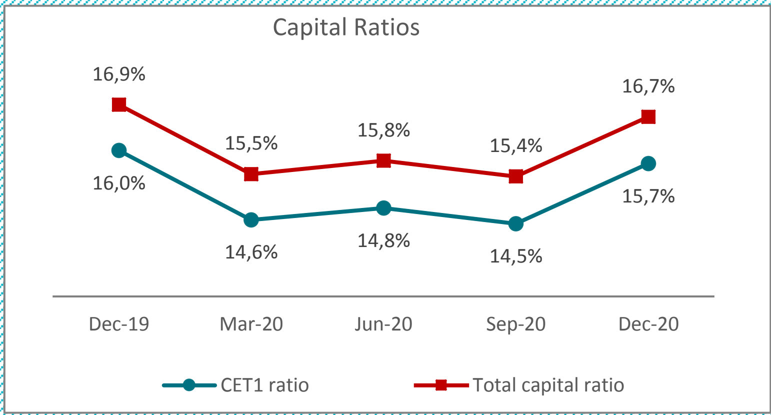
The Bank focuses on complying fully with the regulatory requirements and ensures that these requirements are strictly and consistently met in all countries where NBG Group (the "Group") operates.

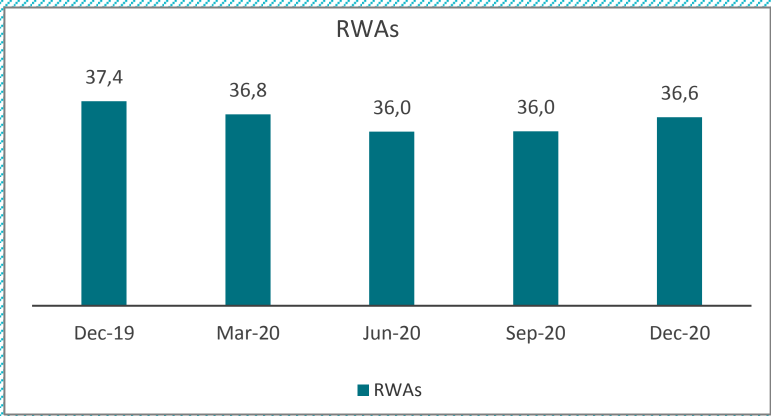
NBG Group offers a wide range of financial services, including retail and corporate banking, asset management, real estate management, financial, investment and insurance services. The Group operates in Greece, the United Kingdom, South-eastern Europe (including Cyprus and Malta) and Egypt.

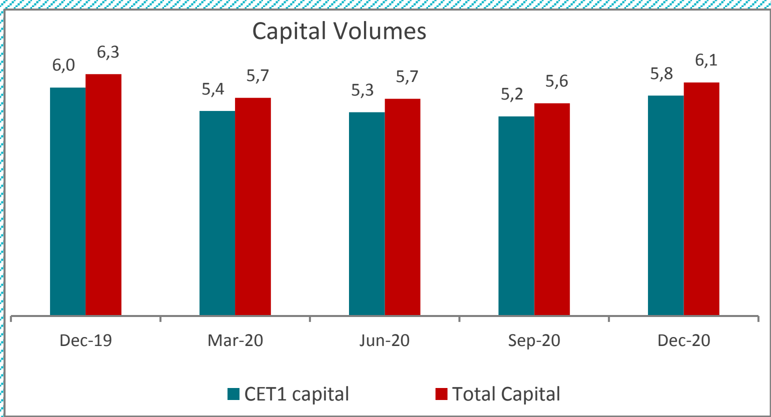
The Bank, as an international organization operating in a rapidly growing and changing environment, acknowledges its Group's exposure to banking risks and the need for these risks to be managed effectively. Risk management forms an integral part of the Group's commitment to pursue sound returns for its shareholders, maintaining the right balance between risks and reward in the Group's day-to-day operations, in its balance sheet and in the Group's capital structure management.

Highlights

- CET1 ratio and Total Capital ratio at 15.7% and 16.7% respectively, mainly due to the impairment charges netted with GGBs gains incurred in December 2020 and the increase of RWAs.







1.1 Pillar III Disclosure Policy

Pillar III complements the minimum regulatory capital requirements (Pillar I) and the Internal Capital and Liquidity Adequacy Assessment Processes (ICAAP/ILAAP, i.e. Pillar II). NBG is committed to publicly disclose information in compliance with EU Regulation 575/2013 of the European Parliament and of the Council, as well as all applicable additional EU Regulations and EBA Guidelines, and to have adequate internal processes and systems in place to meet these disclosure requirements.

The Bank has established a Pillar III Disclosures Policy that describes the scope, the principles and the content of public disclosures under Pillar III. Moreover, the Policy defines the relevant disclosures' governance, including the assessment of the appropriateness of the disclosures, their verification and frequency. Disclosures on a consolidated basis provide (inter alia) information on capital structure, capital adequacy, risk profile, and the processes in place for assessing and managing risks.

The Bank is firmly committed to best practices regarding public disclosures and recognizes that Pillar III provides an additional layer of market information and transparency, hence contributing to financial stability. Additional information for investors and other stakeholders (regarding e.g. the members of the management body, the Corporate Governance Code etc) is to be found in the Bank's website www.nbg.gr.

The objectives of the Pillar III Disclosures are:

- To provide investors and other stakeholders with the appropriate, complete, accurate and timely information that they reasonably need to make investment decisions and informed judgements of NBG Group;
- To foster and facilitate compliance with all applicable legal and regulatory requirements.

The Pillar III Disclosures Policy:

- Formulates the disclosure framework, including frequency, location, monitoring and verification process for disclosures;
- Defines the authorities and responsibilities for the management of the Pillar III process;
- Articulates the principles for identifying information that is material, confidential and proprietary;
- Raises awareness of the Bank's approach to disclosure among the Board of Directors, Senior Management and Employees.

2 REGULATORY FRAMEWORK & RECENT DEVELOPMENTS

2.1 Regulatory Framework

2.1.1 The Main Pillars

Several steps have been made towards the European Banking Union (mandatory for all euro area States). The following are the Banking Union's constituent elements:

A. The ***Single Supervisory Mechanism*** that places the ECB as the central prudential supervisor of financial institutions in the euro area. Since November 2014 NBG Group's supervision is assigned directly to the ECB, as NBG is classified as one of the significant banking groups of the Eurozone;

B. The ***Single Resolution Mechanism ("SRM")*** that implements the EU-wide Bank Recovery and Resolution Directive (BRRD – *see next paragraph*) in the euro area. The centralized decision-making is built around the Single Resolution Board ("SRB") and the relevant National Resolution Authorities;

C. The ***Single Rulebook***, a single set of harmonized prudential rules for institutions throughout the EU. Its three basic legal documents are:

- **CRD IV:** Directive 2013/36/EU of the European Parliament and Council *"on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms"*, transposed into Greek legislation by virtue of Law 4261/2014;
- **CRR** (Capital Requirements Regulation): Regulation (EU) No. 575/2013 of the European Parliament and Council *"on prudential requirements for credit institutions and investment firms"*, which is legally binding and directly applicable in all Member States; and
- **BRRD**: Directive 2014/59/EU of the European Parliament and Council *"establishing a framework for the recovery and resolution of credit institutions and investment firms"*, transposed into Greek legislation by virtue of article 2 of Law 4335/2015.

These documents are complemented by numerous Implementing Technical Standards (ITS), Regulatory Technical Standards (RTS), Guidelines (GL) and Recommendations issued by the European Banking Authority, which specify particular aspects of the CRD IV, the CRR and the BRRD and aim at ensuring harmonization in specific areas. EBA's Technical Standards have to be endorsed by the European Commission (EC) and become EU Regulations in order to be legally binding and directly applicable in all Member States.

The CRD IV and the CRR constitute the "Basel III" regulatory framework in the EU.

D. ***Deposit Guarantee Schemes***: Directive 2014/49/EU of the European Parliament and Council "on deposit guarantee schemes" (DGSD), transposed into Greek legislation by virtue of Law 4370/2016. A common European Deposit Insurance Scheme (EDIS) is intended to be a pillar of the Banking Union. The EC put forward a relevant proposal in November 2015. However, a common system for deposit protection has not yet been established. Work has started on a roadmap for beginning political negotiations. In December 2018, the European Council stated that it will establish a High-level working group with a mandate to work on next steps. The High-level group should report back by June 2019. On 8 August 2019, EBA published its opinion on the implementation of the Deposit Guarantee Schemes Directive (DGSD) in the EU. The opinion proposes changes in relation to the current provisions on transfers of DGS contributions between DGSs, DGSs' cooperation with various stakeholders, the current list of exclusions from eligibility, current provisions on eligibility, depositor information, the approach to third country branches' DGS membership, the implications of the recent review of the three European Supervisory Authorities (ESAs), and cross-references to other EU regulations and EU directives. The opinion proposed no changes, for example, to the current coverage level of EUR 100,000, provisions on home-host cooperation, cooperation agreements, or the cooperation between the EBA and the European Systemic Risk Board (ESRB).

2.1.2 EU package of Risk Reduction Measures: CRR2 / CRD5 / BRRD2 / SRMR2

On November 23rd, 2016, the EC presented a comprehensive package of reforms aimed at amending CRR, CRD IV, as well as the BRRD and the SRM. The package, known as "CRR2/CRD5", was submitted to the European Parliament and the Council for their consideration and adoption. The Banking Package includes prudential standards adopted by the Basel Committee on Banking Supervision and by the Financial Stability Board (FSB), while its main objective is to reduce risk in the EU banking system.

The Banking Package comprises two regulations and two directives, relating to:

- bank capital requirements (amendments to regulation 575/2013 and directive 2013/36/EU);
- the recovery and resolution of banks in difficulty (amendments to directive 2014/59/EU and regulation 806/2014).

The Banking Package strengthens bank capital requirements and reduces incentives for excessive risk taking, by including a binding leverage ratio, a binding net stable funding ratio and setting risk sensitive rules for trading in securities and derivatives. In addition, it contains measures to improve banks' lending capacity and facilitate a greater role for banks in the capital markets, such as:

- reducing the administrative burden for smaller and less complex banks, linked in particular to reporting and disclosure requirements;
- enhancing the capacity of banks to lend to SMEs and to fund infrastructure projects.

The banking package also contains a framework for the cooperation and information sharing among various authorities involved in the supervision and resolution of cross-border banking groups.

In 20th May 2019 the relevant legislation 2019/876 was published, and entered into force on 27 June 2019.

This marks a milestone in the completion of the Banking Union, in the finalization of the post-crisis regulatory agenda, and in the implementation of international standards. Building on the existing rules, this set of adopted measures addresses the remaining challenges to financial stability, while strengthening the global competitiveness of the EU banking sector. This package had already made subject of an agreement during the inter-institutional negotiations with the Council of the EU.
The main focus areas of Risk Reduction Measures Package are illustrated below:

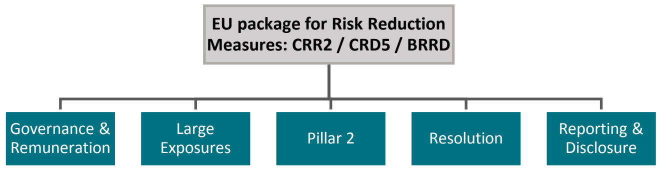


Figure 1: EU package of Risk Reduction Measures

The approved agreement on the package of reforms implements components of the Basel III framework, including the following key aspects:

- Proposal for CRR 2 covers the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, the Standardized Approach for counterparty credit risk (SA-CCR), market risk and the fundamental review of the trading book (FRTB), exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and amends European Market Infrastructure Regulation (EMIR or EU Regulation No 648/2012).
- Proposal for CRD 5 is on exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers, and capital conservation measures.
- Proposal for SRMR 2 is about loss-absorbing and recapitalization capacity for credit institutions and investment firms.
- Proposal for BRRD 2 is on loss-absorbing and recapitalization capacity of credit institutions and investment firms and it amends Directive 98/26/EC, Directive 2002/47/EC, Directive 2012/30/EU, Directive 2011/35/EU, Directive 2005/56/EC, Directive 2004/25/EC, and Directive 2007/36/EC.

However, it excludes the package of Basel reforms that was agreed on 7 December 2017 by the Basel Committee on Banking Supervision (BCBS) often referred to as 'Basel IV' (see relevant section 2.2.5 Basel 4).

2.2 Recent Regulatory Developments 2020

2.2.1 Response to COVID-19

Fiscal Policy

The European Commission published the Temporary Framework that allowed EU Member States exceptionally to provide five types of state aid: (i) Direct grants, selective tax advantages and advance payments; (ii) State guarantees for loans taken by companies from banks; (iii) Subsidized public loans to companies; (iv) Safeguards for banks that channel state aid to the economy; and (v) Short-term export credit insurance. The Commission decided to extend the temporary framework to five additional types of state aid: (i) support for COVID-19-related research and development; (ii) support for the construction and upgrading of testing facilities; (iii) support for the production of products to tackle the COVID-19 outbreak; (iv) targeted support in the form of deferral of tax payments and/or suspensions of employers' social security contributions; and (v) targeted support in the form of wage subsidies for employees.

The Commission also decided to temporarily remove all countries from the list of "marketable risk" countries under the short-term credit insurance Communication, in order to make public short-term export credit insurance more widely available. This contributes to expanding the flexibility introduced by the temporary state aid framework with respect to the possibility by State insurers to provide insurance for short-term export-credit.

Activation of the general escape clause of the Stability and Growth Pact (SGP), after the European Council agreed that the conditions for "a severe economic downturn in the euro area or the Union as a whole" were fulfilled.

Activation of a new instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) mobilized EUR 100 billion solidarity instrument with support of the Member States, with the provision of voluntary guarantees for 25 billion euros, instrument to complement or contribute to the creation of national short-term unemployment schemes in the form of loans.

The European Investment Fund (EIF) unlocked EUR1bn from the European Fund for Strategic Investments as a guarantee to the EIF to provide guarantees worth €2.2 billion to financial intermediaries, unlocking €8 billion in available financing.

Monetary policy and liquidity/market operations

On 12 March 2020, the ECB announced that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.00%, 0.25% and -0.50% respectively. In addition, a temporary envelope of additional net asset purchases of EUR 120 billion will be added until the end of the year, ensuring a strong contribution from the private sector purchase programs. Reinvestments of the principal payments from maturing securities purchased under the asset purchasing program (APP) will continue, in full, for an extended period of time past the date when the Governing Council starts raising the key ECB interest rates, and in any case for as long as necessary to maintain favorable liquidity conditions and an ample degree of monetary accommodation.

ECB recalibrated targeted lending operations to further support real economy. Interest rate on TLTRO III reduced by 25bps, as low as 25bps below average deposit facility rate from June 2020 to June

2021 for all TLTRO III operations outstanding during that period (-0.75%). Borrowing allowance raised from 30% to 50% of eligible loans. Lending performance threshold to be met between 1 April 2020 and 31 March 2021 in order to attain minimum interest rate on TLTRO III reduced to 0% from 2.5%. Early repayment option available after one year from settlement starting in September 2021. Easing of TLTRO III accompanied by series of LTROs designed to bridge liquidity needs until settlement of fourth TLTRO III operation in June 2020. Operations conducted as fixed rate tender procedures with full allotment. Rate in these operations fixed at the average of the deposit facility rate over the life of the respective operation. Interest paid on maturity, with maturity date for all operations on 25 June 2020. In December 2020, the Governing Council of the ECB decided to offer four additional pandemic emergency longer-term refinancing operations (PELTROs) on a quarterly basis during 2021. Each operation will have a tenor of approximately one year, to serve as an additional liquidity backstop to the euro area banking system and contribute to preserving the smooth functioning of money markets during the extended pandemic period. It also decided on modifications to the terms and conditions of the third series of targeted longer-term refinancing operations (TLTRO III). The extension of the pandemic-related low interest rate period, the addition of three more operations and the increase in the amount that can potentially be borrowed under TLTRO III to preserve the very attractive funding conditions.

For the period from 24 June 2021 to 23 June 2022, the interest rate on all outstanding TLTRO III operations will remain 50 basis points below the average rate applied in the Eurosystem's main refinancing operations over the same period. The interest rate on the main refinancing operations is currently 0%. For counterparties whose eligible net lending between 1 October 2020 and 31 December 2021 reaches the lending performance threshold, the interest rate applied on all TLTRO III operations outstanding over the period from 24 June 2021 to 23 June 2022 will be 50 basis points below the average interest rate on the deposit facility prevailing over the same period, and in any case not higher than -1%. The deposit facility rate is currently -0.5%. Participants in the operations announced will, on a quarterly basis starting in June 2022, have the option of withdrawing from or reducing the amount borrowed in the new TLTRO III operations, before maturity.

The maximum amount that counterparties will be entitled to borrow is raised from 50% to 55% of their stock of eligible loans as at 28 February 2019 for all future TLTRO III operations, starting from the March 2021 operation. The amount that counterparties can borrow under each future TLTRO III operation is reduced by any amounts that they have previously borrowed under any TLTRO II or TLTRO III operations that are still outstanding.

On 4 May, the European Supervisory Authorities (EBA, EIOPA and ESMA – ESAs), published joint draft Regulatory Technical Standards (RTS) to amend the Delegated Regulation on the risk mitigation techniques for non-centrally cleared OTC derivatives (bilateral margining), under the European Markets Infrastructure Regulation (EMIR), to incorporate a one-year deferral of the two implementation phases of the bilateral margining requirements.

The Pandemic Emergency Purchase Programme (PEPP) was launched, which is a new temporary asset purchase programme of private and public sector securities, with a total envelope of EUR 750 billion. Purchases should be conducted until the end of 2020 and include the asset categories eligible under the APP. For the purchase of public sector securities, the benchmark allocation across jurisdictions should continue to be capital key of national central banks, but PEPP should be conducted in flexible manner – allowing for fluctuations in the distribution of purchase flows over time, across asset classes and among jurisdictions. A waiver of eligibility requirements for securities issued by the Greek government was granted for purchases under PEPP. The eligible range of assets under the corporate sector purchase programme (CSPP) extended to non-financial commercial paper, making all commercial papers of sufficient credit quality eligible for purchase under CSPP. Additionally, the ECB announced the easing of collateral standards by adjusting main risk parameters under the collateral framework. In particular, the scope of Additional Credit Claims (ACC) –i.e. loans and other debt obligations which are not tradable bonds –has been expanded to include claims related to the financing of the corporate sector. Furthermore, the Governing Council decided to grandfather the eligibility of marketable assets and the issuers of such assets that fulfilled minimum credit quality requirements on 7 April 2020 in the event of a deterioration in credit ratings decided by the credit rating agencies accepted in the Eurosystem as long as the ratings remain above a certain credit quality level, in order to avoid potential procyclical dynamics and ensure continued collateral availability and funding to firms and households. On 26 March, it was clarified that the Public Sector Purchase Programme issuer/issue limit, which limited purchases to 33% of a single Member State's debt instrument, would not apply to the PEPP.

In April 2020, the Governing Council of the ECB decided to extend the timeline for the review of its monetary policy strategy, as the decision-making bodies and staff of the ECB and the national central banks of the Eurosystem were focusing all their efforts on addressing the challenges posed by the coronavirus pandemic. The conclusion of the strategy review was postponed from the end of 2020 to mid-2021. The ECB also decided to amend the Guidelines on the implementation of the Eurosystem monetary policy framework and Guideline on the valuation haircuts applied in the implementation of the Eurosystem monetary policy framework.

On 8 June, the ESRB took a second set of macroprudential actions on the five priority areas identified, aimed at ensuring that the European financial system is able to withstand the shock and thus prevent an even sharper loss of economic capacity and jobs.

- Implications for the financial system of guarantee schemes and other fiscal measures to protect the real economy;
- Market illiquidity and implications for asset managers and insurers;
- Impact of large-scale downgrades of corporate bonds on markets and entities across the financial system;
- System-wide restraints on dividend payments, share buybacks and other pay-outs;
- Liquidity risks arising from margin calls.

Capital

ECB provided guidance clarifying that banks are allowed to operate temporarily below Pillar 2 Guidance (P2G), the Capital Conservation Buffer (CCB) and the Liquidity Coverage Ratio (LCR) in times of stress. The ECB also brought forward the implementation of Article 104a CRD5, which allows banks to meet Pillar 2 Requirements (P2R) partially with lower quality capital (a measure which was originally set to apply to EU banks from June 2021). Additionally the ECB set out its expectation then NCA draw down the Countercyclical Capital Buffer (CCyB).

The Basel Committee on Banking Supervision set out technical guidance related to: (i) the exceptional measures introduced by governments and banks to alleviate the impact of the coronavirus disease (Covid-19); and (ii) expected credit loss (ECL) accounting. The guidance aimed to ensure that banks reflect the risk-reducing effect of the exceptional measures when calculating their capital requirements, and set out the amended transitional arrangements for the regulatory capital treatment of ECL accounting, which will provide jurisdictions with greater flexibility in how to phase in the impact of ECL on regulatory capital.

The EBA Guidelines on legislative and non-legislative loan repayments moratoria were published on 2 April 2020 to ensure that banks, while maintaining comparable metrics, would be able to grant payment holidays to customers avoiding the automatic classification of exposures under the definition of forbearance or as defaulted under distressed restructuring. On 18 June, initially extended the Guidelines on payment moratoria to 30 September 2020, and further on decided to reactivate its Guidelines on legislative and non-legislative moratoria, to ensure that loans, which had previously not benefitted from payment moratoria, could also benefit from them, applying until 31 March 2021.

To complement the above implementation, on June 2nd, the EBA published its Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis, Following the reactivation of moratoria, in January 2021, it published additional clarifications on the application of the prudential framework in response to issues raised as a consequence of the COVID-19 pandemic to provide clarity on the implementation of (i) the EBA Guidelines on moratoria and (ii) the EBA Guidelines on COVID-19 reporting and disclosure. For a more detailed analysis see section 6.5 Covid-19 Reporting

In April 2020, ECB Banking Supervision provided temporary relief by allowing for lower capital requirements for market risk to smooth procyclicality and maintain market-making activities and market liquidity. The ECB temporarily reduced the qualitative market risk multiplier, set by supervisors and used to compensate for the possible underestimation by banks of their capital requirements for market risk. This temporary reduction of the qualitative multiplier aimed to balance the observed increases of another factor, the quantitative multiplier due market volatilities being higher than predicted by the bank's internal model.

The EBA also provided further clarity on how additional flexibility will guide supervisory approaches in relation to market risk, the Supervisory Review and Evaluation Process (SREP), recovery planning, digital operational resilience and ICT risk and securitisation, and highlighted the need for stringent attention by supervisors and financial institutions in relation to key risks in these areas.

Throughout 2020 several recommendations by ECB, BIS, EBA and EBF called on banks to suspend all discretionary dividend distributions and share buy-backs at least until September 2021. This approach should be applied at the consolidated level also regarding significant intra-group dividend distributions or similar transactions, whenever these may materially influence the solvency or liquidity position of the group or of one of the undertakings involved, and should also be applicable to the variable remuneration policies.

IFRS9

On 20 March, the ECB announced it will exercise flexibility regarding the classification of debtors as "unlikely to pay" when banks call on public guarantees granted in the context of COVID-19. The supervisor will also exercise certain flexibilities regarding loans under COVID-19 related public moratoriums. Second, loans which become non-performing and are under public guarantees will benefit from preferential prudential treatment in terms of supervisory expectations about loss provisioning. Lastly, supervisors will deploy full flexibility when discussing with banks the implementation of NPL reduction strategies, taking into account the extraordinary nature of current market conditions. It encourages banks to avoid excessive pro-cyclical effects when applying the IFRS9 international accounting standards. The ECB also confirmed the activation of capital and operational relief measures announced on March 12. Estimates that these could free up EUR 120 billion of CET1.

On 25 March, ESMA issued a statement that sets out some accounting implications of the economic support and relief measures adopted by EU Member States in response to the outbreak. The measures include moratoria on repayment of loans and have an impact on the calculation of expected credit losses in accordance with IFRS9. The statement provides guidance to issuers and auditors on the application of IFRS 9 Financial Instruments, specifically as regards the calculation of expected credit losses and related disclosure requirements.

EBA, following its call on 12 March 2020 to Competent Authorities to make use of the full flexibility provided for in the existing regulation, issued a second statement to explain a number of additional interpretative aspects on the functioning of the prudential framework in relation to the classification of loans in default, the identification of forborne exposures, and their accounting treatment. The EBA also provides some guidance for payment system providers to ensure the protection of consumers and the good functioning of the EU payment system.

In Greece, a Legislative Decree was issued on 30 March, announcing that:

- State will award a repayable advance. The total amount of said funding plan will reach EUR 1 billion. All affected businesses may benefit from an extended time horizon for repayment, in conjunction with low interest rates and a grace period.
- The postponement of the maturity and payment date for securities is provided. The said postponement shall last for 75 days. The measure under examination applies to: i) Businesses whose operation has been banned or are affected by COVID-19; ii) Securities with maturity date from 30.03.2020 until 31.05.2020. For affected businesses with CPA codes that will be included in the relevant list in April, the measure is also applicable, starting from the day after the inclusion of their CPA code list of affected businesses.

In addition, the Hellenic Bank Association issued a communication, announcing that the postponement of payment of instalment of principal, which are on from 18.03.2020 until 30.09.2020 due on 18.03.2020 until 30.09.2020 (at least), is provided. The measure applies to legal entities operating in sectors affected by COVID-19, on the basis of the list of CPA codes of affected business sectors. The borrowers that fall within the above scope are eligible to apply for payment deferral provided their loans were not overdue as at 31.12.2019.

Other

On 25 March, the Basel Committee announced that the implementation date of the Basel III standards finalized in December 2017 has been deferred by one year to 1 January 2023. The accompanying transitional arrangements for the output floor have also been extended by one year to 1 January 2028. Also, the implementation date of the revised market risk framework finalized in January 2019 has been deferred by one year to 1 January 2023 and the implementation date of the revised Pillar 3 disclosure requirements finalized in December 2018 has been deferred by one year to 1 January 2023.

2.2.2 Revision of Market Risk Capital Requirements

In April 2014, the Basel Committee on Banking Supervision (BCBS) finalized the standardized approach for measuring counterparty credit risk exposures (standardized approach for counterparty credit risk – SA-CCR). In January 2016, it published Minimum capital requirements for market risk (fundamental review of the trading book – FRTB).

As of January 2016, the first iteration of FRTB appeared, with its core features including: a clearly defined boundary of the trading and the banking book; an internal models approach with separate capital requirements for risk factors that cannot be modelled; and a standardized approach that is risk-sensitive and designed and calibrated as a credible fullback to the internal models approach.

In order to address issues identified in the course of monitoring the implementation and impact of the FRTB framework, the BCBS published in March 2018 a consultative document on revisions to the standards on market risk, which put forward proposals to review the FRTB standards on targeted areas, as well as a proposal for a simplified standardized approach for market risk. Following this, the BCBS published a revised version of its Minimum capital requirements for market risk in January 2019.

On January 14th, 2019, the Basel Committee's oversight body, the Group of Central Bank Governors and Heads of Supervision (GHOS), endorsed a set of revisions to the market risk framework. The revisions to the FRTB framework include the following key changes:

- a simplified standardized approach for banks with small or non-complex trading portfolios;
- clarifications on the scope of exposures that are subject to market risk capital requirements;
- refined standardized approach treatments of foreign exchange risk and index instruments;
- revised standardized approach risk weights applicable to general interest rate risk, foreign exchange and certain exposures subject to credit spread risk;
- revisions to the assessment process to determine whether a bank's internal risk management models appropriately reflect the risks of individual trading desks; and
- revisions to the requirements for identification of risk factors eligible for internal modelling.

On 8 July 2020, the BCBS published an updated standard for the regulatory capital treatment of credit valuation adjustment (CVA) risk for derivatives and securities financing transactions.

The revisions for the regulatory capital treatment of CVA risk include:

- recalibrated risk weights;
- different treatment of certain client cleared derivatives; and
- an overall recalibration of the standardized and basic approach.

In November 2019 the Committee consulted on a set of targeted, final revisions to the CVA risk framework that bring the revised CVA risk framework into alignment with the market risk framework.

Fundamental Review of the Trading Book

On 27 March 2020, the EBA published its final draft Regulatory Technical Standards (RTS) on the new Internal Model Approach (IMA) under the Fundamental Review of the Trading Book (FRTB) that cover 11 mandates.

These mandates are distinguished in liquidity horizons for the IMA, back-testing and PLA requirements and criteria for assessing the model lability of risk factors under the IMA.

On 17 December 2020, the EBA published its final draft Regulatory Technical Standards (RTS) on the capitalization of non-modellable risk factors (NMRFs) for institutions using the FRTB Internal Model Approach (IMA) implemented in EU as a reporting requirement. These draft RTS are a key deliverables in the EBA’s work on implementing the FRTB in EU and part of its roadmap for the new market and counterparty credit risk approaches. The methodology is applicable to all kinds of risk factors and adjusts to different levels of NMRF data availability. Data collected in the data collection exercise launched in June 2019 served as a basis for its calibration.

The methodology set out in these draft RTS ensures a level playing field among credit institutions in the Union on a key component for determining own funds requirements for market risk. They also provide legal certainty on how the level of own funds requirements for NMRFs should be determined. With this publication, a significant milestone is reached towards the implementation of the FRTB standards in the EU.

In July 2020, the European Banking Authority (EBA) launched a consultation on draft Regulatory Technical Standards (RTS) on default probabilities (PDs) and losses given default (LGDs) for default risk model for institutions using the new Internal Model Approach (IMA) under the Fundamental Review of the Trading Book (FRTB). These draft RTS are part of the deliverables included in the roadmap for the new market and counterparty credit risk approaches. Institutions using the IMA to compute own funds requirements for market risk are required to compute additional own funds requirement using an internal default risk model for their positions in traded debt and equity instruments included in IMA trading desks.

On 13 January 2020, the EBA launched a consultation on draft RTS on how institutions should calculate the own funds requirements for market risk for their non-trading book positions that are subject to foreign-exchange risk or commodity risk stemming from banking book positions under the FRTB standardized and internal model approaches. The European Banking Authority (EBA) published its relevant final draft Regulatory Technical Standards (RTS) in December 2020.

The final draft standards specify the value that institutions are to use when computing the own funds requirements for market risk for banking book positions. In addition, the final draft standards lay down a prudential treatment for the calculation of the own funds requirements for market risk of non-monetary items held at historical cost that may be impaired due to changes in the foreign-exchange rate. Finally, the standards specify an ad-hoc treatment with respect to the calculation of the actual and hypothetical changes associated to banking book positions for the purpose of the backtesting and the profit and loss attribution requirements. This is to address the issue of jumps in the value of banking book positions that may lead to over-shootings in the backtesting that are not due to changes of market risk factors.

In light of the current situation linked to COVID-19, the Group of Central Bank Governors and Heads of Supervision (GHOS) decided to defer the implementation date of the revised market risk framework by one year to 1 January 2023, which will also allow EU banks to benefit from a longer implementation time.

Standardized Approach for Counterparty Credit Risk

On 18 December 2019, the EBA published the final draft Regulatory Technical Standards (RTS) on the Standardized Approach for Counterparty Credit Risk (SA-CCR). These draft RTS specify key aspects of the SA-CCR and represent an important contribution to its smooth harmonised implementation in the EU.

The final draft RTS set out the method for identifying the material risk drivers of derivative transactions on the basis of which the mapping to one or more risk categories is to be done. In addition, these RTS set out the formula that institutions are to use to calculate the supervisory delta of options, when mapped to the interest rate risk category, which is compatible with negative interest rates. Finally, the final draft RTS introduces a method suitable for determining the direction of the position in a material risk driver.

2.2.3 Basel 4 (finalisation of Basel 3)

In late 2019, the European Commission launched a Consultation for the adoption of the full framework of Basel IV. Based on the results of the Consultation, the suggestions of the European Commission for the further amendment of the CRR/CRD were to be submitted by the summer of 2020. The feedback period was completed on 3/1/2020.

Impact of Basel 4 in EU banks

On 10 December 2020, the EBA published its Report on the impact of implementing the final Basel III reforms on the EU Banks' Capital Being based on December 2019 reporting date, these results do not reflect the economic impact of the coronavirus disease (Covid-19) on participating banks.

Overall, the results of the Basel III capital monitoring exercise show that European banks' minimum Tier 1 capital requirement would increase by 15.4% at the full implementation date (2028), without taking into account EU-specific adjustments. Excluding the leverage ratio contribution, the impact of the reforms is 18.3%, of which the leading factors are the output floor (6.2%) and credit risk (5%). The minimum Tier 1 capital requirement for large and internationally active banks (Group 1) would increase by 16.2%. The respective requirement for the global systemically important institutions (subset of Group 1) and that of Group 2 banks would raise by 23% and 11.1%, respectively.

On 17 December 2020, the EBA published its second Report on liquidity measures and confirms banks' solid liquidity position. Differently from previous reports, the current report uses figures as of two different reporting dates (end-December 2019 and end-June 2020). End-June 2020 figures are shown in this report with the purpose of showing the potential impact of the COVID-19 outbreak on banks' liquidity profile. At end-June 2020, EU banks' average liquidity coverage ratio (LCR) stood at 166% and no bank reported LCR levels below the minimum threshold of 100%.

The Report shows that EU banks have continued to improve their LCR. This trend continued at end-June 2020 even if the Covid-19 crisis had an impact on banks' liquidity positions. The access to additional liquidity via extraordinary central bank facilities supported EU banks' efforts to maintain their LCR buffers.

A more in-depth analysis of potential currency mismatches in LCR levels revealed that EU banks tend to hold materially lower liquidity buffers in some foreign currencies, in particular US dollar. The activation of FX swap lines among the major central banks in the first semester of 2020 helped mitigate the stress in the FX funding markets and contributed to an improvement in EU banks' foreign currency LCRs.

2.2.4 Pillar 2 (SREP, ICAAP, ILAAP)

ECB Guides on ICAAP/ILAAP

In August 2020, the ECB released its Report on banks' ICAAP practices, presenting the main conclusions alongside the seven principles, and identified three key areas as being particularly in need of improvement to allow the ICAAPs to effectively foster banks' continuity:

1. The set of data upon which the ICAAP is based. Good ICAAP data quality is a prerequisite for a sound ICAAP as many banks show material deficiencies in this key area. This gives rise to strong concerns, since it hampers the effectiveness of the ICAAPs as a whole and it can hamper banks' ability to take decisions on the basis of timely, available and reliable figures. Ultimately, weak data quality poses a clear threat to banks' continuity.

2. The economic perspective which warrants improvements with regard to several areas, beginning with the implementation of the general economic perspective concept, the determination of internal capital in line with continuity and economic value considerations, the consistent and conservative quantification of economic risk, the well-informed determination of internal capital adequacy thresholds, the information flow to the normative perspective, the effective performance of stress tests, and last, but not least, the use of economic perspective information in decision-making, as reflected, for instance, in the limit system and internal reporting. A weak economic perspective can hamper banks' ability to take decisions with due consideration of the economic risk associated with those decisions, which will ultimately be detrimental to banks' financial strength. Moreover, it evidentially threatens banks' continuity, because issues concerning the relationship between economic value and economic risk cannot be addressed in an active and timely manner. This, in turn, could weaken market participants' and depositors' trust.

3. Stress-testing. While banks are exposed to a wide, and at times dynamically changing, range of threats, many banks do not systematically monitor their environment to identify new threats early enough. This is related to the frequency of application and review of stress-testing scenarios, ad hoc stress-testing capabilities, the severity level of stress-testing assumptions and follow-up management actions. All of these issues can impede banks' ability to effectively prepare for, avoid and respond to potential upcoming stress situations and, thus, their ability to ensure continuity. Often, stress-testing, on the basis of comprehensive scenarios, is just regarded as a regular annual exercise conducted by the finance functions, rather than risk management being the "owners" of an agile and responsive instrument used to swiftly assess the bank-wide potential impact of adverse external developments.

On 28 January 2021, ECB released the outcomes of its 2020 SREP, covering four main topics, namely the extraordinary features of the crisis due to COVID-19 pandemic, the resilience of the euro area banking sector in 2020, the major vulnerabilities identified through monitoring and pragmatic SREP, supervisory priorities and the outlook for the euro area banking sector going into 2021.

The main features of the ECB pragmatic SREP 2020 include the following:

- focusing on how banks are handling the challenges and risks to capital and liquidity arising from the ongoing crisis;
- keeping Pillar 2 requirements (P2R) stable, unless changes are justified by exceptional circumstances affecting an individual bank;
- keeping Pillar 2 guidance (P2G) stable, reflecting the postponement of the EBA stress test exercise;
- no updating of SREP scores, unless justified by exceptional circumstances affecting an individual bank;
- addressing supervisory concerns mainly via qualitative recommendations;
- following a pragmatic approach to collecting information on the ICAAP and the ILAAP.

EBA Pillar 2 Guidelines: SREP / IRRBB / Stress Testing

The SREP is the key mechanism by which supervisors review the risks not covered, or not fully covered, under Pillar 1 and decide whether capital and liquidity resources are adequate. Its main constituents are: (i) the business model assessment, (ii) the governance and risk management assessment, (iii) the assessment of risks to capital (including ICAAP) and (iv) the assessment of risks to liquidity and funding (including ILAAP). Supervisors can use the SREP to decide whether additional Pillar 2 capital is required, as a new minimum, where Pillar 1 does not capture the risks adequately.

On 19 July 2018, the EBA published its final guidance in order to strengthen the EU's Pillar 2 framework. These final revised Guidelines are aimed at further enhancing institutions' risk management and supervisory convergence in the SREP. The three Guidelines are the following:

- Final Report on the Guidelines on the revised common procedures and methodologies for SREP and supervisory stress testing: The changes to the SREP Guidelines do not alter the overall SREP framework and mainly aim to enhance the requirements for supervisory stress testing and explain how stress testing results will be used in setting the Pillar 2 Guidance (P2G). The changes and additions outlined in the Final Report, include: i) a section on P2G, ii) supervisory stress testing requirements, iii) a clarification on the scoring framework and iv) consistency checks with relevant EBA standards and guidelines, in particular in the areas of internal governance and institution-wide controls assessment.
- Revised final Guidelines on the management of interest rate risk arising from non-trading activities (IRRBB Guidelines): The revised IRRBB Guidelines reflect developments in the BCBS and clarify internal governance and supervisory outlier tests requirements during the first phase of the European implementation of the Basel standards. The revisions are intended to link to future requirements, which will be incorporated in the CRD5/CRR2 framework.

The revised Guidelines have been applicable since 30 June 2019 with transitional arrangements for specific provisions until 31 December 2019.

Based on the Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 (applied on 29 December 2020 with the exception of some provisions) that amends the Capital Requirements Directive (CRD 5), the main changes to the Pillar 2 framework are the below:

- A focus on proportionality led to the introduction of simple and conservative alternatives for smaller, less complex banks in terms of standards for and disclosures and reporting of interest rate risks in the banking book;
- In light of sustainable finance, the EBA is mandated to assess the potential inclusion of environmental, social and governance (ESG) risks in the SREP review;
- In view of the prudential supervisors' role in complementing the role of anti-money laundering (AML) authorities and participating actively in the fight against money laundering (ML) and terrorist financing (TF), the AML dimension is highlighted in several key prudential instruments such as the SREP;
- Pillar 2 capital add-ons are confined to a purely micro prudential perspective in order to avoid overlaps with the existing macro prudential tools that aim to address systemic risk;
- The conditions for applying Pillar 2 capital add-ons to cover specific risks to which a bank is exposed are clarified and the institution-specific nature of those requirements is emphasized. The add-ons are complemented by the possibility for supervisors to express supervisory expectations for banks to hold additional capital under the form of Pillar 2 guidance. The Pillar 2 guidance now also forms part of the joint decision on institution-specific prudential requirements for EU cross-border banking groups;
- The framework for the interest rate risk in the non-trading book (IRRBB) is modified (in CRD 5 and CRR 2), introducing the credit spread risk in the banking book (CSRBB), as well as a common standardized approach and a simplified standardized methodology for IRRBB, and adding the net interest income (NII) perspective to the economic value of equity (EVE) perspective for the purposes of interest rate risk management, disclosures and prudential supervision.

In October 2020, the EBA following the entry into force of the CRD-V, published a set of Guidelines on the appropriate subsets of sectoral exposures to which a competent or designated authority may apply a systemic risk buffer. In particular, the Guidelines suggest a common framework of dimensions and sub-dimensions from which the relevant authority can define a subset of exposures. The Guidelines include detailed definitions of elements used in each dimension and sub-dimension, along with examples of application. A pre-condition when defining a subset of sectoral exposures is the systemic relevance of the risks stemming from the subset of sectoral exposures. The Guidelines recommend a set of criteria to be used by the relevant authority when assessing such relevance. Finally, the Guidelines advocate for appropriate coordination and cooperation between the competent authority and the designated authority in order to avoid the risk of overlaps, double counting of risk and inefficient risk targeting

On 4 November 2020, the EBA published a draft opinion to set out in high level terms how it expects prudential supervisors to take into account money laundering and terrorist financing (ML/TF) risks in the Supervisory Review and Evaluation Process (SREP). ML/TF risks that are particularly relevant to prudential supervisors include the risk that an institution is misused for ML/TF purposes by members of its management body or members of its staff, or by other parties, including beneficial owners, or criminals that use weaknesses in the internal governance and controls framework such as information and communication technology (ICT) related weaknesses. Combating ML/TF requires certain actions from both AML/CFT and prudential supervisors. This is why Union Law requires prudential supervisors and authorities or bodies that supervise institutions in accordance with Directive (EU) 2015/849 and are competent for ensuring compliance with that Directive ('AML/CFT supervisors') to cooperate and exchange information to inform their respective supervisory activities.

The EBA also published own-initiative guidelines on supervisory cooperation in the AML/CFT context , and facilitated the conclusion of a Multilateral Agreement between the ECB and national AML/CFT supervisors of credit and financial institutions across the EEA to facilitate information exchange in this regard. The EBA will include guidance on how to take into account ML/TF risks into the SREP in the EBA Guidelines on common procedures and methodologies for the SREP and supervisory stress testing (SREP Guidelines) during the upcoming revision of these Guidelines aimed to be completed by end December 2021 as set out in the EBA Roadmap on Pillar 2 Deliverables. In anticipation of the more detailed common guidance as part of the future revision of the SREP Guidelines, this opinion provides advice at a high level on the subject.

2.2.5 Internal Models

ECB guide to internal models

On 7 September 2018, ECB launched public consultation in regards to the three risk-type-specific chapters of its guide to internal models, on credit risk, market risk and counterparty credit risk. The chapters provide transparency as to how ECB understands the applicable regulations for using internal models to calculate own fund requirements for credit risk, market risk and counterparty credit risk.

On 1 October 2019, ECB released the guide to internal models, in order to ensure a common and consistent approach to matters related to them. The guide covers issues regarding credit, market and counterparty credit risk, as well as general topics about the governance, the validation, the audit and the use of internal models.

In February 2020, the European Central Bank (ECB) published for consultation a guide that outlines the methodology it uses to assess the internal models banks apply to calculate their exposure to counterparty credit risk (CCR). The guide also describes how the ECB will assess the advanced methods banks use to calculate the own funds required to account for the risks related to credit valuation adjustments. The guide indicates how ECB Banking Supervision intends to assess the internal CCR models used by directly supervised banks, drawing on the approaches already defined by the European Banking Authority for other risk types.

The guide aims to harmonize supervisory practices related to internal CCR models and to provide transparency regarding the methodologies the ECB uses to assess the components of these models during investigations.

In September 2020, the European Central Bank (ECB) published the finalized guide outlining the methodology it uses to assess how euro area banks calculate their exposure to counterparty credit risk (CCR) and advanced credit valuation adjustment (CVA) risk, following a public consultation.

EBA on internal models

On 4 May 2020, the EBA published an update to its Implementing Technical Standards (ITS) on benchmarking of internal approaches. The updated ITS include all benchmarking portfolios that will be used for the 2021 exercise. The main novelty is the inclusion of the IFRS9 template. The EBA stressed out that benchmarking exercise is an essential supervisory tool to enhance the quality of internal models, which is particularly important in a stressed economic situation such as the one under COVID-19. The collection of quantitative data on the IFRS 9 parameters will contribute to gather a better understanding of the different methodologies, models, inputs and scenarios, which could lead to material inconsistencies in expected credit loss (ECL) outcomes, and affect own funds and regulatory ratios.

2.2.6 Reporting and Disclosure

Reporting

The EBA works on harmonizing and improving the reporting framework since its inception in 2011 with the first reporting framework to be published in 2013. Since then, the EBA reporting framework has evolved over the years with its latest release to have been published on 22 December 2020 (reporting framework 3.0). The EBA reporting framework 3.0 comprises amendments linked to the CRR2/CRD5, BRRD2 and IFR and is expected to apply from 30.06.2021. The main changes compared to the previous version of the EBA reporting framework relate to the new ITS on supervisory reporting replacing Regulation (EU) No 680/2014, as well as to the new ITS on disclosure and reporting on MREL and TLAC.

The previously released reporting framework v2.9 (published on 14 February 2020) acknowledged the adoption by the EC of the Implementing Act amending Regulation (EU) No 680/2014 with regard to COREP and FINREP changes. More specifically:

- *The COREP amendments concern the new securitization framework and changes to LCR to align with the LCR amending Act;*
- *The FINREP amendments concern the reporting requirements on non-performing exposures (NPE) and forbearance to allow the monitoring of reporting institutions' NPE strategies, the reporting requirements on profit and loss items and the implementation of the new International Financial Reporting Standard on Leases (IFRS 16).*

CRR2 implements a number of key measures such as net stable funding ratio, leverage ratio and large exposures and introduces new disclosure requirements for institutions on all prudential topics.

In June 2020, the European Banking Authority (EBA) published revised final draft ITS on supervisory reporting that implements changes introduced in the CRR2 and the Prudential Backstop Regulation, moving towards keeping the reporting requirements in line with the evolving needs for Supervisory Authorities' risk assessments and improve the consistency between the reporting and disclosure requirements. They include new reporting requirements on counterparty credit risk and net stable funding ratio, non-performing exposures minimum coverage and changes to different areas of reporting, including own funds, credit risk, large exposures, leverage ratio, FINREP and G-SII indicators. These ITS are designed to replace the Commission's Implementing Regulation (EU) No 680/2014.

The first reporting reference date will be 30 June 2021.

The above ITS were supplemented with EBA ITS of August 2020 as regards certain adjustments introduced with CRR 'quick fix', which is part of a series of measures taken by European institutions to mitigate the impact of the COVID-19 pandemic on institutions across the Member States. In addition to the flexibility already provided in the existing rules, the CRR quick fix introduces certain adjustments to the CRR, including temporary measures intended to enhance credit flows to companies and households, thereby supporting the EU's economy. The EBA also provided clarification and helped institutions to implement the reporting requirements that are linked to the regulatory measures adopted in the context of the pandemic.

In August 2020, the European Banking Authority (EBA) published its final draft Implementing Technical Standards (ITS) on disclosure and reporting on the G-SII requirement for own funds and eligible liabilities (TLAC) and the minimum requirements for own funds and eligible liabilities (MREL), to expand the scope of the existing Pillar 3 and supervisory reporting frameworks in the EU and maximize efficiency for entities when complying with their disclosure and reporting obligations and to facilitate the use of information by authorities and market participants. For these purposes, MREL and TLAC are presented in an integrated manner, both in the reporting and disclosure templates. The reporting and disclosure requirements are enshrined in a single set of ITS and a mapping between the quantitative information that has to be disclosed and the data that has to be reported is provided.

The disclosure and reporting requirements on TLAC apply only to G-SIIs, entities that are part of G-SIIs and material subsidiaries of non-EU G-SIIs, while those on MREL apply to entities other than those whose resolution plan provides that they would be wound up under normal insolvency proceedings.

The first reference date for reporting in accordance with the ITS is the 30 June 2021 (reporting framework 3.0) both for MREL and TLAC.

In December 2020, the European Banking Authority (EBA) published its final draft Implementing Technical Standards (ITS) specifying uniform reporting templates, instructions and methodology for the identification and transmission, by resolution authorities to the EBA, of information on minimum requirements for own funds and eligible liabilities (MREL). The EBA also published its final draft Regulatory Technical Standards (RTS) specifying the methodology to be used by resolution authorities to estimate the Pillar 2 (P2R) and combined buffer requirements (CBR) at resolution group level for the purpose of setting the minimum requirement for own funds and eligible liabilities requirement (MREL), as part of the EBA's major program of work to implement the BRRD and address the problem of too-big-to-fail banks. The estimation of P2R and CBR is necessary for setting MREL when the resolution group perimeter differs significantly from the prudential perimeter at which own fund requirements have been set by the competent authority. The final draft RTS further specify a straightforward and proportionate methodology for estimating own fund and combined buffer requirements. They provide a framework for a dialogue between resolution groups, competent authorities and resolution authorities aiming to improve the accuracy of the input for MREL setting.

These revised Implementing Technical Standards (ITS) on supervisory reporting aim to keep the reporting requirements in line with changes in the regulatory framework related to CRR2 and the Backstop Regulation and with the evolving needs for Supervisory Authorities' risk assessments.

The package also aims to enhance proportionality, as the new rules are more growth-friendly and better able to be adapted to the size, risk and systemic importance of the banks. Proportionality is also reflected in the EBA's proposals for reporting requirements, as well as in the cost of compliance study on reporting and the feasibility study on integrated reporting that the EBA is mandated to submit to the European Commission by CRR 2.

In addition to the changes stemming from the risk reduction package, the European Council published its conclusions on an action plan designed to tackle non-performing loans (NPLs) in Europe in July 2017. In its action plan, the European Council requests that the European Commission consider introducing prudential backstops to address potential under-provisioning of non-performing exposures (NPEs). The backstop would apply to newly originated exposures in the form of compulsory prudential deductions from institutions' own funds.

Following this request, Regulation (EU) 2019/30 of the European Parliament and of the Council amending Regulation (EU) No 575/2013 (the Backstop Regulation) was published in April 2019. It introduced a Pillar 1 measure that directly applies to all institutions subject to the CRR. In particular, the Backstop Regulation sets out uniform minimum levels of coverage to ensure that institutions have sufficient loss coverage for future NPEs. Consequently, the reporting framework was expanded to cover this new element.

In May 2020, the European Banking Authority (EBA) published its final draft Implementing Technical Standards (ITS) on specific reporting requirements for market risk. These ITS introduce the first elements of the Fundamental Review of the Trading Book (FRTB) into the EU prudential framework by means of a reporting requirement. The ITS are expected to apply from September 2021.

The specific reporting requirements for market risk include a thresholds template, providing insights into the size of institutions' trading books and the volume of their business subject to market risk, and a summary template, reflecting the own funds requirements under the alternative standardized approach for market risk (MKR-ASA). Those reporting requirements will become part of version 3.1 of the EBA reporting framework.

Disclosure – Pillar III

On 2 March 2020, the EBA published its Report assessing institutions' Pillar 3 disclosures with aim to assess the implementation by institutions of the Pillar 3 framework as well as of identifying best practices and potential areas for improvement that should help institutions enhance their own disclosures and which will be a valid input to the EBA's policy work on Pillar 3. According to the finding of the report, institutions are on the correct path towards achieving consistency and comparability through the implementation of common disclosure formats, accompanied by qualitative explanations that help communicate meaningful prudential information. However, it noted some areas for improvement:

- Omission of information without any indication of the reasons;
- Unclear identification and location of Pillar 3 reports that hinders the ability of users to find them;
- Lack of consistency in the structure of Pillar 3 reports and of some of the information reported, particularly qualitative information;
- Oversimplification of interim reports compared to end-of-year reports;

Lack of reconciliation of quantitative information across disclosure templates or inconsistent ways to calculate quantitative flows of information.

In June 2020, the European Banking Authority (EBA), following a consultation period, published new Implementing Technical Standards (ITS) on public disclosures by institutions that implements changes introduced in the CRR2 and the Prudential Backstop Regulation, to promote market discipline through enhanced and comparable public disclosures for stakeholders. It seeks to optimize the EBA Pillar 3 policy framework by moving from a silo based approach, with different disclosure policy products, to an all-inclusive ITS, and aligns the disclosure framework with international standards.

The disclosure ITS optimize the Pillar 3 policy framework for credit institutions by providing a single overarching package that brings together all previous pieces of regulation and incorporates all prudential disclosures, thus facilitating implementation by institutions and improving clarity for users of such information. The ITS implement the disclosures in a way to ensure that market participants have sufficient and comparable information to assess the risk profiles of institutions, in line with the Basel Committee's Pillar 3 standards and with the increased standardization of institutions' public disclosures. This reinforces the ultimate objective of market discipline. The CRR2 definitions for 'small and less complex institutions' and 'large institutions' support proportionality of Pillar 3 disclosures. In addition, the ITS include thresholds to trigger additional disclosures for large banks based on their risk profiles.

The first disclosure reference date will be 30 June 2021.

The proposed amendments of the EBA ITS in August 2020, provided clarifications on the application of certain adjustments ("quick fix") on institutions' disclosures and supervisory reporting introduced in the Capital Requirements Regulation (CRR) in response to the COVID-19.

In particular, the amending Guidelines on disclosure clarify whether institutions are going to apply or not the temporary treatment included in the new Article 468 of the CRR for unrealized gains and losses measured at fair value through other comprehensive income and adjustments to the provisions on IFRS 9 transitional arrangements in accordance with Article 473a of the CRR.

As mentioned above, in August 2020, the European Banking Authority (EBA) published its final draft Implementing Technical Standards (ITS) on disclosure and reporting on the G-SII requirement for own funds and eligible liabilities (TLAC) and the minimum requirements for own funds and eligible liabilities (MREL), enshrined in a single set of ITS and a mapping between the quantitative information that has to be disclosed and the data that has to be reported is provided.

The ITS also seek to maximize the consistency and comparability of disclosures with the templates and definitions included in the relevant Pillar 3 standards of the Basel Committee on Banking Supervision (BCBS), in order to reinforce market discipline.

The provisions on the disclosures on TLAC apply immediately, while on MREL from 1 January 2024 at the earliest.

On February 2021, the Joint Committee of the three European Supervisory Authorities (EBA, EIOPA and ESMA – ESAs) delivered to the European Commission (EC) the Final Report, including the draft Regulatory Technical Standards (RTS), on the content, methodologies and presentation of disclosures under the EU Regulation on sustainability-related disclosures in the financial services sector (SFDR).

The proposed RTS aim to strengthen protection for end-investors by improving Environmental, Social and Governance (ESG) disclosures to them on the principal adverse impacts of investment decisions and on the sustainability features of a wide range of financial products. This will help to respond to investor demands for sustainable products and reduce the risk of greenwashing.

The main proposals in particular, include that the principal adverse impacts that investment decisions have on sustainability factors in relation to climate and environment, as well as social and employee matters, respect for human rights, anti-corruption and anti-bribery aspects, should be disclosed on the entity's website. While financial market participants and financial advisers are required to apply most of the provisions on sustainability-related disclosures laid down in the SFDR from 10 March 2021, the application of the RTS will be delayed to a later date as the ESAs have proposed in these draft RTS that the application date of the RTS should be 1 January 2022.

On 1 March 2021, the European Banking Authority (EBA) launched a public consultation on draft implementing technical standards (ITS) on Pillar 3 disclosures on Environmental, Social and Governance (ESG) risks. The draft ITS put forward comparable disclosures that show how climate change may exacerbate other risks within institutions' balance sheets, how institutions are mitigating those risks, and their green asset ratio on exposures financing taxonomy-aligned activities, such as those consistent with the Paris agreement goals.

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.

The EBA has integrated proportionality measures that should facilitate institutions' disclosures, including transitional periods where disclosures in terms of estimates and proxies are allowed.

To complement the implementation on legislative and non-legislative moratoria, the EBA published its Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis, through set disclosure templates that can be found in section 6.5 Covid-19 Reporting.

2.2.7 Recovery and Resolution Developments

Announcement of the 'Minimum Requirements for Own Funds and Eligible Liabilities (MREL) Policy under the Banking Package': On 20 May 2020, the Single Resolution Board ("SRB") published its final 'Minimum Requirements for Own Funds and Eligible Liabilities (MREL) Policy under the Banking Package'. MREL is one of the key tools in resolvability, ensuring that banks maintain a minimum amount of equity and debt to support an effective resolution. In line with the new Banking Package (BRRD2/SRMR2), the policy covers:

- MREL requirements for Global Systemically Important institutions (G-SIIs);
- Changes to the calibration of MREL, including introducing MREL based on the leverage ratio;
- Changes to the quality of MREL (subordination);
- Dedicated rules for certain business models, such as cooperatives, and for resolution strategies, such as multiple point of entry (MPE);
- Provisions on internal MREL;
- Clarifications on third-country issuances;
- How these changes will be phased in.

Publication of the "Expectations for Banks": The Single Resolution Board (SRB) published on 1 April 2020 the "Expectations for Banks" document, that sets out the capabilities the SRB expects banks to demonstrate in order to show that they are resolvable. It describes best practice and sets benchmarks for assessing resolvability. It also provides clarity to the market on the actions that the SRB expects banks to take in order to demonstrate resolvability. The 'Expectations for Banks' will be subject to a gradual phase-in. Banks are expected to have built up their capabilities on all aspects by the end of 2023, except where indicated otherwise. The Expectations are tailored to each individual bank and its resolution strategy, allowing for flexibility and proportionality.

2.2.8 Governance and Remuneration

In February 2020, the European Banking Authority (EBA) issued a new benchmarking report on diversity practices in credit institutions and investment firms analyzing the development since its 2015 diversity benchmarking exercise, stating that the representation of women in management bodies is still relatively low and many institutions do not have a gender diverse board. The EBA called on institutions and Member States to consider additional measures for promoting a more balanced representation of both genders and on competent authorities to ensure institutions' compliance with the requirement to adopt diversity policies. More diverse management bodies can help improve decision-making regarding strategies and risk-taking by incorporating a broader range of views, opinions, experiences, perceptions, values and backgrounds. All institutions are required to adopt a policy promoting diversity within their management bodies. The issue of diversity is not limited to gender; it also concerns the age, professional and educational background, and geographical provenance of the members of the management body.

In June 2020, the EBA published its final draft Regulatory Technical Standards (RTS) on the criteria to identify all categories of staff whose professional activities have a material impact on the institutions' risk profile ("risk takers"). The objective of these RTS is to define and harmonize the criteria for the identification of such staff and to ensure a consistent approach across the EU. The identification process is based on a combination of qualitative and quantitative criteria.

"Risk takers" are identified meeting at least one of the criteria laid down in the revised Capital Requirements Directive (CRD) and those specified in the RTS or, where necessary because of the specificities of their business model, additional internal criteria.

In terms of quantitative criteria, the revised CRD set out a threshold of total remuneration of EUR 500.000 combined with the average of the remuneration of members of the management body and senior management.

The final draft RTS retain the qualitative criterion that identify the staff high levels of remuneration above EUR 750.000. In addition, the 0.3% of staff with the highest remuneration criterion has been amended to be applied only by institutions that have more than 1.000 staff in order to reduce the burden for small institutions.

In October 2020, the EBA launched a public consultation on revised Guidelines on sound remuneration policies. This review takes into account the amendments introduced by the fifth Capital Requirements Directive (CRD V) in relation to institutions' sound remuneration policies and in particular the requirement that those remuneration policies should be gender neutral. The principle of equal pay for male and female workers for equal work or work of equal value is laid down in Article 157 of the Treaty on the Functioning of the European Union (TFEU). Institutions need to apply this principle in a consistent manner. The EBA will follow up on institutions' practices with a report to be published within two year after the publication of the final guidelines.

Finally, the sections on severance payments and retention bonuses have been revised based on supervisory experience regarding cases of circumvention.

2.2.9 EU-wide Stress Test

Stress testing has become an essential tool for supervisors to understand and assess firms' risks, vulnerabilities and risk management capabilities. As concerns about crystallisation of significant cyclical economic risks grow, scrutiny of stress testing outcomes is likely to increase.

On 30 July 2020, the Board of Supervisors (BoS) of the EBA agreed on the tentative timeline and sample of the 2021 EU-wide stress test. The exercise was launched at the end of January 2021 and its results are expected to be published at the end of July 2021. The 2021 EU-wide stress test will be carried out at the highest level of consolidation on a sample of 51 banks, of which 39 from the Euro Area, covering broadly 70% of the banking sector in the euro area, each non-Eurozone Member States and Norway.

The tentative sample, includes the banks that were going to participate in the postponed 2020 stress test, with some adjustments to ensure sufficient coverage in terms of total assets as well as to reflect changed conditions for specific institutions. UK banks are excluded from the sample while, their EU27 subsidiaries are included when necessary. The final sample can still be subject to adjustments, depending on possible mergers, divestments, restructuring, etc.

The EBA has also agreed on the preliminary timeline for the potential future changes to the EU-wide stress test framework, a final decision on potential changes to the framework, which takes account of the feedback received on the discussion paper is expected to be taken in Q2-Q3 2021, while the implementation of any potential change will be possible for the 2023 EU-wide stress test.

On 13 November, the EBA published the final methodology, draft templates and template guidance for the 2021 EU-wide stress test along with the key milestones of the exercise. The methodology and templates include some targeted changes compared to the postponed 2020 exercise, such as the recognition of FX effects for certain P&L items, and the treatment of moratoria and public guarantees in relation to the current Covid-19 crisis. The stress test exercise will be launched in January 2021 with the publication of the macroeconomic scenarios and the results published by 31 July 2021.

Like the previous ones, the 2021 EU-wide stress test is a bottom-up exercise with constraints, including a static balance sheet assumption. The exercise is primarily a diagnostic tool focused on the assessment of the impact of adverse shocks on the solvency of banks. Banks are required to estimate the evolution of a common set of risks (credit, market, counterparty and operational risk) under an adverse scenario. In addition, banks are requested to project the impact of the scenarios on the main income sources.

A draft version of the stress test templates is also published along with a template guidance. The draft version of the templates and template guidance can still be subject to minor technical adjustments before its final publication.

Along with the methodology, the sample of banks participating in the exercise is also published.

Key milestone dates of the 2021 EU-wide stress test exercise

- Launch of the exercise at the end of January 2021;
- First submission of results to the EBA at the beginning of April 2021;
- Second submission to the EBA in mid-May 2021;
- Third submission to the EBA at the end of June 2021;
- Final submission to the EBA in mid-July 2021;
- Publication of results by end-July 2021.

On 29 January 2021, the EBA launched the 2021 EU-wide stress test and released the macroeconomic scenarios. The adverse scenario is based on a narrative of a prolonged COVID-19 scenario in a 'lower for longer' interest rate environment, in which negative confidence shocks would prolong the economic contraction. The EBA expects to publish the results of the exercise by 31 July 2021.

2.2.10 Other regulatory developments

Supervisory priorities

On 30 September 2020, the EBA published its annual work program for 2021, describing the activities and tasks of the Authority for the coming year and highlighting its key strategic areas of work.

In 2021, the EBA will focus on six strategic areas: (i) supporting the deployment of the risk reduction package and the implementation of effective resolution tools; (ii) reviewing and upgrading the EU-wide EBA stress testing framework; (iii) becoming an integrated EU data hub by leveraging on the enhanced technical capability for performing flexible and comprehensive analyses; (iv) contributing to the sound development of financial innovation and operational resilience in the financial sector; (v) building the infrastructure in the EU to lead, coordinate and monitor AML/CFT supervision; and (vi) providing the policies for factoring in and managing Environmental, Social and Governance (ESG) risks.

Regarding its horizontal streams of work, the EBA will continue working towards (a) establishing a culture of sound and effective governance and good conduct in financial institutions, and particularly focus on (b) addressing the aftermath of COVID-19.

New Securitisation framework

On 12 December 2017, the European Parliament and the Council of the EU issued the Regulation (EU) 2017/2402 in reference to a general framework for securitization, creating a specific framework for simple, transparent and standardized ("STS") securitizations, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012. Securitization is an important element of well-functioning financial markets, while soundly structured securitizations are an important channel to diversify sources and allocate risk more widely within the Union. The newly established framework for STS securitizations is in effect from January 1st, 2019 and applies only to securitizations taking place after this date, irrespective of the institution's status as originator or investor. Further, on December 12th, 2017, the European Parliament and the Council of the EU issued the Regulation (EU) 2017/2401 amending Regulation the CRR on prudential requirements for credit institutions and investment firms.

On 4 May 2020, the EBA published its final Guidelines on the determination of the weighted average maturity (WAM) of the contractual payments due under the tranche of a securitization transaction, as laid down in the CRR, aiming to ensure that the methodology applicable for the determination of the WAM for regulatory purposes is sufficiently transparent and harmonized in order to increase consistency and comparability in the own funds held by institutions.

Furthermore, on 6 May 2020, the EBA published its proposals for developing a simple, transparent and standardized (STS) framework for synthetic securitization.

In July 2020, the European Securities and Markets Authority (ESMA), the EU's securities markets regulator, published its final report on the Guidelines on securitization repository data completeness and consistency thresholds to provide clarity for market participants and securitization repositories (SRs) on the accepted levels of No-Data (ND) options contained in the securitization data submitted to SRs.

Furthermore, in August the ESMA published updated reporting instructions and XML schema (version 1.2.0) for the templates set out in the technical standards on disclosure requirements, to address technical issues identified by stakeholders since December 2019. The reporting templates and the associated XML schema and reporting instructions will enter into force 20 days after the technical standards on disclosure requirements have been published in the Official Journal of the European Union.

In September 2020, the ESMA confirmed that the different elements of the new regime under the Securitization Regulation will come into force on 23 September 2020, following the publication of seven technical standards implementing the Securitization Regulation in the Official Journal of the European Union. The publication of the technical standards triggers

- Opening of applications for entities to register as Securitization Repository (SR); and
- Entry into force of new disclosure templates.

ESMA has developed a set of securitization disclosure templates to improve and standardize the information made available to investors, potential investors and competent authorities. These disclosure templates entered into force on 23 September 2020 and must as of that date be used to make any new information available about a securitization.

In November 2020, the BCBS published a technical amendment to address a gap in the regulatory framework and set out a prudent treatment for securitizations of non-performing loans. These transactions are subject to different risk drivers compared to securitizations of performing assets. Consistent with this, recent observations in which the securitized portfolio consisted mostly of non-performing loans shed light on potential risk weight miscalibration. To correct this situation, the Committee agreed to add the following elements to the securitization standard in the Basel Framework, to be implemented by no later than 1 January 2023:

- An explicit definition of securitizations of non-performing loans;
- Removal of the option to use foundation internal risk-based parameters as inputs for the internal ratings-based approach (SEC-IRBA) for all securitizations of non-performing loans;
- Introduction of a 100% risk weight floor for exposures to securitizations of non-performing loans that are risk weighted under the SEC-IRBA or the standardized approach (SEC-SA);
- For the senior tranches of securitizations of non-performing loans where the non-refundable purchase price discount is equal to, or greater than, 50% of the securitized portfolio, the risk weight under SEC-IRBA or SEC-SA is 100%;

All other provisions of the current securitization standard, including the use of external ratings based approach (SEC-ERBA) and the possibility of capping the capital requirement for exposures from the same transaction, will also apply to securitizations of non-performing loans. The technical amendment does not change any rule related to securitizations of performing loans.

EBA Guidelines on Own Funds & Eligible Liabilities

On 29 May 2020, the EBA published a Consultation Paper on the draft amended Regulatory Technical Standards (RTS) on own funds and eligible liabilities. Since their entry into force, the RTS on own funds have significantly enhanced regulatory harmonization of prudential rules and contributed to strengthening the quality of regulatory capital. With the revised Capital Requirements Regulation (CRR) introducing new criteria and requirements for eligible liabilities, these amended RTS capture several aspects of eligible liabilities as well as the changes to the own funds framework.

BIS consultation on Operational Risk

The BCBS introduced its Principles for the sound management of operational risk in 2003, and subsequently revised them in 2011 to incorporate the lessons from the financial crisis. In 2014, the Committee conducted a review of the implementation of the principles which indicated that several principles had not been adequately implemented, and that the principles did not sufficiently capture certain important sources of operational risk.

In August 2020, the BCBS proposed a limited number of updates to:

- align the principles with the recently finalized Basel III operational risk framework;
- update the guidance where needed in the areas of change management and information and communication technologies; and
- enhance the overall clarity of the principles.

The Committee also published a consultative document, seeking to promote a principles-based approach to improving operational resilience. The principles aim to strengthen the ability of banks to withstand operational risk-related events which could cause significant operational failures or wide-scale disruptions in financial markets, such as pandemics, cyber incidents, technology failures or natural disasters. The approach builds on updates to the Committee's Principles for the sound management of operational risk, and draws from previously issued principles on corporate governance for banks, as well as outsourcing, business continuity and relevant risk management-related guidance.

External Credit Assessment Institutions

In January 2021, the Joint Committee of the three European Supervisory Authorities (EBA, EIOPA and ESMA - ESAs) launched a public consultation to amend the Implementing Regulations on the mapping of credit assessments of External Credit Assessment Institutions (ECAIs) for credit risk. The amendments are needed to assign mappings for two newly established ECAIs and to reflect the outcomes of a monitoring exercise on the adequacy of existing mappings, namely changes to the Credit Quality Steps (CQS) allocation for two ECAIs and the introduction of new credit rating scales for nine ECAIs. The Implementing Regulations are part of the EU Single Rulebook for banking and insurance aimed at creating a safe and sound regulatory framework consistently applicable across the European Union (EU). The consultation runs until 5 March 2021.
In the Implementing Regulations on the mapping of ECAIs, adopted by the European Commission on 11 October 2016, the three ESAs specified an approach that establishes the correspondence between credit ratings and the credit quality steps defined in the Capital Requirements Regulation (CRR) and in the Solvency II Directive.
The ESAs are now consulting on an amendment to the Implementing Regulation to reflect the establishment of two additional ECAIs and the outcome of a monitoring exercise on the adequacy of the mappings, based on a quantitative and qualitative assessment. In particular, the ESAs are proposing to change the CQS allocation for two ECAIs, together with the introduction of new credit rating scales for nine ECAIs.
The ESAs also published individual draft mapping reports illustrating how the methodology was applied to produce the amended mappings in line with the CRR mandate.
This change follows a second amendment to the Implementing Regulations, which was proposed by the ESAs in May 2019 and adopted by the European Commission on 29 November 2019. The first amendment reflected the withdrawal of the registration of one CRA and the recognition of five additional CRAs since the adoption of the Implementing Regulations in October 2016. The second amendment, on the other hand, reflected the outcomes of a monitoring exercise on the adequacy of existing mappings, namely changes to the Credit Quality Steps (CQS) allocation for two ECAIs and the introduction of new credit rating scales for ten ECAIs. Two ECAIs, Credit reform and ACRA Europe, have not consented to the publication of their mapping reports. In the absence of a consent, the ESAs published only the outcome of the revision, i.e. the relevant mappings in Annex III of the draft amended ITS ("Mapping tables") together with two documents listing the applicable credit rating scales and credit rating types for each of the concerned ECAI.

EBA Benchmarking Exercise

On 17 December 2020 the EBA published a consultation paper proposing to amend the EU Commission's Implementing Regulation on the benchmarking of credit risk, market risk and IFRS9 models so as to include some new elements for the 2022 exercise. The EBA benchmarking exercise forms the basis for both supervisory assessment and horizontal analysis of internal models. It ensures consistent monitoring of the impact of the several different supervisory and regulatory measures aiming at the harmonising capital requirements in the EU.
For each of the three areas, the EBA is proposing to include the following new elements: i) for credit risk, additional information on the level of conservatism embedded in the IRB risk parameters; ii) for market risk, new sensitivities related to the so-called sensitivities-based method, in line with the new FRTB framework; and iii) for the IFRS9 exercise, updated templates with the collection of additional IFRS 9 parameters.
These draft ITS have been developed in accordance with article 78 of the Capital Requirements Directive (CRD), which requires the EBA to specify the benchmarking portfolios, templates and definitions to be used as part of the annual benchmarking exercises. These are used by competent authorities to conduct an annual assessment of the quality of internal approaches used for the calculation of own funds requirements.

3 NBG's TRANSFORMATION PROGRAM

Following a clear mandate from its Board of Directors, NBG embarked already in 2018 on a program to transform itself deeply and radically and achieve a profitable and sustainable business model, which will enhance its capital adequacy. Building upon its long-lasting tradition of trust and service to society, NBG has set out to become more than just a modern banking institution: its aspiration is to become the bank of first choice.

The Transformation Program is delivered across specific Workstreams, each led by a General Manager/ Assistant General Manager. While Workstreams broadly coincide with the accountable executives' functional areas, cross-functional collaboration is strongly encouraged.

The Program is structured along the following Workstreams:

- **Healthy Balance Sheet:** relating to the reduction of NPEs and resolution of legacy balance sheet issues, including real estate assets.
- **Efficiency & Agility:** relating to the timely and sustainable reduction of costs (personnel and non-personnel costs), and the delivery of a Bank-wide Value Based Management framework.
- **Best Bank for our Clients:** relating to Retail and Corporate lending strategy, client service and coverage model, improved palette of RM tools and systems, enhanced product offerings with digital and cross-selling focus, branch network transformation and use of analytics in commercial actions.
- **Technology & Processes:** relating to the underlying technological platforms of the Bank, as well as to the reengineering of its core processes towards an efficient and agile operating model.
- **People, Organisation & Culture:** relating to the redesign of the overall Human Resources framework, including a leaner organizational structure and a unified, comprehensive and rigorous Performance Management System.
- **Visibility, Controls & Compliance:** relating to the delivery of a new Credit framework, the management of non-financial and AML risks, the enhancement of risk culture and the delivery of a robust system of internal controls.

The Transformation Program is structured over six-month periods, termed Seasons. This setup helps sustain the pace and ensures that the Bank remains focused, yet agile, as new Initiatives may enter the Program and existing ones may be appropriately adjusted in line with the Bank's Strategy and Business Plan targets.

The Program is well into its execution phase, maintaining significant momentum with active participation of over 1000 employees. All Transformation Program priorities have "locked-down" tangible and measurable objectives.

Transformation Program priorities for 2021

Taking stock of the achievements of Transformation Program in 2020, NBG confidently looks forward to 2021 and beyond:

- The completion of a large NPE securitization transaction of more than €6 billion of NPEs (Project Frontier), is expected to further support the balance sheet clean-up and clearly set up the Bank for growth;
- Further streamlining of NBG's capacity, and continued control of non-staff spend through initiatives targeting specific categories of spend (e.g., legal spend, real estate spend) are expected to further contain costs;
- Increased focus on the Small Business segment, cross-selling and customer service in both Corporate and Retail Banking is expected to boost the Bank's capacity to capture the anticipated growth in the Greek market; a strong digital offering with new innovative and value-adding solutions for Retail and Corporate customers is expected to further boost sales through digital channels;
- Additional efforts to further enhance technological infrastructure and platforms, as well as further process optimization, centralization and automation initiatives are expected to enable efficiencies and boost customer experience;
- Implementation of the new PMS, the roll-out of NBG Academy (including flagship learning programs) and the launch of workplace improvement actions in line with findings from the Employee Engagement Survey are expected to further modernise the Bank's HR management framework;
- Modernization of NBG's credit policies and frameworks across the Retail and Corporate lines of business to support healthy growth, implementation of ESAs initiative, and roll-out of internal controls for very high priority processes are expected to strengthen visibility and transparency across the organization.

The launch of a comprehensive culture and change management program since 2020 is also expected to mark an important step in NBG's transformation journey. Priorities in 2021 include the internal and external dissemination of purpose and values, as well as the refresh of NBG's brand. Finally, NBG has launched a new initiative aiming to achieve a major improvement in NBG's Environment, Social & Governance (ESG) practices.

COVID19 Statement and Impact on Transformation Programs

NBG moved fast since February 2020 in terms of identifying and addressing the COVID-19 pandemic. Our immediate priorities included securing the health and safety of our employees and customers, while enabling a "work-from-home" operating model.

While the Bank's strategic priorities have not changed, we have adjusted the Transformation Program in response to COVID-19. Specifically note the following:

- The Bank has launched relief measures to support its customers and ensure the health of its balance sheet, in line with regulatory guidelines and measures announced by the Greek Government and the Hellenic Bank Association;
- NBG accelerated the implementation of digital transformation, offering more digital functionalities for Retail and Corporate customers, and supporting their migration to alternative channels through targeted campaigns;
- NBG adapted a key customer-facing processes to allow for remote functionality while at the same time putting in place appropriate internal controls and operational risk mitigation actions;
- The Bank increased the level of ambition in terms of medium-to-long term cost efficiency, considering a faster move towards digital channels and a more flexible operating model in a post-COVID-19 environment.

Overall, NBG remains committed to our aspiration to be the bank of first choice for its customers, its talent and its shareholders during and after these trying times.

4 RISK MANAGEMENT FRAMEWORK

4.1 Basic Principles and governance structure of the Group risk management

Risk management and control plays a fundamental role in the overall strategy of the Group, aiming to both effectively manage the risks of the organization and to align with the legal and regulatory requirements.

The Group aims at adopting best practices regarding risk governance, taking into account all relevant guidelines and regulatory requirements, as set by the Basel Committee on Banking Supervision (BCBS), the European Banking Authority (EBA), the European Central Bank (ECB) \ Single Supervisory Mechanism (SSM), the Bank of Greece (BoG), the Hellenic Capital Market Commission (HCMC) legislation, as well as any decisions of the competent authorities supervising the Group's entities.

Group Risk Management Governance Framework

Group Risk management at NBG has a structured and tiered approach, based on a number of governance bodies, internal policies and procedures, and controls framework.

The Board of Directors bears ultimate accountability for NBG's risk position. It signs off on the risk strategy and risk appetite, and monitors the effectiveness of risk governance and management advised by its two specialized committees: the Board Risk Committee (BRC) and the Board Audit Committee (BAC). The Bank's Executive Committee (ExCo) and other committees, supporting to the Executive Committee are in charge of daily management actions and steer of the business. The Group Chief Risk Officer (CRO) is a member of the Executive Committee. The CRO has direct access to the Board of Directors, has delegated decision-authority for executive matters over Risk and leads the Risk Management Function.

The Group Risk management Function has specialized teams per risk type. The Group Risk Management Function's teams conduct day-to-day risk management activities according to policies and procedures as approved by the BRC, the Senior Executive Committee and other executive committees. The perimeter is based on the industry standard "Three Lines of Defense" model (please see below). The Group Risk Management Function's activities are supported by underlying systems and infrastructure. Finally, risk culture is viewed as a core component of effective risk management, with the tone and example set by the Board of Directors and senior management. Objective of the Bank is to establish a consistent risk culture across all Units.

Hence, there are four layers relevant to Risk Management, all rolling up into the Board of Directors:

1. Oversight and approval

At the top of the house, the members of the Board are responsible for oversight and approval on governance structures of NBG, ensuring the right frameworks and policies are in place to ensure the bank can be effectively managed.

2. Executive management actions & sign-off

The Executive management layer (ExCo and other executive committees) decides on management actions, signs off on materials produced and reported, and actively steers the bank.

3. Methodology and framework

Procedures and methodologies are in place to guide risk management, e.g. credit approval procedures, model development and validation, product assessments.

4. Execution and analysis

The execution layer is in charge of implementing the frameworks, models and policies set forth by the aforementioned layers, and provide the Board and the executive committees with relevant analyses and results to base their decisions upon.

The Board Risk Committee

The Group has clearly defined its risk appetite and has established a risk strategy and risk management policies. Ultimately responsible for the development and application of this general framework of risk management at a Group level is the Board of Directors (the Board) supported by the Board Risk Committee (BRC).

The BRC reviews and proposes to the Board on an annual basis or more frequently if necessary, the Bank's risk strategy and risk appetite for approval, and ensures that the Bank's risk appetite and risk strategy are clearly communicated throughout the Bank and form the basis on which risk policies and risk limits are established at group, business and/or regional level. It also reviews and proposes to the Board of Directors for approval all risk management frameworks, methodologies and policies for identifying, measuring, evaluating, monitoring, reporting and mitigating risks, including frameworks, methodologies and policies related to credit risk (inclusive of material aspects of the credit rating systems), market risk, liquidity risk, interest rate risk in the banking book, operational risk, model risk and model validation. The BRC has the responsibility to review reports and evaluate the overall risk exposure of the Bank and the Group on a regular basis, taking into account the approved risk strategy and the business plan of the Group, to develop proposals and recommend corrective actions for consideration by the Board regarding any matter within its purview. The proposals to the BRC are submitted by the Group Chief Risk Officer (CRO).

The Committee has two roles, namely it operates a) as the Board Risk Management Committee and b) as the Board Committee Responsible for Non-Performing Loans/Exposures (NPLs/NPEs) as prescribed by Art. 10 par. 8 of Greek Law 3864/2010, as in force.

The BRC convenes regularly at least on a monthly basis, and on an ad hoc basis whenever the Committee Chair deems fit.

During 2020, the Committee convened **nineteen** times. In the context of its responsibilities and during the course of the year, key workings of the Committee included redesign of the OpRisk Management Framework and its components and development of KRI dashboard, review of Risk Appetite Framework and ongoing monitoring of compliance, enhancements in risk reporting, update and implementation of the RCSA methodology at Group Level, launching of Risk Culture Initiative, included within the Bank's Transformation Program initiatives, update of ICAAP/ILAAP frameworks, Corporate Credit Policy, IRRBB Policy, Stress Test Framework, Liquidity Risk Framework, development of Significant Risk Transfer Policy, iInterim revision of NPE Targets submitted to the Single Supervisory Mechanism, review of Models used and respective Model Validation Unit assessments.

Since 19 December 2013 the Committee has been composed exclusively of non-executive Board members, at least three in number. At least one third (excluding the HFSF Representative and rounded to the nearest whole number) are independent members of the Board, in accordance with the definition of independence specified in the Bank's Corporate Governance Code and one member is the HFSF representative at the Board of Directors. The members of the Committee (including its Chair and Vice-Chair) are appointed by the Board of the Bank, following recommendation by the Board's Corporate Governance and Nominations Committee. All members shall fulfill the eligibility criteria applying in accordance with Art.10 of the Law 3864/2010 as in force and should have previous experience in the field of financial services or commercial banking and at least one member (expert) should have solid risk and capital management experience, as well as familiarity with local and international regulatory framework. Also, in accordance with the provisions of Art. 68 of Law 4261/2014, transposing Art. 76 of EU Directive 2013/36, as applicable, all members of the Committee have appropriate knowledge, skills and expertise to fully understand and monitor the risk strategy and the risk appetite.

In January 2017 the Committee Charter was amended, introducing the new dual role of the BRC, namely its operation a) as the Board Risk Management Committee and b) as the Board Committee Responsible for Non-Performing Loans/Exposures (NPLs/NPEs) prescribed by Art. 10 par. 8 of Law 3864/2010 as in force. The Committee Charter was further updated in February 2019, in July 2019, and further in March 2021, and is available on the Bank's website www.nbg.gr (section: The Group / Corporate Governance / Board of Directors / Committees)

"Three Lines of defence" model in the Group's risk management

The Group's risk management is spread on three different levels, in order to create three lines of defense, as follows:

- **First line:** The risk taking units (e.g. credit originating departments, Treasury) are responsible for assessing and minimizing risks for a given level of expected return by establishing and implementing internal rules and controls to the on-going business.
- **Second line:** The Group Risk Management Function oversees, monitors, controls and quantifies risks; provides appropriate tools and methodologies, coordination and assistance to lines of business; provides input towards the measurement of risk adjusted performance across business line; participates in the credit approval process for the Group's corporate banking, retail banking and subsidiaries portfolios; performs independent assessment of credit risk undertaking in respect of each portfolio and has the right of veto; proposes appropriate risk mitigation measures, supported by local Risk Management (for subsidiaries) and specialized units (for the Bank). Additionally, under the Second line:
  - The Group Compliance Function follows regulatory compliance across the Group and ensures that all units meet regulatory and other compliance requirements, through monitoring, advising and training.
  - The Group Risk Management Function cooperates with the Business Processes Division, the Group Internal Control Function, the Group CyberSecurity & Data Governance Division, the Group Security Division and the Legal Division. These Divisions provide support, advice, appropriate tools and methodologies, acting as control units for specific subcategories of operational risk (e.g. legal risk, Information & Communication Technology (ICT) risk) as well as ensuring the Bank's business continuity and mitigation of physical threats.
- **Third line:** The Internal Audit function of the Group, which reports directly to the Board of Directors through the Audit Committee, complements the risk management framework, acting as an independent reviewer, focusing on the effectiveness of the risk management framework and control environment.

The duties and responsibilities of all lines of defense are clearly identified and separated, and the relevant Units are sufficiently independent.

The Group Risk Management Function

The organizational chart and reporting lines of NBG Group Risk Management Function are depicted in the figure below:

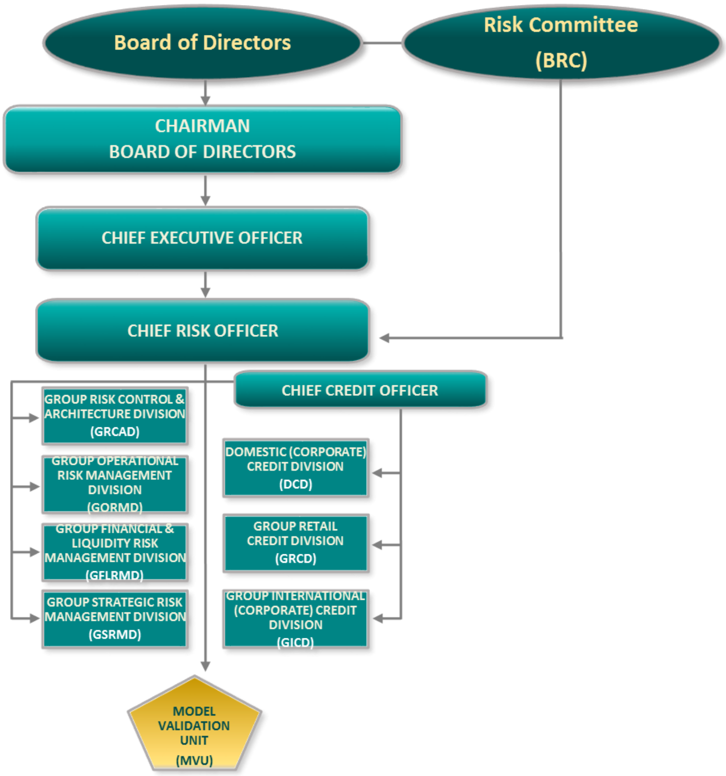


Figure 2: Organizational Chart of Risk Function

The CRO reports to the CEO, has direct access to the BRC and is its main rapporteur. The CCO, is operating under the CRO, supervises three Credit Divisions, as above, which are involved in the credit approval process for the Group's corporate banking, retail banking and subsidiaries portfolios.

Group Risk Management

The Bank acknowledges the need for efficient risk management and has established four specialized Divisions and one Unit: the NBG Group Risk Control and Architecture Division (GRCAD), the NBG Group Financial and Liquidity Risk Management Division (GFLRMD), the NBG Group Operational Risk Management Division (GORMD), the NBG Group Strategic Risk Management Division (GSRM), and the Model Validation Unit (MVU), to properly identify, measure, analyze manage, and report the risks, entailed in all its business activities.. All risk management units of the Group subsidiaries adequately report to the aforementioned Divisions/Unit.

In addition, the three Credit Divisions, which are independent of the credit granting units, are involved in the credit approval process for the Group's corporate banking, retail banking and subsidiaries portfolios. They perform an independent assessment of the credit risk undertaking in respect of each portfolio and have the right of veto (see Section 4.2).

Based on its charter, the mission and the constitution of each Division/Unit are as follows:

Group Risk Control & Architecture Division (GRCAD)

The mission of the GRCAD is to:

- specify and implement credit risk policies emphasizing on rating systems, risk assessment models and risk parameters, according to the guidelines set by the Bank's Board of Directors;
- establish guidelines for the development of methodologies for Expected Credit Loss (ECL) and its components, i.e. Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD) for each segment of corporate and retail asset class;
- implement a number of clearly defined and independent credit risk controls on credit risk models, which enable an effective oversight of risks emerging from credit activities at all levels. These controls are documented and communicated to the business units on a quarterly basis. GRCAD itself monitors these same controls on a quarterly basis, assuring they are operating effectively and remain altogether sufficient for the purposes they were established;
- provide regular assurance that models continue to perform adequately, thus complementing the periodic validation and usage reviews;
- assess the adequacy of methods and systems that aim to analyze, measure, monitor, control and report credit risk undertaken by the Bank and other financial institutions of the Group; and
- estimate Regulatory Capital required in respect with Credit Risk and Internal Capital required in respect to all banking risks and prepare relevant regulatory and Management Information System (MIS) reports.

The GRCAD consists of the :

- Credit Risk Control Sector, which in turn consists of the Credit Risk Control Subdivision and Credit Risk Internal Reporting and the NPE Independent Review Subdivision;
- Corporate Credit Risk Model Development Subdivision;
- Retail Credit Risk Model Development Subdivision;
- Credit Risk Regulatory Reporting Subdivision;
- ICAAP, Stress Testing and Risk Management Regulatory Framework Monitoring Subdivision; and
- Risk Management Operations Support Subdivision.

Group Financial & Liquidity Risk Management Division (GFLRMD)

The mission of the GFLRMD is to:

- plan, specify, implement and introduce market, counterparty, liquidity and Interest Rate Risk in the Banking Book (IRRBB) risk policies, under the guidelines of the Bank's Board of Directors;
- develop and implement in-house models for pricing and risk measurement purposes;
- run appropriate tests to ensure that the models continue to perform adequately, thus complementing the periodic validation reviews;
- assess the adequacy of methods and systems that aim to analyze, measure, monitor, control and report the aforementioned risks undertaken by the Bank and other financial institutions of the Group;
- independently evaluate financial products, assets and liabilities of the Bank and the Group;
- estimate Regulatory Capital required in respect with market risk and counterparty credit risk, calculate the regulatory metrics for Liquidity Risk and IRRBB and prepare relevant regulatory and MIS reports; and
- provide timely and accurate information to the Bank's senior competent bodies (the BRC and the Asset Liability Committee (ALCO) and the Regulator (the SSM), with sufficient explanatory and investigation capabilities on the materiality and trend of the aforementioned risks, as well as handle all issues pertaining to market, counterparty, liquidity and IRRBB risks, under the guidelines and specific decisions of the BRC, the ALCO and the SSM.

The GFLRMD consists of the:

- Market Risk Management & IRRBB Sector which in turn consists of the Market Risk Management Subdivision and the IRRBB Management Subdivision;
- Liquidity Risk Management Subdivision;
- ILAAP Framework Monitoring Subdivision; and
- Counterparty Credit Risk Subdivision.

Group Operational Risk Management Division (GORMD)

The mission of the GORMD is to:

- design, propose, support and periodically validate the Operational Risk Management Framework ("ORMF"), ensuring that it is aligned with the best practices, the regulatory requirements and the directions set by the Board of Directors;
- ensure the development of policies, methods and systems for the identification, measurement and monitoring of operational risks and their periodic assessment and validation;
- design and implement training programs on operational risk, the use and implementation of programs, methods and systems as well as any other action aiming at knowledge sharing and the establishment of operational risk culture Group-wide;
- address all operational risk related issues as per the directions and decisions of the BRC;
- continuously monitor and review the Group operational risk profile and report to senior management and the Supervisory Authorities.

The GORMD consists of the:

- Operational Risk Framework Implementation Sector, which in turn consists of the Operational Risk Program Implementation and the Operational Risk Internal Events Collection Subdivisions;
- Operational Risk Framework Development Subdivision;
- Operational Risk Reporting Subdivision; and
- Operational Risk Awareness and Training Subdivision.

Group Strategic Risk Management Division (GSRM)

The mission of GSRM, is shaped taking into account the wide spectrum of risks that may be correlated to the Group's Strategy, in alignment with the prevailing business needs. GSRM is responsible for:

- monitoring, analyzing and evaluating risks that are evident or related to the Business Strategy of the Group and may negatively impact the profitability and the dynamic structure of the Balance Sheet for both the Bank and/or the Group;
- analyzing the hypothesis and assumptions embedded in the Strategic Planning, Business Planning (business model mapping), and Future Profitability;
- managing of risks related to the implementation of the Business Strategy;
- analyzing risks and potential impacts measured via appropriate Key Risk Indicators (KRI's) and stemming from deviations in

relation to the expressed targets set in the Business Strategy & Business Planning;

- developing scenarios and the execution of Stress Testing Exercises;
- performing sensitivity analyses related to the risks entailed in the dynamic profitability evolution and of the Asset & Liability Structure;
- monitoring the development, execution, and revising of financial targets related to the Strategy of NPE's;
- selecting and using appropriate performance measures which are adjusted based on risk (risk-adjusted performance metrics – RAPM) aiming to evaluate the Strategy Risks;
- analyzing & evaluating of Capital Adequacy & Profitability Risks;
- executing of industry wide Stress Test exercises according to regulatory demands and guidelines (EBA, SSM, etc) in cooperation with the involved units;
- modelling, methodological documentation & submission of estimations, reports and sensitivity analyses under different scenarios, and more specifically of the Dynamic Analysis of the Net Interest Income (NII) and of profitability;
- monitoring of the evolution of NPEs; and
- monitoring of the dynamic evolution of Assets & Liabilities (Dynamic Asset Liability Management (ALM)).

The GSRM Consists of the:

- Business Strategy Risk Monitoring Sector which in turn consists of the Profitability Risk Monitoring Subdivision, the Risk Adjusted Performance Monitoring Subdivision & the Strategic Risk Evaluation & Action Planning Subdivision;
- Scenario Planning & Analysis Sector which in turn consists of the NPE Monitoring Subdivision, the Stress Testing & Sensitivity Analysis Subdivision & the Strategic Risk Evaluation & Unified platform management Subdivision; and
- Dynamic Modelling & Asset Liability Management Subdivision.

Model Validation Unit (MVU)

MVU's responsibility is to:

- establish, manage, and enforce the Model Validation Policy;
- develop new and enhance the existing Model Risk Management standards;
- update the Model Validation Policy based on applicable regulatory guidance and requirements;
- communicate and escalate model risk metrics to the Board of Directors, the BRC, the Group CRO and senior management;
- independently validate and approve new and existing models based on their materiality;
- document material changes in model validation reports; and
- annually recertify material models and review results of on-going monitoring.

The MVU consists of the:

- Market Risk models Validation Subdivision; and
- Credit Risk models Validation Subdivision.

Domestic (Corporate) Credit Division (DCD)

The mission of the DCD is to provide an independent assessment of the domestic corporate credits. DCD's key responsibilities are to:

- participate in the credit approving bodies for corporate clients with the right of veto;
- review all Corporate (incl. SAU) credit proposals, submitted for assessment and approval by the competent credit committees;
- review the outcome of the individual assessment for impairment of lending exposures performed by the Credit Granting units;
- participate in the formulation / revision of the Corporate Credit Policy, the Credit Process Manual and other credit regulations;
- draft and circulate guidelines / instructions for the effective implementation of relevant policies and regulations;
- monitor the implementation and the timely management of the Early Warning alerts for each client as well as the outcome of relevant actions;
- monitor, on a quarterly basis, the proper use of existing internal rating models for corporate clients and review the timely renewal of credit ratings.

Group Retail Credit Division (GRCD)

The mission of the GRCD is to provide an independent assessment of domestic and international retail credit. This is achieved through the following:

- manage the Retail Credit Policy in co-operation with GRCAD;
- form the relevant Retail Banking Regulations;
- participate in the development of Retail products in all stages of the credit cycle (new credit, rescheduling, restructuring) and determine the framework and dynamic controls of the relevant credit criteria;
- set in detail through the frameworks referred in the relevant Regulations the appropriate approval procedure;
- participate in decision-making, in accordance with the approval authority tables, based on the credit proposals of the relevant Credit Granting units, which are solely responsible for the correct presentation of the quantitative and qualitative data contained in those. The GRCD reviews the correct implementation of the Credit Policy and Regulations.

The GRCD consists of the:

- Retail Banking Credit Policy Subdivision (Domestic);
- Applications Assessment Subdivision (Domestic);
- Portfolio Analysis (Domestic) & International Subsidiaries Retail Credit Subdivision; and
- Credit Policy Implementation Review Subdivision.

Group International (Corporate) Credit Division (GICD)

The mission of the GICD is to provide an independent assessment of corporate credit in the Group's Banking Subsidiaries and Branches outside Greece. This is achieved through the following:

- participation in the Credit Committees with veto power;
- review all Corporate credit proposals, submitted for assessment and approval by the competent credit committees;
- participation in the classification process of Obligors;
- participation in the formulation /revision of Corporate Credit Policies and Credit Procedures Manuals.

Each Division/Unit has distinct responsibilities and covers specific types of risk and all Divisions/Units report ultimately to the CRO.

Risk Appetite Framework

Following work during 2018 and early 2019, the Bank recently established a new, enhanced Risk Appetite Framework (RAF) adhering to the best international practices.

GRCAD has in place Risk Appetite Framework (RAF). The objective of the RAF is to set out the level of risk that the Group is willing to take in pursuit of its strategic objectives, also outlying the key principles and rules that govern the risk appetite setting. The RAF constitutes an integral part of the Group's Risk & Capital Strategy and the overall Group risk management framework. The RAF has been developed in order to be used as a key management tool to better align business strategy, financial targets and risk management, and enable a balance between risk and return. It is perceived as a reference point for all relevant stakeholders within the Bank, as well as the supervisory bodies, for the assessment of whether the undertaken business endeavors are consistent with the respective risk appetite. An effective RAF is fundamental to a strong risk management and governance framework. The RAF is not just a Key Performance Indicator (KPI) monitoring system; it constitutes an essential mechanism to support the Board of Director's oversight of the strategy execution within the risk boundaries that the Group is willing to operate. Through RAF, overall aspirations of the Board of Directors are translated to specific statements and risk metrics, enabling planning and execution, while promoting firm-wide thinking. In 2020, the Risk Appetite Framework was updated to reflect the latest developments and to get aligned with the new Business Plan of the Group.

NBG has in place an effective RAF that:

- is formed by both top-down Board of Directors guidance and leadership and bottom-up involvement of senior management and other stakeholders, and understood and practiced across all levels of the Bank;
- incorporates quantitative risk metrics and qualitative Risk Appetite statements that are easy to communicate and assimilate;
- supports Group's business strategy by ensuring that business objectives are pursued in a risk-controlled manner that allows to preserve earnings stability and protect against unforeseen losses;
- reflects the types and level of risk that the Bank is willing to operate within, based on its overall risk appetite and risk profile, sets the guidelines for new products development, as well as the maximum level of risk that the Group can withstand, through the risk capacity;
- contributes in promoting a risk culture across the Group,
- is aligned with other associated key processes of the Bank.

Within this context, the RAF allows:

- to strengthen the ability to identify, assess, manage and mitigate risks;
- to facilitate the monitoring and communication of the Bank's risk profile quickly and effectively.

The assessment of the Bank's risk profile against the RAF is an ongoing and iterative process. With regards to the timing that the RAF update takes place (as part of the regular annual update process), the interaction with other key processes of the Bank is taken into consideration. Specific focus is placed to RAF's interplay with the Business Plan, as the two processes feed into each other: in certain cases the risk appetite is expected to act as backstop / constraint to the Business Plan, while for other cases, the Business Plan provides input for setting risk tolerance levels. RAF is also interrelated with other key processes such as ICAAP, ILAAP, Recovery Plan, NPE Plan.

Risk Profile Assessment / Risk Taxonomy

The ongoing assessment of the Group's risk profile is a key component of the risk management process and comprises a series of specific steps. Every type of risk is analyzed and assessed on the basis of its specific characteristics and the qualitative features (policies, procedures, control mechanisms) applied in its management. A common component is the "internal capital" approach, which enables different types of risks to be captured under the same (and, therefore, comparable) terms, and also enables the risk profile of the Group to be expressed in a single measure ("total internal capital").

The ICAAP framework provides a list of the main risk categories and sub-categories covered by the ICAAP, as well as information regarding their definitions, risk management framework and the methodologies and models used for their assessment. Under ICAAP, the Group plans and monitors its capital adequacy by utilizing two quantification/ estimation approaches for capital requirements:

- Regulatory capital, whereby regulatory rules are used to calculate the capital requirement.
- Internal capital, whereby internal methodologies are used to calculate the capital requirement.

Apart from the ICAAP Framework, NBG has also developed an ICAAP methodological manual to describe in detail the methodologies used by NBG Group for each material risk, aiming to measure internal capital requirements where quantification in the near-to-medium term is deemed possible.

Table 1: Material Risk Types & their treatment

Material Risk Types and their treatment in ICAAP			
	Capital requirements approaches		
Risk Types	Regulatory Capital	Internal Capital	Qualitative Analysis
Credit Risk	√	√	√
Concentration Risk	-	√	√
Settlement Risk	-	√	√
Residual Risk	-	√	√
Securitization Risk	√	√	√
Market Risk	√	√	√
General Interest Rate Risk	√	√	√
Issuer Risk	√	√	√
Country Risk	-	-	√
Equity Risk	√	√	√
Underwriting Risk	-	-	√
Foreign Exchange Risk	√	√	√
Commodity Risk	√	√	√
Counterparty Risk	√	√	√
Gamma Risk & Vega Risk	√	√	√
IRRBB	-	√	√
Operational Risk	√	√	√
Conduct Risk	-	√	√
Information & Communication Technology ("ICT") Risk	-	√	√
Model Risk	-	√	√
Legal Risk	-	√	√
Environmental Risk (Climate Change)	-	√	√
Money Laundering Risk	-	√	√
Reputational Risk	-	-	√
Strategic Risk	-	-	√
Business Risk	-	√	√
Capital Access Risk	-	-	√
Liquidity Risk	-	-	√
Real Estate Risk	-	√	√
Pension Risk	-	-	√
Country Risk	-	√	√

Internal Capital Adequacy Assessment Process (ICAAP)

The guides on ICAAP and ILAAP published by the ECB, which are not legally binding, expect Banks to assess the risks they face, and ensure, in a forward-looking manner, that all material risks are identified, effectively managed and covered by adequate capital and liquidity levels at all times. The ICAAP and ILAAP are, above all, internal processes and remain the responsibility of individual institutions to implement in a proportionate manner. As the ICAAP and ILAAP are expected to play an even greater role in the SREP in the future, Banks are encouraged to continuously improve these processes, taking into consideration the seven ECB principles, below:

- **Principle 1:** The management body is responsible for the sound governance of the ICAAP/ILAAP.
- **Principle 2:** The ICAAP/ILAAP is an integral part of the overall management framework.
- **Principle 3:** The ICAAP/ILAAP contribute fundamentally to the continuity of the institution by ensuring its capital/liquidity adequacy from different perspectives.
- **Principle 4:** All material risks are identified and taken into account in the ICAAP/ILAAP.
- **Principle 5:** For ICAAP the internal capital is of high quality and clearly defined. For ILAAP the internal liquidity buffers are of high quality and clearly defined: the internal stable sources of funding are clearly defined.
- **Principle 6:** ICAAP/ILAAP risk quantification methodologies are adequate, consistent and independently validated.
- **Principle 7:** Regular stress testing aims at ensuring capital/liquidity adequacy in adverse circumstances.

NBG Group has devoted substantial resources to the assessment of its capital adequacy, relating to both risk and capital management. The process is continuously developed and formalized so as to enhance business benefits and support the strategic aspirations of NBG Group.
ICAAP objectives are the:

- proper identification, measurement, control and overall assessment of all material risks;
- development of appropriate systems to measure and manage those risks;
- evaluation of capital required to cover those risks (the “internal capital”).

The term “internal capital” refers to the amount of own funds adequate to cover losses at a specified confidence level within a certain time horizon (both set in accordance with the risk-appetite framework).
The NBG Group has created an analytical framework for the annual implementation of the ICAAP. The framework is formally documented and describes the components of ICAAP at both Group and Bank level in detail. The framework comprises the following:

- Group risk profile assessment;
- Risk measurement and internal capital adequacy assessment;
- Stress testing development, analysis and evaluation;
- ICAAP reporting;
- ICAAP documentation.

Both the Board of Directors and the Bank’s Executive Committees are actively involved and support the ICAAP. Detailed roles and responsibilities are described in detail in the ICAAP Framework document. The BRC approves the confidence interval for “internal capital”, reviews the proper use of risk parameters and/or scenarios where appropriate, and ensures that all forms of risk are effectively covered, by means of integrated controls, specialized treatment, and proper coordination at Group level. The BRC bears ultimate responsibility for the adequacy and proper execution of the ICAAP.
ICAAP’s design and implementation Framework concerns the entire Group’s material risks. The parameters taken into account are the size of the relevant Business Unit/Group’s Subsidiary, the exposure per risk type and the risk methodology and measurement approach for each type of risk.
The identification, evaluation and mapping of risks to each relevant Business Unit/Group subsidiary is a core ICAAP procedure. Risks’ materiality assessment is performed on the basis of certain quantitative (e.g. exposure as percentage of the Group RWAs) and qualitative criteria (e.g. established framework of risk management policies, procedures and systems, governance framework and specific roles and responsibilities of relevant units, limits setting and evaluation).
NBG Group has recognized the following risk types as the most significant within the ICAAP framework:

- Credit
- Market
- Operational
  - Conduct Risk
  - ICT Risk
  - Model Risk
  - Legal Risk
  - Environmental Risk (Climate change)
  - Money Laundering Risk
- Interest Rate Risk in the Banking Book (IRRBB)
- Concentration (Credit)
- Liquidity
- Business
- Strategic
- Reputational
- Real estate
- Capital Access
- Pension

The calculation of NBG Group “Total Internal Capital” consists of two steps: In the first step, internal capital per risk type is calculated on a Group basis. NBG Group has developed methodologies allowing the calculation of the required internal capital for quantifiable risks. These are reassessed on a regular basis and upgraded in accordance with the global best practices. In the second step, internal capital per risk type is summed up to yield the Group’s “Total Internal Capital”.
Capital allocation aims at distributing the “Internal Capital” to the Business Units and Subsidiaries so that ICAAP connects business decisions and performance measurement.
For 2020 the Bank implemented the ICAAP by estimating the relevant internal capital for all major risk types at Group level. Calculations were based on methodologies already developed in the ICAAP Framework. Moreover, NBG Group conducted a bank-wide macro Stress Test exercise, relating to the evolution of its CET I Funds under adverse scenarios (so as to ensure relevance and adequacy of the outcome with a realistic and non-catastrophic forward-looking view of downside tail risks).
In addition to the institution-wide bottom-up solvency stress test, a number of Business risk and portfolio stress tests as well as reverse stress tests and sensitivity analysis were also performed, aiming at increasing the Group’s awareness of its vulnerabilities.
It should be noted that the Bank implements, monitors and uses the ICAAP aiming at achieving full compliance with the EBA and ECB guidelines and standards concerning ICAAP/ILAAP, the Supervisory Review and Evaluation Process (“SREP”) and Stress Testing.

Internal Liquidity Adequacy Assessment Process (ILAAP)

The scope of ILAAP is to assess that the Group has adequate liquidity sources to ensure that its business operations are not disrupted, both in a going concern status, as well as under stressed conditions. Within the ILAAP the Group evaluates its liquidity and funding risk in the context of a management framework of established policies, systems and procedures for their identification, management, measurement and monitoring.

The ILAAP is an integrated process, therefore it is aligned with the Group's risk management framework and takes into account its current operating environment. Moreover, besides describing the Group's current liquidity state, it further serves as a forward-looking assessment, by depicting the prospective liquidity position, upon the execution of the Bank's Funding Plan. Finally, the ILAAP examines the potential impact of the realization of extreme stress scenarios, on the Bank's liquidity position, ensuring that the Group can withstand such severe shocks and continue operating.

New developments within 2020 and 2021 initiatives

New Definition of Default

The EBA Guidelines on definition of default, published in September 2016, with the intention of harmonizing its application among European Financial institutions and improving consistency in the way these institutions estimate regulatory requirements to their capital positions, apply from 1 January 2021, but the EBA encourages institutions to implement changes prior to this date, as they will have to adapt their default identification processes and IT systems.

The three main pillars for the identification of the new DoD are:

- **New Days Past Due counting**

The DPD start to count when both relative and absolute materiality thresholds are breached.

- **New Default 90+**

A delinquency default event shall be deemed to have occurred when both materiality limits are exceeded for more than 90 consecutive days, while the exit criterion is a 3-month probation period for the non-forborne exposures

- **Unlikeliness to Pay Criteria**
  - Default definition is fully aligned with the NPE criteria;
  - Exposures in non-accrued status are directly transferred to a Default/NPE status;
  - Assessment of the loss of a sale of a credit financial obligation; and
  - Avoidance of Restructuring Solutions with low impact in Net Present Value (NPV).

On November 21th, 2018, the ECB published the Regulation on the materiality threshold for credit obligations past due for all SIs within SSM, both for retail and for non-retail exposures. The materiality threshold comprises an absolute component, expressed as a specific maximum amount for the sum of all amounts past due owed by an obligor, and a relative component, expressed as a percentage of the amount of credit obligation past due in relation to the total amount of all on-balance sheet exposures to that obligor. By setting a single materiality threshold, the ECB Regulation improves the comparability of RWAs and defaulted exposures across SIs.

Furthermore, on July 8th 2020, the ECB published a guideline on the definition of the so-called "materiality threshold" for banks that are directly supervised by national supervisors, following a public consultation. The materiality threshold refers to the point at which a bank decides a debtor is in default on its loan. The new definition specifies how national supervisors should exercise their discretion in this regard. The Capital Requirements Regulation had required the competent banking supervision authorities to determine this threshold. The new guideline for less significant banks, is aligned with the threshold defined in the above ECB regulation for significant banks. The alignment of the materiality threshold for credit obligations past due for all banks, regardless of whether they are supervised directly by the ECB or by national supervisors, contributes to the consistent application of supervisory standards to both significant and less significant credit institutions.

The Bank initiated a dedicated project as part of its Transformation Program in order to define detailed tasks and milestones and regularly monitor the progress. The project is utterly executed in-house with the effective collaboration of Risk, Finance and IT functions as well as participation and data input from all involved Units. NBG also conducted a full-blown gap analysis and extensive data processing for bottom-up impact estimation purposes.

The Bank in 2020 completed all necessary actions and tasks, embedding in its IT infrastructure the new technical specifications along with all unlikeliness to pay (UTP) triggers and conducted User Acceptance Testings (UATs) and parallel runs for initiation purposes.

Therefore, as of the first day of the application of the new DoD, the Bank will be aligned with the changes enforced by the new DoD Regulation which will be depicted in the relevant regulatory reporting. Moreover, during 2021, the following relevant actions will take place in order to achieve full integration of the New DoD across the Bank:

- communication of new DoD results to Business Units for their proactive/corrective actions;
- enhancements of internal reporting based on New DoD; and
- re-calibration of IFRS 9 models based on the New DoD.

The Group's preliminary assessments indicate that the changes brought about by the implementation of these new regulatory default provisions will not have a material effect on the consolidated or separate Financial Statements.

BCBS 239

BCBS 239 is the Basel Committee on Banking Supervision's standard with an overall objective to strengthen banks' risk data aggregation capabilities and internal risk reporting practices, in turn, enhancing the Group risk management and decision making processes at banks.

NBG initiated BCBS 239 program on April 2019 to reach the desired target state of compliance with the 3 main pillars, namely Governance and Infrastructure, Risk Data Aggregation Capabilities and Risk Reporting Practices, which embed all the main principles set by the standard. More specifically, the Bank completed the implementation of a set of mitigating actions, such as:

- Development of 40 Service Level Agreements, standardizing data exchanges between Risk Divisions and Non-Risk Divisions or Subsidiaries of the Bank and providing a clear mapping of the data flow and the dependencies among the involved counterparties;
- Review of the IRRBB framework;
- Establishment of a formal adjustment log within Data Governance Tool (AMM) and monitoring functionality;
- Standardization of Risk documentation and alignment to a common template;
- Assessment of NPE reporting process and establishment of quality metrics for the NPE stock;
- Integration of the BCBS 239 self-assessment function.

The Bank further enhances compliance with all 11 overarching principles for effective risk data aggregation, governance and reporting, through actions such as improvement in automation in data management and reporting process, monitoring and documentation of data quality controls.

Developments in CRR2

On April 2020 the European Parliament and the Council proposed a regulation that included amendments related to (i) the early implementation of the finalized Basel III framework, (ii) the new IFRS9 transitional arrangements and (iii) the minimum loss coverage for NPEs, to mitigate the economic impact due to COVID-19 pandemic and support recovery. The main thematic areas were:

- **IFRS 9 transitional adjustments**: Extension of the transitional period for mitigating the impact on own funds from the potential sudden increase in ECL provisions.
- **Risk Weighted Assets:** Lower risk weight to certain loans granted by credit institutions to pensioners or employees with a permanent contract (35% instead of 75%) and to infrastructure finance (75% instead of 100%).
- **Revised supporting factor for small and medium-sized enterprises (SME):** Relinquish of the preferential treatment threshold and assignment of a risk weight ranging from 76.19% to 85% to all SME exposures.
- **CRR (Pillar I) prudential NPE treatment:** Temporary extension of the preferential treatment, of NPEs guaranteed by ECAs regarding minimum loss coverage, to NPEs covered by guarantee schemes that were put in place by Member States as a consequence of the COVID-19 pandemic.
- **Capital:** Inclusion of "prudently valued software assets", not materially affected in a gone concern situation (i.e. the resolution, insolvency or liquidation of an institution), in Common Equity Tier 1 capital, to further support the transition towards a more digitalized banking sector.
- **Leverage ratio:** Exclusion ability of certain central bank exposures from the calculation of leverage ratio and deferral of application of leverage ratio buffer requirement for G-SIIs by one year in line with the revised implementation timeline agreed by the BCBS.

The Bank in 2020 proceeded in all the necessary reforms to timely and effectively implement the above amendments.

Risk Culture Program

Risk Culture is defined as an institution's norms, attitudes and behaviors related to risk awareness, risk taking and risk management, and the controls that shape decisions on risk. Risk Culture influences the decisions of management and employees during the day-to-day activities and has an impact on the risks they assume.

The objective of NBG is to establish a sound and consistent Risk Culture across all units that is appropriate for the scale, complexity, and nature of the Bank's business, in line with regulatory/ supervisory requirements and in accordance with best business practices, based on solid values which are articulated by the Group's Board of Directors and Group's Senior Management.

Group Risk Management Function, as part of the Risk Culture Program, established the Risk Culture Framework (RCF), with the objective to define and document the principles, processes and methodologies that pertain to the identification, measurement, monitoring and reporting of Risk Culture in NBG. The RCF is a key element for the establishment of a sound Risk Culture within the Group. It constitutes an essential tool for the BoD and Senior Management to ensure that the Risk Culture is monitored and measured consistently over time and risk awareness enhancement actions are taken when necessary, while at the same time meets the Supervisory Authorities' expectations on efficient risk governance, based on common perception of risk culture-related issues.

NBG has in place an effective RCF that:

- Is aligned with the core HR values;
- Is formed by both top-down Board and Senior Management guidance and leadership and bottom-up involvement of management and other stakeholders, and is understood and applied across all levels of the Bank;
- Incorporates Risk Culture Principles that are easy to communicate and assimilate;
- Describes the process for the definition and implementation of personnel's risk awareness and corresponding behaviours' enhancement initiatives;
- Incorporates a forward looking view about the Group's Risk Culture profile expectations through setting the corresponding Risk Culture Principles;
- Establishes the governance arrangements for its update and monitoring;

Risk Culture Framework: Foundational Elements and Assessment Indicators

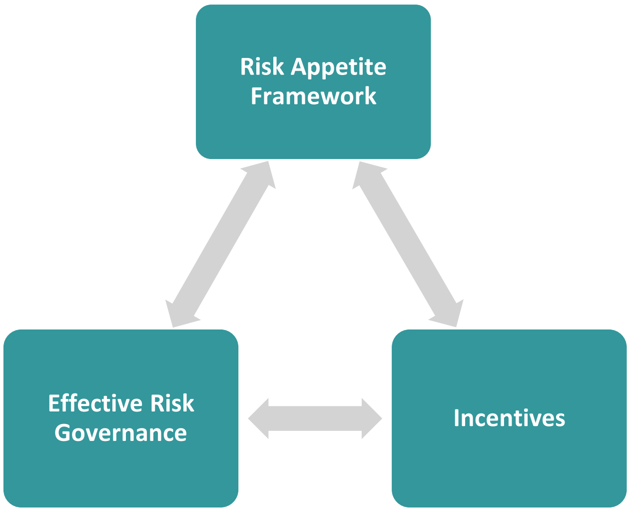


Figure 3: Elements of Risk Culture Program

Figure 4: Risk Culture assessment indicators

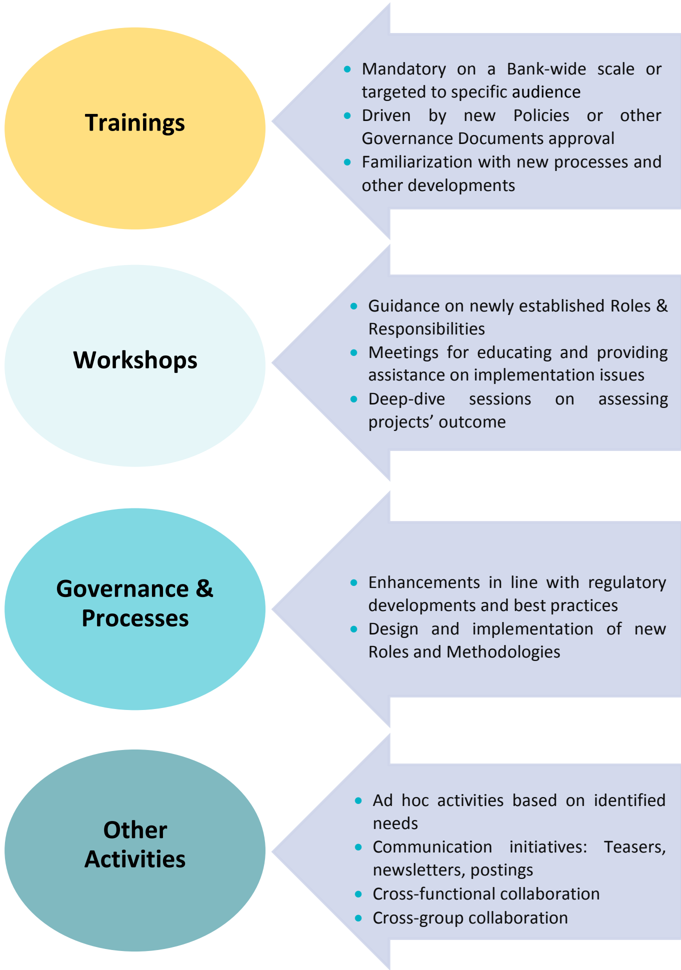


Figure 5: 2021 Risk awareness enhancement initiatives

In 2020, the Risk Culture program:

- Conducted the 1st Bank-wide Risk Culture Survey (based on the RCF assessment indicators) with the objective to:
  - Identify areas of improvement, by tracking positive or negative Risk Culture trends;
  - Plan & prioritize Risk awareness enhancement activities for 2021.
- Developed and implemented a communication campaign relating to Risk Culture Principles and concepts across all Personnel;
- Continued the implementation of the initiative to harmonize NBG Group Subsidiaries' approach with regards to setting, measuring, monitoring, reporting and enhancing Risk Culture;
- Identified, in cooperation with Risk Culture Stakeholders, the plan for the Risk Awareness enhancement initiatives for 2021.

2021 Risk Awareness enhancement initiatives overview

Given NBG's objective to promote risk and control awareness, seeking that all employees are fully aware of the risks arising in the course of their work and have adequate skills for their management, including the establishment of adequate and efficient controls, the Risk Culture Stakeholders will proceed with the implementation of several initiatives, consisting of the following:

Market Risk

In order to enhance the robustness and completeness of the Bank's internal model for the calculation of the Market Risk capital requirements and in line with the relevant obligation set in ECB's Final Decision on Market Risk TRIM, the GFLRMD finalized the implementation for the inclusion of volatility risk (Vega risk) in NBG's Value-at-Risk (VaR) model, in Q3 2020. All the relevant work and the respective results were reviewed by the Model Validation Unit and approved by the Bank's senior bodies. GFLRMD officially applied to the SSM for the inclusion of Vega risk in its internal model, on 9 October 2020.

Additionally, a major project initiative aimed at aligning NBG's market risk practice to the latest Regulatory Standard on market risk is currently in progress. This is a significant undertaking, which will affect the Bank's market risk infrastructure and procedures. In this context, the GFLRMD completed the implementation of the standardized approach under FRTB (SA-FRTB) in the current risk platform, supplemented by an aggregation tool purchased from the same provider, in 2020. The respective results were presented to the SSM, as well as to the Bank's Board Risk Committee. The standardized method serves as a fallback approach and as a benchmark to the internal model outcome, and therefore is compulsory for all banks.

The projects which are in progress and are related to Market Risk are the following:

Implementation of the new Market Risk standard (Fundamental Review of the Trading Book - "FRTB")

Following the completion of the implementation of SA-FRTB, the GFLRMD is currently working on the implementation of the internal model approach (IMA-FRTB), which is a major undertaking in terms of IT infrastructure, data migration and capital allocation strategies for the Bank.

Implementation of the Standardized Approach for measuring Counterparty Credit Risk (SA-CCR) under CRR2

SA-CCR is an exhaustive, more risk-sensitive, standardized approach for the calculation of counterparty credit risk capital requirements. The implementation of the revised regulatory framework is in progress and is expected to be complete within the first six months of 2021.

Interest Rate Risk in the Banking Book

The Group has recently upgraded its IRRBB measurement capabilities, through the implementation of a new IRRBB calculation engine. This project initiative completely revamped the NBG's IRRBB risk management capabilities, including both changes in its target operating model and significant investment in related IT infrastructure and processes. The new infrastructure is fully operational since March 2019 and has been used to produce Regulatory and Internal IRRBB Reports since June 2019, in line with the introduction in the EU jurisdiction of new IRRBB management Guidelines by the European Banking Authority.

Updated IRRBB policy and methodology documents were approved by the BRC in September 2020. These documents reflect the methodological and processing overhaul of NBG's IRRBB calculation capabilities through the delivery of the new calculation engine in 2019, as well as current best practices in the area of IRRBB management. The new Policy document includes the definition of IRRBB limits on earnings risk measures (NII sensitivity), in line with the latest Regulatory Guidelines. The newly established limit structures are scheduled to be introduced in the upcoming update of the Bank's Risk Appetite Framework.

A new behavioral model of the maturity and repricing characteristics of deposits without specific maturity (Non-Maturing Deposits – NMD) has been developed and rolled out to the new IRRBB calculation engine in 2020. The model was developed internally, utilizes data sourced from the Bank's Data Warehouse, and as such its assumptions and segmentation characteristics are calibrated to reflect NBG's customer base and business model.

A model of the interest rate sensitivity of NPEs has also been rolled out to the newly developed IRRBB calculation engine in 2020, in line with Regulatory Requirements.

Finally, the initial validation of the new IRRBB model framework has been completed in 2020, with the model granted full approval status for risk management purposes by the Bank's independent Model Validation Unit.

ESG Risk Governance

Climate change and the response to it by the public sector and society in general have led to an increasing relevance of environmental, social and governance (ESG) factors for financial markets. It is, therefore, essential that financial institutions are able to measure and monitor the ESG risks in order to deal with transition and physical risks.

In September 2020, the European Banking Authority (EBA) published an online survey to receive input from credit institutions on their practices and views in the area of disclosure of information on environmental social governance (ESG) risks. The survey, which is addressed to large credit institutions that will be required to disclose prudential information on ESG risks, aims to support the EBA's policy work on Pillar 3 disclosure and its wider efforts to develop a robust policy framework in the area of sustainable finance.

The disclosure of information on ESG risks is one of the key components in the policy framework of sustainable finance. This online survey is part of the EBA's work to develop draft implementing technical standards (ITS) on Pillar 3 disclosure of prudential information on ESG risks by institutions. It will also be used to monitor the short-term expectations specified in the EBA Action Plan on Sustainable Finance, including the request for institutions to identify metrics, covering a green assets ratio, that provide transparency on how they are embedding climate change related risks into the organization.

On 14 January 2020, the Commission published its Sustainable Europe Investment Plan, outlining the strategy to mobilise the EUR 1 trillion in investment necessary to achieve the 2050 climate neutrality goal, through a mix of public and private funding from a variety of sources, including the EU budget, the Invest EU programme and gradually transforming the European Investment Bank (EIB) into a climate bank. The plan also aims at creating an enabling framework for private investors to identify and allocate funds in sustainable products and activities, as well as, support for the public sector and local administrations.

In June 2020, the EC welcomed the adoption by the European Parliament of the Taxonomy Regulation – a key piece of legislation that will contribute to the European Green Deal by boosting private sector investment in green and sustainable projects. It will help create the world's first-ever "green list" – a classification system for sustainable economic activities – that will create a common language that investors can use everywhere when investing in projects and economic activities that have a substantial positive impact on the climate and the environment. By enabling investors to re-orient investments towards more sustainable technologies and businesses, this piece of legislation will be instrumental for the EU to become climate neutral by 2050.

The EBA, in November 2020, also published a Discussion Paper on Environmental, Social and Governance (ESG) risks management and supervision aiming to collect feedback for the preparation of its final report on the topic. The Discussion Paper provides a comprehensive proposal on how ESG factors and ESG risks could be included in the regulatory and supervisory framework for credit institutions and investment firms.

The EBA sees the need for enhancing the incorporation of ESG risks into institutions' business strategies and processes and proportionately incorporating them into their internal governance arrangements. This could be done by evaluating the long-term resilience of institutions' business models, setting ESG risk-related objectives, engaging with customers and considering the development of sustainable products. Adjusting the business strategy of an institution to incorporate ESG risks as drivers of prudential risks should be considered as a progressive risk management tool to mitigate the potential impact of ESG risks.

In November 2020, the European Central Bank (ECB) published a report which finds that banks are lagging behind on their climate-related and environmental risk disclosures. While there has been some improvement since the previous year, banks need to make significant efforts to better support their disclosure statements with relevant quantitative and qualitative information.

On the same day it published its guide on climate-related and environmental risks following a public consultation. The guide explains how the ECB expects banks to prudently manage and transparently disclose such risks under current prudential rules.

The ECB will follow up with banks in two concrete steps. In early 2021 it will ask banks to conduct a self-assessment in light of the supervisory expectations outlined in the guide and to draw up action plans on that basis. The ECB will then benchmark the banks' self-assessments and plans, and challenge them in the supervisory dialogue. In 2022 it will conduct a full supervisory review of banks' practices and take concrete follow-up measures where needed.

In line with the growing importance of climate change for the economy and increasing evidence of its financial impact on banks, the ECB will conduct its next supervisory stress test in 2022 on climate-related risks.

In January 2021, the European Central Bank (ECB) announced the setting up of a climate change center to bring together the work on climate issues in different parts of the bank. This decision reflects the growing importance of climate change for the economy and the ECB's policy, as well as the need for a more structured approach to strategic planning and coordination.

Green Banking

In addition, the Bank launched in 2020 the following green banking products, which contribute to environmental protection:

- Loans for participation in the "Energy-Saving at Home II" program co-funded by HDB (ex. ETEAN S.A.), on favorable terms for energy improvements in homes. In 2020, 1,380 of such loan applications were approved of amount €10 million, while 2,070 loans were disbursed corresponding to a total of €13 million.
- "Green Loan": a loan granted under favourable terms and conditions for financing the purchase and installation of energy-saving equipment and new hybrid technology cars.
- "Estia Green Home" loan for the purchase, repair or construction of energy upgraded homes.
- For yet another consecutive year the Bank contributed to the country's efforts to improve its environmental footprint by financing RES projects worth €510 million.
- "NBG Loan for Climate Action Program": Within the context of enhancing financial support for investments contributing to the delivery of climate action objectives, National Bank of Greece has entered into an agreement with the EIB to take out a loan of €50 million in the context of the NBG Loan for Climate Action & Female Empowerment Program, part of which (i.e. €35 million) will be used to finance Greek SME and MidCap investment plans contributing to the delivery of climate action objectives. The program's objective is to enhance access by SMEs and MidCaps to bank financing on very favorable terms for the implementation of investment plans and, specifically, generation of energy from renewable energy sources (RES), such as solar energy, biomass, biogas, hydroelectric energy, wind energy or other forms of RES.

NBG demonstrates its commitment to supporting the green economy and its strategic direction as the bank for energy. It completed successfully the placement of the first green senior bond in the Greek market, totalling €500 million. The transaction also marks the first issue of a senior bond by a Greek bank since 2015. According to International Capital Market Association (ICMA) principles for green bonds, based on which the transaction was issued, NBG is contractually committed to channeling all the funds raised from the sale of the bond to financing projects related to the green economy. It should be noted that NBG already maintains a high share (40%) in the Renewable Energy Market – a level that is expected to strengthen further. The financing of projects in the energy sector, and above all in renewable energy, is a strategic goal of the bank, which targets financing of €3 billion over the next 3 years. Climate-related Green Bond Ratio: 51.9%.

Code of Ethics / Whistleblowing Policy

Extensive information about the Bank's Code of Ethics, Whistleblowing Policy and other items regarding sound Corporate Governance can be found in the Corporate Governance Statement section of the Bank's Annual Financial Report for 31.12.2020 www.nbg.gr (section: Investor Relations / Financial Infromation).

The Code of Ethics is available on the Bank's website www.nbg.gr (section: Group / Corporate Governance / Regulations and Principles). The Code was updated in 2020.

The Bank's website (section: Group / Corporate Governance / Contact / Contact Audit Committee) also provides the contact information for the submission of confidential reports.

4.2 Credit Risk

4.2.1 Credit granting processes and controls

Credit risk is the risk of financial loss relating to the failure of a borrower to honor its contractual obligations. It arises in lending activities as well as in various other activities where the Group is exposed to the risk of counterparty default, such as its trading, capital markets and settlement activities. Credit risk is the largest single risk the Group faces. The Credit risk processes are conducted separately by the Bank and each of its subsidiaries. The credit risk procedures established by the subsidiaries are coordinated by the GRCAD.

The Group's credit granting processes include:

- Credit-granting criteria based on the particular target market, the borrower or counterparty, as well as the purpose and structure of the credit and its source of repayment;
- Credit limits that aggregate in comparable and meaningful manner different types of exposures at various levels;
- Clearly established procedures for approving new credits as well as the amendment, renewal and re-financing of existing
- credits.

The Group maintains on-going credit administration, measurement and monitoring processes, including in particular:

- Documented credit risk policies;
- Internal risk rating systems;
- Information systems and analytical techniques that enable measurement of credit risk inherent in all relevant activities.

The Group's controls implemented for the above processes include:

- Proper management of the credit-granting functions;
- Periodical and timely remedial actions on deteriorating credits;
- Independent, periodic audit of the credit risk management processes by Group Internal Audit Division, covering in particular the credit risk systems/models employed by the Group.

Additionally, the GRCAD measures and monitors credit risk on an on-going basis through documented credit risk policies, internal rating systems, as well as information systems and analytical techniques that enable measurement of credit risk inherent in all relevant activities. Thus, the Group achieves active credit risk management through:

- The application of appropriate limits for exposures to a particular single or group of obligors;
- The use of credit risk mitigation techniques;
- The estimation of risk adjusted pricing for most products and services;
- A formalized validation process, encompassing all risk rating models, conducted by the Bank's independent MVU.

4.2.2 Credit Policy for Corporate Portfolios

The Credit Policies for the Corporate portfolios of the Bank and its Subsidiaries ("the Subsidiaries") present the fundamental policies for the identification, measurement, approval and monitoring of credit risk related to the Corporate Portfolio and ensure equal treatment for all obligors.

The Corporate Credit Policy of the Bank is approved by the Board of Directors (BoD) upon recommendation of the Board Risk Committee (BRC) following proposal by the Group CRO to the BRC and the Executive Committee and is reviewed on an annual basis and revised whenever deemed necessary and in any case every two years.

Exceptions to the Corporate Credit Policy are approved by the BoD upon recommendation of the BRC following proposal by the Group CRO to the BRC and the Executive Committee. All exceptions and their justification are duly recorded and have either an expiry date or a review date.

The Credit Policy of each Subsidiary is approved by the competent local Boards / Committees, following a recommendation by the responsible Officers or Subsidiaries' Bodies, according to the decisions of the Bank and the provisions of the Credit Policies. Each proposal must bear the prior consent of the Group Chief Credit Officer (CCO) or the Head of NBG's Group International Credit Division in cooperation with the Head of NBG's Group Risk Control and Architecture Division (GRCAD) for issues falling under their responsibility. The subsidiaries' Credit Policies are reviewed on an annual basis and revised whenever deemed necessary and in any case every two years.

Any exception to the Credit Policies of the Subsidiaries is ultimately approved by the Group CCO, or the Head of NBG's Group International Credit Division in cooperation with the Head of NBG's Group Risk Control and Architecture Division, for issues falling under their responsibility. All exceptions and their justification are duly recorded and have either an expiry date or a review date.

4.2.3 Credit Policy for Retail Banking

The Credit Policy for the Retail Portfolio (Credit Policy) sets out the fundamental principles and the minimum rules and conditions for the control (identification, measurement, approval, monitoring and generation of management information) of the credit risk deriving from retail financing, both at Bank and Group level.

The Credit Policy is designed in such a manner as to be an integral part of the Risk Appetite Framework, meeting the requirements of the current legal and regulatory framework and in any case, ensures equal treatment for all counterparties.

Its main scope is to enhance, guide and regulate the effective and adequate management of credit risk, thus achieving a viable balance between risk and return.

All credit risk control procedures, always in compliance with the Credit Policy, are set out in the Procedures and Management Regulation Manuals of the relevant Retail Divisions. These procedures are subject to amendments, which facilitate the Bank's alignment with the business environment.

The Retail Regulations are made to serve three basic objectives:

- to set the framework for basic credit criteria, policies and procedures;
- to consolidate Retail Credit policies of the Group; and
- to establish a common approach for managing Retail Banking risks.

The Credit Policy is approved by the Board of Directors of the Bank (BoD) upon the recommendation of the Board Risk Committee (BRC), following proposal by the General Manager of Group Risk Management (Chief Risk Officer), to the Executive Committee and the BRC. Credit policy is reviewed on an annual basis and revised whenever deemed necessary and in any case at least every two years

The Retail Credit Policy of each Subsidiary is approved and can be amended or revised by the competent local Boards/Committees,

following a recommendation by the responsible Officers or Subsidiaries' Bodies, according to the decisions of the Bank and the provisions of the Credit Policies. Each proposal must bear the prior consent of the Group CCO, or the Head of NBG's Group Retail Credit Division in cooperation with the Head of NBG's Group Risk Control and Architecture Division for issues falling under their responsibility. The subsidiaries' Credit Policies are subject to periodical revision.
The NBG Group Retail Credit Division reports directly to the Group CCO. Its main task is to evaluate, design and approve the credit policy that governs the retail banking products, both locally and abroad. Furthermore, the Division closely monitors the consistent implementation of both credit policy provisions and credit granting procedures.
Through the implementation of the Credit Policy, the evaluation and estimation of credit risk, for new as well as for existing products, are effectively facilitated. The ongoing assessment of the credit facilities is considered as an integral part of the credit risk monitoring.
NBG's Senior Management is regularly informed on all aspects regarding the Credit Policy. Remedial action plans are set to resolve the issues, whenever necessary, within the risk appetite and strategic orientation of the Bank.

4.2.4 Concentration Risk

The Bank manages the extension of credit, controls its exposure to credit risk and ensures its regulatory compliance based on an internal limits system. The GRCAD is responsible for limits setting, limits monitoring and regulatory compliance.
The fundamental instruments for controlling Corporate Portfolio concentration are Obligor Limits reflecting the maximum permitted level of exposure for a specific Obligor given its Risk Rating, and sector limits that set the maximum allowed level of exposure for any specific industry of the economy; industries are classified in groups on the basis of NACE (General Industrial Classification of Economic Activities within the European Communities) codes. Sector limits constitute part of the Bank's Risk Appetite Framework and are revised at least annually. Excesses of the Industry Concentration Limits should be approved by the Board Risk Committee following a proposal of the General Manager of Group Risk Management (CRO). Any risk exposure in excess of the authorized internal Obligor Limits must be approved by a higher level Credit Approving Body, based on the Credit Approval Authorities as presented in the Corporate Credit Policy. Like Sector limits, Obligor Limits are subject to BRC approval on an annual basis.
Credit risk concentration arising from a large exposure to a counterparty or group of connected clients whose probability of default depends on common risk factors is monitored, through the Large Exposures and Large Debtors reporting framework.
Finally, within the ICAAP, the Bank has adopted a methodology to measure the risk arising from concentration to economic sectors (sectoral concentration) and to individual companies (name concentration). Additional capital requirements are calculated, if necessary, and Pillar 1 capital adequacy is adjusted to ultimately take into account such concentration risks.

4.3 Counterparty Credit Risk

Counterparty Credit Risk (CCR) stems from OTC derivatives and other interbank secured and unsecured funding transactions and is due to the potential failure of a counterparty to meet its contractual obligations.
More specifically, the framework for managing CCR that pertains to Financial Institutions (FIs) is established and implemented by the GFLRM Division. It consists of:

- Measuring the exposure per counterparty, on a daily basis;
- Establishing the respective limits per counterparty;
- Monitoring the exposure against the defined limits, on a daily basis.

The methodology for measuring exposure to a FI depends on the characteristics of the transaction. Specifically, unsecured interbank placements produce an exposure that is equal to the face amount of the transaction, whereas secured interbank transactions and OTC Derivatives have Pre-Settlement Risk, which is measured through each product's Credit Equivalent Factors (CEFs), as described in the Counterparty Credit Risk Framework.
For the efficient management of CCR, the Bank has established a framework of counterparty limits. These limits are based on the credit rating of the financial institutions as well as the product type. Credit ratings are provided by internationally recognized rating agencies, in particular Moody's and Standard & Poor's. According to the Bank's policy, if the agencies' evaluations diverge, the lower (worse) credit rating will be considered. The limit-framework is revised periodically, according to business needs and the prevailing conditions in the international and domestic financial markets.
Counterparty limits apply to all financial Instruments in which the Treasury Division is active in the interbank market. Subsequently, all limits are monitored by GFLRM on a daily basis.
The Bank seeks to further mitigate CCR by standardizing the terms of the agreements with counterparties through ISDA and GMRA contracts that encompass all necessary netting and margining clauses. Credit Support Annexes (CSAs) have also been signed with almost all active FIs, so that net current exposures are managed through margin accounts, on a daily basis, by exchanging mainly cash or debt securities as collateral.
Moreover, the policy of the Bank is to avoid taking positions on derivative contracts where the values of the underlying assets are highly correlated with the credit quality of the counterparty, i.e. avoid wrong-way risk.
Finally, the current Bank's rating has already activated the contract clauses against downgrading. Therefore a further expansion of the existing margins triggered by the Bank's rating downgrade is not expected.

4.4 Market Risk

Market risk is the current or prospective risk to earnings and capital arising from adverse movements in interest rates, equity prices, commodity prices and exchange rates or their levels of volatility. The Group engages in moderate trading activities in order to enhance profitability and service its clientele. These trading activities create market risk, which the Group seeks to identify, estimate, monitor and manage effectively through a framework of principles, measurement processes and a valid set of limits that apply to all of the Group's transactions. The most significant types of market risk for the Group are interest rate, equity and foreign exchange risk.

- **Interest Rate Risk** is the risk related to the potential loss on the Group's portfolio due to adverse movements in interest rates. Interest rate risk mainly stems from the interest rate, over-the-counter (OTC) and exchange traded derivative transactions, as well as from the trading and the HTCS bond portfolios.
  The most significant contributor to market risk in the Group is the Bank. More specifically, the Bank maintains a portfolio of interest rate swaps (IRSs) and other IR related OTC transactions, as well positions in exchange traded bond and interest rate futures, mainly as a means of hedging and to a lesser extent for speculative purposes. Additionally, the Bank

retains a portfolio of Greek government bonds and T-Bills, as well as positions in other European Union (EU) sovereign debt and European Financial Stability Fund (EFSF) issues. Also, it holds moderate positions in Greek and international corporate bonds. Overall, NBG has moderate exposure to interest rate risk in the Trading Book, while it enters into IRS transactions in order to mitigate the interest rate risk of the bonds classified in the Banking Book.

- **Equity Risk** is the risk related to the potential loss due to adverse movements in the prices of stocks and equity indices. The Group holds a limited portfolio of stocks, the majority of which are traded on the Athens Exchange (the ATHEX) and retains positions in stock and equity index derivatives traded on the ATHEX, as well as, on international exchanges. The cash portfolio comprises of trading (i.e. short-term) and held to collect and sell (i.e. long-term) positions. The portfolio of equity derivatives is mainly used for the hedging of equity risk arising from the Group's cash position and equity-linked products offered to customers and to a lesser extent for proprietary trading. The equity risk undertaken by the rest of the Group's subsidiaries is insignificant.
- **Foreign Exchange Risk** is the risk arising from fluctuations of foreign exchange rates and/or their implied volatility and stems from the Group's Open Currency Position (OCP). The OCP primarily arises from foreign exchange spot and forward transactions. The OCP is distinguished between Trading and Structural. The Structural OCP contains all of the Bank's assets and liabilities in foreign currency (for example loans, deposits, etc.), along with the foreign exchange transactions performed by the Treasury Division. The Bank trades in all major currencies, holding mainly short-term positions for trading purposes and for servicing its institutional/corporate, domestic and international clientele. The subsidiaries of the Group bear minimal foreign exchange risk.

The Bank uses market risk models and dedicated processes to assess and quantify its portfolio market risk, based on best practice and industry-wide accepted risk metrics. More specifically, the Bank estimates the market risk of its Trading and HTCS portfolios, using the Value-at-Risk (VaR) methodology. The VaR estimates are used both for internal management and regulatory purposes. In order to verify the predictive power of the VaR model, the Bank conducts back-testing on a daily basis.

The Bank has also established a framework of VaR limits in order to control and manage the risks to which it is exposed in a more efficient way. These limits are based on the Bank's Risk Appetite, as outlined in the Risk Appetite Framework (RAF), the anticipated profitability of the Treasury, as well as on the level of the Bank's own funds (capital budgeting), in the context of the Group strategy. The VaR limits refer not only to specific types of market risk, such as interest rate, foreign exchange and equity, but also to the overall market risk of the Bank's trading and HTCS portfolios taking into account the respective diversification between portfolios. Moreover, the same set of limits are used to monitor and manage risk levels on the Trading book, on an overall basis and per risk type, since this is the aggregation level relevant for the calculation of the own funds requirements for Market Risk under the Internal Model Approach (IMA).

All key principles that govern the Bank's activities in the financial markets, along with the framework for the estimation, monitoring and management of market risk are incorporated in the Bank's Market Risk Policy ("Policy"). The Policy is established to evidence the Bank's commitment to develop and adhere to the highest standards for assessing, measuring, monitoring and controlling market risk arising from trading and non-trading activities. The Policy has been approved by the Board Risk Committee and is reviewed and updated on a regular basis, or when deemed necessary. Additionally, the VaR model as well as the processes followed by the GFLRM Division for the measurement and monitoring of Market Risk are described in the VaR/sVaR Model Methodology document, which is subordinate to the Market Risk Management Policy and is subject to changes, in accordance with amendments to the Policy.

The operation of the market risk management unit as a whole, including the VaR calculation framework, have been thoroughly reviewed and approved by the Bank of Greece, while the Group's Internal Audit Division assesses the effectiveness of the relevant internal controls on a periodic basis. Furthermore, the adequacy of the market risk management framework, as well as the appropriateness of the VaR model used for the calculation of the Bank's capital requirements, were successfully reassessed by the SSM during the on-site investigation in the context of the Market Risk TRIM. According to ECB's final Decision, NBG may continue calculating the own funds requirements for general market risk with the internal model approach, which verifies the robustness of the Bank's Market Risk management model.

NBG employs a three-line of defense framework, as per the NBG Risk Strategy, to monitor market risk and comply with market risk limits. The first line of defense is at the risk-taking level, where NBG's various market risk taking Business Lines are responsible to monitor and maintain compliance with the set market risk limits, on a continuous basis. The GFLRM Division constitutes the second line of defense, and is responsible to monitor and report NBG's market risk exposures and market risk limits utilization. Finally, NBG's Internal Audit is responsible to validate that the Group, as a whole, as well as the various departments individually, are compliant with the set market risk policies and procedures.

Regarding NBG Group's subsidiaries, they have independent market risk management units and report their positions and other market risk metrics to NBG's Market Risk Management Subdivision on a daily basis. However, given the low materiality and limited market risk exposure of NBG's subsidiaries, as well as the current NBG Group divestment plan, these entities do not use internal models for market risk capital calculations. To this extent, NBG uses internal models for monitoring market risk and calculates capital requirements only at a Bank level and subsequently consolidates the subsidiaries, at a Group level.

4.5 Operational Risk

4.5.1 Introduction

The Bank acknowledges its exposure to operational risk stemming from its day-to-day business activities. It also acknowledges the need for managing this type of risk, as well as the necessity for holding adequate capital in order to deal with any potential exceptional operational risk loss.

The Bank has established and maintains a group-wide, effective framework for the management of operational risk (Operational Risk Management Framework - ORMF). This Framework complies with regulatory requirements and is reviewed regularly.

4.5.2 Definition and objectives

The Bank defines operational risk (OR) as the risk of loss resulting from inadequate or failure in internal processes, people and systems or from external events. This definition includes legal risk, excludes

strategic and business risk, but takes into consideration the reputational impact of Operational Risk.
The main subcategories of operational risk are:

- **Legal Risk** is the risk of loss caused to a business, in this instance the Bank, which is mainly due to one of the following causes: i) irregular transaction, or ii) claim (including defence-claims or counterclaims) raised or any other event that follows and leads to the establishment of legal grounds for liability on the part of the credit institution or another kind of loss (e.g. because of termination of contract), or iii) failure to adopt the necessary measures for the protection of assets owned by the institution, or iv) change in the legislation.
- **Compliance risk** refers to the risk that NBG, in the course of conducting its business or risk management activities, may be found, in circumstances of a breach of the regulatory framework as defined in certain international, EU and Greek laws and regulations, as well as the risk deriving from legal or regulatory sanctions, material financial loss or loss of reputation the Bank might suffer as a result of such breach. Consequently, the Bank's reputation, business model and financial position are negatively affected.
- **Conduct risk** as the risk of loss arising from inappropriate supply of financial services including cases of wilful or negligent misconduct, e.g. mis-selling, conflicts of interest, pushed cross-selling, automatic renewals of products or exit penalties etc. It also relates to corruption risk, i.e. the risk deriving from abuse of entrusted power by the Group's executives or employees with the purpose of private gain.
- **Information & Communication Technology risk**, which is the risk of loss due to breach of confidentiality, failure of integrity of systems and data, inappropriateness or unavailability of systems and data or inability to change IT within a reasonable time and costs when the environment or business requirements change. This includes security risks resulting from inadequate or failed internal processes or internal/external cyber-attacks or inadequate physical security.
- **Model risk**, which is the potential loss that may occur as a consequence of decisions that could be principally based on the output of all models deployed, due to errors in the development, implementation or use of such models. A model refers to a quantitative method, system or approach that applies statistical, economic, financial or mathematical theories, techniques and assumptions to convert input data into quantitative estimates.
- **Outsourcing Risk,** which is the risk that engaging a service provider, by virtue of an arrangement of any form between the Bank and a service provider, to perform a process, a service or an activity that would otherwise be undertaken by the Bank itself, adversely impacts the Bank's performance and risk management.

Operational risk is inherent to all products, activities, processes and systems and is generated in all business and support areas. For this reason, all employees are responsible for managing and controlling OR generated in their sphere of action. Consequently, managers throughout the Group are accountable for operational risks related to their business area, and responsible for managing these risks within their risk appetite, in accordance with the ORMF.
The Bank's objective is to effectively identify, measure, evaluate, monitor, control and mitigate its operational risk. In 2020 the Bank continued to drive the improvement of its OR management through a range of initiatives. Among these, the most significant are:

- Segment and Unit Risk & Control Officers were established and appointed in the role of the 1st Level of Defence throughout the General Divisions of the Bank;
- Operational Risk Management Framework was reviewed and its component Policy & Guideline documents (Risk & Controls Self-Assessment (RCSA), KRIs, Internal Events, Scenario Analysis) were enhanced and issued;
- an evaluation of the Group's main risks (Top Operational Risks) with the participation of the Bank's Executive and Senior Management was conducted for a second consecutive year ;
- the RCSA methodology was updated and enhanced, and following three pilot projects, it was launched at a Group level;
- a bank-wide KRI Dashboard consisting of approximately 300 indicators was developed and approved by the Bank's Operational Risk Committee and the CEO;
- the subscription, at a Group level, to an external database that enables real-time access to publicly available Operational Risk related news, articles, publications, surveys and reports was completed. Access was provided to 177 users at a Group level;
- Group Operational Risk delivered several training sessions to all Segment Risk and Control Officers (SRCOs)/ Unit Risk & Control Officer (URCOs) of the Bank. Areas covered include Operational Risk Overview, RCSA, KRIs and Internal Events Management.

4.5.3 Operational risk management framework

The ORMF has been approved by the Board Risk Committee, in order to effectively address operational risks and meet the regulatory requirements (CRR / CRD IV / Basel III).
In 2020 the ORMF was implemented in the Bank and its subsidiaries.
The basic elements of the Bank's ORMF are the following:

- **The Risk and Control Self-Assessment (RCSA) process:** it is a recurring, forward looking process performed on an annual basis aiming at the identification and assessment of the operational risks faced by the Group. The scope of RCSA extends to all business lines, thereby to all business, support or specialized Units;
- **The Internal Events Management process:** NBG requires accurate and timely knowledge of operational risk related internal events and has therefore established an appropriate event management process that covers the event life cycle, comprising the event identification, categorization, analysis, on-going management, remediation actions and reporting;
- **The Key Risk Indicators definition and monitoring process:** NBG defines as Key Risk Indicator any simple or combined data variable, which allows the assessment of a situation exposing the Bank to operational risk, as well as its trend, by monitoring/comparing its values over time. Therefore, KRIs are metrics providing early warning signs, preventing and detecting potential risks and vulnerabilities in the activities of the Bank;
- **The Scenario Analysis process:** NBG defines Risk Scenario as the creation of a potential event or consequence of events that expose the organization to significant operational risks and can lead to severe operational losses. Scenario Analysis is the process that reveals all the long term exposures to major and unusual operational risks which can have substantial negative impacts on the organization's profitability and reputation;
- **The Training Initiatives and Risk Culture awareness actions:** Group Operational Risk Management Division designs and implements training programs on operational risk and the ORMF, the use and implementation of programs, methods and systems as well as other actions aiming at knowledge sharing and the establishment of Operational Risk culture Group-wide.

The Bank uses a Group wide information system (IBM OpenPages) that supports the operational risk management programs and facilitates information and reporting requirements. GORMD participated in the selection process of a new Governance Risk and Compliance (GRC) platform for the Group, as part of the enhancement of the Group's Risk Management and Internal Control System. This GRC tool will be used by OpRisk, Model Validation, Cybersecurity, Compliance, Regulatory Affairs & HFSF Relations, Internal Control and Internal Audit Units. The implementation of the Operational Risk Management module of the GRC platform is under development and is expected to be completed by the end of 2021.

4.5.4 Governance

The ORMF is supported by an appropriate organizational structure with well-defined roles and responsibilities which is based on the three lines of defense model. The ORM Governance aims to ensure that all Bank's stakeholders, including the Board of Directors, Executive and Senior Management and Staff, manage operational risk within a formalized Framework that is aligned to business objectives and compliant with the regulatory requirements.
Governance responsibility for operational risk management resides in the Board Risk Committee (BRC). The BRC reviews and approves the Bank's operational risk appetite and tolerance, is informed on material risks and exposures and sets the tone and the expectations of the Board.
GORMD also reports to the Operational Risk Management Committee (ORCO), a sub-committee of the Executive Committee (ExCo). ORCO, that has the overview of the ORMF implementation, meets regularly on a quarterly basis, providing a semi-annual report to the ExCo.
The Chief Risk Officer (CRO) promotes the development and implementation of a consistent Group ORMF and provides overall vision and leadership for the function across the Group.
GORMD is responsible for overseeing and monitoring the risks assessments, providing appropriate tools and methodologies, coordination and assistance to the Business Units and proposing appropriate risk mitigation measures. Furthermore, it regularly reviews the Group Framework in order to ensure that all relevant regulatory requirements are met.
The overall responsibility for the management of Operational Risk relies within the 1st Level of Defense Business Units, that are responsible and accountable for directly identifying, assessing, controlling and mitigating operational risk within their business activities in compliance with the Bank's standards and policies.
Segment and Unit Risk & Control Officer were established and appointed in the main Business Functions/General Divisions of NBG. They act as liaisons to the GORMD and are responsible for coordinating the ORMF implementation, assisting in the development of the culture of operational risk and communicating relevant information throughout to the GORMD.

4.6 Analysis and Reporting

NBG places great emphasis on achieving a high level of quality regarding its risk data and reporting. The three Group Risk Management Divisions (GRCAD, GFLRMD, GORMD) and the independent Model Valuation Unit have developed a comprehensive framework of analysis and reporting, in order to provide the Bank's Board Risk Committee, Senior Management, regulatory authorities, the market and investors with consistent quantitative and qualitative information. Specialized applications are used to produce this analysis, collecting relevant data from the Bank's and Group's core systems (such as loans and credit limits systems, trading position-keeping systems, collateral management system etc.). NBG's software is fully configured to calculate Risk Weighted Assets for the entire Group according to the regulatory approach chosen for each portfolio, in accordance with the current CRR / CRD IV (Basel III) regulatory framework.
Among others, the following are analyzed and reported:

- Capital requirements for Credit Risk, Market Risk, Operational Risk and Counterparty Risk on a solo and on a Group basis;
- Large exposures on a solo and on a Group basis;
- Leverage exposure measure on a solo and on a Group basis,
- Large debtors;
- Quality and vintage analysis of the Bank's and its subsidiaries portfolios;
- Benchmarking of the Bank's Market Risk internal models;
- Daily Liquidity Reports pertaining to the Bank's liabilities, liquidity structure, counterbalancing capacity, as well as subsidiary-funding;
- Quarterly report of the Bank's Value at Risk and P&L results for backtesting purposes;
- Sensitivity analysis of the Bond and Derivatives portfolios on a solo and a Group basis;
- Data regarding RCSA results, Actions mitigating OpRisk status and Operational Risk losses;
- Exposures to Financial Institutions;
- Cross border exposures.

❖ According to **ECB's rating on data quality**, NBG was ranked **1st among its peers** (32 in total) for the period Q3 2019 – Q3 2020. Specifically, the data quality is performed on a quarterly basis for a large amount of regulatory reports submitted by the institutions mostly related to capital adequacy (COREP), financial information (FINREP), liquidity (LCR, NSFR), concentration risk (LE). The basic data quality indicators examined are Punctuality measuring the days of delay from the reports submission, Completeness which checks whether there are missing templates within the reports and Accuracy measuring the number of validation rules failings across all reports. For all the above indicators, NBG ranked as fully compliant and consistently for the last five quarters.

5 REGULATORY OWN FUNDS & PRUDENTIAL REQUIREMENTS

In June 2013, the European Parliament and the Council of Europe issued Directive 2013/36/EU and Regulation (EU) No 575/2013, (known as Capital Requirements Directive IV (CRD IV) and Capital Requirements Regulation (CRR) respectively), which incorporate the key amendments that have been proposed by the Basel Committee for Banking Supervision (known as Basel III). Directive 2013/36/EU has been transported into Greek Law by virtue of Greek Law 4261/2014 and Regulation (EU) No 575/2013 has been directly applicable to all EU Member States since 1 January 2014 and certain changes under CRD IV were implemented gradually.

5.1 Balance sheet reconciliation between financial and regulatory reporting

The table below presents the differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories. References in this table link to the corresponding references in table "Own Funds Structure", identifying balances relating to own funds calculation.

Table 2: EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

€ mio	*Ref*	a Accounting Balance Sheet	b Regulatory Balance Sheet	c Subject to the credit risk framework	d Subject to the CCR framework	e Subject to the securitization framework	f Subject to the market risk framework	g Not subject to capital requirements or subject to deduction from capital
ASSETS								
Cash and balances with central banks		9,175	9,175	9,175				
Due from banks [1 2 3]		3,440	3,440	2,470	(1,258)		(1,580)	
Financial assets at fair value through profit or loss		541	541	24			517	
Derivative financial instruments [2,3]		5,585	5,585	0	5,585		5,561	
Loans and advances to customers	*f*	26,807	26,857	26,701				156
Investment securities		15,055	15,055	15,055				
Investment property		125	125	125				
Investments in subsidiaries		0	0	0				
Equity method investments	*d*	22	22	22				
Goodwill, software and other intangible assets	*c*	282	282	93				*189*
Property and equipment		1,663	1,663	1,663				
Deferred tax assets (DTAs)		4,911	4,911	4,668				*243*
of which: DTAs that rely on future profitability and arise from temporary differences	*e*	*596*	*596*	353				*243*
of which: DTAs that do not rely on future profitability		*4,315*	*4,315*	4,315				
Current income tax advance		338	338	338				
Other assets		2,282	2,290	2,274				*16*
Non-current assets held for sale [4]		7,259	3,885	3,882				*3*
of which: Goodwill and other intangibles	*c*	*0*	*0*	0				
of which: Deferred tax assets that rely on future profitability and arise from temporary differences	*e*	*3*	*3*	*1*				*2*
of which: Deferred tax assets that rely on future profitability and do not arise from temporary differences	*e*	*1*	*1*	*0*				*1*
of which: Equity Method Investments	*d*	*0*	*317*	*317*				
Total assets		**77,485**	**74,169**	**66,490**	**4,327**	**0**	**4,498**	**607**

1. The fair value of OTC derivatives is presented under the Derivative Asset or Derivative Liability line in the Balance Sheet and Derivatives used for Hedge Accounting respectively while the fair value of derivatives with CCPs is netted with the respective cash collateral received or paid to the respective counterparty, and the net amount is presented in the Balance Sheet line "Due from Banks" (column a). On the other hand, in columns (c) and (e) the fair value of derivatives with CCPs is depicted. Respectively for Repos and Reverse repos performed at the same date with the same counterparty and the same maturity date and for almost the same amount, we follow the same netting approach in line with IAS 32 para 42, in the Balance sheet line "Due from Banks". The latter approach is in line with the IFRS accounting framework and in particular with IAS 32 para 42.
2. Items in the trading book portfolio are subject to both Market and Counterparty Credit Risk frameworks.
3. The derivative financial instruments that are subject to the Market Risk framework are those held with a trading intent, thus included in the daily, regulatory, VaR and stressed VaR calculations. The remaining derivative transactions are used either as economic hedges or they are part of an accounting hedge relationship of banking book items.
4. Non-current assets held for sale at 31 December 2020 comprise of Ethniki Hellenic General Insurance S.A, NBG Cyprus Ltd, CAC Coral Ltd and loan portfolio disposals mainly relating to projects Frontier, ICON & Danube.

Table 4: EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories *(continued)*

€ mio	*Ref*	a Accounting Balance Sheet	b Regulatory Balance Sheet	c Subject to the credit risk framework	d Subject to the CCR framework	e Subject to the securitization framework	f Subject to the market risk framework	g Not subject to capital requirements or subject to deduction from capital
LIABILITIES								
Due to banks		12,724	12,724		517			
Derivative financial instruments		3,321	3,321		3,321		2,822	
Due to customers		48,504	48,524				270	
Debt securities in issue		910	910					
Other borrowed funds		60	60					
Deferred tax liabilities		14	15					
Retirement benefit obligations		300	301					
Current income tax liabilities		2	2					
Other liabilities		2,632	2,632					
Liabilities associated with non-current assets held for sale		3,939	602					
Total liabilities		**72,406**	**69,091**		**3,838**		**3,093**	
SHAREHOLDERS' EQUITY								
Share capital		2,744	2,744					2,744
Share premium account		13,866	13,866					13,866
Less: treasury shares		-1	-1					-1
Reserves and retained earnings		-11,550	-11,550					-11,550
Equity attributable to NBG shareholders	***a***	**5,059**	**5,059**					**5,059**
Non-controlling interests	***b***	20	19					20
Total equity		**5,079**	**5,078**					**5,079**
Total equity and liabilities		**77,485**	**74,169**					**5,079**

Table 3: EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements

	€ mio	a **Total**	b Subject to the credit risk framework	c Subject to the CCR framework	d Subject to the securitization framework	e Subject to the market risk framework
1	**Assets carrying value amount under the scope of regulatory consolidation**	**74,169**	**66,490**	**4,327**		**4,498**
2	Liabilities carrying value amount under the regulatory scope of consolidation	69,091		3,838		3,093
3	Total net amount under the regulatory scope of consolidation	5,078	66,490	489		1,405
4	Off-balance-sheet amounts	10,657	715			
5	Differences in valuations					
6	*Differences due to different netting values, other than those already included in row 2*					
7	*Differences due to the effect of IFRS9 transitional arrangement*		*571*			
8	*Differences due to prudential filters*					
9	*Other adjustments related to credit risk mitigation techniques*		*(422)*			
10	**Exposure amounts considered for regulatory purposes**		**67,354**			

5.2 Regulatory vs accounting consolidation

All Group subsidiaries (companies which the Bank controls either directly or indirectly, regardless of their line of business) are consolidated in accordance with International Financial Reporting Standards (IFRS). For further information please refer to Note 2.4 of the 2020 Annual Financial Report.

In accordance with the regulatory requirements for consolidation as defined by the CRR and CRD IV, Group subsidiaries that are classified as banks, financial institutions or supplementary service providers are consolidated under the regulatory scope of consolidation. Subsidiaries that are not fully consolidated for regulatory purposes (insurance entities) are accounted by applying the equity method.

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

Table 4: **EU LI3** - Outline of the differences in the scope of consolidation

Name of entity	Method of accounting consolidation	Method of regulatory consolidation	Description of the entity
National Bank of Greece (Cyprus) Ltd (2)	Full	Full	Financial Institution
NBG Bank Malta Ltd	Full	Full	Financial Institution
Stopanska Banka A.D.-Skopje	Full	Full	Financial Institution
National Securities S.A.	Full	Full	Capital Markets & Investment Services
National Securities Co (Cyprus) Ltd (1)	Full	Full	Capital Markets Services
EKTENEPOL Construction Company S.A.	Full	Full	Construction Company
Ethniki Factors S.A.	Full	Full	Factoring Company
Ethniki Leasing S.A.	Full	Full	Financial Leasing
NBG Leasing S.R.L.	Full	Full	Financial Leasing
Probank Leasing S.A. (3)	Full	Full	Financial Leasing
NBG Finance (Dollar) Plc (1)	Full	Full	Financial Services
NBG Finance (Sterling) Plc (1)	Full	Full	Financial Services
NBG Finance Plc	Full	Full	Financial Services
NBG International Ltd	Full	Full	Financial Services
I-Bank Direct S.A. .	Full	Full	Financial Services
NBG Greek Fund Ltd	Full	Full	Fund Management
NBG Asset Management Luxembourg S.A.	Full	Full	Holding Company
NBG International Holdings B.V.	Full	Full	Holding Company
NBG Malta Holdings Ltd	Full	Full	Holding Company
NBG Insurance Brokers S.A	Full	Full	Insurance Brokerage and Other Services
NBG Management Services Ltd	Full	Full	Management Services
NBG Asset Management Mutual Funds S.A.	Full	Full	Mutual Funds Management
NBGI Private Equity Ltd (1)	Full	Full	Private Equity
DIONYSOS S.A.	Full	Full	Real Estate Services
Ethniki Ktimatikis Ekmetalefsis S.A.	Full	Full	Real Estate Services
Hellenic Touristic Constructions S.A.	Full	Full	Real Estate Services
KADMOS S.A.	Full	Full	Real Estate Services
Mortgage Touristic PROTYPOS S.A.	Full	Full	Real Estate Services
NBG Property Services S.A.	Full	Full	Real Estate Services
ARC Management One SRL	Full	Full	Real Estate Services
ARC Management Two EAD	Full	Full	Real Estate Services
Sinepia Designated Activity Company (Special Purpose Entity) (1)	Full	Full	Special Puprose Entity (Securitisation of commercial loans)
Bankteco EOOD	Full	Full	Information Technology Services
Pronomiouchos S.A. Genikon Apothikon Hellados	Full	Full	Warehouse activities
Cac Coral Limited (2)	Full	Full	Debt Collection Company
Ethniki Hellenic General Insurance S.A.(2)	Full	Equity Method	Insurance Services
Ethniki General Insurance (Cyprus) Ltd (2)	Full	Equity Method	Insurance Services
Ethniki Insurance (Cyprus) Ltd (2)	Full	Equity Method	Insurance Services
S.C. Garanta Asigurari S.A.(2)	Full	Equity Method	Insurance – Reinsurance Services
National Insurance Agents & Consultants Ltd (2)	Full	Equity Method	Insurance Brokerage
Social Securities Funds Management S.A.	Equity Method	Equity Method	Associate Company
Larco S.A.	Equity Method	Equity Method	Associate Company
Eviop Tempo S.A.	Equity Method	Equity Method	Associate Company
Teiresias S.A.	Equity Method	Equity Method	Associate Company
Planet S.A.	Equity Method	Equity Method	Associate Company
Pyrrichos Real Estate S.A.	Equity Method	Equity Method	Associate Company
Sato S.A.	Equity Method	Equity Method	Associate Company
Olganos S.A.	Equity Method	Equity Method	Associate Company
Perigenis Business Properties S.A.	Equity Method	Equity Method	Associate Company

(1) Under Liquidation

(2) Companies have been reclassified to Non-current assets held for sale

(3)(The Squeeze out of Probank Leasing S.A. was completed in December 2020.

In addition, participations exceeding 10% in the share capital or voting rights in financial sector entities (including insurance companies) are deducted from Common Equity Tier I capital (CET1) if exceeding threshold rules set in CRR.

There is no NBG Group subsidiary or associate, which is proportionately consolidated for regulatory or accounting purposes.

Based on the current regulatory framework there is no substantial, practical or legal incapacity in capital transfers or payment of obligations between parent Bank and its subsidiaries. The time of full repayment of the subordinated loans, which have already been granted by the parent Bank to its subsidiaries, has been notified to the appropriate Supervisory Authorities and abides by the relative regulations of each country. Potential early prepayment of the above mentioned loans requires prior permission from appropriate Regulatory Authorities.

Perigenis Business Properties S.A.

On 6 July 2020 the Bank participated in the establishment of the entity Perigenis Business Properties S.A. The contribution to the share capital amounted € 14 million and represents a shareholding of 28,5%. The company has been classified as equity method investment.

Probank - M.F.M.C

The liquidation of the entity was completed during the year.

5.3 Structure of own funds

Regulatory capital, according to CRR rules falls into two categories: Tier 1 and Tier 2 capital. Tier 1 capital is further divided into Common Equity Tier 1 (CET1) capital and Additional Tier 1 capital.

CET1 capital includes the Bank's ordinary shareholders' equity, share premium, reserves and retained earnings and minority interest allowed in consolidated CET1.

The following items are deducted from the above:

- positive or negative adjustments in the fair value of financial derivatives used for cash flow hedging;
- fair value gains and losses arising from the institution's own credit risk related to derivative liabilities;
- prudent valuation adjustment calculated according to article 105 of Regulation (EU) No 575/2013;
- goodwill and intangibles;
- deferred tax assets not arising from temporary differences;
- deferred tax assets arising from temporary differences; and significant investments that exceed 10%/17.65% of CET1 filter.

Tier 2 capital includes the issuance of a Tier 2 note, totalling €398 million.

NBG Group's regulatory capital structure is presented in the following table. In Q4 2020 CET1 capital increased to €5,750 million, mainly due to the recognition of the profits for the year and the reduction of the deductions relating to goodwill and intangibles, significant investments and deferred tax assets arising from temporary differences.

Table 5: Own Funds Structure

Group's Own Funds Structure *(€ mio)*	*Q42020*	*Q32020*
Shareholders' Equity per balance sheet	**5,059**	**5,426**
Non-controlling interests	**10**	**10**
Non-controlling interests per balance sheet	*19*	*19*
Non-controlling interests not recognized in CET1	*(9)*	*(9)*
Regulatory Adjustments	**1,116**	**647**
Profit for the period		*(461)*
IFRS9 transitional arrangements	*1,139*	*1,128*
Own credit risk	*(35)*	*(32)*
Prudent valuation adjustment	*(12)*	*(12)*
Cash flow hedging reserve	*40*	*40*
Other	*(16)*	*(16)*
Deductions	**(435)**	**(874)**
Goodwill and intangibles	*(189)*	*(251)*
Significant Investments	*0*	*(170)*
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	*(1)*	*(1)*
Deferred tax assets that rely on future profitability and arise from temporary differences	*(245)*	*(452)*
Common Equity Tier 1 Capital (CET1)	**5,750**	**5,209**
Additional Tier 1 Capital (AT1)	**0**	**-**
Total Tier 1 Capital	**5,750**	**5,209**
Capital instruments and subordinated loans eligible as Tier 2 Capital	**398**	**398**
Deductions	**(50)**	**(50)**
Subordinated loans of financial sector entities where the institution has a sign. Inv. in those entities	*(50)*	*(50)*
Tier 2 Capital	**348**	**348**
Total Regulatory Capital	**6,098**	**5,557**

The main features of capital instruments issued by the Group are presented in the table below.

Table 6: Capital Instruments main features

Capital instruments' main features template			*€ mio*
1	Issuer	National Bank of Greece, S. A. (Greece)	National Bank of Greece S.A.
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement	GRS003003035	XS2028846363
3	Governing law(s) of the instrument	Greek	English law, save that subordination provisions applicable to the Notes and provisions on statutory loss absorption powers will 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
5	Post-transitional CRR rules	Common Equity Tier 1	Tier2
6	Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Solo & Consolidated	Solo & Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Ordinary Shares	Tier 2
8	Amount recognized in regulatory capital (currency in million, as of most recent reporting date)	2,744	400
9	Nominal amount of instrument	2,744 (914,715,153 shares @ €3.00 each)	400
9a	Issue price	-	100%
9b	Redemption price	-	100%
10	Accounting classification	Share Capital	Liability
11	Original date of issuance	Various	18/07/2019
12	Perpetual or dated	Perpetual	Dated
13	Original maturity date	-	18/07/2029
14	Issuer call subject to prior supervisory approval	N/A	Yes
15	Optional call date, contingent call dates, and redemption amount	N/A	18/07/2024
16	Subsequent call dates, if applicable	N/A	No. Call date is one-off
	Coupons / dividends		
17	Fixed or floating dividend/coupon	N/A	Fixed Coupon
18	Coupon rate and any related index	N/A	8.25%. MS (-0.214%) + Reset Margin (+8.464%)
19	Existence of a dividend stopper	N/A	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	partially discretionary	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	partially discretionary	Mandatory
21	Existence of step up or other incentive to redeem	No	No
22	Noncumulative or cumulative	Non cumulative	Non-Cumulative
23	Convertible or non-convertible	Non convertible	Non-Convertible
24	If convertible, conversion trigger (s)	N/A	N/A
25	If convertible, fully or partially	N/A	N/A
26	If convertible, conversion rate	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A
28	If convertible, specifiy instrument type convertible into	N/A	N/A
29	If convertible, specifiy issuer of instrument it converts into	N/A	N/A
30	Write-down features	No	No
31	If write-down, write-down trigger (s)	N/A	N/A
32	If write-down, full or partial	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A
35	Position in subordination hierachy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier 1	The Notes constitute direct, unsecured and subordinated obligations of the Issuer and rank at all times (i) pari passu without any preference among themselves and pari passu with all other present and future subordinated and unsecured obligations of the relevant Issuer which rank or are expressed to rank pari passu with the Subordinated Notes,(ii) junior to present and future obligations of the relevant Issuer in respect of Unsubordinated Notes and Unsubordinated MREL Notes (and all other present and future obligations of the relevant Issuer which rank or are expressed to rank pari passu with Unsubordinated Notes and Unsubordinated MREL Notes) and Senior Non-Preferred Notes (and all other present and future obligations of the relevant Issuer which rank or are expressed to rank pari passu with Senior Non-Preferred Notes) and any other obligations of the relevant Issuer which rank or are expressed to rank senior to the Subordinated Notes, including (where the relevant Issuer is the Bank) deposits of the Bank and (iii) in priority to present and future subordinated and unsecured obligations of the relevant Issuer (A) which rank or are expressed to rank junior to the Subordinated Notes and (B) in respect of the share capital of such Issuer.
36	Non-compliant transitioned features	No	No
37	If yes, specifiy non-compliant features	N/A	N/A

5.4 IFRS 9 impact on own funds

On 12 December 2017 the European Parliament and the Council of the European Union adopted Regulation (EU) 2017/2395 (the "Regulation"), which amended Regulation 575/2013 with Article 473a, allowing credit institutions to gradually apply the impact of the application of IFRS 9 to own funds.

In particular, upon adoption of IFRS 9, credit institutions are allowed to include in the Common Equity Tier 1 capital (CET1), a portion of the increased ECL provisions over a 5-year transitional period starting in 2018. The portion of ECL provisions that can be included in CET1 should decrease over time down to zero to ensure the full implementation of IFRS 9, after the end of the transitional period.

In addition, in accordance with paragraph (4) of the Regulation, if the ECL provisions for Stages 1 and 2 incurred after the first adoption of IFRS 9 are increased, credit institutions are allowed to include the increase in the transitional arrangements.

The percentages of recognition in CET1 of the increased ECL provisions during the 5-year transition period are as follows:

- 0.95 during the period from 01/01/2018-31/12/2018
- 0.85 during the period from 01/01/2019-31/12/2019
- 0.70 during the period from 01/01/2020-31/12/2020
- 0.50 during the period from 01/01/2021-31/12/2021
- 0.25 during the period from 01/01/2022-31/12/2022

The Group has decided to apply the transitional arrangements set out in Article 1 of the aforementioned Regulation, including the provisions of paragraph (4), during the transitional period.

According to the amendments of IFRS9 transitional arrangements (*see section 2.2 Recent Regulatory Developments, p. 11)* the transitional period is extended in order to mitigate the impact on own funds from the potential sudden increase in ECL allowance. More specifically, the reference date for any increase in ECL allowance (the "dynamic component"), is moved to 1 January 2020 and the CET1 add-back percentages for the new ECL provisions recognized in 2020 are set to:

- 1.00 during the period from 01/01/2020 – 31/12/2021
- 0.75 during the period from 01/01/2022 – 31/12/2022
- 0.50 during the period from 01/01/2023 – 31/12/2023
- 0.25 during the period from 01/01/2024 – 31/12/2024.

Furthermore, the calculation of the RWAs according to the reduction of the ECL provisions by the scaling factor (sf) is replaced by the application of a standard risk weight of 100% to the amounts added back to CET1 capital.
The table below presents a comparison of own funds, capital ratios and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs.

Table 7: IFRS 9 impact

€ mio

Comparison of own funds, capital ratios and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19
Available capital (amounts)					
Common Equity Tier 1 (CET1) capital	5,750	5,209***	5,322**	5,351*	5,966
Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	4,611	4,082***	4,181**	4,247*	4,707
Tier 1 capital	5,750	5,209	5,322	5,351	5,966
Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	4,611	4,082	4,181	4,247	4,707
Total capital	6,098	5,557***	5,668**	5,695*	6,313
Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	4,959	4,429***	4,528**	4,591*	5,054
Risk-weighted assets (amounts)					
Total risk-weighted assets	36,617	35,984	35,962	36,758	37,354
Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	36,045	35,426	35,392	36,309	36,815
Capital ratios					
Common Equity Tier 1 (as percentage of risk exposure amount)	15.70%	14.48%***	14.80%**	14.56%*	15.97%
Common Equity Tier 1 (as percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	12.79%	11.52%***	11.81%**	11.70%*	12.79%
Tier 1 (as percentage of risk exposure amount)	15.70%	14.48%	14.80%	14.56%	15.97%
Tier 1 (as percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	12.79%	11.52%	11.81%	11.70%	12.79%
Total capital (as percentage of risk exposure amount)	16.65%	15.44%***	15.76%**	15.49%*	16.90%
Total capital (as percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	13.76%	12.50%***	12.79%**	12.64%*	13.73%
Leverage ratio					
Leverage ratio total exposure measure	72,095	67,515	67,112	62,500	57,853
Leverage ratio	7.98%	7.72%	7.93%	8.56%	10.31%
Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6.45%	6.10%	6.28%	6.85%	8.21%

**including profits for the period, CET1 capital and Total Capital are 5,708mio and 6,052mio respectively, resulting to CET1 and Total Capital ratios of 15.47% and 16.41% respectively. Moreover, without the application of IFRS 9 or analogous ECLs transitional arrangements, CET1 and Total Capital stand at 4,604mio and 4,948mio respectively, resulting to 12.63% and 13.58% CET1 and Total capital ratios.*

***including profits for the period, CET1 capital and Total Capital are 5,746mio and 6,092mio respectively, resulting to CET1 and Total Capital ratios of 15.91% and 16.87% respectively. Moreover, without the application of IFRS 9 or analogous ECLs transitional arrangements, CET1 and Total Capital stand at 4,605mio and 4,951mio respectively, resulting to 12.95% and 13.93% CET1 and Total Capital ratios.*

****including profits for the period, CET1 capital and Total Capital are 5,752mio and 6,100mio respectively, resulting to CET1 and Total Capital ratios of 15.89% and 16.85% respectively. Moreover, without the application of IFRS 9 or analogous ECLs transitional arrangements, CET1 and Total Capital stand at 4,624mio and 4,972mio respectively, resulting to 12.98% and 13.95% CET1 and Total Capital ratios.*

5.5 DTC Law

Article 27A of Greek Law 4172/2013 (DTC Law), as currently in force, allows credit institutions, under certain conditions, and from 2017 onwards to convert deferred tax assets (DTAs) arising from (a) private sector initiative (PSI) losses, (b) accumulated provisions for credit losses recognized as at 30 June 2015, (c) losses from final write off or the disposal of loans and (d) accounting write offs, which will ultimately lead to final write offs and losses from disposals, to a receivable (Tax Credit) from the Greek State. Items (c) and (d) above were added with Greek Law 4465/2017 enacted on 29 March 2017. The same Greek Law 4465/2017 provided that the total tax relating to cases (b) to (d) above cannot exceed the tax corresponding to accumulated provisions recorded up to 30 June 2015 less (a) any definitive and cleared Tax Credit, which arose in the case of accounting loss for a year according to the provisions of par. 2 of article 27A of Greek Law 4172/2013, which relate to the above accumulated provisions, (b) the amount of tax corresponding to any subsequent specific tax provisions, which relate to the above accumulated provisions and (c) the amount of the tax corresponding to the annual amortization of the debit difference that corresponds to the above provisions and other losses in general arising due to credit risk.

The main condition for the conversion of DTAs to a Tax Credit is the existence of an accounting loss at Bank level of a respective year, starting from accounting year 2016 and onwards. The Tax Credits will be calculated as a ratio of IFRS accounting losses to net equity (excluding the year's losses) on a solo basis and such ratio will be applied to the remaining Eligible DTAs in a given year to calculate the Tax Credit that will be converted in that year, in respect of the prior tax year. The Tax Credit may be offset against income taxes payable. The non-offset part of the Tax Credit is immediately recognized as a receivable from the Greek State. The Bank is obliged to issue conversion rights to the Greek State for an amount of 100% of the Tax Credit in favour of the Greek State and will create a specific reserve for an equal amount. Common shareholders have pre-emption rights on these conversion rights. The reserve will be capitalized with the issuance of common shares in favour of the Greek State. This legislation allows credit institutions to treat such DTAs as not "relying on future profitability" according to CRD IV, and as a result such DTAs are not deducted from CET1, hence improving a credit institution's capital position.

Furthermore, Greek Law 4465/2017 amended article 27 "Carry forward losses" by introducing an amortization period of 20 years for losses due to loan write offs as part of a settlement or restructuring and losses that crystallize as a result of a disposal of loans.

On 7 November 2014, the Bank convened an extraordinary General Shareholders Meeting which resolved to include the Bank in the DTC Law. An exit by the Bank from the provisions of the DTC Law requires regulatory approval and a General Shareholders meeting resolution.

As of 31 December 2020, the amount of DTAs that were eligible for conversion to a receivable from the Greek State subject to the DTC Law was €4.3 billion (31 December 2019: €4.5 billion). The conditions for conversion rights were not met in the year ended 31 December 2020 and no conversion rights are deliverable in 2021.

5.6 Transitional own funds disclosure template

The table below provides information regarding the amounts and nature of specific items on own funds during the IFRS9 transitional period, in accordance with Annex IV of the Commission Implementing Regulation (EU) No 1423/2013.

Table 8: Transitional Own Funds

Transitional own funds disclosure template as of 31.12.2020		*€ mio*
Common Equity Tier 1 capital: Instruments and Reserves		
1	Capital instruments and the related share premium accounts	**16,609**
	of which: ordinary shares	*16,610*
2	Retained earnings	(17,271)
3	Accumulated other comprehensive income and other reserves	5,706
3a	Funds for general banking risk	15
5	Minority Interests (amount allowed in consolidated CET1)	10
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**5,069**
Common Equity Tier 1 capital: Regulatory Adjustments		
7	Additional Value Adjustments	(12)
8	Intangible assets (net of related tax liability)	(189)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences	(1)
11	Fair value reserves related to gain or losses on cash flow hedges	40
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(35)
19	CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold)	0
20	Adjustments due to IFRS 9 transitional arrangements	1,139
21	Deferred tax assets arising from temporary differences (amount above 10% threshold)	(112)
22	Amount exceeding the 17.65% threshold	(133)
25	Of which: deferred tax assets arising from temporary differences	(133)
26	Other CET1 capital elements or deductions	(16)
28	**Total regulatory adjustments to Common equity Tier 1 (CET1)**	**681**
29	**Common Equity Tier 1 (CET1) capital**	**5,750**
Additional Tier 1 (AT1) capital		
36	Additional Tier 1 (AT1) capital before regulatory adjustments	-
Additional Tier 1 (AT1) capital: regulatory adjustments		
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**-**
44	**Additional Tier 1 (AT1) capital**	**-**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**5,750**
Tier 2 (T2) capital		
46	**Capital instruments and the related share premium accounts**	**398**
51	**Tier 2 capital (T2) capital before regulatory adjustments**	**398**
Tier 2 (T2) capital: Regulatory adjustments		
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities	(50)
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(50)**
58	**Tier 2 (T2) capital**	**348**
59	**Total capital (TC = T1 + T2)**	**6,098**
60	**Total Risk Weighted Assets (RWAs)**	**36,617**
Capital Adequacy Ratios		**%**
61	**Common Equity Tier 1**	**15.70%**
62	**Tier 1**	**15.70%**
63	**TOTAL**	**16.65%**
68	**Common Equity Tier 1 available to meet buffers**	**5.65%**
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	61
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)	340
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)	354

Table 8: *Transitional Own Funds 30.06.2020*

Transitional own funds disclosure template as of 30.06.2020		*€ mio*
Common Equity Tier 1 capital: Instruments and Reserves		
1	Capital instruments and the related share premium accounts	**16,609**
	of which: ordinary shares	*16,610*
2	Retained earnings	(16,962)
3	Accumulated other comprehensive income and other reserves	5,652
3a	Funds for general banking risk	15
5	Minority Interests (amount allowed in consolidated CET1)	10
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**5,324**
Common Equity Tier 1 capital: Regulatory Adjustments		
7	Additional Value Adjustments	(13)
8	Intangible assets (net of related tax liability)	(236)
9	Part of interim or year-end profit not eligible	(360)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences	(1)
11	Fair value reserves related to gain or losses on cash flow hedges	40
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(34)
19	CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold)	(133)
20	Adjustments due to IFRS 9 transitional arrangements	1,141
22	Amount exceeding the 17.65% threshold	(389)
25	Of which: deferred tax assets arising from temporary differences	*(389)*
26	Other CET1 capital elements or deductions	(17)
28	**Total regulatory adjustments to Common equity Tier 1 (CET1)**	**(2)**
29	**Common Equity Tier 1 (CET1) capital**	**5,322**
Additional Tier 1 (AT1) capital		
36	Additional Tier 1 (AT1) capital before regulatory adjustments	-
Additional Tier 1 (AT1) capital: regulatory adjustments		
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**-**
44	**Additional Tier 1 (AT1) capital**	**-**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**5,322**
Tier 2 (T2) capital		
46	**Capital instruments and the related share premium accounts**	**396**
51	**Tier 2 capital (T2) capital before regulatory adjustments**	**396**
Tier 2 (T2) capital: Regulatory adjustments		
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities	(50)
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(50)**
58	**Tier 2 (T2) capital**	**346**
59	**Total capital (TC = T1 + T2)**	**5,668**
60	**Total Risk Weighted Assets (RWAs)**	**35,962**
Capital Adequacy Ratios		**%**
61	**Common Equity Tier 1**	**14.80%**
62	**Tier 1**	**14.80%**
63	**TOTAL**	**15.80%**
68	**Common Equity Tier 1 available to meet buffers**	**4.76%**
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	54
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)	472
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)	158

5.7 Capital requirements under Pillar I

The table below presents the risk exposure amounts (or Risk Weighted Assets - RWAs) and the capital requirements at Group level under Pillar I as of 31.12.2020 and 30.09.2020, according to the CRR/CRD IV regulatory framework. The capital requirements under Pillar I are equal to 8% of the risk exposure amounts.

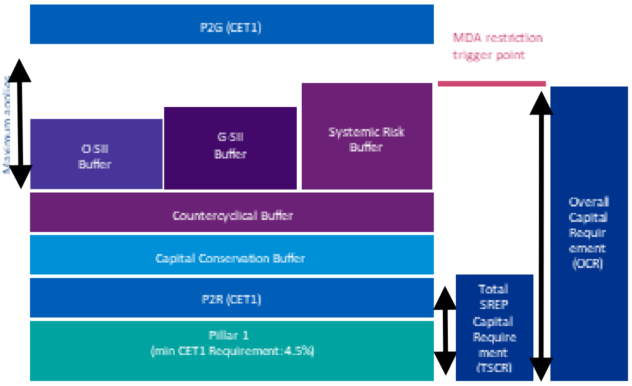
Total RWAs are broken down in 88.4% Credit (including Counterparty Credit Risk), 4.2% Market and 7.4% Operational Risk RWAs respectively. On a quarterly basis total RWAs increased by €0.6billion mostly due to Credit RWAs stemming from new disbursements in Corporate portfolio and finalization of developments according to CRR2 quickfixes. Slight increase of Market RWAs and Operational RWAs.

Table 9: EU OV1 - Overview of RWAs

Overview of RWAs			RWAs		Minimum Capital Requirements
			31.12.2020	30.09.2020	31.12.2020
	1	**Credit risk (excluding CCR)**	**32,162**	**31,636**	**2,573**
Article 438(c)(d)	2	*Of which the standardized approach*	32,162	31,636	2,573
Article 438(c)(d)	3	*Of which the foundation IRB (FIRB) approach*			
Article 438(c)(d)	4	*Of which the advanced IRB (AIRB) approach*			
Article 438(d)	5	*Of which equity IRB under the simple risk-weighted approach or the IMA*			
Article 107 Article 438(c)(d)	6	**CCR**	**327**	**342**	**26**
Article 438(c)(d)	7	*Of which mark to market*	213	171	17
Article 438(c)(d)	8	*Of which original exposure*			
	9	*Of which the standardised approach*	13	12	1
	10	*Of which internal model method (IMM)*			
Article 438(c)(d)	11	*Of which risk exposure amount for contributions to the default fund of a CCP*			
Article 438(c)(d)	12	*Of which CVA*	100	158	8
Article 438(e)	13	**Settlement risk**			
Article 449(o)(i)	14	**Securitization exposures in the banking book (after the cap)**			
	15	*Of which IRB approach*			
	16	*Of which IRB supervisory formula approach (SFA)*			
	17	*Of which internal assessment approach (IAA)*			
	18	*Of which standardised approach*			
Article 438 (e)	19	**Market risk**	**1,434**	**1,397**	**115**
	20	*Of which the standardised approach*	484	523	39
	21	*Of which IMA*	950	874	76
Article 438(e)	22	**Large exposures**			
Article 438(f)	23	**Operational risk**	**2,695**	**2,609**	**216**
	24	*Of which basic indicator approach*			
	25	*Of which standardised approach*	2,695	2,609	216
	26	*Of which advanced measurement approach*			
Article 437(2), Article 48 and Article 60	27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**1,736**	**1,539**	**139**
Article 500	28	Floor adjustment			
	29	**Total**	**36,617**	**35,984**	**2,929**

5.8 Overall Capital Requirement (OCR)

The stacking order of the various own funds requirements is shown in the figure below.



P2R: Pillar 2 Requirement, P2G: Pillar 2 Guidance, MDA: Maximum Distributable Amount, G-SII, O-SII: Global/Other Systemically Important Institutions

Figure 6: Stacking order of own funds requirements

Following the completion of the Supervisory Review and Evaluation Process (SREP) for year 2018, the ECB notified NBG Group of its total SREP capital requirement (TSCR), which applies from 1 March 2019. According to this decision, the ECB requires National Bank of Greece to maintain, on an individual and consolidated basis, a total SREP capital requirement of 11%.
The TSCR of 11% includes:

- the minimum Pillar I own funds requirement of 8% to be maintained at all times in accordance with Article 92(1) of Regulation (EU) No 575/2013; and
- an additional Pillar II own funds requirement of 3% to be maintained at all times in accordance with Article 16(2)(a) of Regulation (EU) No 1024/2013, to be made up entirely of Common Equity Tier 1 capital.

In addition to the TSCR, the Group is also subject to the Overall Capital Requirement (OCR). The OCR consists of the TSCR and the combined buffer requirement as defined in point (6) of Article 128 of Directive 2013/36/EU.
The combined buffer requirement is defined as the sum of:

- the Capital Conservation Buffer;
- the institution specific Countercyclical Capital Buffer (CcyB); and
- the systemic risk / systemically important institutions buffer, as applicable.

The Capital Conservation Buffer stands at 2.5% (from 1 January 2019 and thereinafter) for all banks in the EU.
The systemic risk / systemically important institutions buffer for 2020 is 0.5% for all four systemically important banks in Greece, due to the imposition of such an O-SII buffer by the Bank of Greece (BoG Act 151 / 30.10.18) and will be phased in to 1% until 2022.

The CCyB is implemented as an extension of the capital conservation buffer and has the primary objective of protecting the banking sector from periods of excess aggregate credit growth that have often been associated with the build-up of system-wide risk. It is calculated as the weighted average of the buffers in effect in the jurisdictions to which a bank has significant credit exposures.

The ECB's SREP pragmatic approach set the SREP requirements and guidance in total capital (excluding systemic buffers and the countercyclical capital buffer) for the 2020 cycle to remain consistent with the 2019 cycle, standing at around 14% on average.

The P2R was also kept stable at around 2.1% for the SREP 2020, except for a few exceptional cases such as those of new banks subject to direct supervision of the ECB, for which a new P2R applicable in 2021 has been disclosed on the following dedicated webpage. However, the P2R CET1 component decreased to 1.2% owing to the frontloading of CRD V on the P2R composition, as part of the COVID-19 capital relief measures.
The P2G, which captures supervisory risk concerns arising from the stress test outcomes, was also kept unchanged at approximately 1.4% for the SREP 2020 owing to the postponement of the stress tests to 2021.
Including systemic buffers and the countercyclical capital buffer (0.9% on average), the overall capital requirement (OCR) and guidance for the 2020 cycle slightly decreased by around 30 basis points, mainly due to a decision by the national macroprudential authorities to relax the countercyclical capital buffer requirement.
Bank of Greece defined its methodology for determining the CCyB in 2015 and consecutively set the CCyB at 0% for Greece throughout 2018-2020 as well as for the first quarter of 2021 according to its decision of December 17th 2020. CCyB is also currently 0% in all other countries in which NBG Group has significant exposures. **Thus, the institution specific Countercyclical Capital Buffer for NBG Group is currently 0%,** as depicted in the following table.

Table 10: Countercyclical Capital Buffer

Country	Risk Exposures*	Capital Requirement**	CCyB rate
Greece	78,852	1,878	0%
North Macedonia	1,263	65	0%
Marshall Islands	825	66	0%
Liberia	608	49	0%
Total	**81,548**		**0%**

**Risk Exposure amount under CCyB calculation requirements*
*** Capital Requirement (8% RWAs), for exposures subject to CCyB calculations*

In light of COVID-19 outbreak, the ECB provided guidance clarifying that banks are allowed to operate temporarily below Pillar 2 Guidance (P2G) and the Capital Conservation Buffer (CCB). The ECB has also brought forward the implementation of Article 104a CRD5, which allows banks to meet Pillar 2 Requirements (P2R) partially with lower quality capital (in the form of 56.25% of CET1 capital and 75% of Tier 1 capital, as a minimum). This measure was originally set to apply to EU banks from June 2021. NBG's total capital requirement was initially set at 16% and taking into account the short term waiver of capital buffers (P2G and CCB, as CCyB is not applicable for Greece) has been reduced to 11.5%. On July 28th, ECB committed to allow banks to operate below P2G and combined buffer requirement until at least end-2022.

As a result, the table below summarizes the capital requirements for NBG Group for 2020:

Table 11: NBG Group Capital Requirements

	CET1 Capital Requirements	Total Capital Requirements
Pillar 1	4.5%	8.0%
Pillar 2	1.7%	3.0%
*Capital Conservation Buffer (2020)**	*2.5%*	*2.5%*
O-SII buffer (2020)**	0.5%	0.5%
Total	**9.2%**	**14.0%**

**Waiver for suspension of Capital Conservation Buffer*
***Waiver for suspension of the phase-in of the OSII (+0.25%) for 2021*

At December 31st 2020, NBG Group's CET1 capital ratio and Total capital ratio stood at 15.7% and 16.7% respectively, exceeding the above regulatory requirements.

5.9 Leverage Ratio

Leverage ratio is calculated in accordance with the methodology set out in article 429 of the regulation (EU) No 575/2013 of the European Parliament and of the Council, as amended by European Commission delegated Regulation 62/2015 of 10 October 2014. It is defined as an institution's capital measure divided by that institution's total leverage exposure measure and is expressed as a percentage. The Group submits to the competent authority the leverage ratio on a quarterly basis. The following table includes the summary of the Group's leverage ratio with reference dates 31.12.2020 and 30.09.2020 (amounts in € mio):

Table 12: Leverage ratio

Leverage Ratio	Q4 20	Q3 20
Tier I	5,750	5,209
Total Exposure Measure	72,095	67,515
Leverage Ratio	**7.98%**	**7.72%**

The tables below include the detailed disclosures on the Group's leverage ratio with reference dates 31.12.2020 and 31.12.2019 (amounts in € mio):

Table 13: Reconciliation of accounting assets and leverage ratio exposures 31.12.2020

Summary reconciliation of accounting assets and leverage ratio exposures		
	Exposures	
1	Total assets as per published financial statements	77,485
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(3,316)
3	Adjustment for fiduciary assets recognized on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure according to Article 429(13) of Regulation (EU) NO. 575/2013.	0
4	Adjustment for derivative financial instruments	(1,826)
5	Adjustments for securities financial transactions (SFTs)	29
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	1,573
7	Other adjustments	(1,850)
8	**Leverage ratio exposure**	**72,095**
Leverage ratio common disclosure		
		CRR leverage ratio exposures
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	66,206
2	Asset amounts deducted in determing Tier 1 capital	123
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)**	**66,329**
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e net of eligible cash variation margin)	
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	
EU-5a	Exposure determined under Original Exposure Method	
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	
8	(Exempted CCP leg of client-cleared trade exposures)	
9	Adjusted effective notional amount of written credit derivatives	
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	
11	**Total derivatives exposures**	**3,760**
	SFT exposures	
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	
14	Counterparty credit risk exposure for SFT assets	
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation (EU) No 575/2013	
15	Agent transaction exposures	
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	
SFT exposures		
16	**Total securities financing transaction exposures**	433
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	10,846
18	Adjustments for conversion to credit equivalent amounts	(9,273)
19	**Other off-balance sheet exposures**	**1,573**
Capital and total exposure measure		
20	**Tier 1 capital**	**5,750**
21	**Leverage ratio total exposure measure**	**72,095**
Leverage Ratio		
22	**Leverage ratio**	7.98%
Choice on transitional arrangements and amount of derecognized fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional
EU-24	Amount of derecognized fiduciary items in accordance with Article 429(11) of Regulation (EU) NO. 575/2013	-
Split-up of on balance sheet exposures (excluding derivatives and SFTs)		
		CRR leverage ratio exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	**66,206**
EU-2	Trading book exposures	517
EU-3	Banking book exposures, of which:	65,690
EU-4	*Covered bonds*	*0*
EU-5	*Exposures treated as sovereigns*	*31,330*
EU-6	*Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns*	*727*
EU-7	*Institutions*	*1,020*
EU-8	*Secured by mortgages of immovable properties*	*9,558*
EU-9	*Retail exposures*	*3,201*
EU-10	*Corporate*	*11,269*
EU-11	*Exposures in default*	*4,538*
EU-12	*Other exposures (eg equity, securitizations, and other non-credit obligation assets)*	*4,047*

As of 31 December 2020, Group leverage ratio, according to the transitional definition of Tier I and the EU Regulation 62/2015, increased to 7.98% (vs 7.72% as of 30 September 2020), still exceeding the proposed minimum threshold of 3%. Its increase is mainly driven by Tier 1 capital increase by €0.47Bn partially offset by total leverage exposures rise by €4.5Bn, mainly due to increase of Greek Sovereign exposures.

Table 13: *Reconciliation of accounting assets and leverage ratio exposures 31.12.2019*

Summary reconciliation of accounting assets and leverage ratio exposures		
		Exposures
1	Total assets as per published financial statements	64,248
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(2,801)
3	Adjustment for fiduciary assets recognized on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure according to Article 429(13) of Regulation (EU) NO. 575/2013.	0
4	Adjustment for derivative financial instruments	(3,381)
5	Adjustments for securities financial transactions (SFTs)	24
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	1,576
7	Other adjustments	(1,813)
8	**Leverage ratio exposure**	**57,853**
Leverage ratio common disclosure		
		CRR leverage ratio exposures
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	55,170
2	Asset amounts deducted in determing Tier 1 capital	(544)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)**	**54,626**
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e net of eligible cash variation margin)	
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	
EU-5a	Exposure determined under Original Exposure Method	
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	
8	(Exempted CCP leg of client-cleared trade exposures)	
9	Adjusted effective notional amount of written credit derivatives	
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	
11	**Total derivatives exposures**	**1,451**
	SFT exposures	
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	
14	Counterparty credit risk exposure for SFT assets	
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation (EU) No 575/2013	
15	Agent transaction exposures	
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	
SFT exposures		
16	**Total securities financing transaction exposures**	**200**
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	9,487
18	Adjustments for conversion to credit equivalent amounts	(7,911)
19	**Other off-balance sheet exposures**	**1,576**
Capital and total exposure measure		
20	**Tier 1 capital**	**5,966**
21	**Leverage ratio total exposure measure**	**57,853**
Leverage Ratio		
22	**Leverage ratio**	**10.31%**
Choice on transitional arrangements and amount of derecognized fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional
EU-24	Amount of derecognized fiduciary items in accordance with Article 429(11) of Regulation (EU) NO. 575/2013	-
Split-up of on balance sheet exposures (excluding derivatives and SFTs)		
		CRR leverage ratio exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	**55,170**
EU-2	Trading book exposures	494
EU-3	Banking book exposures, of which:	54,676
EU-4	*Covered bonds*	0
EU-5	*Exposures treated as sovereigns*	19,355
EU-6	*Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns*	624
EU-7	*Institutions*	1,099
EU-8	*Secured by mortgages of immovable properties*	9,346
EU-9	*Retail exposures*	3,510
EU-10	*Corporate*	10,234
EU-11	*Exposures in default*	6,080
EU-12	*Other exposures (eg equity, securitizations, and other non-credit obligation assets)*	4,428

6 CREDIT RISK

6.1 Definitions and general information

For accounting purposes, "past due" exposures are those exposures which are past due for at least 1 day. Credit impaired exposures include all past-due exposures more than 90 days.

The Group has aligned the definition of default for financial reporting purposes, with the non performing exposures (NPE) definition used for regulatory purposes, as per EBA Implementing Technical Standards on Supervisory reporting on forbearance and non-performing exposures, as adopted by the Commission Implementing Regulation (EU) 2015/227 of 9 January 2015 amending Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council (EBA ITS). The definition of default for financial reporting purposes is consistent with the one used for internal credit risk management purposes.

A debt security is considered as credit impaired, and is classified into Stage 3, when at least one payment of capital or interest is overdue by the issuer, based on the contractual terms of the instrument, irrespective of the days past due. In addition, a debt security is assessed as credit impaired if there is at least one external credit rating on the security or the issuer corresponding to Default or Selective Default.

6.2 Impairment - Expected credit losses

ECL are recognized for all financial assets measured at amortized cost, debt financial assets measured at FVTOCI, lease receivables, financial guarantees and certain loan commitments. ECL represent the difference between contractual cash flows and those that the Group expects to receive, discounted at the EIR. For loan commitments and other credit facilities in scope of ECL, the expected cash shortfalls are determined by considering expected future draw downs.

Recognition of expected credit losses

At initial recognition, an impairment allowance is required for ECL resulting from default events that are possible within the next 12 months (12-month ECL), weighted by the risk of a default occurring. Instruments in this category are referred to as instruments in Stage 1. For instruments with a remaining maturity of less than 12 months, ECL are determined for this shorter period.

In the event of a significant increase in credit risk (SICR), an ECL allowance is required, reflecting lifetime cash shortfalls that would result from all possible default events over the expected life of the financial instrument ("lifetime ECL"), weighted by the risk of a default occurring. Instruments in this category are referred to as instruments in Stage 2.

Lifetime ECL are always recognized on financial assets for which there is objective evidence of impairment, that is they are considered to be in default or otherwise credit-impaired. Such instruments are referred to as instruments in Stage 3.

Write-off

A write-off is made when the Group does not have a reasonable expectation to recover all or part of a financial asset. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are generally credited to "credit provisions and other impairment charges". Write-offs and partial write-offs represent derecognition or partial derecognition events.

Measurement of expected credit losses

The Group assesses on a forward-looking basis the ECL associated with all financial assets subject to impairment under IFRS 9. The Group recognizes an ECL allowance for such losses at each reporting date. The measurement of ECL reflects:

- An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes. The Group uses three macroeconomic scenarios and estimates the ECL that would arise under each scenario. A weighting is allocated to each scenario, such that the weighted probabilities of all three scenarios are equal to one. The distribution of possible ECL may be non-linear, hence three distinct calculations are performed, where the associated ECLs are multiplied by the weighting allocated to the respective scenario. The sum of the three weighted ECL calculations represents the probability-weighted ECL.
- The time value of money.
- Reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

For the purposes of measuring ECL, the estimate of expected cash shortfalls reflects the cash proceeds expected from collateral liquidation (if any) and other credit enhancements that are part of the contractual terms and are not recognized separately by the Group. The estimate of expected cash shortfalls on a collateralized loan exposure reflects the assumptions used regarding the amount and timing of cash flows that are expected from foreclosure on the collateral less the costs of obtaining and selling the collateral, irrespective of whether the foreclosure is probable.

The ECL calculations are based on Exposure at Default (EAD), Credit Conversion Factor (CCF), Probability of Default (PD), Loss given default (LGD) and Discount Rate.

The PD and LGD are determined for three different scenarios whereas EAD projections are treated as scenario independent.

The ECL is determined by projecting the PD, LGD and EAD for each time step between future cash flow dates and for each individual exposure or collective segment. These three components are multiplied together and adjusted for the likelihood of survival, if appropriate. This effectively calculates an ECL for each future period, which is then discounted back to the reporting date and summed.

Significant increase of credit risk

A financial asset is considered as non-credit impaired, when the definition for Stage 3 classification is not met. The exposure is classified as Stage 2 if it has suffered a SICR, otherwise it is classified as Stage 1.

At each reporting date, the Group performs the SICR assessment comparing the risk of a default occurring over the remaining expected lifetime of the exposure with the expected risk of a default as estimated at origination.

The Group's process to assess SICR has three main components:

- a quantitative element, i.e. reflecting a quantitative comparison of PD or credit rating at the reporting date versus the respective metric at initial recognition;

- a qualitative element, i.e. all Forborne Performing Exposures (FPE), in accordance with EBA ITS, internal watch list for corporate obligors; and
- "backstop" indicators. The Group applies on all lending exposures the IFRS 9 presumption that a SICR has occurred when the financial asset is more than 30 days past due.

Table 14: EU CRB-B - Total and average net amount of exposures 31.12.2020

	a	b	a	b
Exposure Class	**Net value of exposures at 31.12.20**	**Average net exposures over 2020**	**Net value of exposures at 31.12.19**	**Average net exposures* over 2019**
Central Governments or Central Banks	30,101	26,512	18,234	17,763
Regional governments or local authorities	19	20	17	22
Public sctor entities	836	796	727	696
Multirateral development banks	11	11	11	11
International organisations	60	58	53	54
Institutions	2,398	2,325	2,264	2,265
Corporates	19,952	18,796	17,497	17,357
Of which: SMEs	7,548	7,301	*7,175*	*7,003*
Retail	5,658	5,579	5,901	6,205
Of which: SMEs	2,002	1,853	*1,871*	*1,926*
Secured by mortgages on immovable property	9,631	9,556	9,432	9,715
Of which: SMEs	3,266	3,372	*3,528*	*3,501*
Exposures in default	4,758	5,373	6,325	6,862
Items associated with particularly high risk	141	136	147	156
Covered bonds				
Claims on institutions and corporates with a short-term credit assessment				
Collective investments undertakings				
Equity exposures	413	511	619	647
Other exposures	3,887	3,675	3,381	3,217
Total	**77,865**	**73,348**	**64,608**	**64,970**

** The Bank reverted to the use of the Standardised Approach of all formerly IRB exposures as of 30.06.2019. Consequently the average net amount of exposures under IRB is omitted from this table as it corresponds to the amounts of Q1 2019 (€32,058mio). Furthermore, aiming to present a more objective view of the volumes of the average net amount of exposures under Standardised Approach, the three quarters of 2019 (Q2-Q4) are taken into consideration.*

6.3 General information on Credit Risk

In order to provide information on the credit quality of exposures the following tables present gross and net values broken down by exposure class, industry and geography. The gross carrying value is the accounting value before any allowance/impairments but after considering write-offs. Off-balance-sheet items are disclosed for their nominal amount gross of any CCF applicable or CRM techniques, and gross of any provision, particularly (a) guarantees given (b) loan and other commitments. Respectively, the net value of the exposure, derives from the gross carrying value after deduction of credit risk adjustments.

Table 15: EU CRB-C - Geographical breakdown of exposures

Exposure Class	Greece	Italy	North Macedonia	United Kingdom	Spain	Cyprus	Marshall Islands*	Germany	Other Countries*	Total
Central Governments or Central Banks	23,746	3,188	405	0	1,297	399	0	542	523	**30,101**
Regional governments or local authorities	19									**19**
Public sctor entities	833								3	**836**
Multirateral development banks									11	**11**
International organisations									60	**60**
Institutions	163	8		1,338	13	3		202	670	**2,398**
Corporates	17,474		268	82		268	853		1,007	**19,952**
Retail	4,919		679	2		49			9	**5,658**
Secured by mortgages on immovable property	9,117		419	24		50			21	**9,631**
Exposures in default	4,501		49	6		128	24		50	**4,758**
Items associated with particularly high risk	50		16	1		61			13	**141**
Covered bonds										
Claims on institutions and corporates with a short-term credit assessment										
Collective investments undertakings										
Equity exposures	370	3	1	9	5	1		3	21	**413**
Other exposures	3,757	0	73	6		21			31	**3,887**
Total	**64,947**	**3,199**	**1,911**	**1,467**	**1,315**	**980**	**877**	**748**	**2,420**	**77,865**

** Exposures to Marshall Islands are related to ocean shipping. The same applies for Other Countries that include exposures to Liberia*

Table 15: EU CRB-C *- Geographical breakdown of exposures 31.12.2019*

Exposure Class	Greece	North Macedonia	United Kingdom	Cyprus	Marshall Islands *	Germany	Spain	Other Countries	Total
Central Governments or Central Banks	15,582	382		290		525	606	849	**18,234**
Regional governments or local authorities	16			1					**17**
Public sctor entities	722							5	**727**
Multirateral development banks								11	**11**
International organisations								53	**53**
Institutions	93	1	1,204	1		150	12	803	**2,264**
Corporates	15,020	227	81	467	872			830	**17,497**
Retail	5,171	665	1	52				12	**5,901**
Secured by mortgages on immovable property	8,942	383	26	51				30	**9,432**
Exposures in default	6,028	51	7	119	28	1		91	**6,325**
Items associated with particularly high risk	32	12	1	86				16	**147**
Covered bonds									
Claims on institutions and corporates with a short-term credit assessment									
Collective investments undertakings									
Equity exposures	544	1	33	1		2	7	31	**619**
Other exposures	3,184	63	6	22				106	**3,381**
Total	**55,334**	**1,785**	**1,359**	**1,090**	**900**	**678**	**625**	**2,837**	**64,608**

** Exposures to Marshall Islands are related to ocean shipping*

Table 16: EU CRB-D - Concentration of corporate exposures by industry

	a	b	c	d	e	f	g	h	i	j	v
Exposure Class	**Accommodation and food service activities**	**Construction**	**Electricity, gas, steam and air conditioning supply**	**Manufacturing**	**Personal**	**Real estate activities**	**Transport and storage**	**Wholesale and retail trade**	**Other Sectors***	**Not Stated****	**Total**
Central Governments or Central Banks									215	29,886	30,101
Regional governments or local authorities									18	1	19
Public sctor entities			114	20		14	1	78	57	552	836
Multirateral development banks									11		11
International organisations									60		60
Institutions									59	2,338	2,398
Corporates	602	1,612	2,212	4,949		639	3,055	3,234	1,670	1,978	19,952
Retail				1	5,591			1		65	5,658
Secured by mortgages on immovable property	608	41	7	491	6,819	559	21	258	128	700	9,631
Exposures in default	125	71	8	342	3,163	99	60	346	206	338	4,758
Items associated with particularly high risk		19				13			1	107	141
Covered bonds											
Claims on institutions and corporates with a short-term credit assessment											
Collective investments undertakings											
Equity exposures										413	413
Other exposures										3,887	3,887
Total	**1,336**	**1,743**	**2,341**	**5,802**	**15,572**	**1,323**	**3,138**	**3,919**	**2,425**	**40,266**	**77,865**

**Other sectors includes Agriculture, Forestry and fishing, Mining and quarrying, water supply, Information and Communication, Professional, scientific and technical activities, Administrative and support service activities, Public administration and defense, compulsory social security, Education, Human health services and social work activities, Arts, entertainment and recreation.*

***Not Stated includes all exposures to Institutions & Central Banks, Retail portfolio, Bonds portfolio and Other Assets*

__Table 16: EU CRB-D__ - Concentration of corporate exposures by industry 31.12.2019

	a	b	c	d	e	f	g	h	i	j	v
Exposure Class	**Accommodation and food service activities**	**Construction**	**Electricity, gas, steam and air conditioning supply**	**Manufacturing**	**Personal**	**Real estate activities**	**Transport and storage**	**Wholesale and retail trade**	**Other Sectors**	**Not Stated**	**Total**
Central Governments or Central Banks									241	17,993	**18,234**
Regional governments or local authorities									16	1	**17**
Public sctor entities			14	24		2	5	72	66	544	**727**
Multirateral development banks									11		**11**
International organisations									53		**53**
Institutions									15	2,249	**2,264**
Corporates	489	1,736	1,708	4,526		782	2,532	2,740	1,569	1,415	**17,497**
Retail					5,890			1	1	9	**5,901**
Secured by mortgages on immovable property	626	42	13	553	6,904	161	22	313	136	662	**9,432**
Exposures in default	127	99	9	453	4,361	120	87	434	282	353	**6,325**
Items associated with particularly high risk		24				16			2	105	**147**
Covered bonds											
Claims on institutions and corporates with a short-term credit assessment											
Collective investments undertakings											
Equity exposures										619	**619**
Other exposures										3,381	**3,381**
Total	**1,242**	**1,901**	**1,744**	**5,556**	**17,155**	**1,081**	**2,646**	**3,559**	**2,392**	**27,331**	**64,608**

Table 17: EU CRB-E – Maturity of exposures

Exposure Class	a	b	c	d	e	f
	Net exposure value					
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
Central Governments or Central Banks	4,800	3,373	821	21,106	1,027	**31,128**
Regional governments or local authorities		1	4	13		**17**
Public sctor entities	15	25	57	632		**729**
Multirateral development banks	11					**11**
International organisations	20			40		**60**
Institutions	1,914	770	73	604	1,385	**4,746**
Corporates	142	2,175	5,605	3,705	41	**11,668**
Retail	371	978	831	1,563		**3,743**
Secured by mortgages on immovable property	106	633	1,454	7,365		**9,558**
Exposures in default	37	1,829	900	1,878		**4,644**
Items associated with particularly high risk	2	77	24	10	1	**113**
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective investments undertakings						
Equity exposures		1			412	**413**
Other exposures	3,762	125				**3,887**
Total	**11,180**	**9,988**	**9,768**	**36,916**	**2,865**	**70,717**

***Table 17: EU CRB-E** – Maturity of exposures 31.12.2019*

Exposure Class	a	b	c	d	e	f
	Net exposure value					
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
Central Governments or Central Banks	4,726	1,215	1,092	11,200	581	**18,814**
Regional governments or local authorities		2	5	8		**15**
Public sctor entities	15	21	43	552		**631**
Multirateral development banks	11					**11**
International organisations	20			33		**53**
Institutions	1,571	472	76	701	835	**3,655**
Corporates	213	2,149	4,386	3,562	20	**10,330**
Retail	455	683	886	2,112		**4,136**
Secured by mortgages on immovable property	141	674	1,240	7,291		**9,346**
Exposures in default	49	2,385	1,166	2,600		**6,200**
Items associated with particularly high risk	1	86	30	12	1	**130**
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective investments undertakings						
Equity exposures		1			618	**619**
Other exposures	3,243	138				**3,381**
Total	**10,445**	**7,826**	**8,924**	**28,071**	**2,056**	**57,321**

Table 18: EU CR1-A - Credit quality of exposures by exposure class and instrument

Exposure Class	a	b	C*	d	e	G
	Gross carrying values of		Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
Central Governments or Central Banks		30,104	3			**30,101**
Regional governments or local authorities		20	1			**19**
Public sctor entities		839	3			**836**
Multirateral development banks		11				**11**
International organisations		60				**60**
Institutions		2,398	1			**2,398**
Corporates		20,172	220			**19,952**
Of which: SMEs		*7,684*	*136*			***7,548***
Retail		6,346	689			**5,658**
Of which: SMEs		*2,282*	*281*			***2,002***
Secured by mortgages on immovable property		9,633	1			**9,631**
Of which: SMEs		*3,267*	*1*			***3,266***
Exposures in default	10,653		5,895		348	**4,758**
Items associated with particularly high risk	215	81	155			**141**
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective investments undertakings						
Equity exposures	5	408				**413**
Other exposures		3,887				3,887
Total	**10,873**	**73,960**	**6,967**		**348**	**77,865**
Of which: Loans	10,703	26,109	6,913		348	29,899
Of which: Debt securities		15,170				15,170
Of which: Off-balance sheet exposures	164	10,682	54			10,792

** Column C refers to loans. Assets held for sale are also included since they are still regulatory consolidated*

***Table 18: EU CR1-A** - Credit quality of exposures by exposure class and instrument 30.06.2020*

Exposure Class	a	b	C*	d	e	G
	Gross carrying values of		Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
Central Governments or Central Banks		27,040	4			**27,036**
Regional governments or local authorities		22	1			**21**
Public sctor entities		790	3			**787**
Multirateral development banks		11				**11**
International organisations		57				**57**
Institutions		2,326				**2,325**
Corporates		19,007	220			**18,787**
Of which: SMEs		*7,493*	*113*			***7,381***
Retail		6,101	612			**5,489**
Of which: SMEs		*2,046*	*271*			***1,775***
Secured by mortgages on immovable property		9,582	3			**9,579**
Of which: SMEs		*3,440*	*3*			***3,437***
Exposures in default	11,466		6,002		364	**5,464**
Items associated with particularly high risk	224	66	162			**128**
Covered bonds						
Claims on institutions and corporates with a short-term credit assessment						
Collective investments undertakings						
Equity exposures	6	544				**550**
Other exposures		3,759				**3,759**
Total	**11,695**	**69,305**	**7,008**		**364**	**73,992**
Of which: Loans	11,519	24,908	6,949		364	**29,478**
Of which: Debt securities		14,886				**14,886**
Of which: Off-balance sheet exposures	170	10,416	59			**10,527**

** Column C refers to loans. Assets held for sale are also included since they are still regulatory consolidated*

Table 19: EU CR1-B - Credit quality of corporate exposures by industry

	a	b	C*	d	e	G
Sector	Gross carrying values of		Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
Accommodation and food service activities	288	1,245	197		9	**1,336**
Construction	248	1,668	172		5	**1,743**
Electricity, gas, steam and air conditioning supply	17	2,353	30		1	**2,341**
Manufacturing	1,027	5,508	733		25	**5,802**
Personal	6,711	13,098	4,237		231	**15,572**
Real estate activities	293	1,227	197		7	**1,323**
Transport and storage	115	3,091	68		4	**3,138**
Wholesale and retail trade	870	3,607	558		25	**3,919**
Other Sectors**	503	2,249	327		15	**2,425**
Not Stated***	799	39,914	448		25	**40,266**
Total	**10,873**	**73,956**	**6,967**		**348**	**77,865**

**Column C refers to loans. Assets held for sale are also included since they are still regulatory consolidated*
***Other sectors includes Agriculture, Forestry and fishing, Mining and quarrying, water supply, Information and Communication, Professional, scientific and technical activities, Administrative and support service activities, Public administration and defense, compulsory social security, Education, Human health services and social work activities, Arts, entertainment and recreation.*
****Not Stated includes all exposures to Institutions & Central Banks, Retail portfolio, Bonds portfolio and Other Assets*

Table 19: EU CR1-B - Credit quality of corporate exposures by industry 30.06.2020

	a	b	C*	d	e	G
Sector	Gross carrying values of		Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
Accommodation and food service activities	240	1,230	161		7	1,310
Construction	255	1,804	174		6	1,885
Electricity, gas, steam and air conditioning supply	17	2,197	33		1	2,181
Manufacturing	1,041	4,927	724		26	5,244
Personal	7,322	12,905	4,069		251	16,158
Real estate activities	308	1,036	214		7	1,130
Transport and storage	162	2,891	120		5	2,932
Wholesale and retail trade	876	3,190	563		25	3,504
Other Sectors**	585	1,973	414		16	2,144
Not Stated***	890	37,150	536		20	37,504
Total	**11,695**	**69,305**	**7,008**		**364**	**73,992**

**Column C refers to loans. Assets held for sale are also included since they are still regulatory consolidated*
***Other sectors includes Agriculture, Forestry and fishing, Mining and quarrying, water supply, Information and Communication, Professional, scientific and technical activities, Administrative and support service activities, Public administration and defense, compulsory social security, Education, Human health services and social work activities, Arts, entertainment and recreation.*
****Not Stated includes all exposures to Institutions & Central Banks, Retail portfolio, Bonds portfolio and Other Assets*

Table 20: EU CR1-C - Credit quality of exposures by geography

	a	b	C	d	e	G
Country	Gross carrying values of		Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
Greece	10,118	61,297	6,467		327	**64,947**
Italy		3,200			9	**3,199**
North Macedonia	95	1,888	72			**1,911**
United Kingdom	17	1,462	11		4	**1,467**
Spain		1,315				**1,315**
Cyprus	435	830	286			**980**
Marshall Islands*	39	854	15			**877**
Germany	3	747	2			**748**
Other countries*	167	2,367	114		8	**2,420**
Total	**10,873**	**73,960**	**6,967**		**348**	**77,865**

** Exposures to Marshall Islands are related to ocean shipping. The same applies for Other Counries that include exposures to Liberia.*

Table 20: EU CR1-C - Credit quality of exposures by geography 30..06.2020

	a	b	C	d	e	G
Country	Gross carrying values of		Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
Greece	10,909	56,528	6,464		363	**60,972**
Italy	-	3,527	-			**3,526**
North Macedonia	116	1,789	74		-	**1,830**
United Kingdom	17	1,447	11		-	**1,452**
Spain	-	1,238	0		-	**1,238**
Cyprus	409	991	288		1	**1,112**
Marshall Islands*	48	777	31		-	**794**
Germany	3	751	2		-	**751**
Other countries	194	2,260	137		-	**2,317**
Total	**11,695**	**69,305**	**7,008**		**364**	**73,992**

** Exposures to Marshall Islands are related to ocean shipping*

6.4 Provision analysis

The following tables show the changes in provisions regarding credit losses for instruments for which ECL is calculated and changes in stock of on balance sheet amounts of defaulted and impaired loans.

Table 21 : EU CR2-A - Changes in the stock of general and specific credit risk adjustments

		a	b
		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	**Opening balance December 31, 2019**	**(5,835)**	
2	Increases due to amounts set aside for estimated loan losses during the period	(1,082)	
3	Decreases due to amounts reversed for estimated loan losses during the period		
4	Decreases due to amounts taken against accumulated credit risks adjustments	731	
5	Transfers between credit risk adjustments		
6	Impact of exchange rate differences	48	
7	Other adjustments	85	
8	Reclassified as Held for Sale	3,242	
9	**Closing balance December 31, 2020**	**(2,811)**	
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss		

Table 21 : EU CR2-A *- Changes in the stock of general and specific credit risk adjustments 31.12.2019*

		a	b
		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	**Opening balance December 31, 2018**	**(9,552)**	
2	Increases due to amounts set aside for estimated loan losses during the period	(319)	
3	Decreases due to amounts reversed for estimated loan losses during the period		
4	Decreases due to amounts taken against accumulated credit risks adjustments	2,916	
5	Transfers between credit risk adjustments		
6	Impact of exchange rate differences	21	
7	Other adjustments	116	
8	Reclassified as Held for Sale	983	
9	**Closing balance December 31, 2019**	**(5,835)**	
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss		

Table 22 : EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities

		a
		Gross carrying value defaulted exposures*
1	**Opening balance June 30, 2020**	**11,519**
2	Loans and debt securities that have defaulted or impaired since the last reporting period	939
3	Returned to non-defaulted status	(608)
4	Amounts written off	(348)
5	Other changes**	(799)
6	**Closing balance December 31,2020**	**10,703**

**Defaulted exposures refer to Loans. Assets held for sale are also included since they are still regulatory consolidated*
*** Other changes include repayments and disposal transactions implemented in the context of NBG's NPE reduction*

Table 22 : EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities 30.06.2020

		a
		Gross carrying value defaulted exposures*
1	**Opening balance December 31, 2019**	**11,865**
2	Loans and debt securities that have defaulted or impaired since the last reporting period	814
3	Returned to non-defaulted status	(382)
4	Amounts written off	(364)
5	Other changes**	(414)
6	**Closing balance June 30, 2020**	**11,519**

**Defaulted exposures refer to Loans. Assets held for sale are also included since they are still regulatory consolidated*

*** Other changes include repayments and disposal transactions implemented in the context of NBG's NPE reduction*

6.5 Covid-19 Reporting

The European Banking Authority (EBA) published on 25 March 2020 a "Statement on the application of the prudential framework regarding Default, Forbearance and IFRS 9 in light of COVID-19 measures" which states that "institutions are expected to use a degree of judgment and distinguish between borrowers whose credit standing would not be significantly affected by the current situation in the long term, and those who would be unlikely to restore their creditworthiness". The Group performed portfolio reviews and applied this regulatory guidance to its clients. EBA also states that "the public and private moratoria, as a response to COVID-19 pandemic, do not have to be automatically classified as forbearance if the moratoria are not borrower specific, based on the applicable national law or on an industry or sector-wide private initiative agreed and applied broadly by relevant credit institutions". The Group has also adopted this guidance, incorporating it into its processes and policies.

Under these moratoria, the Group has granted a postponement of interest and/or principal payments, extensions of loan terms as well as renewal of credit lines, depending on the program. Specifically, the gross carrying amount of loans and advances to customers subject to moratoria granted during 2020 for the Group amounts to €4.0 billion as at 31 December 2020, consisting of 30.0% mortgage loans, 9.7% consumer loans and 60.3% corporate and small business lending. More specifically, the gross carrying amount of loans for which the moratoria expired during 2020 amounts to €3.9 billion (out of which €0.3 billion relates to moratoria that expired at 30 September 2020 and €3.6 billion to moratoria that expired at 31 December 2020), whereby 90.5% comprises performing loans as at 31 December 2020. Therefore, the gross carrying amount of loans for which the moratoria have not expired as at 31 December 2020 amounts to €0.1 billion and mainly relates to corporate and small business lending. The modification impact of the aforementioned moratoria has been assessed by the Group and was not material to the Group and the Bank's Annual Financial Statements.

Moreover, the Group also evaluated its assets, including intangibles and equity investments, for potential impairment, and assessed fair values of financial instruments that are carried at fair value. Based upon our assessment as of 31 December 2020, no significant impairments have been recorded for the Group relating to loans and advances to customers at amortized cost, and there have been no significant changes in fair values and in fair value hierarchy classifications.

However, higher expected credit losses have been estimated during the year reflecting the significant impact of the COVID-19 pandemic on the Group and Bank's performance, including overlays applied in response to the current economic uncertainty and exceptional circumstances, taking also into account the customer support measures implemented as a result of the COVID-19 pandemic.

Table 23 : Information on loans and advances subject to legislative and non-legislative moratoria 31.12.2020

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
			Performing			Non performing				Performing			Non performing			
				Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days			Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
1	Loans and advances subject to moratorium	141	141	4	40				(5)	(5)		(3)				
2	of which: Households	51	51		17				(1)	(1)		(1)				
3	*of which: Collateralised by residential immovable property*	16	16		6											
4	of which: Non-financial corporations	90	90	4	23				(4)	(4)		(3)				
5	*of which: Small and Medium-sized Enterprises*	68	68	4	19				(4)	(4)		(2)				
6	*of which: Collateralised by commercial immovable property*	13	13	1												

__Table 23 :__ Information on loans and advances subject to legislative and non-legislative moratoria 30.06.2020

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
			Performing			Non performing				Performing			Non performing			
				Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days			Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
1	Loans and advances subject to moratorium	3,811	3,192	489	968	619	588	593	(298)	(94)	(36)	(71)	(204)	(191)	(194)	20
2	of which: Households	1,925	1,530	421	713	395	393	394	(147)	(39)	(23)	(31)	(108)	(107)	(107)	1
3	*of which: Collateralised by residential immovable property*	1,442	1,066	393	626	377	376	376	(119)	(24)	(17)	(22)	(95)	(95)	(95)	0
4	of which: Non-financial corporations	1,855	1,650	68	254	205	177	180	(144)	(55)	(13)	(40)	(89)	(77)	(80)	19
5	*of which: Small and Medium-sized Enterprises*	778	584	63	234	194	175	177	(133)	(48)	(13)	(39)	(85)	(76)	(78)	17
6	*of which: Collateralised by commercial immovable property*	86	72	3	13	14	13	13	(5)	(1)		(1)	(3)	(3)	(3)	0

Table 24 : Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria 31.12.20

		a	b	c	d	e	f	g	h	i
		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
1	Loans and advances for which moratorium was offered	161,913	4,459							
2	Loans and advances subject to moratorium (granted)	148,652	4,007	593	3,866	82	57	2		
3	of which: Households		1,592	447	1,542	51				
4	*of which: Collateralised by residential immovable property*		1,201	127	1,186	16				
5	of which: Non-financial corporations		2,385	146	2,295	31	57	2		
6	*of which: Small and Medium-sized Enterprises*		766	91	699	21	46	1		
7	*of which: Collateralised by commercial immovable property*		300	17	287		13			

***Table 24 :** Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria 30.06.2020*

		a	b	c	d	e	f	g	h	i
		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
1	Loans and advances for which moratorium was offered	159,365	4,933							
2	Loans and advances subject to moratorium (granted)	151,067	3,811	648		1,524	2,286	1		
3	of which: Households		1,925	496		1,439	485			
4	*of which: Collateralised by residential immovable property*		*1,442*	*95*		*1,355*	*87*			
5	of which: Non-financial corporations		1,855	152		84	1,770	1		
6	*of which: Small and Medium-sized Enterprises*		*778*	*95*		*72*	*704*	*1*		
7	*of which: Collateralised by commercial immovable property*		*86*	*19*		*3*	*84*			

Table 25 : Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis 30.12.2020

		a	b	c	d
		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
1	**Newly originated loans and advances subject to public guarantee schemes**	1,131	12	905	2
2	of which: Households				
3	of which: Collateralised by residential immovable property				
4	of which: Non-financial corporations	1,113	12	890	2
5	of which: Small and Medium-sized Enterprises	572			
6	of which: Collateralised by commercial immovable property	2			

***Table 25 :** Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis 30.06.20*

		a	b	c	d
		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
1	**Newly originated loans and advances subject to public guarantee schemes ***	0	0	0	0
2	of which: Households	0			0
3	of which: Collateralised by residential immovable property	0			0
4	of which: Non-financial corporations	0	0	0	0
5	of which: Small and Medium-sized Enterprises	0			0
6	of which: Collateralised by commercial immovable property	0			0

** Althrough the new public guarantee schemes in response to COVID-19 have been applicable since the beginning of June 2020, no disbusrsements had taken place until 30.06.2020*

6.6 Non-performing and forborne exposures

The Bank continues to operate in a challenging economic environment as a result of the Greek financial crisis. Against this backdrop, the Bank is executing a well-developed strategy that aims to reduce its NPE ratio and maximize collections from the Bank's troubled assets portfolio. This strategy includes a set of detailed operational targets and Key Performance Indicators as well as a time-bound action plan for their implementation with a view to significantly reducing NPE stocks.

The strategy establishes realistic but sufficiently ambitious targets, and NBG assesses its effectiveness and adequacy on a regular basis. The strategy is both consistent with, and linked to, the Bank's business plan and the current ICAAP.

The Bank's NPE Management actions as well as internal monitoring and modelling mechanisms are built around the Business segmentation criteria and largely operating in a bottom-up approach. The main strategy drivers of the Bank's NPE Management Strategy are:

- Restructurings
- Sale & securitisation of portfolios
- Liquidations
- Real estate collateral repossessions

The execution of the envisaged strategic actions and the related timetables depend on the legal, market and economic conditions and are consequently subject to ongoing re-evaluation. The annual revision of NPE operational targets and submission to SSM (regularly due in March) has been postponed by the ECB due to the COVID-19 pandemic crisis.

Disposal of NPE portfolios

Project "Frontier" NPE securitization

NBG in the context of its Transformation Program, has launched the securitization of a portfolio of NPEs under the project name "Frontier", accounting for €6.1 billion in terms of gross book value as of 30 June 2020. The Bank has submitted on 29 January 2021, an application for the inclusion of Frontier under the "Hercules" guarantee scheme, according to the provisions of Greek Law 4649/2019. The application provides for a guarantee by the Greek State for senior notes with a total value up to €3.3 billion. NBG launched the transaction in the fourth quarter of 2020. Upon the successful completion of the transaction, the Bank expects to retain 100% of the senior and 5% of the mezzanine and junior notes, while disposing up to 95% of the latter to the market through a competitive process, which is expected to be completed (Signing and Closing) in the second quarter of 2021.

Hellenic Republic Asset Protection Scheme

In December 2019, the Greek parliament voted for the creation of an Asset Protection Scheme (APS) (Greek Law 4649/2019) also known as the "Hercules Scheme". The Hercules Scheme will support banks on deleveraging NPEs through securitization, with the aim of obtaining greater market stability. The participation in the Hercules Scheme is voluntary and open to all Greek banks and it does not constitute state aid as guarantees are priced on market terms.

Under the Hercules Scheme, the Hellenic Republic will provide guarantees up to €12.0 billion on the senior bonds of securitizations of NPEs. The Hercules Scheme will become effective only when the originator has sold at least 50% plus one of junior tranches (and mezzanine if any) and the notes are of such amount that allows the derecognition and the Significant Risk Transfer (SRT) of the securitized receivables.

However, the launch of the extended "Hercules" Scheme, named Hercules II, is expected in April 2021 upon approval from the Directorate General for the Competition of the European Commission (the "DG Competition"). Hercules II scheme aims to expand the scheme by 18 months, with no material changes in terms.

Project "Icon"

As part of the implementation of the NBG Transformation Program the Bank, on 12 February 2021, NBG announced that it has completed the disposal of a non-performing, predominantly secured, corporate loan portfolio ("Project Icon") with total principal amount as at 30 June 2019 of c. €1.6 billion (€0.6 billion of allocated collateral value) to Bain Capital Credit ("Bain Capital"). The transaction was implemented in the context of NBG's NPE deleveraging strategy and in accordance with the Operational Targets submitted to the SSM.

Project Danube

On 22 December 2020, the Bank announced that it has entered into a definite agreement with Bain Capital for the disposal of a Romanian-risk corporate NPE portfolio ("Project Danube") with a total Gross Book Value of c. €174 million (€102 million of allocated collateral value). The transaction is being implemented in the context of NBG's NPE deleveraging strategy and in accordance with the Operational Targets submitted to the SSM.

The transaction is currently expected to be concluded in the second quarter of 2021, after approval of the competent regulatory authorities.

Table 26: Credit quality of forborne exposures 31.12.2020

		a	b	c	d	e	f	g	h
		Gross carrying amount/ nominal amount of exposures with forbearance measures				Accumulated impairment		Collateral 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				
1	Loans and advances	**2,427**	**2,221**	**1,735**	**2,165**	**(133)**	**(898)**	**3,135**	**1,200**
2	*Central Banks*								
3	*General Governments*	*25*	*18*	*18*	*18*	*(2)*	*(5)*	*16*	*13*
4	*Credit Institutions*								
5	*Other Financial Corporations*	*40*	*51*	*40*	*51*	*(8)*	*(27)*	*11*	*10*
6	*Non-Financial Corporations*	*469*	*1,094*	*942*	*1,038*	*(39)*	*(559)*	*847*	*454*
7	*Households*	*1,892*	*1,058*	*735*	*1,058*	*(83)*	*(308)*	*2,261*	*722*
8	Debt Securities								
9	Loan Commitments given								
10	**Total**	**2,427**	**2,221**	**1,735**	**2,165**	**(133)**	**(898)**	**3,135**	**1,200**

***Table 26**: Credit quality of forborne exposures 30.06.2020*

		a	b	c	d	e	f	g	h
		Gross carrying amount/ nominal amount of exposures with forbearance measures				Accumulated impairment		Collateral 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				
1	Loans and advances	2,684	4,480	3,796	4,418	(193)	(1,871)	4,559	2,456
2	*Central Banks*								
3	*General Governments*	*26*	*23*	*23*	*23*	*(3)*	*(9)*	*16*	*14*
4	*Credit Institutions*								
5	*Other Financial Corporations*		*19*	*7*	*19*		*(11)*	*8*	*8*
6	*Non-Financial Corporations*	*535*	*1,479*	*1,283*	*1,417*	*(60)*	*(820)*	*992*	*556*
7	*Households*	*2,122*	*2,959*	*2,483*	*2,959*	*(130)*	*(1,032)*	*3,543*	*1,879*
8	Debt Securities								
9	Loan Commitments given								
10	**Total**	**2,684**	**4,480**	**3,796**	**4,418**	**(193)**	**(1,871)**	**4,559**	**2,456**

Table 27: Quality of forbearance 31.12.2020 and 31.12.2019

		a	a
		Gross carrying amount of forborne exposures 31.12.2020	**Gross carrying amount of forborne exposures 31.12.2019**
1	Loans and advances that have been forborne more than twice	1,417	2,290
2	Non-performing forborne loan and advances that failed to meet the non-performing exit criteria	2,132	3,095

Table 28: Credit quality of performing and non-performing exposures by past due days 31.12.2020

		a	b	c	d	e	f	g	h	i	j	k	l
		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 are past due ≤90 days	Past due >90 days ≤180 days	Past due >180 days ≤1 year	Past due >1 year ≤2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
1	Loans and advances	**28,311**	**27,957**	**354**	**4,473**	**2,083**	**100**	**221**	**182**	**776**	**245**	**865**	3891
2	*Central Banks*												
3	*General Governments*	*434*	*317*	*117*	*28*	*18*				*9*		*1*	*28*
4	*Credit Institutions*	*3,172*	*3,172*										
5	*Other Financial Corporations*	*145*	*105*	*41*	*56*	*51*				*3*		*1*	*45*
6	*Non-Financial Corporations*	*14,971*	*14,909*	*62*	*2,552*	*1,031*	*27*	*127*	*119*	*594*	*158*	*495*	*2364*
7	*Of which SMEs*	*4,569*	*4,524*	*45*	*1,292*	*358*	*26*	*50*	*67*	*224*	*133*	*435*	*1134*
8	*Households*	*9,589*	*9,454*	*135*	*1,837*	*983*	*72*	*94*	*63*	*170*	*87*	*368*	*1455*
9	Debt Securities*	**12,290**	**12,290**										
10	*Central Banks*												
11	*General Governments*	*12,231*	*12,231*										
12	*Credit Institutions*	*31*	*31*										
13	*Other Financial Corporations*	*4*	*4*										
14	*Non-Financial Corporations*	*25*	*25*										
15	Off-balance sheet exposures	**10,465**			**192**								**143**
16	*Central Banks*												
17	*General Governments*	*79*											
18	*Credit Institutions*	*2*											
19	*Other Financial Corporations*	*101*			*1*								*1*
20	*Non-Financial Corporations*	*8,964*			*185*								*137*
21	*Households*	*1318*			*6*								*5*
22	**Total**	**51,066**	**40,247**	**354**	**4,665**	**2,083**	**100**	**221**	**182**	**776**	**245**	**865**	**4,034**

**Included only Debt securities classified as HTC*

CREDIT RISK

***Table 28**: Credit quality of performing and non-performing exposures by past due days 30.06.2020*

		a	b	c	d	e	f	g	h	i	j	k	l
		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 are past due ≤90 days	Past due >90 days ≤180 days	Past due >180 days ≤1 year	Past due >1 year ≤2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
1	Loans and advances	27,729	27,355	374	10,471	3,187	346	394	902	1,546	1,079	3,018	9675
2	*Central Banks*												
3	*General Governments*	420	293	127	39	18	4			9	6	1	35
4	*Credit Institutions*	3,348	3,348		1								
5	*Other Financial Corporations*	148	109	39	34	18		3	1	5	1	6	22
6	*Non-Financial Corporations*	13,768	13,691	77	3,664	1,381	95	92	462	580	315	739	3427
7	*Of which SMEs*	3,954	3,906	48	2,178	515	84	64	139	437	277	663	1980
8	*Households*	10,044	9,913	131	6,734	1,769	247	299	439	951	757	2,272	6191
9	Debt Securities	12,103	12,103										
10	*Central Banks*												
11	*General Governments*	11,952	11,952										
12	*Credit Institutions*	127	127										
13	*Other Financial Corporations*	3	3										
14	*Non-Financial Corporations*	21	21										
15	Off-balance sheet exposures	9,870			195								160
16	*Central Banks*	0											
17	*General Governments*	101											
18	*Credit Institutions*	2											
19	*Other Financial Corporations*	42			1								1
20	*Non-Financial Corporations*	8,416			189								154
21	*Households*	1,309			5								5
22	**Total**	**49,702**	**39,458**	**374**	**10,667**	**3,187**	**346**	**394**	**902**	**1,546**	**1,079**	**3,018**	**9,835**

Table 29: Performing and non-performing exposures and related provisions 31.12.2020

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Gross carrying amount/ nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write-offs	Collateral 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			
Loans and advances	**28,311**	23,764	**4,538**	**4,473**		**4,365**	**(413)**	**(174)**	**(238)**	**(2,343)**		**(2,296)**	**(254)**	**14,961**	**1,814**
Central Banks															
General Governments	*434*	*290*	*144*	*28*		*28*	*(7)*	*(2)*	*(5)*	*(14)*		*(14)*		*83*	*13*
Credit Institutions	*3,172*	*3,172*					*(1)*	*(1)*							
Other Financial Corporations	*145*	*104*	*42*	*56*		*56*	*(17)*	*(9)*	*(8)*	*(32)*		*(32)*		*3*	*10*
Non-Financial Corporations	*14,971*	*13,664*	*1,298*	*2,552*		*2,444*	*(215)*	*(106)*	*(109)*	*(1,592)*		*(1,546)*	*(65)*	*7,568*	*796*
Of which SMEs	*4,569*	*3,721*	*848*	*1,292*		*1,252*	*(121)*	*(37)*	*(84)*	*(777)*		*(759)*	*(52)*	*2,572*	*442*
Households	*9,589*	*6,534*	*3,055*	*1,837*		*1,837*	*(173)*	*(56)*	*(117)*	*(704)*		*(704)*	*(189)*	*7,308*	*993*
Debt Securities*	**12,290**	10,821	**1,445**				**(93)**	**(25)**	**(68)**						
Central Banks															
General Governments	*12,231*	*10,786*	*1,445*				*(92)*	*(24)*	*(68)*						
Credit Institutions	*31*	*10*													
Other Financial Corporations	*4*														
Non-Financial Corporations	*25*	*25*													
Off-balance sheet exposures	**10,465**	**10,052**	**413**	**192**		**192**	**(7)**	**(3)**	**(4)**	**(49)**		**(49)**			
Central Banks															
General Governments	*79*	*78*	*1*												
Credit Institutions	*2*	*2*													
Other Financial Corporations	*101*	*101*		*1*		*1*	*(2)*		*(2)*						
Non-Financial Corporations	*8,964*	*8,601*	*363*	*185*		*185*	*(5)*	*(2)*	*(3)*	*(49)*		*(49)*			
Households	*1318*	*1270*	*48*	*6*		*6*									
Total	**51,066**	**44,637**	**6,396**	**4,665**		**4,557**	**(513)**	**(202)**	**(311)**	**(2,391)**		**(2,345)**	**(254)**	**14,961**	**1,814**

** Included only Debt securities classified as HTC*

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***Table 29**: Performing and non-performing exposures and related provisions 30.06.2020*

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
	Gross carrying amount/ nominal amount						**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**						**Collateral 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		
Loans and advances	**27,729**	**22,505**	**5,170**	**10,471**		**10,357**	**(586)**	**(216)**	**(370)**	**(5,325)**		**(5,278)**	**14,065**	**4758**
Central Banks														
General Governments	*420*	*265*	*155*	*39*		*39*	*(8)*	*(2)*	*(6)*	*(21)*		*(21)*	*65*	*17*
Credit Institutions	*3,348*	*3,348*		*1*		*1*				*(1)*		*(1)*		
Other Financial Corporations	*148*	*108*	*40*	*34*		*34*	*(18)*	*(10)*	*(8)*	*(22)*		*(22)*	*2*	*11*
Non-Financial Corporations	*13,768*	*12,270*	*1,444*	*3,664*		*3,550*	*(297)*	*(121)*	*(176)*	*(2,395)*		*(2,348)*	*6,495*	*1050*
Of which SMEs	*3,954*	*2,974*	*980*	*2,178*		*2,137*	*(199)*	*(46)*	*(153)*	*(1,392)*		*(1,374)*	*2,150*	*694*
Households	*10,044*	*6,513*	*3,531*	*6,734*		*6,734*	*(263)*	*(83)*	*(180)*	*(2,887)*		*(2,887)*	*7,503*	*3681*
Debt Securities	**12,103**	**10,665**	**1,414**				**(94)**	**(31)**	**(63)**					
Central Banks														
General Governments	*11,952*	*10,538*	*1,414*				*(93)*	*(31)*	*(63)*					
Credit Institutions	*127*	*107*												
Other Financial Corporations	*3*													
Non-Financial Corporations	*21*	*21*												
Off-balance sheet exposures	**9,870**	**9,476**	**394**	**195**		**195**	**(9)**	**(4)**	**(5)**	**(49)**		**(49)**		
Central Banks														
General Governments	*101*	*100*	*1*											
Credit Institutions	*2*	*2*												
Other Financial Corporations	*42*	*42*		*1*										
Non-Financial Corporations	*8,416*	*8,042*	*373*	*189*		*189*	*(8)*	*(4)*	*(5)*	*(49)*		*(49)*		
Households	*1309*	*1290*	*20*	*5*		*5*								
Total	**49,702**	**42,647**	**6,978**	**10,667**		**10,552**	**(688)**	**(251)**	**(437)**	**(5,374)**		**(5,327)**	**14,065**	**4,758**

Table 30: Quality of non-performing exposures by geography 31.12.2020

		a	b	c	d	e	f	g
		Gross carrying amount/ nominal amount				Accumulated impairement*	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 impairement			
				Of which defaulted				
1	**On-balance-sheet exposures**	**56,734**	**4,473**	**3,891**	**56,594**	**(2,811)**		**(47)**
2	*Greece*	*44,521*	*4,352*	*3,839*	*44,405*	*(2,705)*		*(47)*
3	*Other Countries*	*2,841*	*21*	*6*	*2,835*	*(18)*		
4	*North Macedonia*	*1,747*	*96*	*44*	*1,747*	*(72)*		
5	*Marshall Islands*	*835*			*835*			
6	*United Kingdom*	*1,329*	*1*		*1,329*	*(1)*		
7	*Cyprus*	*325*	*3*	*3*	*325*	*(11)*		
8	*Germany*	*664*			*646*			
9	*Spain*	*1,309*			*1,309*	*(1)*		
10	*Italy*	*3,163*			*3,163*	*(3)*		
11	**Off-balance-sheet-exposures**	**10,657**	**192**	**143**			**(55)**	
12	*Greece*	*10,130*	*182*	*143*			*(55)*	
13	*North Macedonia*	*255*						
14	*Cyprus*	*229*	*3*					
15	*United Kingdom*	*36*						
16	*Other Countries*	*7*	*7*					
17	**Total**	**67,391**	**4,665**	**4,034**	**56,594**	**(2,811)**	**(55)**	**(47)**

** Accumulated impairement is not reported for off balance-sheet exposures*

***Table 30**: Quality of non-performing exposures by geography 31.12.2019*

		a	b	c	d	e	f	g
		Gross carrying amount/ nominal amount				Accumulated impairement	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 impairement			
				Of which defaulted				
1	On-balance-sheet exposures	49,782	10,985	9,843	49,586	(5,835)		(45)
2	*Greece*	41,369	10,717	9,604	41,196	(5,674)		(45)
3	*Other Countries*	3,161	162	145	3,155	(81)		
4	*North Macedonia*	1,652	101	91	1,652	(70)		
5	*Marshall Islands*	882			882			
6	*United Kingdom*	1,220	1	1	1,220	(1)		
7	*Cyprus*	277	3	2	277	(8)		
8	*Germany*	604			586			
9	*Spain*	617			617			
10	Off-balance-sheet-exposures	9,503	197	155			(52)	
11	*Greece*	9,067	197	155			(52)	
12	*North Macedonia*	228						
13	*Cyprus*	142						
14	*United Kingdom*	67						
15	Total	59,284	11,181	9,999	49,586	(5,835)	(52)	(45)

Table 31: Credit quality of loans and advances by industry 31.12.2020

		a	b	c	d	e	f
		Gross carrying amount				**Accumulated impairment**	Accumulated negative changes in fair value due to credit risk on non-performing exposures
			of which non-performing		Of which loans and advances subject to impairment		
				of which defaulted			
1	Agriculture, forestry and fishing	301	60	59	301	(31)	
2	Mining and quarrying	777	354	352	777	(304)	
3	Manufacturing	2,662	515	484	2,662	(325)	(21)
4	Electricity, gas, steam and air conditioning supply	2,136	8	8	2,136	(22)	
5	Water supply						
6	Construction	812	96	87	812	(80)	
7	Wholesale and retail trade	3,454	714	639	3,454	(495)	(3)
8	Transport and storage	2,767	137	136	2,767	(50)	(20)
9	Accomodation and food service activities	1,410	210	195	1,410	(150)	
10	Information and communication	136	5	2	136	(2)	
11	Financial and insurance activities						
12	Real estate activities	1,410	128	125	1,410	(70)	
13	Professional, scientific, and technical activities	300	105	101	300	(75)	
14	Administrative and support service activities	8			8		
15	Public administration and defence, compulsory social security						
16	Education	30	30		30	(12)	
17	Human health services and social work activities	118	16	15	118	(13)	
18	Arts, entertainment and recreation	3			3		
19	Other services	1,199	174	162	1,083	(133)	(1)
20	**Total**	**17,522**	**2,552**	**2,364**	**17,406**	**(1,761)**	**(47)**

***Table 31**: Credit quality of loans and advances by industry 31.12.2019*

		a	b	c	d	e	f
		Gross carrying amount				**Accumulated impairment**	Accumulated negative changes in fair value due to credit risk on non-performing exposures
			of which non-performing		Of which loans and advances subject to impairment		
				of which defaulted			
1	Agriculture, forestry and fishing	305	76	75	305	(39)	
2	Mining and quarrying	888	396	394	888	(329)	
3	Manufacturing	2,580	736	687	2,580	(430)	(21)
4	Electricity, gas, steam and air conditioning supply	2,057	41	27	2,057	(41)	
5	Water supply						
6	Construction	978	221	203	978	(160)	(0)
7	Wholesale and retail trade	3,649	1,232	1,096	3,649	(834)	(3)
8	Transport and storage	2,606	249	197	2,606	(136)	(19)
9	Accomodation and food service activities	1,380	273	245	1,380	(169)	(0)
10	Information and communication	116	12	2	116	(2)	
11	Financial and insurance activities						
12	Real estate activities	1,246	272	176	1,246	(148)	
13	Professional, scientific, and technical activities	310	139	135	310	(88)	
14	Administrative and support service activities	8	1		8		
15	Public administration and defense, compulsory social security						
16	Education						
17	Human health services and social work activities	190	47	46	190	(31)	
18	Arts, entertainment and recreation	3			3		
19	Other services	759	110	48	587	(124)	(1)
20	**Total**	**17,076**	**3,805**	**3,333**	**16,904**	**(2,532)**	**(45)**

Table 32: Collateral valuation - loans and advances

		a	b	c	d	e	f	g	h	i	j	k	l
		Loans and advances											
			Performing		**Non- performing**								
						Unlikely to pay that are not past due or are 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
1	Gross carrying amount	**32,784**	**28,311**	**354**	**4,473**	**2,083**	**2,389**	**100**	**221**	**182**	**776**	**245**	**865**
2	*Of which secured*	*25,003*	*21,208*	*199*	*3,795*	*1,915*	*1,880*	*72*	*155*	*144*	*606*	*210*	*692*
3	Accumulated impairment for secured assets	(2,110)	(274)	(21)	(1,836)	(719)	*(1,116)*	(20)	(83)	(75)	(403)	(104)	(431)
4	Collateral												
5	*Of which secured*	*14,864*	*13,142*	*126*	*1,722*	*1,053*	*669*	*51*	*57*	*56*	*166*	*95*	*244*
6	*Of which immovable property*	*11,434*	*9,946*	*106*	*1,488*	*940*	*548*	*47*	*51*	*52*	*137*	*76*	*184*
7	Financial guarantees receved	*1,910*	*1,819*	*6*	*92*	*70*	*22*	*1*	*2*	*3*	*5*	*0*	*12*
8	Accumulated partial write-offs	(254)	(9)	0	(245)	(160)	(85)	(1)	(1)	(6)	(43)	(6)	(28)

***Table 32**: Collateral valuation - loans and advances 31.12.2019*

		a	b	c	d	e	f	g	h	i	j	k	l
		Loans and advances											
			Performing		**Non- performing**								
						Unlikely to pay that are not past due or are 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
1	Gross carrying amount	**40,908**	**29,923**	**323**	**10,985**	**3,386**	7,599	434	464	944	1,623	1,242	2,891
2	*Of which secured*	*32,803*	*23,232*	***281***	*9,571*	*3,014*	*6,557*	*379*	*405*	*772*	*1,359*	*1,094*	*2,547*
3	Accumulated impairment for secured assets	(4,556)	(314)	**(23)**	(4,241)	(1,015)	(3,227)	(133)	(175)	(394)	(641)	(540)	(1,344)
4	Collateral												
5	*Of which secured*	*18,129*	*13,071*	***240***	*5,058*	*1,814*	*3,244*	*241*	*206*	*359*	*676*	*582*	*1,180*
6	*Of which immovable property*	*14,249*	*9,551*	***202***	*4,698*	*1,659*	*3,039*	*237*	*199*	*324*	*605*	*564*	*1,109*
7	Financial guarantees receved	1,060	971	**3**	89	51	38	2	3	3	14	4	12

Table 33: Changes in the stock of non-performing loans and advances 31.12.2020

		a	b
		Gross carrying amount	Related net accumulated recoveries
1	**Initial stock of non-performing loans and advances**	**10,985**	
2	Inflows to non-performing portfolios	1,247	
3	Outflows from non-performing portfolios	(7,759)	
4	Outflow to performing portfolio	(987)	
5	Outflow due to loan repayment, partial or total	(325)	
6	Outflow due to collateral liquidation	(171)	29
7	Outflow due to taking possession of collateral	(119)	42
8	Outflow due to sale of instruments	(39)	18
9	Outflow due to risk transfers	0	0
10	Outflow due to write-off	(488)	
11	Outflow due to other situations	(125)	
12	Outflow due to reclassification as held for sale	(5,505)	
13	**Final stock of non-performing loans and advances**	**4,473**	

***Table 33**: Changes in the stock of non-performing loans and advances 31.12.2019*

		a	b
		Gross carrying amount	Related net accumulated recoveries
1	**Initial stock of non-performing loans and advances**	**16,272**	
2	Inflows to non-performing portfolios	1,785	
3	Outflows from non-performing portfolios	(7,073)	
4	Outflow to performing portfolio	(1,521)	
5	Outflow due to loan repayment, partial or total	(429)	
6	Outflow due to collateral liquidation	(208)	(83)
7	Outflow due to taking possession of collateral	(202)	(80)
8	Outflow due to sale of instruments	(1,855)	(467)
9	Outflow due to risk transfers		
10	Outflow due to write-off	(1,090)	
11	Outflow due to other situations	(283)	
12	Outflow due to reclassification as held for sale	(1,485)	
13	**Final stock of non-performing loans and advances**	**10,985**	

Table 34: Collateral obtained by taking possession and execution processes 31.12.2020

		a	b
		Collateral obtained by taking possession	
		Value at initial recognition	Accumulated negative changes
1	Property, plant and equipment (PP&E)	**0**	**0**
2	Other than PP&E	***624***	**(103)**
3	*Residential immovable property*	*252*	(21)
4	*Commercial immovable property*	*360*	(71)
5	*Movable propert (auto, shipping, etc.)*	*1*	(1)
6	*Equity and debt instruments*	*8*	(8)
7	*Other*	*3*	*(2)*
8	**Total**	**624**	**(103)**

***Table 34**: Collateral obtained by taking possession and execution processes 30.06.2020*

		a	b
		Collateral obtained by taking possession	
		Value at initial recognition	Accumulated negative changes
1	Property, plant and equipment (PP&E)	*0*	0
2	Other than PP&E	*566*	(100)
3	*Residential immovable property*	*193*	(19)
4	*Commercial immovable property*	*360*	(71)
5	*Movable property (auto, shipping, etc.)*	*0*	0
6	*Equity and debt instruments*	*8*	(8)
7	*Other*	*5*	*(1)*
8	**Total**	**566**	**(100)**

Table 35: Collateral obtained by taking possession and execution process - vintage breakdown 31.12.2020

		a	b	c	d	e	f	g	h	i	j	k	l
		Debt balance reduction		Total collateral obtained by taking possession									
		Gross carrying amount	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes	Foreclosed ≤ 2 years		Foreclosed >2 years and ≤ 5 years		Foreclosed >5 years		of which non-current assets held-for-sale	
						Value at initial recogn.	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes
1	Collateral obtained by taking possession classified as PP&E												
2	Collateral obtained by taking possession other than that classified as PP&E			**624**	(103)	291	(12)	146	(11)	187	(80)	378	
3	*Residential immovable property*			***252***	*(21)*	*157*	*(2)*	*55*	*(3)*	*40*	*(16)*	*175*	
4	*Commercial immovable property*			***360***	*(71)*	*125*	*(1)*	*89*	*(7)*	*146*	*(63)*	*203*	
5	*Movable property (auto, shipping etc.)*			***1***	*(1)*	*1*							
6	*Equity and debt instruments*			***8***	*(8)*	*8*	*(8)*						
7	*Other*			***3***	*(2)*			*2*	*(2)*	*1*		*0*	
8	**Total**			**624**	**(103)**	**291**	**(12)**	**146**	**(11)**	**187**	**(80)**	**378**	

***Table 35**: Collateral obtained by taking possession and execution process - vintage breakdown 31.12.2019*

		a	b	c	d	e	f	g	h	i	j	k	l
		Debt balance reduction		Total collateral obtained by taking possession									
		Gross carrying amount	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes	Foreclosed ≤ 2 years		Foreclosed >2 years and ≤ 5 years		Foreclosed >5 years		of which non-current assets held-for-sale	
						Value at initial recogn.	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes	Value at initial recogn.	Accum. neg. changes
1	Collateral obtained by taking possession classified as PP&E												
2	Collateral obtained by taking possession other than that classified as PP&E			**564**	(100)	348	(15)	13	(4)	203	(81)	382	(51)
3	*Residential immovable property*			***184***	*(17)*	*142*	*(1)*	*1*		*42*	*(16)*	*180*	*(16)*
4	*Commercial immovable property*			***363***	*(70)*	*197*	*(5)*	*9*	*(3)*	*157*	*(63)*	*202*	*(34)*
5	*Movable property (auto, shipping etc.)*												
6	*Equity and debt instruments*			***8***	*(8)*	*8*	*(8)*						
7	*Other*			***8***	*(4)*	*2*	*(1)*	*3*	*(2)*	*4*	*(2)*		
8	**Total**			**564**	**(100)**	**348**	**(15)**	**13**	**(4)**	**203**	**(81)**	**382**	**(51)**

6.7 Credit risk mitigation techniques

Since 2007, NBG uses a specialised Collateral Management system, both for corporate and retail exposures. The system aims to:

- Record Bank's collaterals;
- Establish a connection between loan contract and collateral;
- Assess qualitatively all collaterals;
- Monitor collaterals' market value and estimate coverage ratio;
- Provide information regarding each and every obligor's collaterals;
- Retrieve necessary data for the estimation of capital requirements per facility;
- Automatically monitor the obligor's entire credit risk position.

The Collateral Management system provides a large number of control elements, reducing operational risk, also keeping track of all securities offered to the Bank, both those that are currently active and those that matured.

The system calculates and/or keeps the following values per collateral:

- Value as of input day;
- Current market value (for traded securities, etc.);
- Security/Guarantee value: this is lower than the Current market value by a fixed proportion which, in turn, is based on the collateral's liquidation feasibility;
- Market value, Tax value, Forced Sale value, Land and Buildings value and Construction Cost for all real estate collaterals.

In principle, NBG accepts the following credit risk mitigation types (funded and unfunded):

- Guarantees from:
  - Physical and Legal entities, both from the Private and Public Sector
  - Central governments, Regional governments, local authorities and PSEs
  - Financial institutions
  - The Greek Government and the Hellenic Fund for Entrepreneurship and Development (ETEAN SA)
- Pledges of
  - Securities (cheques and bills of exchange)
  - Deposits
  - Equity, Mutual funds and Non-tangible securities (bonds, etc.)
  - Claims against Central Government, Public and Private Sector Entities
  - Goods, Exported claims and Leases
  - Letters of Guarantee and Trademarks
  - Claims on Insurance Contracts
  - Claims from Credit Cards' sales
- Liens
  - On Real Estate and Ships
- Other
  - Discounting of Bills of Exchange
  - Cash
  - Receivables

Credit and Counterparty Risk exposures secured by CRR eligible credit risk mitigation instruments (collateral and guarantees) as of 31.12.2020 (in € mio) were as follows:

Table 36 : EU CR3 - CRM techniques – Overview 31.12.2020

		a	b	c	d	e
		Exposures* unsecured - Carrying amount	Exposures* secured - Carrying amount	Exposures* secured by collateral	Exposures* secured by financial guarantees	Exposures* secured by credit derivatives
1	Total loans	**7,135**	**22,893**	**16,300**	**6,592**	
2	Total debt securities**	12,187	10	10	0	
3	**Total exposures**	**19,323**	**22,903**	**16,310**	**6,592**	
4	*Of which defaulted*	**4,898**	**5,805**	**4,134**	**1,671**	

**Amounts are gross of provisions*
*** Included only Debt securities classified as HTC*

***Table 36 : EU CR3** - CRM techniques – Overview 30.06.2020*

		a	b	c	d	e
		Exposures* unsecured - Carrying amount	Exposures* secured - Carrying amount	Exposures* secured by collateral	Exposures* secured by financial guarantees	Exposures* secured by credit derivatives
1	Total loans	7,177	25,112	19,251	5,861	
2	Total debt securities	11,968	42	42	0	
3	**Total exposures**	**19,145**	**25,154**	**19,292**	**5,861**	
4	*Of which defaulted*	*4,525*	*5,946*	*4,560*	*1,385*	

**Amounts are gross of provisions*

6.8 Portfolios under the Standardised Approach

External Credit Assessment Institutions (ECAI) used to risk weight exposures under the Standardised Approach are Standard & Poor's, Moody's Investors Service Ltd and Fitch Ratings Ltd. There is no process to transfer the issuer and issue credit assessments onto items not included in the trading book, as this is not applicable to NBG Group's portfolios.
The asset classes for which ECAI ratings are used are the following:

- Central Governments and Central Banks
- Regional Governments and Local Authorities
- Public Sector Entities
- Financial Institutions
- Corporate

The following table depicts the mapping of external credit assessments to the corresponding credit quality steps.

Table 37: Mapping of Credit quality steps

Fitch	Standard & Poor's	Moody's	Credit Quality Steps
From AA to AAA	From AA to AAA	From Aa1 to Aaa	1
From A to A+	From A to A+	From A1 to A3	2
From BBB to BBB+	From BBB to BBB+	From Baa1 to Baa3	3
From BB to BB+	From BB to BB+	From Ba1 to Ba3	4
From B to B+	From B to B+	From B1 to B3	5
From C to CCC+	From C to CCC+	From C1 to Caa3	6

The table below presents the Exposures (net of accounting provisions), before and after Credit Risk Mitigation (CRM), as of 31.12.2020, according to the supervisory exposure classes (amounts are in € mio):

Table 38: EU CR4 - Standardised approach - Credit Risk Exposure and CRM effects 31.12.2020

	a	b	c	d	e	f
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
Exposure classes	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs*	RWA density
Central governments or central banks	30,102		30,959		5,677	18%
Regional governments or local authorities	17	1	17		3	18%
Public sector entities	729	107	706	3	706	100%
Multilateral development banks	11		66		0	0%
International organisations	60		60		0	0%
Institutions	2,217	181	2,283	40	179	8%
Corporates	11,581	8,372	10,995	613	10,999	95%
Retail	3,743	1,915	3,114	15	2,149	69%
Secured by mortgages on immovable property	9,557	73	9,557	26	3,493	36%
Exposures in default	4,643	115	4,482	13	4,605	102%
Exposures associated with particularly high risk	113	28	111	5	174	150%
Covered bonds						
Institutions and corporates with a short-term credit assessment						
Collective investment undertakings						
Equity	413		413		923	223%
Other items	3,887		3,887		3,256	84%
Total	**67,074**	**10,791**	**66,650**	**716**	**32,162**	**48%**

**Counterparty Credit Risk RWAS are not included*

Table 38: EU CR4 - Standardised approach - Credit Risk Exposure and CRM effects 30.06.2020

	a	b	c	d	e	f
	Exposures before CCF and CRM		**Exposures post CCF and CRM**		**RWAs and RWA density**	
Exposure classes	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs*	RWA density
Central governments or central banks	27,036		27,715		5,191	19%
Regional governments or local authorities	19	2	18		4	22%
Public sector entities	675	113	651	3	256	39%
Multilateral development banks	11		69		0	0%
International organisations	57		57		0	0%
Institutions	2,170	155	2,234	35	271	12%
Corporates	10,598	8,189	10,164	635	10,334	96%
Retail	3,639	1,850	2,996	14	2,086	69%
Secured by mortgages on immovable property	9,498	80	9,498	24	3,438	36%
Exposures in default	5,342	122	5,180	15	5,291	102%
Exposures associated with particularly high risk	111	16	111	3	171	150%
Covered bonds						
Institutions and corporates with a short-term credit assessment						
Collective investment undertakings						
Equity	550		550		1,258	229%
Other items	3,759		3,759		3,166	84%
Total	**63,465**	**10,527**	**63,002**	**729**	**31,466**	**49%**

**Counterparty Credit Risk RWAS are not included*

Table 39 : EU CR5 - Standardised approach 31.12.2020

	Exposure classes	**Risk Weight**							
		0%	2%	4%	10%	20%	35%	50%	70%
1	Central governments or central banks	25,791				2		43	
2	Regional governments or local authorities					17			
3	Public sector entities					4			
4	Multilateral development banks	66							
5	International organisations	60							
6	Institutions	1,790				362		132	
7	Corporates								
8	Retail								
9	Secured by mortgages on immovable property						6,694	2,891	
10	Exposures in default								
11	Exposures associated with particularly high risk								
12	Covered bonds								
13	Institutions and corporates with a short-term credit assessment								
14	Collective investment undertakings								
15	Equity								
16	Other items	627				7			
17	**Total**	**28,334**				**392**	**6,694**	**3,066**	

Table 39 : EU CR5 - Standardised approach 31.12.2020 *(continued)*

	Exposure classes	Risk Weight								Total*
		75%	100%	150%	250%	370%	1250%	Others	Deducted	
1	Central governments or central banks		4,768		354					**30,958**
2	Regional governments or local authorities									**17**
3	Public sector entities		705							**709**
4	Multilateral development banks									**66**
5	International organisations									**60**
6	Institutions		32	6						**2,322**
7	Corporates		10,977	631						**11,608**
8	Retail	3,129								**3,129**
9	Secured by mortgages on immovable property									**9,585**
10	Exposures in default		4,274	221						**4,495**
11	Exposures associated with particularly high risk			116						**116**
12	Covered bonds									
13	Institutions and corporates with a short-term credit assessment									
14	Collective investment undertakings									
15	Equity		73		340					**413**
16	Other items		3,253							**3,887**
17	**Total**	**3,129**	**24,082**	**974**	**694**					**67,365**

**Counterparty Credit Risk exposures are not included*

***Table 39 : EU CR5** - Standardised approach 30.06.2020*

	Exposure classes	Risk Weight							
		0%	2%	4%	10%	20%	35%	50%	70%
1	Central governments or central banks	22,738						47	
2	Regional governments or local authorities					18			
3	Public sector entities					497			
4	Multilateral development banks	69							
5	International organisations	57							
6	Institutions	1,652				373		127	
7	Corporates								
8	Retail								
9	Secured by mortgages on immovable property						6,751	2.771	
10	Exposures in default								
11	Exposures associated with particularly high risk								
12	Covered bonds								
13	Institutions and corporates with a short-term credit assessment								
14	Collective investment undertakings								
15	Equity								
16	Other items	586				8			
17	**Total**	**25,101**				**897**	**6,751**	**2,945**	

Table 39 : EU CR5 - Standardised approach 30.06.2020 (continued)

	Exposure classes	Risk Weight								Total*
		75%	100%	150%	250%	370%	1250%	Others	Deducted	
1	Central governments or central banks		4,771		159					**27,715**
2	Regional governments or local authorities									**18**
3	Public sector entities		157							**654**
4	Multilateral development banks									**69**
5	International organisations									**57**
6	Institutions		86	31						**2,269**
7	Corporates		10,133	666						**10,799**
8	Retail	3,010								**3,010**
9	Secured by mortgages on immovable property									**9,522**
10	Exposures in default		5,003	192						**5,195**
11	Exposures associated with particularly high risk			114						**114**
12	Covered bonds									**0**
13	Institutions and corporates with a short-term credit assessment									**0**
14	Collective investment undertakings									**0**
15	Equity		78		472					**550**
16	Other items		3,165							**3,759**
17	**Total**	**3,010**	**23,392**	**1,003**	**631**					**63,731**

**Counterparty Credit Risk exposures are not included*

7 COUNTERPARTY CREDIT RISK

Counterparty Credit Risk (CCR) for regulatory purposes derives from OTC derivative and secured interbank transactions, namely repurchase agreements, and the calculations refer on both the trading portfolio and the banking book. The main contributor to CCR within NBG Group is the Bank.

The approach for the calculation of the exposure values for CRR depends on the type of transaction. For OTC derivative transactions, the exposure at default (EAD) is calculated based on the mark-to-market method. In particular, the EAD is calculated as the current value plus the potential future credit exposure, based on regulatory add-ons, taking into account the netting clauses and collateral agreements that are in place. In the case of repurchase agreements, the EAD is calculated in accordance with the financial collateral comprehensive method.

In addition, the GFLRM Division calculates the capital requirements against credit valuation adjustment (CVA) risk. CVA is an adjustment to the fair value of derivative instruments to account for CCR, due to possible changes in the creditworthiness of the counterparty. NBG employs the Standardized approach for the calculation of the respective capital charges. The calculations only refer to transactions with financial institutions.

The components of CCR on a Group level are shown in the tables below, as of 31 December 2020.

Table 40: EU CCR1 - Analysis of CCR exposure by approach (€ mio) 31.12.2020

		Notional	Replacement cost/ current market value	Potential Future Credit Exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		2,273	488			1,228	166
2	Original exposure							
3	Standardized approach							
4	IMM (for derivatives and SFTs)							
5	Of which securities financing transactions							
6	Of which derivatives and long settlement transactions							
7	Of which from contractual cross-product netting							
8	Financial collateral simple method (for SFTs)							
9	Financial collateral comprehensive method (for SFTs)`						29	13
10	VaR for SFTs							
11	**Total**							**179**

Table 40: EU CCR1 - Analysis of CCR exposure by approach (€ mio) 30.06.2020

		Notional	Replacement cost/ current market value	Potential Future Credit Exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		2,308	508			1,127	159
2	Original exposure							
3	Standardised approach							
4	IMM (for derivatives and SFTs)							
5	Of which securities financing transactions							
6	Of which derivatives and long settlement transactions							
7	Of which from contractual cross-product netting							
8	Financial collateral simple method (for SFTs)							
9	Financial collateral comprehensive method (for SFTs)`						27	13
10	VaR for SFTs							
11	**Total**							**172**

Table 41: EU CCR2 – CVA capital charge (€ mio) 31.12.2020

		Exposure value	RWAs
1	Total portfolios subject to the advanced method		
2	(i) VaR component (including the 3x multiplier)		
3	(ii) SVaR component (including the 3x multiplier)		
4	All portfolios subject to the Standardized method	119	100
EU4	Based on the original exposure method		
5	**Total subject to the CVA capital charge**	**119**	**100**

Table 41: EU CCR2 *– CVA capital charge (€ mio) 30.06.2020*

		Exposure value	RWAs
1	Total portfolios subject to the advanced method		
2	(i) VaR component (including the 3x multiplier)		
3	(ii) SVaR component (including the 3x multiplier)		
4	All portfolios subject to the standardised method	124	112
EU4	Based on the original exposure method		
5	**Total subject to the CVA capital charge**	**124**	**112**

Table 42: **EU CCR8** – Exposures to CCPs (€ mio) 31.12.2020

		EAD psot CRM	RWAs
1	**Exposures to QCCPs* (total)**		47
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	**10**	2
3	(i) OTC derivatives		
4	(ii) Exchange-traded derivatives	10	2
5	(iii) SFTs		
6	(iv) Netting sets where cross-product netting has been approved		
7	Segregated initial margin		
8	Non-segregated initial margin	6	1
9	Prefunded default fund contributions	**12**	
10	Alternative calculation of own funds requirements for exposures		44
11	**Exposures to non-QCCPs* (total)**		
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which		
113	(i) OTC derivatives		
14	(ii) Exchange-traded derivatives		
15	(iii) SFTs		
17	Segregated initial margin		
18	Non-segregated initial margin		
19	Prefunded default fund contributions		
20	Unfunded default fund contributions		

**QCCP: Qyalifying Central Counterparty*

***Table 42**: **EU CCR8** – Exposures to CCPs (€ mio) 30.06.2020*

		EAD psot CRM	RWAs
1	**Exposures to QCCPs (total)**		**53**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	**8**	2
3	(i) OTC derivatives		
4	(ii) Exchange-traded derivatives	8	2
5	(iii) SFTs		
6	(iv) Netting sets where cross-product netting has been approved		
7	Segregated initial margin		
8	Non-segregated initial margin	16	3
9	Prefunded default fund contributions	**12**	
10	Alternative calculation of own funds requirements for exposures		47
11	**Exposures to non-QCCPs (total)**		
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which		
113	(i) OTC derivatives		
14	(ii) Exchange-traded derivatives		
15	(iii) SFTs		
17	Segregated initial margin		
18	Non-segregated initial margin		
19	Prefunded default fund contributions		
20	Unfunded default fund contributions		

Table 43: EU CCR3 - Standardized approach - CCR exposures by regulatory portfolio and risk (€ mio) 31.12.2020

	Exposure classes	**Risk Weight**											**Total**
		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	
1	Central governments or central banks	1,027											**1,027**
2	Regional governments or local authorities												
3	Public sector entities												
4	Multilateral development banks												
5	International organisations												
6	Institutions	12	1,141			138	93			18	15		**1,416**
7	Corporates									84	3		**87**
8	Retail												
9	Institutions and corporates with a short-term credit assessment												
10	Other items												
11	**Total**	**1,039**	**1,141**			**138**	**93**			**102**	**19**		**2,530**

Table 43: EU CCR3 - Standardized approach - CCR exposures by regulatory portfolio and risk (€ mio) 30.06.2020

	Exposure classes	Risk Weight											Total
		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	
1	Central governments or central banks	938											**938**
2	Regional governments or local authorities												
3	Public sector entities												
4	Multilateral development banks												
5	International organisations												
6	Institutions	12	1,360			132	98			19	16		**1,636**
7	Corporates									74	3		**78**
8	Retail												
9	Institutions and corporates with a short-term credit assessment												
10	Other items												
11	**Total**	**949**	**1,360**			**132**	**98**			**93**	**19**		**2,651**

Table 44: EU CCR6 - Credit derivatives exposures (€ mio) 31.12.2020

	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
Notionals			
Single-name credit default swaps	**10**		
Index credit default swaps			
Total return swaps			
Credit options			
Other credit derivatives			
Total notionals	**10**		
Fair values			
Positive fair value (asset)			
Negative fair value (liability)	**0**		

***Table 44: EU CCR6** - Credit derivatives exposures (€ mio) 31.12.2019*

	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
Notionals			
Single-name credit default swaps	**25**		
Index credit default swaps			
Total return swaps			
Credit options			
Other credit derivatives			
Total notionals	**25**		
Fair values			
Positive fair value (asset)			
Negative fair value (liability)	**2**		

8 MARKET RISK

The Bank uses internally developed and implemented market risk models and systems to assess and quantify the portfolio market risk, based on best practice and industry-wide accepted risk metrics. More specifically, the Bank estimates the market risk of its trading and the held to collect and sell (HTCS) portfolios using the Value at Risk (VaR) methodology. In particular, the Bank has adopted the Variance-Covariance (VCV) methodology, with a 99% confidence interval and 1-day holding period.

The variance-covariance methodology can be summarised as follows:

1. Collection of transactional data per type of product;
2. Identification of "risk factors" i.e., variables whose price changes could affect the value of the portfolio. The risk factors relevant to the financial products in the Bank's portfolio are interest rates, equity indices, foreign exchange rates and commodity prices;
3. Collection of market data for instruments/positions valuation;
4. Specification of the confidence interval and the holding period for the VaR calculations at 99% and 1-day, respectively;
5. Estimation of the model's parameters:
    - the variance of each risk factor, from which respective volatilities are derived;
    - the covariance of the risk factors, from which respective correlations are derived;
    - the beta of stocks;
    - the volatility for the estimation of equity specific risk.
6. Estimation of the VaR per type of risk (interest rate risk, equity risk, foreign exchange risk);
7. Estimation of Total VaR, taking into consideration the correlation matrix among all risk factors.

The calculation of the model's parameters relies on the following statistical assumptions:

- Returns on individual risk factors follow a normal distribution
- Portfolio's payout is considered to be linear

The VaR is calculated on a daily basis for the Bank's trading and held-to-collect-and-sell (HTCS) portfolios, along with the VaR per risk type (interest rate, equity and foreign exchange risk). The VaR estimates are used internally as a risk management tool, as well as for regulatory purposes. More specifically, the GFLRM Division calculates the VaR of the Bank's trading and HTCS portfolios, for internal use, using the latest 75 exponentially weighted daily observations to construct the VCV matrices. For regulatory purposes, the calculations apply only on the trading portfolio and the VCV matrices are based on 252, equally weighted, daily observations per risk factor. Currently the number of risk factors involved in the VaR calculations is 1,597.

Moreover, since the Bank has approval to use an internal model approach (IMA) only for general market risk purposes, the issuer risk and the equity specific risk of the portfolio are excluded from the regulatory VaR calculations. The respective capital requirements are based on the Standardized Approach (SA).

Additionally, the GFLRM Division calculates the stressed VaR (sVaR) of the Bank's trading portfolio, which is defined as the VaR, where model inputs are calibrated to historical data from a continuous 1-year period of significant financial stress, relevant to the Bank's portfolio. To identify this 1-year time window of significant stress, NBG follows a conservative approach, which covers the entire period from the beginning of the financial crisis of 2008. More specifically, VCV matrices dating back to the 3rd of January 2008, are calculated on a daily basis and the VCV matrix that corresponds to the maximum VaR of NBG's trading portfolio, over the entire period, is selected. To ensure consistency, at each year-end, the process is repeated for certain days of the last calendar month of the year, and subsequently the identified "stressed VCV matrix" is applied over the next year. Similarly to VaR, NBG calculates sVaR on a daily basis, using a 1-day holding period and 99% confidence level.

For the calculation of the regulatory capital requirements, the VaR/sVaR is scaled up to 10-days via the square-root-of-time rule[1].

Based on the above, the capital charges for the Bank's general market risk are calculated as the sum of the following two amounts:

- the maximum of: a) the VaR of the previous day, calculated with a 10-days holding period, b) the average VaR of the last 60-days, using a 10-days holding period and multiplied by a factor(mc), determined by the regulator and varying between three (3) and four (4); plus
- the maximum of: a) the Stressed VaR of the previous day, calculated with a 10-days holding period, b) the average Stressed VaR of the last 60-days, using a 10-days holding period and multiplied by a factor (ms), determined by the regulator and varying between three (3) and four (4).

Finally, the use of internal model is granted only for NBG, therefore the calculation of market risk capital charges for the rest of the Group's subsidiaries is based on the Standardized Approach. The components of capital requirements under the standardized approach and the internal model approach for market risk, as of 31 December, 2020, are shown in the tables below.

Table 45: EU MR1 – Market risk under the Standardized approach (€ mio) 31.12.2020

		RWAs	Cap. Req.
	Outright products		
1	Interest rate risk (general and specific)	40	3
2	Equity risk (general and specific)	46	4
3	Foreign echange risk	186	15
4	Commodity risk		
	Options		
5	Delta-plus method	212	17
6	**Total**	**484**	**39**

Table 45: EU MR1 – Market risk under the standardized approach (€ mio) 30.06.2020

		RWAs	Cap. Req.
	Outright products		
1	Interest rate risk (general and specific)	51	4
2	Equity risk (general and specific)	30	2
3	Foreign echange risk	178	14
4	Commodity risk		
	Options		
5	Delta-plus method	249	20
6	**Total**	**508**	**41**

[1] 10-day VaR is obtained by multiplying the 1-day VaR with the square root of 10 (i.e. $VaR10-day=VaR1-day*\sqrt{10}$)

Table 46: EU MR2-A – Market risk under the IMA (€ mio) 31.12.2020

		RWAs	Capital requirements
1	**VaR** (higher of values a and b)	**240**	**19**
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		6
(b)	Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		19
2	**SVaR** (higher of values a and b)	**710**	**57**
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		19
(b)	Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		57
6	**Total**	**950**	**76**

***Table 46: EU MR2-A** – Market risk under the IMA (€ mio) 30.06.2020*

		RWAs	Capital requirements
1	**VaR** (higher of values a and b)	295	24
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		8
(b)	Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		24
2	**SVaR** (higher of values a and b)	747	60
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		20
(b)	Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		60
6	Total	1,042	83

Table 47: EU MR2-B – RWA flow statements of market risk expsoures under the IMA (€ mio)

		VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total capital requirements
1	**RWAs as of Septemper 30, 2020**	**268**	**606**	-	-	-	**874**	**70**
1a	*Regulatory adjustment*	181	391	-	-	-	572	46
1b	*RWAs at the previous quarter-end (end of the day)*	87	215	-	-	-	302	24
2	Movement in risk levels	(1)	30	-	-	-		
3	Model updates/changes			-	-	-		
4	Methodology and policy			-	-	-		
5	Acquisitions and disposals			-	-	-		
6	Foreign exchange movements			-	-	-		
7	Other	(5)	(8)	-	-	-		
8a	*RWAs at the end of the reporting period (end of the day)*	80	236	-	-	-	317	25
8b	*Regulatory adjustment*	159	474	-	-	-	634	51
8	**RWAs as of December 31, 2020**	**240**	**710**	-	-	-	**950**	**76**

***Table 47: EU MR2-B** – RWA flow statements of market risk expsoures under the IMA (€ mio) 30.09.2020*

		VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total capital requirements
1	**RWAs as of June 30, 2020**	**295**	**747**	-	-	-	**1,043**	**83**
1a	*Regulatory adjustment*	192	496	-	-	-	687	55
1b	*RWAs at the previous quarter-end (end of the day)*	104	252	-	-	-	355	28
2	Movement in risk levels	(19)	(44)	-	-	-		
3	Model updates/changes			-	-	-		
4	Methodology and policy			-	-	-		
5	Acquisitions and disposals			-	-	-		
6	Foreign exchange movements			-	-	-		
7	Interest Rate Volatilities	2	7	-	-	-		
8a	*RWAs at the end of the reporting period (end of the day)*	87	215	-	-	-	302	24
8b	*Regulatory adjustment*	181	391	-	-	-	572	46
8	**RWAs as of September 30, 2020**	**268**	**606**	-	-	-	**874**	**70**

The Market Risk RWAs, based on the Internal Model Approach, stand moderately higher in the fourth quarter of the year, compared to the respective figure over the previous quarter, mainly due to the increased sensitivity of the Trading book, following the movements of the EUR IRS rates.

Finally, the Bank's regulatory VaR/sVaR estimates during the last six months of 2020 are shown in the table below.

Table 48: EU MR3 – IMA values for trading portfolios (€ mio) 31.12.2020

	VaR (10 day 99%)	
1	Maximum value	9
2	Average value	7
3	Minimum value	6
4	Period end	6
	SVaR (10 day 99%)	
5	Maximum value	20
6	Average value	18
7	Minimum value	14
8	Period end	19

Table 48: EU MR3 – IMA values for trading portfolios (€ mio) 30.06.2020

	VaR (10 day 99%)	
1	Maximum value	14
2	Average value	8
3	Minimum value	6
4	Period end	9
	SVaR (10 day 99%)	
5	Maximum value	29
6	Average value	20
7	Minimum value	15
8	Period end	22

8.1 Stress testing

The daily VaR refers to "normal" market conditions. Supplementary analysis is, however, necessary for capturing the potential loss that might incur under extreme and unusual conditions in financial markets. Thus, the GFLRM Division conducts stress testing on a weekly basis, through the application of different stress scenarios on the relevant risk factors (interest rates, equity indices, foreign exchange rates). Stress testing is performed on both the Trading and the HTCS portfolios, as well as separately on the positions of the Trading Book.

The scenarios used are shown in the following table:

Table 49: Stress test Scenarios

Scenario	Description			
Interest Rate Risk				
		0 - 3 months	3 months –5 years	> 5 years
1	Parallel Curve shift	+200 bps.	+200 bps.	+200 bps.
2	Parallel Curve shift	-200 bps.	-200 bps.	-200 bps.
3	Steepening of the curve	0 bps.	+100 bps.	+200 bps.
4	Flattening of the curve	+200 bps.	+100 bps	0 bps.
Equity Risk				
	-30% for all indices			
Foreign Exchange Risk				
	EUR depreciation by 30%/EUR appreciation by 30%			

Additionally, the following volatility stress test scenarios are defined and the Trading and HTCS P&L is assessed, on a daily basis:

Table 50: Volatility stress test Scenarios

Scenario	Description
1	IR: normal +1bp, lognormal +1%, EQT & FX: +1%
2	IR: normal +5bp, lognormal +5%, EQT & FX: +5%
3	IR: normal +10bp, lognormal +10%, EQT & FX: +10%
4	IR: normal -1bp, lognormal -1%, EQT & FX: -1%
5	IR: normal -5bp, lognormal -5%, EQT & FX: -5%
6	IR: normal -10bp, lognormal -10%, EQT & FX: -10%

8.2 Back-testing

In order to verify the predictive power of the VaR model used for the calculation of Market Risk capital requirements, the Bank conducts back-testing on a daily basis. In accordance with the guidelines set out in the Capital Requirements Regulation 575/2013, the calculations only refer to the Bank's trading portfolio and involve the comparison of the hypothetical as well as the actual daily gains/losses of the portfolio, with the respective estimates of the VaR model used for regulatory purposes. The hypothetical gains/losses is the change in the value of the portfolio between days t and t+1, assuming that the portfolio remains constant between the two days. In the same context, the actual gains/losses is the change in the value of the portfolio between days t and t+1, including all the transactions and/or any realized gains/losses that took place in day t+1, excluding fees, commissions and net interest income.
Any excess of the hypothetical / actual losses over the VaR estimate is reported to the regulatory authorities within five business days. During 2020, the back-testing result exceeded the respective VaR calculation only in 1 case, which was attributed to the extraordinary conditions caused by the outbreak of the COVID-19 pandemic. However, following NBG's petition, this overshooting will be excluded from the calculation of the addend on the VaR and sVaR multiplication factors, as per the ECB's letter on 17.12.2020.

The graph below illustrates the regulatory VaR, as well as the hypothetical and the actual P&L, since the beginning of 2020.

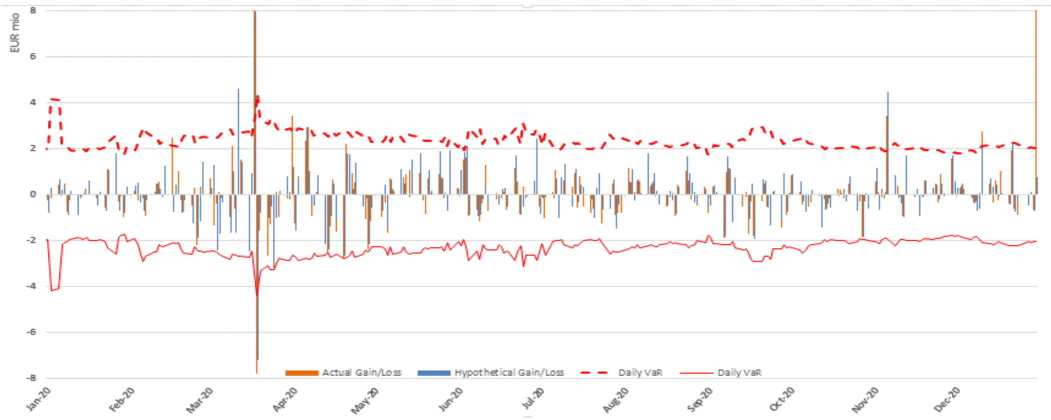

Figure 7: EU MR4 – Comparison of VaR estimates with gains/losses 2020

Respectively, the graph below illustrates the regulatory VaR, as well as the hypothetical and the actual P&L, for period June19 – June20.

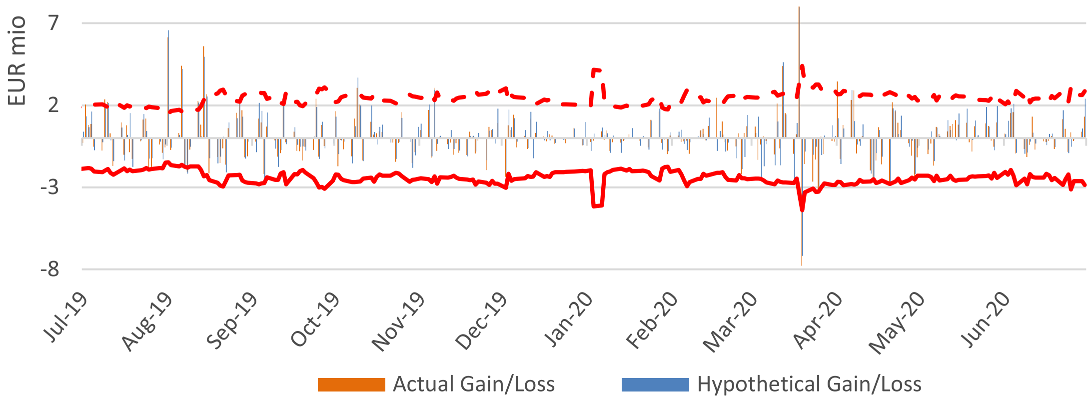

***Figure 7: EU MR4** – Comparison of VaR estimates with gains/losses (June 2019 – June 2020)*

9 OPERATIONAL RISK

The Bank has adopted the Standardized Approach (SA) for the calculation of operational risk regulatory capital requirements, on an individual, as well as on a consolidated basis. Under the Standardized Approach, the capital requirement for operational risk is the average, over three years, of the risk-weighted relevant indicators calculated each year through the allocation of Gross Income to the eight (8) regulatory business lines. Being conservative and compliant with regulatory reporting requirements, the Bank classifies revenues accrued from activities that cannot be readily mapped into a particular business line (unallocated) to the business line yielding the highest capital risk weight (18%).

10 EQUITY EXPOSURES NOT INCLUDED IN THE TRADING BOOK

Investments in shares of stock not included in the Trading and Fair Value through Profit and Loss (FVTPL) portfolio are included in the Fair Value through Other Comprehensive Income (FVTOCI) portfolio. These investments are held with the intention of achieving capital gains. The FVTOCI investments in shares are initially recognised and subsequently measured at fair value. Initial measurement includes transaction costs. The fair value of FVTOCI investments in shares that are quoted in active markets is determined on the basis of the quoted prices. For those not quoted in an active market, fair value is determined, where possible, using valuation techniques and taking into consideration the particular facts and circumstances of the shares' issuers. The carrying amount of FVTOCI equity instruments listed on a Stock Exchange Market equals their market value. The carrying amount as of 31.12.2020 is presented below:

Table 51: FVTOCI Equity instruments 31.12.2020

	€ mio
Listed	42
Not Listed	34
Total	**76**

Table 51: FVTOCI *Equity instruments 31.12.2019*

	€ mio
Listed	70
Not Listed	47
Total	**117**

The total amount of realised gains from the disposal of FVTOCI equity instruments for the year 2020 was €14 mio. The net amount of unrealised losses of FVTOCI equity instruments as at 31 December 2020 was €19 mio after tax.
The amount of unrealised losses of FVTOCI equity instruments, recognised in reserves as at 31 December 2020 is included in Common Equity Tier 1 capital (CET1).

11 SECURITIZATION

Overview

This section provides details of traditional and synthetic securitization exposures in the banking and trading book based on the Basel III securitization framework.
The Bank treats securitization transactions per the provisions of Chapter 5, Title II, Part Three of Regulation (EU) No 575/2013 of the European Parliament and the Council, of 26 June 2013, on prudential requirements for credit institutions and investment firms (hereinafter, the CRR).
An explanation of various basic concepts is given below, to make clear the content of this chapter:

- Securitization is a transaction or scheme whereby the credit risk associated with an asset or pool of assets is divided into tranches, having all the following characteristics:
  - Payments in the transaction or scheme are dependent upon the performance of the securitized asset or pool of assets.
  - The subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.
  - Primary recourse for securitization lies with the underlying securitized financial assets.
- Tranche: a contractually established segment of the credit risk associated with an exposure or exposures, where each position in the segment entails a risk of credit loss greater than or less than a position of the same amount in each of the other segments in line with the order of payment priority outlined in the securitization, without taking into account credit protection provided by third parties directly to the holders of positions in the segment in question or other segments. To this end, every securitization position either forms part of a tranche or constitutes a tranche in itself. Therefore, different types of tranches may be distinguished and are typically the following:
  - First loss tranche (or equity tranche): this is the most subordinated tranche in a securitization. It is the first tranche to bear losses incurred on the securitized exposures and, consequently, it protects the second loss tranche and, where relevant, higher ranking tranches.
  - Intermediate risk tranche (or mezzanine tranche): this tranche has a lower ranking than the highest-ranking position in the securitization and ranks lower than any securitization position within the said agreement.
  - High priority tranche (or senior tranche): any tranche that is not a first loss tranche or an intermediate risk tranche. The 'highest priority tranche' is the tranche of the highest priority among the securitisation payments.
- Traditional securitization: securitization involving the economic transfer of the exposures being securitized to a 'securitization special purpose entity' (SSPE) that issues securities. This can be accomplished by the transfer of ownership of the securitized exposures from the originator. Securities issued by SSPEs do not represent any legally binding payment obligations for the originator institution.
- Synthetic securitization: means a securitization where the transfer of the credit risk of an asset portfolio risk is achieved by the use of credit derivatives or guarantees (mainly Credit Default Swaps (CDS) or Financial Guarantees). In these transactions, protection sellers acquire a position equivalent to that of a direct investor in the tranche that they are securing.
- Originator institution: An entity which, by itself or through related entities, directly or indirectly, was involved in the original agreement which created the obligations or potential obligations of the obligor or potential obligor, giving rise to the securitization of the exposure.
- Investor institution: any institution or subject, different from the originator, that holds a securitization position.
- Arranger: entity responsible for designing the structure of securitization and determining credit enhancements and the different tranches of securities that will be issued. The arranger may also participate in their placing on the market.

Objectives in relation to securitizations

As originator, the Bank may securitize financial assets (e.g. mortgage or corporate loans) in a traditional or a synthetic transaction, depending on the objectives of it. The objectives pursued through a transaction can vary from funding to the reduction of the credit risk and capital requirements or more sophisticated asset management.
Securitization offers a series of advantages in terms of liquidity and risk management, facilitating the efficient management of the balance sheet, as a tool that allows:

- Generation of liquidity: the transformation of relatively illiquid assets into marketable securities, which can allow liquidity to be gained in wholesale markets either through their sale or use as collateral.
- Diversification of sources of funding: the diversification of the sources that the Group uses to finance its activities, arising from its objective of obtaining liquidity.
- Capital management: securitizations in which there is an effective transfer of risks contribute to optimizing capital management and contribute to the generation of value.
- Asset disposals: securitizations in which large-scale asset disposals are achieved.

The Bank may securitize financial assets in a traditional or a synthetic transaction, depending on the objectives of each transaction.
The Bank considers all aspects of such transaction and makes a comprehensive judgment on the structure and its appropriateness, assessing the effects on the liquidity position, the reduction of credit risk, the cost of capital, the improvement of return on risk as well as any operational effects. Where the Bank intends to securitize assets it has originated, it ensures the terms and conditions applicable to the proposed securitization and any support facilities or dealings are arm's length and market-based and compliant with prudential regulations. Where the Bank has sold assets to an SSPE but retains a servicer role in managing those assets, the Bank ensures those securitized assets are effectively ring-fenced from the Bank's own assets per the applicable legislation.
The authorization and approval of the various governing bodies are required to realize or execute transactions.

Risk inherent to securitizations

The risks associated with securitization activities are mainly assumed by the originator institution and/or investor institutions. Specifically, these risks are the following:

- Credit risk: the risk of borrowers being unable to honour their contractual obligations in due time and form (e.g. the non-payment of mortgage loan instalments), which leads to the impairment of the asset which is backing the issued securities. This is the main risk transferred to investors through the securities issued or the use of credit derivatives and financial guarantees.

- Prepayment risk: risk arising from the early amortization, either in full or in part, of assets that back the securitization. As a result, the actual maturity of the securities issued may be shorter than the contractual maturity of the underlying assets.
- Basis risk: the risk that arises when interest rates or the maturity schedule of securitized assets do not coincide with those of issued bonds. This risk may be covered by the originator institution using interest rate swaps.
- Commingling risk: this is the risk that affects all investors and which exists in transactions wherein the payment of interest on the underlying portfolio is not immediately transferred from the originator to the accounts of the SSPE.
- Liquidity risk: the risk that the issued securities will not be traded in the market with a frequency or volume that will enable the investor to sell positions at any given time.
- Operational risk: securitizations are subject to operational risks, associated with the inadequacy of applied processes. In any securitization, the greatest operational risk relates to the operations required to claim and settle payments of cash flows related to the structure.

Role and involvement of the Bank

The main functions carried out by the Bank are:

- Originator: the Bank has completed various securitization programmes in which, the Bank has assigned pools of residential mortgage loans, loans to small and medium-sized enterprises (SMEs), loans to corporates, financial lease rights and personal consumer loans, to be converted into asset-backed securities.
- Servicer of securitized portfolios: the Bank also acts as the servicer of securitized assets, managing the collection of principal and interest payments as well as providing cash management services.
- Provider of financing: the Bank may act as a provider of financing associated with subordinated loans for the creation of reserve funds and for loans to fund the initial expenses incurred by SSPEs.
- Counterparty: additionally, the Bank may act as a counterparty in swaps to mitigate basis risk.

The Bank has taken on the role of the originator as well as an investor for transactions targeting the generation of liquidity.

The Bank has not carried out any synthetic securitizations or re-securitizations.

As an originator and for the purposes of CRR Article 409, in compliance with that outlined in Article 405, the Bank maintains a commitment to consistently retain in a securitization of which it is an originator, a significant net economic interest of at least 5%, which it has done by retaining at least 5% of the bonds or at least 5% of the portfolio of similar assets.

Article 248 of the CRR sets forth that originator institutions, which in respect of a securitization have made use of Article 245(1) and (2) in the calculation of risk-weighted exposure amounts, shall not, with a view to reducing potential or actual losses to investors, provide support to the securitization beyond their contractual obligations. The implicit support to which this article of the CRR refers is a concept linked to the transfer of risk and refers to a situation in which originator institutions may be providing support to a securitization beyond that contractually agreed, as a result of an actual or expected impairment in the credit quality of the portfolio used to reduce the actual or potential losses to investors.

Accounting policies for securitization

The accounting of securitized transactions is conditional upon the extent and way in which the risks and rewards associated with the assets transferred are passed on to third parties, as outlined in applicable regulations.

Financial assets are derecognised from the balance sheet when their inherent risks and rewards have been substantially transferred to third parties, and no subordinated loans or any other type of credit enhancements of a significant amount are retained.

Securitizations that do not trigger derecognition from the balance sheet are accounted for in the following manner:

- If the transfer does not result in derecognition because NBG has retained substantially all the risks and rewards of ownership of the transferred assets, IFRS 9 requires NBG to continue to recognise the transferred assets in its entirety and recognise a financial liability for any consideration received. In subsequent periods, NBG recognises any income on the transferred assets and any expense incurred on the financial liability.
- The securitized assets are kept on the balance sheet in the same accounting portfolio before and after the transfer and, as such, no changes are applied to the valuation after securitization.

Once the derecognition criteria described above are met the difference between the consideration received (including any new assets obtained) and the carrying amount of the assets transferred represents the gain or loss from the transaction and is recognised in the income statement.

To analyse the possible consolidation of SSPEs to which the Bank transfers assets, the deciding factor is determining who controls the entity. The following are taken into account:

The first step is the performance of a detailed assessment on whether the Bank controls the Issuer, which will acquire the reference portfolio, and hence needs to consolidate it in accordance with IFRS 10.

Design of the Transaction

In assessing the purpose and design of the Issuer, the involvement and decisions made by the Bank at the Issuer's inception as part of its design should be taken into consideration and it should be evaluated whether the transaction terms and features of the involvement provide the Bank with rights that are sufficient to give it power over the Issuer. ***Being involved in the design of the Issuer alone is not sufficient to give an investor control. However, involvement in the design may indicate that the Bank had the opportunity to obtain rights that are sufficient to give it power over the Issuer*** (IFRS 10. B51).

According to IFRS 10.6, an investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. *Under IFRS 10.7, control over the investee exists if and only if the investor* **has all the following**:

- Power over the investee;
- Exposure, or rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect the amount of the investor's returns.

An investor shall consider **all facts and circumstances** when assessing whether it controls an investee (IFRS 10.8).

An analysis is then performed considering (a), (b) and (c) above.

Calculating risk-weighted exposures in securitization activities

The approaches used to calculate risk weighted exposure amounts in securitization activities differ in terms of the fulfilment or non-fulfilment of conditions required to assume that a significant amount of risk has been transferred, as outlined in Articles 244 and 245 of the CRR.

For securitizations in which the risk has been significantly transferred, the Bank uses either the standardised approach (SEC-SA) to calculate risk weights in accordance with CRR Article 267 or the external ratings-based approach (SEC-ERBA) to calculate risk weights according to the credit quality rating and the maturity as per CRR Article 263. The SEC-ERBA approach can only be applied for rated exposures, which -for example- in the case of the Frontier transaction are only the Class A Notes.

For unrated Notes risk-weighted assets remain calculated with the SEC-SA approach. According to CRR Article 267, the Class A Note of a transaction is subject to a maximum risk-weight (also termed a "cap"). There are two approaches, namely 1) the look-through approach and 2) the EBA opinion.

1. The look-though approach calculates the cap by determining the weighted average of RW of the portfolio multiplied by the concentration ratio, whereby the concentration is the ratio of the nominal amounts of all the tranches divided by the nominal amounts of the tranches junior to the tranche in which the position is held including that tranche itself.
2. The EBA opinion states that CRR Article 127 should be read in conjunction with Article 267 to determine the applicable risk-weight. Article 127 states that a 100% risk-weight should be applied where specific credit risk adjustments (SCRAs) are no less than 20% of the unsecured part of the exposure value if these SCRAs were not applied. It can be assumed that SCRAs are equal to the provisions.

The Bank then chooses the lower resulting Class A Note RW of the two approaches to move forward with any further calculations.

Where no risk has been transferred, capital requirements are calculated for the original securitized exposures, in line with the portfolio and the approach used, determined at the outset based on their characteristics.

Project "Frontier"

In the context of deleveraging its NPEs through inorganic actions, the Bank launched in December 2020 a large-scale transaction for the disposal of a portfolio of Greek NPEs in the form of a rated securitization, under the project name "Frontier", which aims to utilize the provisions of the Hellenic Asset Protection Scheme (HAPS). The envisaged transaction comprises a portfolio of secured Large Corporate, Small and Medium Enterprises (SME), Small Business Lending (SBL) and Mortgage loans, accounting for €6.1 billion in terms of gross book value as of 30 June 2020. The Net Book Value as of 31 December 2020 amounted to €2.6 billion. On 29 January 2021, the Bank announced the submission of application under the Hercules Asset Protection Scheme, according to the provisions of Greek Law 4649/2019, for the securitization of project Frontier. The application relates to the provision of a guarantee by the Greek State on the senior notes of an amount up to €3.3 billion and therefore the Risk-Weight for these notes can be reduced to 0%.

Upon the successful completion of the Transaction, NBG expects to retain 100% of the senior and 5% of the mezzanine and junior notes, while disposing up to 95% of the latter to the market through a competitive process, which is expected to be completed (Signing and Closing) in the second quarter 2021.

12 INTEREST RATE RISK IN THE BANKING BOOK

Interest Rate Risk in the Banking Book (IRRBB) concerns potential losses on the Bank's earnings (Net Interest Income – NII) and on the net present value of assets and liabilities (Economic Value of Equity – EVE) arising from changes in interest rates.
The main sources of IRRBB are the following:

- **Repricing risk:** it arises from timing differences in the maturity (for fixed-rate) and repricing (for floating-rate) of the Group's assets, liabilities and off balance-sheet positions, which can expose the Group's income and underlying economic value to adverse interest rate fluctuations;
- **Yield curve risk:** it arises from unanticipated changes in slope and / or the shape of the yield curve, resulting in adverse effects on the Group's income or underlying economic value;
- **Basis risk:** it arises from imperfect correlation in the adjustment of the rates earned and paid on different instruments with otherwise similar repricing characteristics;
- **Optionality risk:** it occurs when a bank's customer or counterparty has the right, but not the obligation, to buy, sell, or in some manner alter the quantity and / or the timing of cash flows of an instrument or financial contract.

On a regular basis the Bank measures the effect of adverse movements in interest rates on the Net Interest Income and the Economic Value of Equity measures by applying a number of specified interest rate scenarios (parallel shifts, flattening and steepening of the interest rate curves).
The Bank has recently upgraded its IRRBB measurement capabilities, through the implementation of a new IRRBB framework, under which all relevant risk metrics are calculated using a full revaluation approach, based on the exact repricing and amortization characteristics of individual positions.

The main assumptions made for the calculation of the interest rate risk in the banking book are the following:

- Saving and Current Accounts: maturity is estimated based on a new behavioural model of the maturity and repricing characteristics of deposits without specific maturity. The deposits' model was developed internally this year and is calibrated to the Bank's data, reflecting NBG's customer base and business model. The model predicts a 20% pass-through rate on average for the calculation of the NII changes;
- Mortgages: prepayment risk options have not been taken into account;
- Non-performing loans: interest rate sensitivity is estimated based on their recovery value, in line with the Bank's provisions' modelling.

It should be noted that:

- the sensitivity of the interest income is measured on the basis of an instantaneous shock in the interest rate curve which is subsequently kept constant over a period of 12 months, assuming a constant balance sheet, i.e., new business assumptions affecting potentially the mix of asset and liabilities are not considered;
- the sensitivity of the Economic Value of Equity is measured across the full maturity spectrum of the bank's assets and liabilities, assuming that matured transactions are not replenished.

The sensitivity of the Group's EVE and NII measures as of 31 December 2020, under the standard regulatory stress scenarios introduced by EBA's latest IRRBB Management Guidelines (EBA/GL/2018/02 – 19 July 2018) are presented in the following table. Furthermore, the comparison of NII and EVE sensitivities between 2020 and 2019 year-end is presented in Table 52.

Table 52: Sensitivity of EVE and NII measures as of Dec 31st, 2020

Amounts in € mio	EVE					NII				
Scenario	EUR	USD	GBP	Other Currencies	Total	EUR	USD	GBP	Other Currencies	Total
Parallel up	1,181	39	14	11	1,245	127	19	9	(5)	151
Parallel down	2,121	16	(6)	(6)	2,125	(65)	(5)	(4)	0	(74)
Steepener	-46	6	(5)	(3)	(49)					
Flattener	1,168	15	8	6	1,197					
Short rates up	546	27	12	10	594					
Short rates down	(127)	9	(6)	(6)	(129)					
Maximum					**(129)**					**(74)**

Table 52: *Sensitivity of EVE and NII measures 31.12.2019*

Amounts in € mio	EVE					NII				
Scenario	EUR	USD	GBP	Other Currencies	Total	EUR	USD	GBP	Other Currencies	Total
Parallel up	400	37	32	10	479	125	15	14	(5)	149
Parallel down	889	(38)	(23)	(8)	819	(60)	(18)	(11)	4	(85)
Steepener	(309)	(9)	(8)	(4)	(329)					
Flattener	446	14	13	7	479					
Short rates up	450	28	22	10	510					
Short rates down	(102)	(34)	(23)	(8)	(167)					
Maximum					**(329)**					**(85)**

The reduction in the economic value under the six regulatory scenarios presented below remained comfortably within the limits set by the prevailing Regulatory provisions (EVE sensitivity does not exceed both 15% CET1 Capital and 20% of the Regulatory Capital). Finally, the year-end results comparison show a significant reduction in EVE sensitivity, mainly the result of increased hedging in the Securities' portfolio as well as of the significant decrease of Euribor rates during 2020.

Table 53: Comparison of EVE and NII sensitivity measures between Dec 31st, 2020 and Dec 31st, 2019

Amounts in € mio	EVE		NII	
Scenario	Dec 31st, 2020	Dec 31st, 2019	Dec 31st, 2020	Dec 31st, 2019
Parallel up	1,245	479	151	149
Parallel down	2,145	819	(74)	(85)
Steepener	(49)	(329)		
Flattener	1,197	479		
Short rates up	594	510		
Short rates down	(129)	(167)		
Maximum	**(129)**	**(329)**		
CET1 Capital (€ mio)	5,684	5,956		
Δ(EVE) Ratio	**2.28%**	**5.52%**		

13 LIQUIDITY RISK

Liquidity risk is defined as the current or prospective risk to earnings and capital arising from the institution's inability to meet its liabilities when they come due without incurring unacceptable losses.

It reflects the potential mismatch between incoming and outgoing payments, taking into account unexpected delays in repayments (term liquidity risk) or unexpectedly high outflows (withdrawal/call risk). Liquidity risk involves both the risk of unexpected increases in the cost of funding of the portfolio of assets at appropriate maturities and rates, and the risk of being unable to liquidate a position in a timely manner and on reasonable terms.

The Bank's executive and senior management has the responsibility to implement the liquidity risk strategy approved by the Board Risk Committee (BRC) and to develop the policies, methodologies and procedures for identifying, measuring, monitoring and controlling liquidity risk, consistent with the nature and complexity of the relevant activities. The Bank's executive and senior management is informed about current liquidity risk exposures, on a daily basis, ensuring that the Group's liquidity risk profile stays within the approved levels.

In addition, top management receives, on a daily basis, a liquidity report which presents a detailed analysis of the Group's funding sources, the liquidity buffer, the cost of funding and other liquidity indicators related to the Risk Appetite Framework (RAF), the Recovery Plan (RP) and the Contingency Funding Plan. Moreover, the Asset Liability Committee (ALCO) monitors the gap in maturities between assets and liabilities, as well as the Bank's funding requirements based on various assumptions, including conditions that might have an adverse impact on the Bank's ability to liquidate investments and trading positions and its ability to access the capital markets. On a long term perspective, the Loans-to-Deposits ratio is monitored. This ratio stood at 54.3% and 55.3% as of 31 December 2020, on a domestic (Greece) and on a Group level, respectively.

Since liquidity risk management seeks to ensure that the respective risk of the Group is measured properly and is maintained within acceptable levels then, even under adverse conditions, the Group must have access to funds necessary to cover customer needs, maturing liabilities and other capital needs, while simultaneously maintaining the appropriate liquidity buffer to ensure the above. In addition to the Bank's liquidity buffer, the rest of the Group's subsidiaries maintain an adequate liquidity buffer, well above 10% of their total deposits, which ensures their funding self-sufficiency in case of a local crisis.

Liquidity Developments within 2020

During the first half of 2020, NBG's robust liquidity position has been successfully tested and confirmed in real stressed conditions, during the COVID-19 crisis. The stability of its funding sources, combined with the comfortable level of its liquidity buffer and LCR, especially during this period, further underpin the quality, as well as the resilience of the Bank's overall liquidity profile.

In addition to its liquidity position, the COVID-19 crisis has also tested the Bank's operational readiness and effectiveness, especially during the period that the first lockdown was imposed and large part of the Treasury and its Operations, as well as the entire Risk Management was working remotely from home. However, the entire liquidity management and monitoring chain of the Bank worked seamlessly and successfully, even under these unprecedented market and operational conditions, which is a testament to the resilience and robustness of the existing infrastructure.

On 31 December 2020 the Bank's strong liquidity profile is representative of a healthy liability side of the balance sheet. The improved funding structure is marked by the significant inflow of customer deposits that reached the 2011 levels, the increase of stable long-term funding, through the cheaper TLTRO III ECB's refinancing operations and the full access to the secured interbank markets. Moreover, LCR and NSFR, as well as the Bank's liquidity buffer currently stand at the highest historical levels while cost of funding has significantly decreased to a historically low level. The liquidity state of the Bank at year end is further analyzed in the next section.

Sources of liquidity

The Bank's principal sources of liquidity are its deposit base, Eurosystem funding currently via the TLTROs with ECB, repurchase agreements (repos) with major FIs and wholesale funding through the placement of the new senior unsecured issuance, as well as the Tier II notes. ECB funding and repos with FIs are collateralized mainly by high quality liquid assets, such as, EU sovereign bonds, Greek government bonds and T-Bills, as well as by other assets, such as highly rated corporate loans and covered bonds issued by the Bank.

Following a pivotal year for the Bank's liquidity in 2019, the year 2020 further strengthened the Bank's strong liquidity profile. On 31 December 2020, the Bank's customer deposit balance stood at €47.3 billion, a significant increase of €4.7 billion compared to 31 December 2019. More importantly, this increase is mainly attributed to the increase of the most stable deposit class, the savings deposits, by €3.4 billion.

Additionally, both the LCR and the NSFR, remained strong even during the first quarter of 2020 where the market volatility increased to unprecedented levels, while they significantly increased throughout the rest of the year, reaching their highest historical level on 31 December 2020. More specifically, the Bank's LCR remained comfortably above the regulatory and internal limits, at all times, while it significantly increased since June, reaching the highest level of 220%, on 31 December 2020. Moreover, the Bank NSFR slightly decreased during the worst point of the COVID-19 crisis, in March, and significantly improved thereafter, standing at the highest historical level of 119.5% on 31 December 2020.

Moreover, the international secured financing markets continued to be open for NBG, which the Bank tapped for €0.7 billion, on 31 December 2020. More specifically, the Bank successfully tested the accessibility of the repo market, based on Greek sovereign collateral that was not ECB eligible, during the first months of the COVID-19 crisis. Even during the first half of March that the market turmoil reached its peak, the Bank comfortably accessed the repo market, taping the necessary liquidity. After the announcement of ECB's measures the Bank adjusted its liquidity strategy, in order to take advantage of the newly available liquidity tools. As a result, the Bank moved ECB eligible collateral from the repo market to ECB. Finally, after the stabilization of the global markets in April, as well as ECB's temporary collateral easing measures, including the waiver that resulted in accepting Greek sovereign debt instruments as collateral for Eurosystem refinancing operations, the Bank's exposure to the cheaper ECB Funding gradually increased and stood at €10.5 billion on 31 December 2020, consisting exclusively of TLTROs.

The Bank's funding cost stood at the historically low level of 7bps as of 31 December 2020 a significant decrease by 34bps compared to the respective figure as of 31 December 2019, driven by the decrease of the cost of customer deposits by 18bps, as well as the increased exposure in Eurosystem funding, at a cost of -67bps.

Finally, the Bank's liquidity buffer stood at €17.9 billion as at 31 December 2020, of which €6.5 billion was collateral eligible for funding with the ECB, €2.7 billion pertained to the unencumbered tradable collateral that could be used for secured funding with FIs, and the remaining €8.7 billion was either in the form of cash, or deposited with the Bank of Greece, as well as in the form of short term unsecured interbank placements and deposited in Nostro accounts, further showing NBG's strong liquidity position.

The next tables present the key components of NBG's LCR, as per the respective guidelines on LCR disclosure (EBA/GL/2017/01) throughout the years 2019 and 2020.

It is evident from the following tables that the Bank's LCR has been steadily increasing over the last two years, reflecting the continuous improvement of NBG's liquidity profile during this period. The key drivers for its significant improvement during the year of 2020 were the significant increase of stable retail deposits, as well as the introduction of the new Additional Credit Claims (ACC) framework by the Bank of Greece and ECB, based on which, a significant amount of additional credit claims were accepted as eligible collateral for Eurosystem funding operations, further expanding the Bank's ECB eligible collateral pool and subsequently increasing its stock of unencumbered high quality liquid assets.

Table 54: Liquidity Coverage Ratio 2020

€ mio		Total unweighted value				Total weighted value			
Quarter ending on		**31.03.20**	**30.06.20**	**30.09.20**	**31.12.20**	**31.03.20**	**30.06.20**	**30.09.20**	**31.12.20**
Number of data points used in the calculation of averages		**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
HIGH-QUALITY LIQUID ASSETS									
1	**Total high-quality liquid assets**					**12,089**	**13,153**	**14,330**	**15,444**
CASH-OUTFLOWS									
2	Retail deposits and deposits from small business customers, *of which:*	**25,016**	**25,581**	**26,123**	**26,994**	**1,447**	**1,479**	**1,509**	**1,558**
3	*Stable deposits*	*22,247*	*22,760*	*23,261*	*24,050*	*1,112*	*1,138*	*1,163*	*1,203*
4	*Less stable deposits*	*2,768*	*2,821*	*2,862*	*2,944*	*335*	*341*	*346*	*355*
5	Unsecured wholesale funding	**10,729**	**10,602**	**10,604**	**10,779**	**4,577**	**4,527**	**4,512**	**4,561**
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*								
7	*Non-operational deposits (all counterparties)*	*10,729*	*10,602*	*10,604*	*10,779*	*4,577*	*4,527*	*4,512*	*4,561*
9	Secured wholesale funding					**20**			
10	Additional requirements	**303**	**574**	**818**	**1,051**	**312**	**574**	**818**	**1,051**
11	*Outflows related to derivative exposures and other collateral requirements*	*303*	*574*	*818*	*1,051*	*312*	*574*	*818*	*1,051*
13	*Credit and liquidity facilities*								
14	Other contractual funding obligations	**598**	**623**	**682**	**626**	**583**	**608**	**665**	**608**
15	Other contingent funding obligations	**6,894**	**8,998**	**8,998**	**8,998**	**455**	**511**	**511**	**511**
16	**TOTAL CASH OUTFLOWS**					**7,394**	**7,699**	**8,014**	**8,289**
CASH-INFLOWS									
18	Inflows from fully performing exposures	751	645	589	565	615	534	472	436
19	Other cash inflows	200	160	144	140	177	157	141	137
20	**TOTAL CASH INFLOWS**	**951**	**805**	**733**	**705**	**792**	**692**	**613**	**573**
EU-20c	***Inflows Subject to 75% Cap***	951	805	733	705	792	692	613	573
						TOTAL ADJUSTED VALUE			
21	**LIQUIDITY BUFFER**					**12,089**	**13,153**	**14,330**	**15,444**
22	**TOTAL NET CASH OUTFLOWS**					**6,602**	**7,008**	**7,401**	**7,716**
23	**LIQUIDITY COVERAGE RATIO (%)**					**183.1**	**187.7**	**193.6**	**200.2**

Table 54: Liquidity Coverage Ratio 2019

€ mio		Total unweighted value				Total weighted value			
	Quarter ending on	**31.03.19**	**30.06.19**	**30.09.19**	**31.12.19**	**31.03.19**	**30.06.19**	**30.09.19**	**31.12.19**
	Number of data points used in the calculation of averages	**9**	**12**	**12**	**12**	**9**	**12**	**12**	**12**
HIGH-QUALITY LIQUID ASSETS									
1	**Total high-quality liquid assets**					**7,774**	**8,357**	**9,590**	**10,952**
CASH-OUTFLOWS									
2	Retail deposits and deposits from small business customers, *of which:*	**24,171**	**24,241**	**24,356**	**24,690**	**1,366**	**1,378**	**1,399**	**1,424**
3	*Stable deposits*	*21,756*	*21,759*	*21,761*	*21,991*	*1,088*	*1,088*	*1,088*	*1,100*
4	*Less stable deposits*	*2,415*	*2,482*	*2,596*	*2,698*	*278*	*287*	*311*	*325*
5	Unsecured wholesale funding	**11,267**	**11,141**	**11,037**	**10,852**	**4,703**	**4,663**	**4,630**	**4,599**
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	*37*	*28*	*16*	*8*	*9*	*7*	*4*	*2*
7	*Non-operational deposits (all counterparties)*	*11,229*	*11,113*	*11,021*	*10,844*	*4,694*	*4,656*	*4,626*	*4,597*
9	Secured wholesale funding					**1,256**	**962**	**550**	**202**
10	Additional requirements	**87**	**81**	**102**	**137**	**67**	**76**	**105**	**144**
11	*Outflows related to derivative exposures and other collateral requirements*	*65*	*65*	*94*	*134*	*65*	*74*	*104*	*144*
13	*Credit and liquidity facilities*	*22*	*17*	*8*	*3*	*2*	*1*	*1*	
14	Other contractual funding obligations	321	387	509	603	304	370	493	586
15	Other contingent funding obligations	582	582	2,684	4,787	288	287	343	399
16	**TOTAL CASH OUTFLOWS**					**7,984**	**7,736**	**7,520**	**7,354**
CASH-INFLOWS									
18	Inflows from fully performing exposures	1,438	1,304	1,027	868	1,045	959	769	686
19	Other cash inflows	1,113	901	673	344	1,026	816	611	302
20	**TOTAL CASH INFLOWS**	**2,551**	**2,205**	**1,701**	**1,212**	**2,072**	**1,774**	**1,379**	**988**
EU-20c	***Inflows Subject to 75% Cap***	2,551	805	1,701	1,212	2,072	1,774	1,379	988
						TOTAL ADJUSTED VALUE			
21	**LIQUIDITY BUFFER**					**7,774**	**8,357**	**9,590**	**10,952**
22	**TOTAL NET CASH OUTFLOWS**					**5,913**	**5,962**	**6,140**	**6,366**
23	**LIQUIDITY COVERAGE RATIO (%)**					**131.1**	**139.7**	**155.6**	**171.7**

14 ASSET ENCUMBRANCE

14.1 Information on importance of encumbrance

The following is the disclosure for the year ended 31 December 2020, of on-balance sheet encumbered and unencumbered assets, and off-balance sheet collateral based on median values (median of the quarterly values reported by the NBG Group), as required by Part Eight of CRD IV.

Table 55: Encumbered and Unencumbered Assets 31.12.2020

€ mio		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
		010	040	060	090
010	**Assets of the reporting institution**	**24,903**		**47,066**	
030	Equity instruments	-		122	
040	Debt securities	8,385	8,514	6,514	6,684
050	of which: covered bonds				
060	of which: asset-backed securities				
070	*of which: issued by general governments*	8,345	8,474	6,270	6,446
080	*of which: issued by financial corporations*	29	29	69	70
090	*of which: issued by non- financial corporations*	11	11	175	168
120	Other assets	16,518		40,430	

***Table 55:** Encumbered and Unencumbered Assets 31.12.2019*

€ mio		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
		010	040	060	090
010	**Assets of the reporting institution**	**13,487**		**48,549**	
030	Equity instruments			199	
040	Debt securities	1,465	1,508	7,642	7,614
050	of which: covered bonds				
060	of which: asset-backed securities				
070	*of which: issued by general governments*	*1,435*	*1,476*	*7,428*	*7,452*
080	*of which: issued by financial corporations*	*22*	*14*	*55*	*56*
090	*of which: issued by non- financial corporations*	*9*	*10*	*127*	*122*
120	Other assets	12,089		40,873	

Table 56: Sources of encumbrance 31.12.2020

€ mio		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		010	030
010	Carrying amount of selected financial liabilities	14,999	24,589
011	of which: central banks	10,479	14,093

***Table 56:** Sources of encumbrance 31.12.2019*

€ mio		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		010	030
010	Carrying amount of selected financial liabilities	7,861	14,423
011	of which: central banks	2,250	3,899

Table 57: Collateral received 31.12.2020

€ mio		Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
		010	040
130	**Collateral received by the reporting institution**	883	3,021
140	Loans on demand		
150	Equity instruments		
160	Debt securities	**-**	**3,021**
170	*of which: covered bonds*	-	-
180	*of which: asset-backed securities*	-	-
190	*of which: issued by general governments*	-	2,756
200	*of which: issued by financial corporations*	-	265
210	*of which: issued by non-financial corporations*	-	-
220	Loans and advances other than loans on demand	-	-
230	Other collateral received	883	-
240	Own debt securities issued other than own covered bonds or ABSs	-	-
241	Own covered bonds and asset-backed securities issued and not yet pledged		329
250	**TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED**	**25,786**	

Table 57: *Collateral received 31.12.2019*

€ mio		Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
		010	040
130	**Collateral received by the reporting institution**	1,846	1,913
140	Loans on demand		
150	Equity instruments		
160	Debt securities	**1,006**	**1,913**
170	*of which: covered bonds*	-	-
180	*of which: asset-backed securities*	-	-
190	*of which: issued by general governments*	*443*	*1,912*
200	*of which: issued by financial corporations*	*185*	-
210	*of which: issued by non-financial corporations*	-	-
220	Loans and advances other than loans on demand	-	-
230	Other collateral received	780	-
240	Own debt securities issued other than own covered bonds or ABSs	-	-
241	Own covered bonds and asset-backed securities issued and not yet pledged		448
250	**TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED**	**15,596**	

The Bank's principal sources of liquidity are its deposit base, ECB funding currently via the Targeted Long-term Refinancing Operations (TLTROs) with ECB, repurchase agreements (repos) with major FIs and wholesale funding through the placement of the new senior unsecured issuance, as well as the Tier II notes.

As at 31 December 2020, the Group and the Bank have the following main types of encumbrance for funding purposes mainly with the ECB, other central banks and FIs:

- trading and investment debt instruments;
- loans and advances to customers; and
- covered bonds backed with mortgage loans.

In addition, as at 31 December 2020, the Group and the Bank have pledged an amount of €315 mio included in due from banks with respect to a guarantee for the non-payment risk of the Hellenic Republic, as well as Greek Government Bond of €733 mio with EIB for trade finance purposes. Also, collaterals are placed by the NBG Group for the market value of derivative transactions or as margin to the clearing system.

ECB funding and repos with FIs are collateralized mainly by high quality liquid assets, such as, EU sovereign bonds, Greek government bonds and T-Bills, as well as by other assets, such as highly rated corporate loans and covered bonds issued by the Bank. ECB funding at 31 December 2020 was €10.5 billion from €2.2 billion 31 December 2019 (compared to its peak of €27.6 billion in the second quarter of 2015). For more details of sources of liquidity and developments within 2020 please refer to Section 13).

15 REMUNERATION POLICIES & PRACTICES

The Bank is committed to an integrated Human Resources Management Policy and hence, has introduced procedures and has taken necessary measures in order to describe the general framework and basic principles for determining the remuneration of all employees working in the Bank and the Group. The governance arrangements and decision making process regarding the remuneration policy are presented in the following paragraphs.

15.1 The proportionality principle

The Bank applies the provisions of the current regulatory remuneration framework in a way and to the extent that is appropriate to its size, internal organization, nature, scope and complexity of its activities. In particular, the Bank aims to match the Remuneration Policy and practices with the individual risk profile, risk appetite and strategy of the Bank and its Group.
In order to apply the proportionality principle, the following (indicatively) criteria are taken into consideration (including the criteria provided in the EBA/GL/2015/22 guidelines):

1. The size of the Bank, particularly relating to the value of its assets and liabilities, its exposure to risk, the level of its regulatory own funds, as well as the number of staff and branches of the Bank;
2. The internal organization of the Bank, its listing on regulated markets, the use of internal methods for the measurement of capital requirements and its corporate goals; and
3. The nature, scope and complexity of its business activities and in particular, the type of its business activities, its Group dimension and activity on an international level, its extended customer base and variety of the type of clients, the portion of High Risk clients and/or activities over the total of clients and/or activities, the relative risks, the complexity of its products and contracts, etc.

15.2 Human Resources and Remuneration Committee

The Human Resources and Remuneration Committee (HRRC) was established by a Board decision (meeting no. 1259/5.5.2005) in order to provide assistance to the Bank's Board of Directors in performing its duties in respect of attracting, retaining, developing and motivating executives and employees of the highest professional and moral caliber, developing and maintaining a coherent system of values and incentives for human resources throughout the NBG Group, in cooperation and alignment with any other competent body overseeing related issues, such as ethics and culture and strategic priorities, developing a framework for fairly evaluating effort and rewarding performance, and ensuring that the preparation and implementation of the Group Remuneration Policy and the relevant procedures comply with the legislative and regulatory framework.
In particular, the Committee ensures the adoption on behalf of the Bank of an accurate, well documented and transparent remuneration policy, which shall be consistent with the business strategy, the risk profile and the risk appetite of the Bank and shall not encourage excessive and short-term risk-taking. The responsibilities of the HRRC include among others the following:

- formulating, reviewing regularly and monitoring the implementation of Group HR policies and practices, such as in relation to staff appointment, evaluation and promotion, training, diversity (including career planning aspects and measures to ensure equal treatment and opportunities for staff of different genders), including ensuring that the Remuneration Policy is up to date and review regularly, and at least whenever there are changes in the applicable regulatory framework, the Group Remuneration Policy with particular focus on the impact and incentives created by risk, capital and liquidity management and propose to the Board any amendments deemed necessary. Where periodic reviews reveal that the remuneration policies do not operate as intended or prescribed or where recommendations are made, the Remuneration Committee shall ensure that a remedial action plan is proposed, approved and timeously implemented;

- monitoring regularly the implementation of Group Remuneration Policy on the basis of reports from annual reviews performed, and submitting proposals to the Board when necessary. To this end, the Committee shall receive and assess the reports submitted regularly by the Internal Audit Function, on the basis of which the Committee shall evaluate the remuneration system. The Committee shall cooperate with other Committees of the Board, whenever required, and shall ensure the proper involvement of the internal control and other relevant functions (e.g. risk, compliance, audit, human resources) within the respective areas of expertise and where necessary seek external advice;

- submitting proposals to the Board on the Group's aggregate level of bonuses as well as on the adoption of new, or amendment of old, longterm share-related incentive plans;

- evaluating the performance of the Bank's Senior Management (including positions of General Managers and Assistant General Managers), with the exception of the performance evaluation of the Group Chief Audit Executive and the Group Chief Compliance Officer whose performance are evaluated by the Audit and the Compliance, Ethics and Culture Committee respectively, and the Chief Risk Officer whose performance is evaluated by the Board Risk Committee;

- submitting proposals to the Board regarding remuneration of Senior Management, upon proposal of the CEO, or of other positions that may be prescribed by the applicable regulatory framework or the Bank's Labor Regulation; and

- supervising the remuneration of the Group Chief Compliance Officer and the Chief Risk Officer whose appointment and performance assessment is overseen by the Compliance, Ethics and Culture Committee in the case of the Group Chief Compliance Officer and by the Risk Committee in the case of the Chief Risk Officer.

The Committee is consulted by the Audit Committee as may be necessary in the Audit Committee's responsibility for approving the Group Chief Audit Executive remuneration, while the appointment and performance assessment of the Chief Audit Executive is overseen by the Audit Committee.

In fulfilling its duties, the Committee should pay particular attention to the impact of its decisions on the risk profile and management.

The Committee is governed by a Functioning Regulation (Charter), which has recently been reviewed. The Charter in force was approved by the Board on 31 March 2021[2].

The Committee consists of at least three members of the Bank's Board, which cannot exceed 40% (rounded to the nearest whole number) of total Board members (excluding the HFSF Representative). All members of the Committee are non-executive Directors, while the majority of the members (excluding the HFSF Representative) including the Chairman are independent Directors, as per the independency definition included in the Corporate Governance Code and in any case according to the provisions of the legal and regulatory framework in force. The members of the Committee (including its Chair and Vice-Chair) are appointed by the Board of the Bank, following recommendation by the Board's Corporate Governance & Nominations Committee. The HFSF Representative on the Bank's Board is a member of the Committee, while also the HFSF Observer attends the Committee meetings. Among the members of the Committee, there are individuals with experience in the financial sector, while at least one member should have adequate expertise and professional experience in risk management and audit activities mainly in alignment of remuneration policy with the risk and capital profile of the Bank. The Members of the Committee have collectively appropriate knowledge, expertise and professional experience concerning remuneration policies and practices, risk management and control activities, namely with regard to the mechanism for aligning the remuneration structure to the Bank's' risk and capital profiles. Further, the Committee Charter includes provisions on participation of a member of the Risk Committee in meetings of the Committee when concerning matters in its competence over Remuneration, while it is noted that the current structure of the Remuneration Committee includes members of the Board's Risk Committee.

The Committee convenes at least four times a year and keeps minutes of its meetings.

Pursuant to Greek Law 3864/2010 and according to the provisions of the Relationship Framework Agreement between the Bank and the HFSF, the HFSF appointed Mr. Periklis Drougkas as its Representative on the Bank's Board. The HFSF Representative participates in Board Committees, including the Human Resources and Remuneration Committee.

The Committee is currently comprised of the following members:

Table 58: Board HRRC Members

Human Resources and Remuneration Committee	
Chair	Anne Marion – Bouchacourt
Vice- Chair	Elena Ana Cernat
Member	Aikaterini Beritsi
Member	JP Rangaswami
Member	Periklis Drougkas (HFSF representative)

Mr Periklis Drougkas has been appointed as the Representative of the Hellenic Financial Stability Fund on the Board of Directors as of 23 July 2018. The HFSF Representative is entitled to participate in the Board Committees and committees which do not solely comprise executive members, and has the rights and authorities prescribed by Law 3864/2010 as in force and the Relationship Framework Agreement between the National Bank of Greece and the Hellenic Financial Stability Fund. Pursuant to Law 3864/2010 (article 10 §2b), the Representative of the HFSF on the Bank's Board, has veto powers on any Board decision relating to the dividend policy and the compensation of the Board's Chairman, the CEO, other members of the Board, as well as the General Managers and their Deputies.

During 2020, the Committee convened fifteen times. Its members receive compensation for their participation.

During 2020, the Committee submitted proposals on contract terms of Bank's Senior Management. Furthermore, the Committee's key workings included the review of updated Performance Management System framework, the review of the results of the Employee Engagement Survey, the oversight of a number of important Transformation Initiatives related to Human Resources issues (NBG Academy/Training, Redesign of HR Unit, Talent Management/ Succession Planning, Career Framework etc.), as well as the oversight of the Voluntary Exit Scheme. Finally, the Committee submitted to the Board of Directors an Annual Report of its work, as per the provisions of its Charter.

Detailed information regarding the responsibilities, the composition and the operation of the HRRC of the Bank's Board is available in the Bank's website www.nbg.gr (section: The Group / Corporate Governance / Board of Directors / Committees), as well as in the Group and the Bank's Annual Financial Reports, as a part of the Board's Corporate Governance Statement.

15.3 Remuneration Policy

The Bank's Remuneration Policy is adopted by the Board, following the recommendation of the Board's Human Resources and Remuneration Committee (the HRRC), and covers all staff, including the staff in units responsible for NPL/NPE management as a specific category of personnel for whom particular incentive schemes should be provided, in compliance with the European Central Bank Guidance to banks on non-performing loans (March 2017). The Bank's remuneration practices are consistent with the Greek Laws 4261/2014 (which transposed European Directive 2013/36/EU – CRD IV) and 3864/2010, as in force, the EU Regulations regarding remuneration (esp. Regulations (EU) 575/2013 and 604/2014), the Bank of Greece Governor's Act 2577/2006, as amended by the Bank of Greece Executive Committee's Act 158/10.5.2019 and the Amended Relationship Framework Agreement between the Bank and the HFSF and the Bank's obligations towards the Monitoring Trustee, as well as the Bank's business strategy, risk profile and risk appetite and discourages excessive and short-term risk taking. Additionally, the Bank's remuneration practices follow the EBA guidelines on sound remuneration policies which are applicable from January 2017, as well as other legislative provisions (e.g Law 4438/2016 for the alignment of Greek legislation with the Directive 2014/17/EE of the European Parliament and the Council on credit agreements for consumers relating to residential immovable property, MiFID II, EBA Guidelines on product oversight and governance arrangements on retail banking products etc). Within a Group context, the Bank oversees the remuneration policies and practices, in order to ensure that irrespective of the type of sector in which a Group company operates, the principles set at a Group level are followed. The Remuneration Policy has been forwarded to the Group companies in order for them to adopt a Remuneration Policy

[2] *It is noted that following the revisions of Board Committees Charters, as of 01.03.2019 proposals to the Board regarding the remuneration of Board members falls within the competence of the Corporate Governance and Nominations Committee.*

taking the Bank's Remuneration Policy as a guide and giving consideration to the respective applicable local regulatory framework, as well as the nature, scale and complexity of their activities. Based on the above and in connection with the variety of business models inside the Group, some Group companies apply more sophisticated policies or practices in fulfilling their regulatory requirements, while others meet these requirements in a simpler or less burdensome way.

The Bank monitors developments in the applicable framework, including the developments on the upcoming transposition of Directive 878/2019/EU (CRD V), as well as the second revision of the EBA Guidelines on sound remuneration policies which is under development.

15.4 Other relevant stakeholders / Units

The Remuneration Policy is elaborated with the assistance of the Human Resources, Risk Management, Compliance and Corporate Governance Units, in accordance with their respective responsibilities. With the assistance of the aforementioned Units, the Policy is reassessed and reviewed. The implementation of the Remuneration Policy is subject to central and independent internal control carried out at least on an annual basis by the Internal Audit - Inspection Division.

The implementation of the Policy is assigned to the Human Resources Unit, while the Group Compliance and Corporate Governance Units reassure the compliance of the Policy and the remuneration practices of the Bank and the Group with the relevant regulatory framework and international best practices.

External experts may participate in the development and periodical review of the Remuneration Policy, whenever the Board sees fit. However, during 2020 no such external expert advice was sought.

15.5 Remuneration Policy Governance

The Bank's and the Group's remuneration policy governance is depicted in the following diagram:

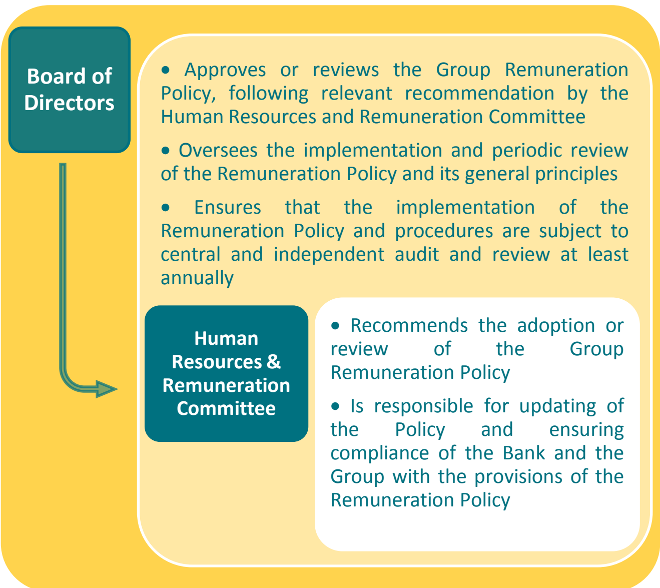

Figure 8: Remuneration Policy Governance

As prescribed by the applicable Remuneration Policy, the Functions of the Bank having competence over the following areas shall be involved in the design, review and implementation of the remuneration policy:

Figure 9: Remuneration policy

15.6 Main characteristics of the remuneration system of the Bank according to the Bank's Remuneration Policy

The remuneration practices of the Bank are in compliance with the provisions of the existing regulatory framework concerning all staff, as well as with regulatory provisions regarding identified staff - specific categories of staff determined in accordance with Regulation (EU) No. 604/2014.

The basic principles and the most important design characteristics of the remuneration system of the Bank, which are aligned with applicable labor legislation, Collective Labor Agreements and Business Collective Labor Agreements, as well as relevant guidelines of the supervisory authorities, are described below.

15.6.1 Remuneration structure

Total remuneration may include fixed (such as salary) as well as variable payments or benefits (such as bonus, share options etc.).

In any case, total remuneration is composed primarily of fixed payments, while the fixed and variable components of total remuneration are balanced to an appropriate ratio, which is within the limits determined by Law 4261/2014 (CRD IV).

Regarding share options in particular, no options were granted in 2020.

15.6.2 Criteria used for determining variable remuneration

For determining variable remuneration, if awarded, the following are taken into account:

- the assessment of the performance (individual and collective), which is set in a multi-year framework sufficient to indicate real performance, not only under financially measurable criteria but also under qualitative criteria, including, but not limited to, knowledge of the field of work, managerial skills, efficiency and general professional conduct, level of interest in and contribution to the work produced, compliance with the Bank's policies etc.;

- the risks linked to such performance over a longer time horizon;
- the overall financial standing of the Bank and the Group;
- the market conditions and the long-term business targets of the Bank and the Group (including risks and the cost of capital).

Any deficiencies or shortcomings as regards a staff member's failure to comply with the procedures and the Policy of the Bank/Group cannot be offset by achievement of targets.

15.6.3 Risk alignment of remuneration

Members of the Board of Directors and Senior Management, officers participating in decisions related to the assumption of risk, as well as other individuals whose professional activities have a material impact on the risk profile of the Bank and the Group Companies, shall not be provided with any incentive to undertake excessive risk, nor shall they be rewarded for undertaking any risks that may exceed the business decisions of the Bank/Group.

When bonuses are awarded, the Bank places emphasis on effecting payment not by means of a pure up-front cash payment, but rather by alternative means (such as shares) and in installments (Deferred Bonus Pool), considering performance and risks linked to such performance over a longer time horizon.

15.7 Adjustment / deferral / retention/ claw back of variable remuneration

The Bank's Remuneration Policy foresees particular provisions including on deferral of at least 40% of variable remuneration for at least 3 to 5 years, or in the case of a variable remuneration component of a particularly high amount, of at least 60% of the amount, as well as on retention of instruments forming part of variable remuneration, with a view to aligning incentives with the Bank's longer-term interests and taking into consideration performance and performance-linked current and future risks over time.

The Bank may suspend, entirely or in part, the payoff of variable remuneration, if specific ratios (such as capital adequacy, liquidity etc.) are not met or if the financial situation of the Bank/Group has deteriorated significantly.

Without prejudice to the provisions of labor law, the Bank shall reclaim any bonus paid if, following such payment, it is discovered that the performance for which the bonus was offered derived from practices that are irregular or inconsistent with the general principles described in the Remuneration Policy. To this end and in cases of ethical or compliance misconduct, the Human Resources and Remuneration Committee in cooperation with the Board Compliance, Ethics and Culture Committee (established on July 2018), shall assess the need for ex post risk adjustment of remuneration, including the application of malus and clawback arrangements.

15.8 Payment / vesting

According to the Remuneration Policy, variable remuneration is paid or vested, including any deferred part, only if it is sustainable in terms of the aggregate financial situation of the Bank and/or the Group companies, and justified on the basis of a) the financial results of the Bank and/or any Group company and b) the performance of the business unit involved, as well as the individual staff member concerned.

15.9 Remuneration of senior management

In accordance with Directive (EU) 2017/828, as this has been (partly) transposed into the Greek legal framework with Greek Law 4548/2018 on Sociétés Anonymes, listed companies are required, among others, to establish a remuneration policy as regards directors and shareholders have the right to vote on the remuneration policy at the General Meeting. Additionally, in accordance with article 110 para 1 of Law 4548/2018, by statutory provision the Policy may also include in its scope the key management personnel, as defined in International Accounting Standard (IAS) 24 para 9.

Within this context, and with the aim at further enhancing transparency in the remuneration framework of the Bank's management structure especially by extending the scope of the Policy so as to include not only Board members but also Senior Managers, the Bank's Annual General Meeting of Shareholders, held on 30 June 2020, following proposal of the Board of Directors, as assisted by the Corporate Governance and Nominations Committee and the Human Resources and Remuneration Committee, approved the revised NBG Directors' & Senior Managers' Remuneration Policy. With this revision, the Board aims to offer shareholders and the market the highest level of transparency and clarity in the remuneration scheme applicable to Senior Manager, further strengthening the investment profile of the Bank so as to ensure external competitiveness,

The NBG Directors' & Senior Managers' Remuneration Policy shall be applicable for a period of four years, unless revised earlier or in cases of temporary derogations, in alignment with the relevant applicable provisions.

The NBG Directors' & Senior Managers' Remuneration Policy is available on the Bank's website, at www.nbg.gr (section: The Group / Investor Relations/ General Assemblies).

The remuneration of Senior Management (namely, General Managers and Assistant General Managers) is approved by the Board, following proposal of the HRRC upon proposal of the CEO, or of other positions that may be prescribed by the applicable regulatory framework or the Bank's Labor Regulation. The remuneration of Senior Managers is determined as provided for under the terms of their relevant contracts, taking into account the salaries of peers in the Greek and international banking and other sectors, as well as the Bank's financial position, risks undertaken and supervisory indicators, and within the approved by the Board relevant salary bands. As long as the Bank is subject to the provisions of Law 3864/2010 (article 10 para 3), Senior Management remuneration cannot exceed the total remuneration of the Governor of the Bank of Greece, while in any case remuneration shall be awarded in accordance with the provisions of the legal and regulatory framework, as this each time applies. In accordance with the provisions of Law 3864/2010 (article 10 para 3), no bonus is paid to Senior Managers.

The Committee shall ensure that the remuneration of internal control functions (e.g. risk management, internal audit, compliance, financial control) personnel should not be linked to the performance of the business units they control. The Committee supervises the remuneration of the Group Chief Compliance Officer and the Chief Risk Officer whose appointment and performance assessment is overseen by the Compliance, Ethics and Culture Committee in the case of the Group Chief Compliance Officer and by the Risk Committee in the case of the Chief Risk Officer. The Committee is consulted by the Audit Committee as may be necessary in the Audit Committee's responsibility for approving the Group Chief Audit Executive remuneration, while the appointment and performance assessment of the Chief Audit Executive is overseen by the Audit Committee. The Committee shall make recommendations to the Board on the design of the remuneration package and amounts of remuneration to be paid to the senior staff members in the control functions.

15.10 Directors' Remuneration

In accordance with Greek Law 4548/2018 article 110, listed companies are required to establish a remuneration policy as regards directors and shareholders have the right to vote on the remuneration policy at the General Meeting. Within this context, the Board of Directors, following proposal of the Corporate Governance and Nominations Committee, submitted the NBG Directors' Remuneration Policy to the Annual General Meeting of Shareholders, which approved it on 31 July 2019. Additionally, in accordance with article 110 para 1 of Law 4548/2018, by statutory provision the Policy may also include in its scope the key management personnel, as defined in International Accounting Standard (IAS) 24 para 9. Within this context, and with the aim at further enhancing transparency in the remuneration framework of the Bank's management structure especially by extending the scope of the Policy so as to include not only Board members but also Senior Managers, the Bank's Annual General Meeting of Shareholders, held on 30 June 2020, following proposal of the Board of Directors, as assisted by the Corporate Governance and Nominations Committee and the Human Resources and Remuneration Committee, approved the revised NBG Directors' & Senior Managers' Remuneration Policy. The Policy shall be applicable for a period of four years, unless revised earlier or in cases of temporary derogations, in alignment with the relevant applicable provisions. This proposal of the Bank's Board of Directors (non-executive members), following recommendation of the Corporate Governance and Nominations Committee, is formulated, in line with the current regulatory framework and the relevant commitments and legislation to which the Bank is subject in accordance with EU state aid rules and according to the Bank's Remuneration Policy, the Charters of competent Board Committees as well as industry best practices, in a way that adequately reflects the time and effort the members are expected to contribute to the work of the Board, while at the same time promoting efficiency of the Board. As long as the Bank is subject to the provisions of Law 3864/2010 (article 10 para 3), Directors' remuneration cannot exceed the total remuneration of the Governor of the Bank of Greece, while in any case remuneration shall be awarded in accordance with the provisions of the legal and regulatory framework, as this each time applies. In accordance with the provisions of Law 3864/2010 (article 10 para 3), no bonus is paid to Executive and Non-Executive Directors.

More information on the NBG Directors' & Senior Managers' Remuneration Policy is available in the Bank's website www.nbg.gr (section: The Group / Investor Relations / General Assemblies).

Remuneration of the Board's Chairman, the CEO and the Executive Board members is determined based on proposal by non-executive members of the Board[3].

The salaries of the Chairman, the CEO and Board members are determined annually or as provided for under the terms of their relevant contracts, taking into account the salaries of peers in the Greek and international banking and other sectors, as well as the Bank's financial position, risks undertaken and supervisory indicators.

The remuneration of non-executive members of the Board is linked to factors such as their general responsibilities and the time they devote to carrying out their duties, but not to the short-term results of the Bank/Group and does not include bonuses.

The Annual Ordinary General Meeting of the Bank's Shareholders approves the remuneration of the Chairman of the Board, the CEO, the Executive and non-executive Directors, as well as their remuneration in their capacity as members of the Bank's Board Committees (i.e. the Audit, Corporate Governance & Nominations, Human Resources & Remuneration, Risk Management, Strategy & Transformation, and Compliance, Ethics & Culture Committees for the previous financial year, pursuant to Law 4548/2018 and determines their respective remuneration through to the next Annual General Meeting. It is noted that, according to the decision of the Annual General Meeting of 30 June 2017 the Chair of the Board of Directors and executives of the Bank do not receive remuneration as members of the Board of Directors and their remuneration is incorporated in their annual gross remuneration.

The remuneration received by the Chairman of the Board, the executive and non-executive Directors for the year 2020, due to their relationship with the Bank, and the compensation they received for their participation in the Board and Board Committees' meetings (as well as the individual attendance of each member of the Board in these meetings) have already been published in the Bank's Annual Financial Report for the annual period ended 31 December 2020, as part of the Board's Annual Report, which is available in the Bank's website www.nbg.gr (section: The Group / Investor Relations / Financial Information / Annual and interim financial statements).

During 2020, no variable remuneration has been granted to the Chairman of the Board and the executive Directors, while the remuneration of the non-executive Directors does not include bonuses according to the NBG Directors' & Senior Managers' Remuneration Policy.

15.11 Aggregate Quantitative Information on remuneration

The total remuneration of the Bank's staff awarded in year 2020, broken down by business area, as well as the remuneration of senior management and staff members whose professional activities have a material impact on the Bank's risk profile, in accordance with the provisions of Regulation (EU) No. 604/2014, is presented in the tables below, as obtained from the data on the Bank and Group staff at the end of the reporting year.

Furthermore, tables are cited concerning the relevant remuneration on a consolidated basis for the most significant companies of the Group in the financial sector.

Specifically, in the following two tables the aggregated quantitative information on remuneration for the financial year 2020 is presented, broken down by business area, on an individual and consolidated basis respectively (amounts in € mio):

[3] *It is noted that following revision of Board Committees Charters, as of 01.03.2019 proposals to the Board regarding the remuneration of Board members falls within the competence of the Corporate Governance and Nominations Committee.*

Table 59: NBG Remuneration figures

NBG SENIOR MANAGEMENT AND STAFF TOTAL REMUNERATION			
Business Areas	**Total per business area**	**Total annual fixed remuneration per business area (€ mio)**	**Total annual variable remuneration per business area (€ mio)**
BoD members	13	1.76	0
Investment Banking	160	8.26	0
Retail Banking	4,822	169.27	2.23
Asset Management	64	3.08	0
Corporate functions	1,797	81.07	0.0017
Independent control functions	446	21.74	0.03
All other	391	15.08	0.095
Total	**7,693**	**300.26**	**2.36**

Table 60: NBG Group Remuneration figures

NBG GROUP SENIOR MANAGEMENT AND STAFF TOTAL REMUNERATION			
Business Areas	**Total per business area**	**Total annual fixed remuneration per business area (€ mio)**	**Total annual variable remuneration per business area (€ mio)**
BoD members	45	4.32	0.07
Investment Banking	256	12.38	0
Retail Banking	5,549	181.51	2.5
Asset Management	96	4.95	0
Corporate Functions	1,989	88.4	0.030
Independent control functions	548	24.12	0.054
All other	936	23.36	0.34
Total	**9,419**	**339.04**	**2.99**

In the following two tables the aggregated quantitative information on remuneration for the financial year 2020 is presented concerning senior management and staff falling within the scope of Regulation (EU) No. 604/2014 whose professional activities have a material impact on the Bank's risk profile, on an individual and consolidated basis respectively (amounts in € mio):

Table 61: NBG Remuneration figures (EU 604/2014)

NBG TOTAL ANNUAL FIXED, VARIABLE REMUNERATION AND SEVERANCE PAYMENTS *Amounts in € mio*	Senior Management	Other staff members whose professional activities have a material impact on the Bank's risk profile
I. Number of staff falling within the scope Regulation (EU) No. 604/2014	39	110
II. Total fixed remuneration	15.52	
III. Total variable remuneration of which:	0.03	
III.1 variable in cash	0.03	
III.2 variable in shares and share-linked instruments	-	
III.3. variable in other types instruments	-	
IV. Total amount of variable remuneration awarded in year 2020 which has been deferred, of which:	-	
IV.1. deferred variable in cash	-	
IV.2. deferred variable in shares and share-linked instruments	-	
IV.3. deferred variable in other types of instruments	-	
V. Article 450 h (iii) CRR - total amount of outstanding deferred variable remuneration awarded in previous periods and not in year 2020	-	
VI. Total amount of explicit ex post performance adjustment applied in year 2020 for previously awarded remuneration	-	
VII. Number of beneficiaries of guaranteed variable remuneration (new sign-on payments)	-	
VIII. Total amount of guaranteed variable remuneration (new sign - on payments)	-	
IX. Number of beneficiaries of severance payments	-	
X. Total amount of severance payments paid in year 2020	-	
XI. Article 450 h(v)-Highest severance payment to a single person in year 2020	-	
XII. Number of beneficiaries of contributions to discretionary pension benefits in year 2020	-	
XIII. Total amount of contributions to discretionary pension benefits in year 2020	-	
XIV. Total amount of variable remuneration awarded for multi-year periods under programs which are not revolved annually	-	

Table 62: NBG Group Remuneration figures (EU 604/2014)

NBG GROUP TOTAL ANNUAL FIXED, VARIABLE REMUNERATION AND SEVERANCE PAYMENTS *Amounts in € mio*	Senior Management	Other staff members whose professional activities have a material impact on the Bank's risk profile
I. Number of staff falling within the scope Regulation (EU) No. 604/2014	138	269
II. Total fixed remuneration	27.72	
III. Total variable remuneration of which:	0.26	
III.1 variable in cash	0.26	
III.2 variable in shares and share-linked instruments	-	
III.3. variable in other types instruments	-	
IV. Total amount of variable remuneration awarded in year 2020 which has been deferred, of which:	-	
IV.1. deferred variable in cash	-	
IV.2. deferred variable in shares and share-linked instruments	-	
IV.3. deferred variable in other types of instruments	-	
V. Article 450 h (iii) CRR - total amount of outstanding deferred variable remuneration awarded in previous periods and not in year 2020	-	
VI. Total amount of explicit ex post performance adjustment applied in year 2020 for previously awarded remuneration	-	
VII. Number of beneficiaries of guaranteed variable remuneration (new sign-on payments)	-	
VIII. Total amount of guaranteed variable remuneration (new sign - on payments)	-	
IX. Number of beneficiaries of severance payments	-	
X. Total amount of severance payments paid in year 2020	-	
XI. Article 450 h(v)-Highest severance payment to a single person in year 2020	-	
XII. Number of beneficiaries of contributions to discretionary pension benefits in year 2020	-	
XIII. Total amount of contributions to discretionary pension benefits in year 2020	-	
XIV. Total amount of variable remuneration awarded for multi-year periods under programs which are not revolved annually	-	

Furthermore, it is noted that, at the Bank and the Group no individuals remunerated with more than EUR 1 million are occupied.

List of abbreviations

Abbreviation	Definition	Abbreviation	Definition
ABS	Asset-Backed Securities	**IAS**	International Accounting Standards
ACC	Additional Credit Claims	**ICAAP / ILAAP**	Internal Capital / Liquidity Adequacy Assessment Process
AFS	Available for Sale	**ICMA**	International Capital Markets Association
A-IRB	Advanced Internal Ratings Based (Approach)	**ICT**	Information and Communication Technology
ALCO	Asset Liability Committee	**IFRS**	International Financial Reporting Standards
ALM	Asset Liquidity Management	**IMA**	Internal Model Approach
AMC	Asset Management Companies	**IRB**	Internal Ratings Based (approach)
AML	Anti-Money Laundering	**IRRBB**	Interest Rate Risk in the Banking Book
APP	Asset Purchasing Program	**IRS**	Interest Rate Swaps
APS	Asset Protection Scheme	**ISDA**	International Swaps and Derivatives Association
ATHEX	Athens Exchange	**IT**	Information Technology
BAC	Board Audit Committee	**ITS**	Implementing Technical Standards
BC	Bankruptcy Code	**IVS**	International Valuation Standards
BCBS	Basel Committee on Banking Supervision	**JST**	Joint Supervisory Team
BoG	Bank of Greece	**KPI**	Key Performance Indicator
BoS	Board of Supervisors (EBA)	**KRI**	Key Risk Indicator
bps	Basis Point	**LCR**	Liquidity Coverage Ratio
BRC	Board Risk Committee	**LGD**	Loss Given Default
BRRD	Bank Recovery and Resolution Directive	**LR**	Leverage Ratio
BU	Business Unit	**M&A**	Mergers and Acquisitions
CBR	Combined Buffer Requirements	**MDA**	Maximum Distributable Amount
CCB	Capital Conservation Requirement	**MIS**	Management Information System
CCF	Credit Conversion Factor	**ML**	Money Laundering
CCO	Chief Credit Officer	**MoB**	Months on Book
CCP	Code of Civil Procedure	**MRA**	Moody's Risk Advisor
CCR	Counterparty Credit Risk	**MREL**	Minimum Requirements for Own Funds & Eligible Liabilities
CCyB	Countercyclical Capital Buffer	**MRO**	Main Refinancing Operations
CDS	Credit Default Swap	**MVS**	Model Validation Sector
CEBS	Committee of European Banking Supervisors	**MVU**	Model Validation Unit
CEF	Credit Equivalent Factor	**NBG**	National Bank Of Greece, S.A
CEO	Chief Executive Officer	**NCA**	National Competent Authority
CET1	Common Equity Tier 1	**NII**	Net Interest Income
CFO	Chief Financial Officer	**NMRF**	Non-Modellable Risk Factors
CMS	Collateral Management System	**NPE**	Non Performing Exposure
COO	Chief Operations Officer	**NPL**	Non Performing Loan
CRD	Capital Requirements Directive	**NPV**	Net Present Value
CRM	Corporate Rating Model	**NRA**	National Resolution Authorities
CRO	Chief Risk Officer	**NSFR**	Net Stable Funding Ratio
CRR	Capital Requirements Regulation	**O/N**	Overnight
CSA	Credit Support Annex	**OCP**	Open Currency Position
CSPP	Corporate Sector Purchasing Program	**OCR**	Overall Capital Requirement
CSRBB	Credit Spread Risk in the Banking Book	**OCW**	Out-of-Court Workout
CVA	Credit Valuation Adjustment	**OR**	Operational Risk
DCD	Domestic Credit Division	**ORCO**	Operational Risk Management Committee
DGSD	Deposit Guarantee Schemes Directive	**ORMF**	Operational Risk Management Framework
dpd	days past due	**ORR**	Obligors' Risk Rating
DoD	Definition of Deafult	**O-SII**	Other Systemically Important Institution
DTA	Deferred Tax Asset	**OTC**	Over-the-counter
DTC	Deferred Tax Credit	**P&L**	Profit and Loss
EAD	Exposure at Default	**P2G**	Pillar 2 Guidance

APPENDIX

EBA	European Banking Authority	**P2R**	Pillar 2 Requirement
EBF	European Banking Federation	**PD**	Probability of Default
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization	**PE**	Performing Exposures
EC	European Commission	**PELTROs**	Pandemic Emergency Long-Term Refinancing Operations
ECAI	External Credit Assessment Institutions	**PEPP**	Pandemic Emergency Purchase Program
ECB	European Central Bank	**PMO**	Project Management Office
ECL	Expected Credit Losses	**ppts**	Percentage points
EDIS	European Deposit Insurance Scheme	**PSE**	Public Sector Entity
EFSF	European Financial Stability Facility	**PSI**	Private Sector Involvement
EIB	European Investment Bank	**QCCP**	Qualifying Central Counterparty
EIF	European Investment Fund	**RAF**	Risk Appetite Framework
EIOPA	European Insurance & Occupational Pensions Authority	**RAPM**	Risk-Adusted Performance Metrics
EL	Expected Loss	**RCF**	Risk Culture Framework
ELA	Emergency Liquidity Assistance	**RCSA**	Risk and Control Self-Assessment
ERBA	External Ratings Based Approach	**RES**	Renewable Energy Resources
ESA	European Supervisory Authorities	**RTS**	Regulatory Technical Standards
ESG	Environmental, Social & Governance	**RWA**	Risk Weighted Assets
ESM	European Stability Mechanism	**SA**	Standardized Approach
ESMA	European Securities & Markets Authority	**SAU**	Special Assets Unit
ESRB	European Systemic Risk Board	**SB(L)**	Small Business (Lending)
ETEAN	Hellenic Fund for Entrepreneurship and Development	**SEC**	Securities and Exchange Commission
EU	European Union	**SFDR**	Sustainable Finance Disclosure Regulation
EVE	Economic Value of Equity	**SGP**	Stability & Growth Pact
EVS	European Valuation Standards	**SICR**	Significant Increase of Credit Risk
EW	Early Warning	**SL**	Specialised Lending
ExCo	Executive Committee	**SME**	Small & Medium Enterprises
FBE	Forborne Exposures	**SPPI**	Solely Payments of Principal and Interest
FI	Financial Institution	**SPV**	Special Purpose Vehicle
F-IRB	Foundation internal ratings-based (approach)	**SR**	Securitization Repositories
FRTB	Fundamental Review of the Trading Book	**SRB**	Single Resolution Board
FSB	Financial Stability Board	**SRCO**	Segment Risk & Control Officer
FVTOCI	Fair Value Through Other Comprehensive Income	**SREP**	Supervisory Review and Evaluation Process
FVTPL	Fair Value Through Profit or Loss	**SRM**	Single Resolution Mechanism
FX	Foreign Exchange	**SSM**	Single Supervisory Mechanism
GAAP	Generally Accepted Accounting Principles	**ST**	Stress Test
GGB	Greek Government Bond	**STS**	Single, Transparent, Standardized (securitization)
GHOS	Governors and Heads of Supervision	**sVaR**	Stressed Value at Risk
GICD	Group International Credit Division	**TF**	Terrorist Financing
GL	Guidelines	**TFEU**	Treaty on the Functioning of the European Union
GMORM(D)	Group Market & Operational Risk Management (Division)	**TLAC**	Total Loss Absorbing Capacity
GMRA	Global Master Repurchase Agreement	**TLTRO**	Targeted Long-Term Refinancing Operations
GRC	Governance Risk & Compliance	**TRIM**	Targeted Review of Internal Models
GRCA(D)	Group Risk Control & Architecture (Division)	**TSCR**	Total SREP Capital Requirement
GRCD	Group Retail Credit Division	**URCO**	Unit Risk & Control Officer
G-SII	Global Systemically Important Institution	**UAT**	User Acceptance Testing
HCMC	Hellenic Capital Market Commission	**UTP**	Unlikeliness to Pay
HDB	Hellenic Development Bank	**VaR**	Value at Risk
HFSF	Hellenic Financial Stability Fund	**VCV**	Variance-Covariance
HRRC	Human Resources and Remuneration Committee	**WAM**	Weighted Average Maturity
HTCS	Held to Collect and Sell		

APPENDIX