

**Alpha Bank Group**  
Pillar III Disclosures  
Report for December 31, 2019



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Abbreviation	Definition
ACM	Ambit Capital Manager
ALCo	Assets-Liabilities Management Committee
BCBS	Basel Committee on Banking Supervision
BoD	Board of Directors
BoG	Bank of Greece
Bps	Basis Point
BRRD	Bank Recovery and Resolution Directive
CAR	Capital Adequacy Ratios
CBR	Combined Buffers Requirements
CCF	Credit Conversion Factor
CCP	Code of Civil Procedure
CCR	Counterparty Credit Risk
CCyB	Countercyclical Capital Buffer
CDS	Credit Default Swaps
CET1	Common Equity Tier 1
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CRD	Capital Requirements Directive
CGNC	Corporate Governance and Nomination Committee
CRE	Commercial Real Estate
CRM	Credit Risk Mitigation
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CSA	Credit Support Annex
CVA	Credit Valuation Adjustment
DTA	Deferred Tax Assets
EAD	Exposure at Default
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
ECB	European Central Bank
ECL	Expected Credit Loss
ELA	Emergency Liquidity Assistance
EU	European Union
FRTB	Fundamental Review of the Trading Book
FTP	Fund Transfer Pricing mechanism
FVTOCI	Fair Value Through Other Comprehensive Income
FVTPL	Fair Value Through Profit or Loss
FX	Foreign Exchange
GDP	Gross Domestic product
GL	Guidelines
GMRA	Global Master Repurchase Agreement
HAPS	Hercules Asset Protection Scheme
KPI	Key Performance Indicator
KRI	Key Risk Indicator
LAS	Liquidity Adequacy Statements
LCR	Liquidity Coverage Ratio
LGD	Loss given default
LTV	Loan to Value
HDIGF	Hellenic Deposit and Investment Guarantee Fund
IAS	International Accounting Standards
ICAAP	Internal Capital Adequacy Assessment Process
ICS	Internal Control System



ILAAP	Internal Liquidity Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IMA	Internal Model Approach
IRB	Internal Ratings Based (approach)
IRRBB	Interest Rate Risk in the Banking Book
ISDA	International Swap and Derivatives Association
IT	Information Technology
ITS	International Technical Standards
MREL	Minimum Requirement for Eligible Liabilities
NCA	National Competent Authorities
NPE	Non-Performing Exposure
NPL	Non-Performing Loan
NRA	National Resolution Authorities
NSFR	Net Stable Funding Ratio
OCR	Overall Capital Requirement
O-SII	Other Systemically Important Institution
OTC	Over the Counter
P2R	Pillar 2 Requirement
PD	Probability of default
POCI	Purchased or Originated Credit Impaired
RAF	Risk Appetite Framework
RAS	Risk Appetite Statement
RCSA	Risk Control Self – Assessment
RRE	Residential Real Estate
RemCo	Remuneration Committee
RWA	Risk Weighted Assets
SA	Standardized Approach
SFTs	Securities Financing Transactions
SME	Small & Medium Enterprises
SPPI	Solely Payments of Principle and Interest
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
STA	Standardized Approach
SVaR	Stressed Value at Risk
TAC	Troubled Assets Committee
TBSCO	Treasury and Balance sheet Management Committee
TC	Total Capital
TLAC	Total Loss Absorbing Capacity
TSCR	Total SREP Capital Requirements
UTP	Unlikely to Pay
VaR	Value at Risk



## 1 Introduction

### 1.1 General Information

Alpha Bank is one of the leading banks of the Greek privately owned banking sector and constitutes a consistent point of reference for over 130 years. The Bank offers a wide range of high-quality financial products and services, including retail banking, SMEs and corporate banking, asset management and private banking, distribution of insurance products, investment banking, brokerage and real estate management.

The Parent Company of the Group, Alpha Bank, which was founded in 1879 by John F. Kostopoulos, has its headquarters at 40 Stadiou Street, Athens, and is registered in the Register of Companies with number 6066/06/B/86/05. The Bank is subject to the Greek banking and accounting law and regulation and is supervised by the European Central Bank (ECB) and the Single Supervisory Mechanism (SSM).

Alpha Bank is active in the Greek and international banking market, with presence in the United Kingdom, Cyprus, Albania, and Romania.

### 1.2 Main Developments

2019 has been a milestone year regarding the overall performance of the banking system in Greece. The management of the Non-Performing Exposures (NPEs) remained the major challenge which had to be faced, while on 1.9.2019 capital controls in the Greek banking system, which were imposed for the first time in June 29th, 2015, were abolished.

For Alpha Bank, 2019 marked the beginning of the remediation of its balance sheet as well as the Bank's return to long-term profitability. In this context, from the beginning of the current year the reliance of Bank on Emergency Liquidity Assistance funding was fully eliminated, while the Bank continued expanding its deposit base.

In November 2019, the Bank announced its Strategic Plan for the years 2020-2022, targeting to accelerate its balance sheet clean-up by launching a large NPE securitization of Euro 12 billion (Project Galaxy) with the utilization of the Hellenic Asset Protection Scheme ("HAPS"), introduced by the Greek Government. The Bank also announced the reorganization of its NPE management platform through a partnership with a strong international player followed by a carve out of the relevant infrastructure into Cepal Hellas and the creation of a new servicer ("New Cepal") which will combine the skills of both platforms, to support an accelerated buildup of servicing capacity for remedial actions on non performing portfolios. The above will contribute to the significant de-risking of the balance sheet leading to a normalized cost of risk of less than 100bps going forward. At the same time, the operating model transformation is expected to drive the group cost to income ratio below 48% and counterbalance the income erosion from balance sheet deleveraging. The cost efficiency efforts continued and accelerated, in 2019, with tangible results through the successful Voluntary Separation Scheme (VSS) while the forthcoming transaction-led NPE management outsourcing is expected to contribute significantly by 2022. The Bank plans to support retail and business segments by new loan disbursements of Euro 14 billion until 2022 with emphasis on infrastructure, energy, real estate, hospitality, manufacturing and shipping, with intensive efforts to further develop business segments that are less capital intensive and have high potential in the Greek market.

Finally, in February 2020, Alpha Bank successfully completed a landmark Tier II bond issuance of Euro 500 million at a yield of 4.25%, optimising its capital structure and diversifying its capital sources. The Tier II issuance adds 104bps to the Group's capital adequacy with total CAD of 31.12.2019, reaching 19%, adjusted for the issuance.

## **Project Galaxy**

One of the key pillars of Bank's Strategy is the de-risking of its Balance Sheet, putting capital to work with a view to improve asset quality and normalize cost of risk. The solo-level NPE stock is envisaged to drop below Euro 3.5 billion at the end of 2022.

To this effect, Alpha Bank planned a frontloading of its efforts through a large securitisation transaction of c. Euro 12 billion, of both retail and wholesale NPEs, known as project Galaxy, making use of the Hellenic Asset Protection Scheme for the retained senior tranche.

The securitisation transaction is coupled with the sale of Bank's servicing platform to an independent entity in order to support Project Galaxy and enhance business model efficiency. The servicer is expected to manage a total of Euro 30 billion of NPEs from Alpha Bank and third parties, including an exclusivity agreement with Alpha Bank to manage its remaining NPEs.

More specifically:

- In January 2020, the Bank launched the transaction and saw prominent international investors participating in the first phase and accessing the VDR. A recent communication with them confirms a strong interest in the transaction, on the back of an attractive servicing business proposition and an opportunity to invest in a diversified portfolio of Greek exposures.
- The Bank also has engaged with rating agencies and are currently progressing the senior notes rating workstreams. It is also now evident that the senior notes will be assigned a 0% risk weight.
- It is also important that the Greek CDS, that experienced volatility during March, has now landed to more normalized levels improving, the feasibility of securitization transactions backed by the Hellenic Asset protection scheme.
- The New Cepal target operating model design has been completed and is now in its implementation phase.

Finally, significant preparatory work has been done for the issuance of the notes and the commencement of the hive down.

The above actions will result in an improved quality of retained NPE portfolio that will act as a key component of the value creation strategy while maintaining strong capital ratios and enhance buffers above requirements.

The emergence of coronavirus in Europe in the first quarter of 2020, which soon received pandemic features, is adding a major uncertainty in terms of both macroeconomic developments and the ability of businesses to operate under the regime of the restrictive measures imposed.

As soon as market conditions normalise project Galaxy will be concluded at an even faster pace.

## **COVID – 19 Outbreak**

In the face of the Covid-19 pandemic, the Bank has timely implemented with discipline all the appropriate measures to minimise risks, to protect its Employees, to ensure its business continuity and to deliver on its social responsibility to support customers and the economy, in line with the evolving situation. Alpha Bank is closely monitoring the situation on COVID-19 and continuously assesses the potential impact of the pandemic on the Bank's asset quality, risk profile and the execution of its Business Plan to which the Bank remains fully committed.

## 2 Pillar III Disclosures Overview

### 2.1 Background and Structure of Pillar III Disclosures

Alpha Bank's Pillar III Report is prepared in accordance with disclosure requirements as laid down in Part Eight of the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation, or "CRR") and the "Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Capital Requirements Directive 4, or "CRD 4").

The present Report is structured under 15 chapters and 4 Appendices. The 1st chapter provides an overview of Group's performance for 2019. Chapter 2 describes the Alpha Bank Group background as well as the Pillar III Disclosures background, an overview of regulatory framework and significant developments within 2019 as well as an overview of the Group's Corporate Governance. The 3rd chapter provides information on the scope of application of the regulatory framework and the relevant differences with accounting scope of consolidation.

Chapters 4 and 5 provide full information on capital and leverage, including quantitative information on Alpha Bank Group capital base and capital requirements.

Chapters 6 - 14 describe the Group's risk management framework, and provide detailed information on credit risk, market risk, counterparty credit risk, operational risk, liquidity risk, as well as asset encumbrance and leverage ratio.

Chapter 15 contains information on Group's remuneration policy.

The appendices include a listing of BoD Committees' composition and terms of reference, the CVs of the Members of the Board of , the differences between the accounting and the regulatory scope of consolidation per entity of the Group and the Organisational Chart.

#### Disclosures enhancements

In January 2015, the Basel Committee on Banking Supervision (BCBS) published the Revised Pillar III Disclosure Requirements, followed by the publication, in December 2016, of the EBA Final Guidelines on disclosure requirements. These Guidelines provide banks with guidance in attaining compliance with the CRR and with the Basel Committee, and are effective from 31 December 2017. Alpha Bank incorporated the enhancements to the extent possible.

In December 2018 EBA published guidelines that specify the common content and uniform disclosure formats for the information on NPEs, forborne exposures and foreclosed assets that credit institutions should disclose. Proportionality is embedded in the guidelines based on two criteria – the significance of the credit institution and the level of NPEs – and there is a set of templates that needs to be disclosed only by significant credit institutions with a gross NPL ratio of 5% or above.

#### Approval and publication

In accordance with the Group's internal governance framework, a "Pillar III Disclosures Policy" has been developed and implemented that ensures consistent and continuous compliance with the disclosure requirements of the regulatory framework (CRR 575/2013, article 431(3)) and best practices.

The adopted policy sets the minimum content of public disclosures presented.

The Bank with the aim to apply, at all times, best practices and cover any new regulatory requirements, revises its disclosure policy on an annual basis or when deemed necessary and updates the extent and type of information provided at each disclosure date accordingly.



The Bank publishes the Pillar III report via its website, within the applicable deadlines. The data included in this report may be different than the respective accounting data, mainly due to differences between the regulatory and the accounting scope of consolidation and/or differences in the definitions used. However, the Group's financial statements, used together with Pillar III disclosures, complement market participants' information and enhance transparency.

The disclosures included within this report were verified and approved internally in line with the Disclosures policy which is approved by the Board. Business units attest to the accuracy of their data submissions. Consistency checks and reconciliations are performed with accounting and regulatory data. The information in this report is subject to the same level of internal control processes as the information provided by the Group for its financial reporting.

## 2.2 Supervision and Regulatory Framework

### 2.2.1 Supervision and regulation

#### Single Supervisory Mechanism (SSM)

Since November 2014, Alpha Bank has been assessed as "Other Systemically Important Institution" (O-SII) and, as such, is directly supervised by the ECB in accordance with the SSM framework.

The SSM is a system of financial supervision composed of the ECB and national competent authorities (NCAs)

The applicable banking regulatory framework in the European Union, the Basel 3 capital framework, was implemented by the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation, or "CRR") published on June 27, 2013, in combination with the "Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Capital Requirements Directive 4, or "CRD 4") published on June 27, 2013 that has been transposed into the Greek legislative framework by the Law 4261/2014. The framework on prudential requirements and prudential supervision is effective from 1<sup>st</sup> January 2014.

The aforementioned framework sets the minimum own funds requirements as follows:

- 4.5% for the Common Equity Tier I ratio (CET I)
- 6% for the Tier I ratio
- 8% for the Total Capital Adequacy ratio

The maintenance of capital buffers additional to the CET I capital are required. In particular:

- Capital Conservation buffer stands at 2.5%
- Bank of Greece (BoG) through Executive Acts set the following capital buffers:
  - Other systemically important institutions (O-SII) buffer, which will gradually rise to 1% from 1.1.2019 to 1.1.2022. For 2019, the O-SII buffer stands at 0.25% while for 2020 it will increase to 0.5%.
  - Countercyclical capital buffer 0% for the fourth quarter of 2019

## Supervisory Review and Evaluation Process (SREP)

According to Council Regulation 1024/2013, ECB conducts annually a Supervisory Review and Evaluation Process (SREP) in order to set prudential as along as other qualitative requirements to banking institutions.

This process evaluates the:

- Sustainability and viability of business model
- Adequacy of governance and risk management
- Assessment of risk to capital and
- Assessment of risks to liquidity and funding

The minimum capital requirements are determined by the ECB following the assessment of the institution's risk profile.

On 8 February 2019, the ECB informed Alpha Bank that since 1st March 2019 the minimum limit for the Overall Capital Requirement (OCR) is 13.75%, increased by 0.875%, due to the fully phased-in capital conservation buffer and the gradual increase of the O-SII buffer. The OCR also includes the Pillar 2 requirement (P2R) of 3.0%.

For 2020, the minimum limit for the Overall Capital Requirement (OCR) was set to 14%, increased by 0.25%, due to the gradual increase of the O-SII buffer in accordance with a decision that was notified to the Bank on 10 December 2019.

As per the recently announced regulatory measures by EBA and ECB, in view of the COVID-19 outbreak, capital regulatory thresholds for European banking institutions have been relaxed. Specifically, on 12 March 2020, the European Central Bank (ECB) and the European Banking Authority (EBA) announced the following relaxation measures for the minimum capital and liquidity requirements for Banks in the Eurozone:

- Banks are temporarily allowed to operate below the level the Capital Conservation Buffer (CCB) and the Countercyclical Buffer (CCyB),
- Furthermore, the upcoming change under CRD5 regarding the P2R buffer was brought forward allowing its partial coverage by Additional Tier 1 (AT1) capital and Tier 2 (T2) capital.

Taking into consideration the recent announcements that allow the Bank to operate temporarily at levels below the abovementioned ones, the minimum limit for the Overall Capital Requirement (OCR) is set at 11.5%.

## Single Resolution Mechanism (SRM)

The Single Resolution Mechanism (SRM) that implements the EU-wide Bank Recovery and Resolution Directive (BRRD – see next paragraph) in the euro area. The Single Resolution Board (SRB) in cooperation with the National Resolution Authorities (NRAs), are responsible for the design of the specific resolution strategy for each institution which, among others, includes the resolution actions that could be executed following adequate preparation.

## Recovery and Resolution

The European Directive 2014/59 (BRRD) which is part of Single Rulebook, is applicable in relation to recovery and resolution of credit institutions and investment firms. The Directive established a set of common rules to deal with banking crises across the EU and the orderly recovery and resolution of financial institutions, with the aim to avoid significant adverse effects on financial stability and to ensure that shareholders and creditors (including unsecured depositors) will share the burden in case of a potential recapitalization and/or liquidation. The Directive was transposed into the Greek legislation with Law 4335/2015.

The BRRD, requires banks to meet a minimum requirement for own funds and eligible liabilities (MREL) so as to be able to absorb losses and restore their capital position, allowing banks to continuously perform their critical economic functions during and after a crisis. MREL represents one of the key tools in enhancing banks' resolvability. In 2017, the SRB developed its MREL policy and adopted its first binding decisions for major and complex banking groups. The policy statement published on January 2019 highlights that for the 2018 resolution planning cycle SRB is moving from informative targets—communicated in the 2017 MREL policy—to bank-specific binding consolidated MREL targets for the majority of banks under the SRB remit. The MREL computation will remain calibrated for bail-in strategies, while the usage of transfer strategy policies requires that banks meet high standards in terms of separability and data availability. The SRB MREL policy contains an objective set of criteria in this regard and represents a step toward bank-specific MREL targets.

On November 23, 2016, the European Commission published a new reform package amending both the prudential banking regime (CRR) and the resolution regime (Bank Recovery and Resolution Directive, BRRD). This revision included the implementation of international standards into European legislation (regulation later than 2010 adopted by the Basel Committee – except for standards approved in December, 2017 and market risk requirements – and the total loss absorbing capacity (TLAC), the final design of the minimum requirement for own funds and eligible liabilities (MREL) along with a package of technical improvements. At the same time, a proposal has also been put forward for a directive to harmonize the hierarchy of senior debt creditors within the European Union.

This directive was adopted in December 2017.

The CRR and BRRD reform package was published on June 7, 2019 and came into force on June 27, 2019.

The regulations and directives that make up this reform are as follows:

- Regulation (EU) 2019/876 (CRR2) of the European Parliament and of the Council of May 20, 2019 amending Regulation (EU) 575/2013 (CRR). Its general implementation date is June 28, 2021, although certain articles apply from its entry into force and others on different dates
- Regulation (EU) 2019/877 of the European Parliament and of the Council of May 20, 2019, amending Regulation (EU) No 806/2014 regarding loss absorption and recapitalization capacity for credit institutions and investment firms.

The implementation date is December 28, 2020.

- Directive (EU) 2019/878 (CRD V) of the European Parliament and of the Council of May 20, 2019 amending Directive 2013/36/EU (CRD IV). Its adoption date is December 28, 2020 as Member States should publish the provisions necessary to comply with this Directive until that date.
- Directive (EU) 2019/879 (BRRD2) of the European Parliament and of the Council of May 20, 2019 amending Directive 2014/59/EU (BRRD). Its adoption date is December 28, 2020 as Member States should publish the provisions necessary to comply with this Directive until that date.

In addition, regarding the supervisory reporting, during the last quarter of 2019, the EBA has published an ITS on disclosure and reporting of MREL and TLAC. The ITS establishes new Pillar 3 and supervisory reporting templates associated with TLAC and MREL requirements of CRR2 and BRRD2. The proposed implementation date is June 28, 2021.

## **NPE Plan**

As a result of the Greek financial crisis that started in 2009, the NPE/NPL levels increased across all business segments resulting in the deterioration of the Bank's loan portfolio.

However, in a challenging economic environment, the effective management of NPEs is of paramount importance for the Bank, as this will lead, not only to the improvement of the its financial strength but also to the release of funds towards households and productive business sectors contributing to the development of the Greek economy in general.

On the 30th of September 2016 the Bank submitted to the SSM the NPE/NPL targets along with the NPE Strategy Explanatory Note and the relevant Action Plan, depicting the Bank's full commitment towards the active management and reduction of NPEs over the business plan period 2016-2019. On the 29<sup>th</sup> of September 2017 the Bank submitted the updated NPE/ NPL targets to the SSM including the review of the progress made in reducing NPEs/NPLs against the first year's targets, as well as the key changes to the Bank's strategy and Business Plan regarding NPEs.

During the first two years of the Business Plan the Bank managed to achieve its SSM reduction targets, despite the non-conducive macroeconomic environment and the presence of certain impediments in the resolution of NPEs. More specifically, the balance of NPE of the Bank as of 31.12.2018 is lower by Euro 48 million compared to the target included in the Plan.

On 30 September 2018, the Bank submitted a revised Business Plan, including targets per asset class for the period 2018 – 2021 according to the latest request from SSM. The Bank's objective for the management of troubled assets is to significantly reduce the Solo-level NPE volume at Euro 8.0 billion, implying an NPE ratio of 20%, approximately by 2021 while curtailing new NPE/NPL formation and minimizing medium term losses for the Bank.

On March 2019, the Bank updated the revised NPE plan for the period 2019 – 2021, targeting for a slightly higher reduction of Solo-level troubled assets, reaching Euro 7.4 billion of NPE balances at the end of 2021.

The submission of the NPE plan for the 2020-2022 period which was due in March 31, 2020, will be extended in the face of the coronavirus pandemic.

## **Other Regulatory Restrictions**

Group's significant restrictions regarding the use of assets or the settlement of obligations, are those imposed by the regulatory framework in which foreign subsidiaries, supervised for their capital adequacy and liquidity, mainly operate. In particular, the regulatory authorities request, where appropriate and depending on the nature of the company, the compliance with specific thresholds, as for example the maintenance of a specific level of capital buffers and/or liquid assets, the limitation of the exposure to other Group companies and the compliance with specific ratios.



## 2.2.2 Significant Developments

Over the last few years the regulatory framework in which financial institutions operate has become stricter and increasingly complex. This complexity has been fed by the introduction of new financial regulations, some of them being still under discussion, and by the ECB's central role in the supervision of a large portion of the European banking system. A synopsis of the key regulatory developments that may impact the Group's financial position and capital requirements is outlined below:

- Adoption of the IFRS 16 accounting standard (Regulation 2017/1986/31.10.2017). The new standard significantly differentiates the accounting of leases for lessees while essentially maintaining the existing requirements of IAS 17 for the lessors. In particular, under the new requirements, the classification of leases as operating or finance is eliminated. A lessee is required to recognize, for all leases with term of more than 12 months, the right-of-use asset as well as the corresponding obligation to pay the lease payments. The above treatment is not required when the asset is of low value.
- Entry into force of the leverage ratio, an additional regulatory requirement compared to the risk based indicators envisaged in the Basel III package. The leverage ratio aims to constrain the building up of financial leverage in the banking industry, as well as to reinforce the capital requirements with a supplementary measure not based on risk parameters.
- Revision of the Basel III framework set out by the Basel Committee that introduces significant changes in the calculation of risk weighted assets mainly for credit risk (standardized approach and IRB), market risk through the Fundamental Review of the Trading Book (FRTB), operational risk and counterparty credit risk, as well as capital floors application through a transitional 5-year period. The new Basel framework is expected to be effective from 1.1.2022.
- In June 2018 the following were published in the Official Journal of the EU:
  - Regulation (EU) 2019/876 of the European Parliament and of the Council amending the Capital Requirements Regulation as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements (CRR II).
  - Directive (EU) 2019/878 of the European Parliament and of the Council amending the Capital Requirements Directive IV as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures (CRD V).

CRR II and CRD V have entered into force on 27 June 2019. The CRR II rules will follow a phased implementation with significant elements entering into force in 2021

- In April 2019 the ECB published the Regulation (EU) 2019/630 amending Regulation (EU) 575/2013 as regards the minimum loss coverage for non-performing loans. The Regulation supplements the ECB's Guidance on NPLs management, by specifying quantitative supervisory expectations concerning the minimum levels of prudential provisions expected for new non-performing exposures (NPEs). More specifically, banks are expected to provide full provision coverage for the unsecured portion of new NPEs after 2 years at the latest and for the secured portion after 7 years at the latest.
- In October 2019 EBA launched a public consultation on the new comprehensive Implementing Technical Standard (ITS) for financial institutions' public disclosure, designed to promote market discipline. The new ITS aim to reinforce market discipline, by increasing consistency and comparability of institutions' public disclosures, and to implement the CRR2 regulatory changes in alignment with the revised Basel Pillar 3 standards



- In June 2016 the United Kingdom (UK) voted to leave the European Union (EU). During early 2017, the formal process to leave the EU was triggered and the UK government began to negotiate with EU. The withdrawal agreement was ratified by the UK on 23 January 2020, by the EU on 30 January 2020 and the country became the first member to formally leave the EU on 31 January 2020. The Bank has limited presence in the UK.

### 2.2.3 EBA 2020 Stress testing

EU-wide stress test is primarily focused on the assessment of the impact of risk drivers on the solvency of banks. Banks are required to stress a common set of risks (credit risk – including securitisations – market risk and counterparty credit risk, operational risk – including conduct risk). The EU – Stress Test is a biannual exercise. However due to the outbreak of COVID – 19 (Coronavirus) and its global spread, EBA decided to postpone until 2021 the EU-wide Stress Test Exercise of 2020 to allow banks to focus on and ensure continuity of their core operations. For 2020, the EBA will carry out an additional EU-wide transparency exercise in order to provide updated information on banks' exposures and asset quality to market participants.

## 2.3 Overview of Alpha Bank Group Corporate Governance

The Board of Directors has the overall responsibility for directing and controlling the Bank and the Group, including guiding the strategy and ensuring balanced risk-taking to promote soundness and safety. The overall Corporate Governance framework is included in the Board of Directors Annual Management Report as at 31.12.2019.

The Board of Directors regularly examines corporate governance issues and during 2019 it revised the Charters of all Board of Directors' Committees in order for them to be fully aligned with the relevant regulatory framework and with the most recent best practices of corporate governance. Further to the above, the Bank updated the Articles of Incorporation, established a Remuneration Policy as per the provisions of articles 110 and 111 of Law 4548/2018 which incorporated into Greek law the relevant provisions of the Shareholders Rights Directive and updated the Senior Executives Severance Payment Policy which applies to the Senior Executives and Managers of Alpha Bank. The aforementioned documents were approved by the Extraordinary General Meeting of Shareholders held on 20.11.2019 and are posted on the Bank's website.

Furthermore, the positions of General Manager of International Network and of General Manager - Chief Legal and Governance Officer were established early in the year.

Additionally, at the Board of Directors meeting held on 19.11.2019 it was resolved that as of 2.12.2019 the Board of Directors' powers and authorities, other than for matters requiring, according to applicable law, a collective decision, are delegated exclusively to the CEO with the power to further sub-delegate such powers and authorities. Moreover, the position of the Deputy CEO was abolished and any power previously granted to the Deputy CEOs was hereby revoked.

Moreover, the Bank conducted a review of Policies relevant to the Corporate Governance practices implemented by Group Companies. Following a thorough gap analysis, the Group Companies' Policies relevant to the Corporate Governance practices were fully aligned with legal and regulatory requirements, EBA guidelines as well as with Alpha Bank's corporate governance practices.

The Bank, in accordance with the best practices of corporate governance and aiming to further enhance the collaboration within the Group, has launched a series of meetings between the Members of the Board of Directors of the Bank and Board Members and representatives of the Group Companies. In these meetings important issues of mutual interest are discussed and the necessary guidance is provided. In particular, a visit to Cyprus took place on 19.4.2019 on the subject of the NPL and NPE portfolios of Cyprus, with the participation of the Member of the Risk Management Committee, Mr. R.R. Gildea, of Executives of the Bank as well as of Executives of Alpha Bank Cyprus Ltd.

Alpha Bank has adopted the Suitability and Nomination Policy for the Members of the Board of Directors and Key Function Holders (the “Policy”) which sets the principles and the framework for the selection, appointment and re-appointment of Members of the Board of Directors as well as the criteria to be used in the assessment.

It also addresses the appointment and re-appointment of the Key Function Holders of Alpha Bank, i.e. the Chief Financial Officer, the Chief Risk Officer, the Head of Internal Audit Division and the Head of the Compliance Division.

The Policy complies with the legislative and regulatory framework in force, including the relevant Joint ESMA and EBA Guidelines on “the assessment of the suitability of members of the management body and key function holders” as well as with European best practices in corporate governance. It also meets the requirements stipulated in the Relationship Framework Agreement (RFA) signed between the Bank and the Hellenic Financial Stability Fund (HFSF).

The objectives of the Policy are to:

- Set general principles that provide guidance to the Corporate Governance and Nominations Committee (the “CGNC”) and its Chair on selecting, vetting and proposing candidates to the Board of Directors.
- Set criteria for the selection and suitability assessment of Board of Directors candidates.
- Set criteria for the assessment of the ongoing individual suitability of the Members of the Board of Directors as well as the collective suitability of the Board of Directors.
- Set criteria for the selection and the appointment of Key Function Holders.
- Establish a transparent, effective and time-efficient suitability and nomination process.

The CGNC will not propose candidates which it deems not suitable to become Members of the Board of Directors according to the criteria set out in the Policy. Suitability is determined in relation to the Policy’s criteria for candidates (fit and proper and general suitability) and current composition needs. For the purposes of the Policy, it is defined as the degree to which an individual is deemed to have good repute and to have, individually and collectively with other individuals, adequate knowledge, skills and experience to perform his/her duties. Suitability also covers the honesty, integrity and independence of mind of each individual and his or her ability to commit sufficient time to perform his or her duties.

In order to be considered as a suitable candidate by the Board and its CGNC, prospective nominees must: meet the fit and proper requirements, meet individual and collective suitability requirements, have no systematic conflict of interests with the Bank, be able to devote sufficient time to the Board of Directors. . All nominees must submit a declaration that they meet the relevant requirements.

On 31.12.2019 the Board of Directors of the Bank was consisted of twelve Members with the following breakdown:

- Four Executive Members
- Three Non-Executive Members
- Five Non-Executive Independent Members

As of 1.2.2020 the Board of Directors of the Bank has eleven members after Mr. D.P. Mantzounis resignation from the position of Non-Executive Member of the Board of Directors on 31.12.2019 and Mr. G.C. Aronis resignation from the position of Executive Member of the Board of Directors on 31.1.2020.

The overall evaluation of the Board of Directors and its Committees, for the year 2018, was conducted by Nestor Advisors, a London-based corporate governance consulting firm, with the assistance of the Corporate Governance and Nominations Committee. The Individual Evaluation of the Members of the Board of Directors was conducted by the Chair of the Board of Directors.

The Corporate Governance and Nominations Committee ascertained that the current composition of all the Committees of the Board of Directors, namely the Audit Committee, the Risk Management Committee, the Remuneration Committee and the Corporate Governance and Nominations Committee, meets the requirements of the regulatory framework, is consistent with the principles of Corporate Governance of the Bank and contributes to the effective and smooth operation of the Committees and the Bank.

The composition of the Board of Directors reflects the knowledge, skills and experience necessary to fulfill its responsibilities. This entails that the Board of Directors collectively has an appropriate understanding of those areas for which the Members are collectively accountable and the skills to effectively manage and oversee the Bank.

While the Executive Members have a high level of managerial skills, the Non-Executive Members have sufficient management skills to organize the Board of Directors' tasks effectively and to be able to understand and challenge the management practices applied and the decisions taken by the Executive Members.

The Corporate Governance and Nominations Committee also ascertained that the Members of the Board of Directors represent different business sectors as well as different geographical areas and are acknowledged for their character, integrity, ability of leadership, management, thought and constructive collective operation in a team environment as well as for their financial knowledge and other professional and business experience. The level of experience and knowledge of all the Members of the Board of Directors and its Committees was evaluated by the Board of Directors as very high, while their work was evaluated as extremely effective.

Further to the aforementioned evaluation of the Board of Directors, a reassessment of the Board Members' collective suitability in terms of knowledge, skills and experience based on the Joint ESMA/EBA Guidelines on the Assessment of the Suitability of Members of the Management Body and Key Function Holders (the "Joint ESMA/EBA Guidelines") was conducted in November with the support of the Corporate Governance and Nominations Committee.

Based on the approved Collective Suitability Matrix, the Board of Directors resolved that in order to enhance the collective suitability of the Board, emphasis should be given on continuous training and informative sessions and new Non-Executive Independent Members should be appointed in order to further enhance collective knowledge in certain areas. Both measures are to be implemented during 2020.

An overview of the CVs of the Members of the Board of Directors is presented in Appendix 2.



The Members of the Board of Directors do not hold more than one of the following combinations of directorships at the same time: (a) One Executive directorship and two Non-Executive directorships; (b) Four Non-Executive directorships, excluding directorships in organisations which do not pursue predominantly commercial objectives (e.g. non-profit, charities). Executive or Non-Executive directorships held within the same group are regarded as one directorship.

The Committees of the Board of Directors are the following:

- Audit Committee
- Risk Management Committee
- Remuneration Committee
- Corporate Governance and Nominations Committee

A more detailed analysis of the Committees and terms of reference as well as description of the Diversity Policy applied to management, administration and supervision bodies are presented in Appendix 1.

## 3 Accounting and Regulatory consolidation

### 3.1 Consolidation for financial reporting purposes

The consolidated financial statements include the parent company Alpha Bank, its subsidiaries, associates and joint ventures. The financial statements of the entities that are used to prepare the consolidated financial statements have been prepared as at 31.12.2019 and the accounting policies applied in their preparation, when necessary, were adjusted to ensure consistency with the Group accounting policies.

#### **Subsidiaries**

Subsidiaries are entities controlled by the Group. The Group considers the following factors, in assessing control:

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

In cases of structured entities where the voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements (i.e. securitization vehicles or mutual funds), the Group assesses the existence of control based on the following:

- The purpose of the entity and the contractual rights of the parties involved,
- The risks to which the investee was designed to be exposed, the risks it was designed to pass on to the parties involved with the investee and the degree of exposure of the Group to those risks,
- Indication of a special relationship with the entity, which suggests that the Group has more than a passive interest in the investee.

Furthermore, regarding the structured entities that are managed by the Group, the Group assesses if it acts as principal or an agent based on the extent of its decision – making authority over the entity's activities, the rights of third parties and the degree of its exposure to variability of returns due to its involvement with the entity.

The Group, based on the above criteria, controls structured entities established for the securitization of loan portfolios.

#### **Associates**

Associates are entities over which the Group has significant influence but not control.

Significant influence is generally presumed to exist when the Group holds, directly or indirectly, more than 20% of the share capital of the company concerned without having control or joint control, unless the ownership of more than 20% does not ensure significant influence, e.g. due to lack of representation of the Group in the company's Board of Directors or due to the Group's non-participation in the policy making process.

Investments in associates are accounted for by the equity method of accounting consolidation.

#### **Joint Ventures**

The Group applies IFRS 11 for the accounting treatment of interests in joint arrangements. All joint arrangements in which the Group participates and has joint control are joint ventures, which are accounted for by using the equity method.



A more detailed description of the financial principles applied for consolidation is mentioned in the Group Annual Financial Reports, whereas a detailed list of all Group subsidiaries, associates and joint ventures, as well as the Group's ownership interest in them is provided in note 40 of the Group Annual Financial Report as of 31.12.2019.

### **3.2 Consolidation for regulatory purposes**

Consolidation for regulatory purposes follows the principles set by the law 4261/2014 and the regulatory framework (CRR 575/2013).

The regulatory consolidation is conducted in accordance with the accounting consolidation, with the exception of the following cases:

- Companies that do not belong to the financial sector are consolidated through the equity method;
- Insurance and reinsurance companies that are not deducted from CET 1 are risk weighted at 250%; and
- Significant investments in financial sector entities where participation does not exceed the 10% threshold are not deducted from CET 1 and are risk weighted at 250%.

A full list of Alpha Bank Group's subsidiaries and associates is included in Appendix III.

### **3.3 Reconciliation between accounting and regulatory consolidation**

The following table provides a reconciliation of the consolidated balance sheet as at 31 December 2019 on an accounting basis (as presented on p.66 of the Group's Annual Report 31 December 2019) to the consolidated balance sheet under the regulatory scope of consolidation.



**Table 1a: EU L1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories as of 31.12.2019 (in Euro million)**

	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items				
			Subject to credit risk framework	Subject to CCR framework	Subject to securitisation framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
<b>Assets</b>							
Cash and balances at central banks	2,028	2,028	2,028	-	-	-	-
Loans and advances to credit institution	3,333	3,333	2,168	1,165	-	-	-
Financial Assets at FV through PL	19	19	-	-	-	19	-
Derivative financial instruments	1,009	1,020	-	1,008	-	12	-
Loans and advances to customers	39,266	39,267	39,267	-	-	-	-
Investment securities	8,684	8,151	8,140	-	11	-	-
Of which: FVOCI	7,557	7,050	7,049	-	1	-	-
Of which: FVPTL (SPPI fail)	56	31	21	-	10	-	-
Of which: measured at amortized cost	1,071	1,071	1,071	-	-	-	-
Investments in associates and joint ventures	13	121	121	-	-	-	-
Investment property	486	486	486	-	-	-	-
Property, plant and equipment	852	850	850	-	-	-	-
Goodwill and other intangible assets	492	456	-	-	-	-	456
Deferred tax assets	5,174	5,174	4,508	-	-	-	666
of which deferred tax assets that rely on future profitability	12	12	-	-	-	-	12
of which deferred tax credit	3,167	3,167	3,167	-	-	-	-
of which deferred tax assets arising from temporary differences	1,995	1,995	1,342	-	-	-	654
Other assets	1,537	1,526	1,526	-	-	-	-
Held for Sale	564	564	564	-	-	-	-
<b>Total Assets</b>	<b>63,458</b>	<b>62,994</b>	<b>59,657</b>	<b>2,173</b>	<b>11</b>	<b>30</b>	<b>1,122</b>
<b>Liabilities</b>							
Due to banks	10,261	10,261	-	6,275	-	-	-
Derivative financial liabilities	1,447	1,447	-	1,414	-	-	-
Due to customers (including debt securities in issue)	40,364	40,394	-	1	-	-	-
Debt securities in issue held by institutional investors and other borrowed funds	1,089	1,089	-	-	-	-	-
Liabilities for current income tax and other taxes	40	38	-	-	-	-	-
Deferred tax liabilities	32	8	-	-	-	-	-
Other liabilities	1,150	1,153	-	-	-	-	-
Provisions	600	194	-	-	-	-	-
<b>Total liabilities</b>	<b>54,982</b>	<b>54,584</b>	<b>-</b>	<b>7,690</b>	<b>-</b>	<b>-</b>	<b>-</b>



**Table 1b: EU LI1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories as of 31.12.2018 (in Euro million)**

	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items				
			Subject to credit risk framework	Subject to CCR framework	Subject to securitisation framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
<b>Assets</b>							
Cash and balances at central banks	1,928	1,928	1,928	-	-	-	-
Loans and advances to credit institution	2,500	2,500	1,953	547	-	-	-
Financial Assets at FV through PL	8	8	-	-	-	8	-
Derivative financial instruments	725	726	-	716	-	10	-
Loans and advances to customers	40,228	40,228	40,228	-	-	-	-
Investment securities	7,005	6,631	6,623	-	8	-	-
Of which: FVOCI	6,962	6,599	6,598	-	1	-	-
Of which: FVPTL (SPPI fail)	43	32	25	-	7	-	-
Investments in associates and joint ventures	23	137	137	-	-	-	-
Investment property	493	493	493	-	-	-	-
Property, plant and equipment	735	734	734	-	-	-	-
Goodwill and other intangible assets	434	400	-	-	-	-	400
Deferred tax assets	5,291	5,291	4,620	-	-	-	671
of which deferred tax assets that rely on future profitability	179	179	-	-	-	-	179
of which deferred tax credit	3,241	3,241	3,241	-	-	-	-
of which deferred tax assets arising from temporary differences	1,871	1,871	1,379	-	-	-	492
Other assets	1,364	1,349	1,349	-	-	-	-
Held for Sale	272	272	272	-	-	-	-
<b>Total Assets</b>	<b>61,007</b>	<b>60,697</b>	<b>58,337</b>	<b>1,263</b>	<b>8</b>	<b>19</b>	<b>1,071</b>
<b>Liabilities</b>							
Due to banks	10,456	10,456	-	-	6,406	-	-
Derivative financial liabilities	1,148	1,148	-	-	719	-	-
Due to customers (including debt securities in issue)	38,732	38,780	-	-	13	-	-
Debt securities in issue held by institutional investors and other borrowed funds	943	943	-	-	-	-	-
Liabilities for current income tax and other taxes	41	38	-	-	-	-	-
Deferred tax liabilities	19	8	-	-	-	-	-
Other liabilities	997	1,000	-	-	-	-	-
Provisions	527	214	-	-	-	-	-
<b>Total liabilities</b>	<b>52,864</b>	<b>52,587</b>	<b>-</b>	<b>-</b>	<b>7,138</b>	<b>-</b>	<b>-</b>

The following table provides a reconciliation between the consolidated regulatory balance sheet to the Exposure at Default (EAD) for items subject to the frameworks for credit risk, CCR, securitisation and market risk. The assets carrying value does not include the amount of the intangible assets.

	Total	Items subject to			
		Credit risk framework	CCR framework	Securitisation framework	Market risk framework
Assets carrying value amount under the scope of regulatory consolidation	61,872	59,657	2,173	11	30
Liabilities carrying value amount under the regulatory scope of consolidation	7,690	-	7,690	-	-
<b>Total net amount under the regulatory scope of consolidation</b>	<b>54,182</b>	<b>59,657</b>	<b>- 5,517</b>	<b>11</b>	<b>30</b>
Off-balance-sheet amounts	7,464	871	-	-	-
Differences in valuations	-	-	-	-	-
Differences due to different netting rules, other than those already included in row 2	7,690	-	7,690	-	-
Differences due to consideration of provisions	-	-	-	-	-
Differences due to prudential filters	7,053	-	7,053	-	-
<b>Exposure amounts considered for regulatory purposes</b>	<b>76,388</b>	<b>60,528</b>	<b>9,226</b>	<b>11</b>	<b>30</b>

	Total	Items subject to			
		Credit risk framework	CCR framework	Securitisation framework	Market risk framework
Assets carrying value amount under the scope of regulatory consolidation	59,627	58,337	1,263	8	19
Liabilities carrying value amount under the regulatory scope of consolidation	7,138	-	7,138	-	-
<b>Total net amount under the regulatory scope of consolidation</b>	<b>52,489</b>	<b>58,337</b>	<b>- 5,874</b>	<b>8</b>	<b>19</b>
Off-balance-sheet amounts	7,032	871	-	-	-
Differences in valuations	-	-	-	-	-
Differences due to different netting rules, other than those already included in row 2	7,138	-	7,138	-	-
Differences due to consideration of provisions	-	-	-	-	-
Differences due to prudential filters	7,331	-	7,331	-	-
<b>Exposure amounts considered for regulatory purposes</b>	<b>73,990</b>	<b>59,208</b>	<b>8,594</b>	<b>8</b>	<b>19</b>



## 4 Capital Management

The Group's Capital Strategy commits to maintain sound capital adequacy both from economic and regulatory perspective. It aims at monitoring and adjusting Group's capital levels, taking into consideration capital markets' demand and supply, in an effort to achieve the optimal balance between the economic and regulatory considerations.

Alpha Bank remains focused on the efficient implementation of its NPE strategy, the NPE plan for 2020 – 2022, on which details are presented in paragraph 2.2 while any institutional solutions to reduce further the NPEs of the Greek banking system, are considered crucial as they will have significant impact on the Group's sound capital, profitability and sustainable strategy. The overall Group's Risk and Capital Strategy sets specific risk limits, based on management's risk appetite, as well as thresholds to monitor whether actual risk exposure deviates from the limits set.

### Main elements impacting Asset Quality, Capital and Liquidity

- The improvement of the liquidity profile continued. Deposits in Greece increased by Euro 1.8 billion in 2019, primarily as a result of inflows from the private sector. The loan to deposit ratio for the Group reduced further to 97% as of December 2019 versus 104% a year ago.
- In 2019, Alpha Bank continued to extend credit to the private sector with new loan disbursements in Greece of Euro 3.5 billion.
- Gross NPE's in Greece reduced further by Euro 0.5 billion in Q4 2019, bringing the total organic reduction for 2019 to Euro 1.2 billion.
- Fees and Commission income continued to grow, increasing by 2.7% y-o-y to Euro 340.1 million on the back of higher revenues from asset management and bancassurance, new loan originations and a higher contribution from investment banking activity.
- Recurring Opex decreased by 2% in 2019, mainly due to headcount reduction resulting from the Voluntary Separation Scheme (VSS) in 2018. Moreover, the successful completion of an additional VSS launched in September 2019 in the Greek operations leads to a gradual departure of 836 Employees with an annualised cost benefit estimated at circa Euro 35 million.
- Pre-Provision Income stood at Euro 1,135.6 million in 2019, corresponding to circa 2% of Total Assets, down from Euro 1,441.3 in 2018, on the back of lower Net Interest Income and trading gains.
- In 2019, impairment losses on loans came to Euro 994.8 million vs. Euro 1,723.1 million for the previous year.
- In 2019, Profit after Tax stood at Euro 97 million vs. Euro 53 million in 2018.

### 4.1 Capital Ratios

The Capital Adequacy Ratio is calculated as the result of the Group's regulatory capital (own funds) to its Risk-Weighted Assets (RWAs). Regulatory capital includes CET1 capital (share capital, reserves, and minority interests), additional Tier 1 capital (hybrid securities) and Tier 2 capital (subordinated debt). RWAs include the credit risk of the banking book, the market risk of the trading book, the operational risk, the counterparty credit risk/CCR and credit valuation adjustment/CVA.

At the end of December 2019, Alpha Bank's CET1 stood at Euro 8.5 billion; RWAs amounted to Euro 47.5 billion resulting in a CET1 ratio of 17.9%, up by 52 bps y-o-y, positively affected mainly by the increase in FVOCI revaluation reserve.

Deferred Tax Assets (DTAs) at the end of December 2019 stood at Euro 5.2 billion with the eligible amount to be converted to tax credit claims at Euro 3.2 billion.

<b>Table 3: Capital Adequacy Ratios (%)*</b>		<b>(in Euro million)</b>
<b>Capital Type</b>	<b>31.12.2019</b>	<b>30.6.2019</b>
CET1	8,495	8,454
Tier 1 Capital	8,499	8,459
Tier 2 Capital	11	11
Total Regulatory Capital for C.A.R. calculation	8,510	8,469
Risk Weighted Assets	47,483	47,562
<b>Capital Ratios</b>		
<b>CET1 Ratio</b>	<b>17.9%</b>	<b>17.8%</b>
<b>Tier 1 Ratio</b>	<b>17.9%</b>	<b>17.8%</b>
<b>Capital Adequacy Ratio (Tier 1 + Tier 2)</b>	<b>17.9%</b>	<b>17.8%</b>

\*The above ratios include the audited year end profits.

On February 6<sup>th</sup> 2020, Alpha Bank successfully placed a Euro 500 million, Tier 2 bond with 10-year maturity callable after 5 years at a yield of 4.25%, listed on the Luxembourg Stock Exchange. The transaction is an integral part of Alpha Bank's strategy which optimizes the Bank's capital structure and diversifies its capital sources while further strengthens the Total Capital Ratio by circa 104bps. The issuance also provides to Alpha Bank an alternative funding source beyond its existing customer deposits, European Central Bank funding and interbank repos. In addition, it allows reduced reliance on secured funding that requires pledged assets, improving its overall funding and liquidity profile.

As mentioned in the section of SREP of this report, in the face of the COVID – 19 outbreak ECB announced significant relief measures. These measures increase the Bank's capital base available to absorb potential losses due to the crisis and create a buffer of €3.0bn to CET1 and €3.5bn to Total CAD pro forma for the recent Tier 2 issuance.

## **4.2 IFRS 9 Capital Impact**

On December 12, 2017 the EU adopted Regulation No 2395/2017 of the European Parliament and of the Council amending EU Regulation 575/2013, as regards transitional arrangements to mitigate the impact of the introduction of IFRS 9 on regulatory capital and leverage ratios. The new Regulation inserts a new article 473a in CRR 575/2013 which introduces a 5-year transitional period which allows banks to add to the CET1 ratio the post-tax amount of the difference in provisions that resulted from the transition to the IFRS 9 in relation to the provisions that have been recognized at 31.12.2017 in accordance with IAS 39 ("Static" amount). The weighting factors were set per year at 0.95 in 2018, 0.85 in 2<sup>nd</sup>, 0.7 in 3<sup>rd</sup>, 0.5 in 4<sup>th</sup> and 0.25 in the last year.

Alpha Bank has decided to make use of Article 473a of the above Regulation and applies the transitional provisions for the calculation of Capital Adequacy on both a standalone and consolidated basis.

The table below shows a comparison of own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9.

<b>Table 4: Comparison of institution's own funds and capital and leverage ratios* with and without the application of transitional arrangements for IFRS 9 or analogous ECLs (in Euro million)</b>					
<b>Available capital (amounts)</b>	<b>31.12.2019*</b>	<b>30.9.2019</b>	<b>30.6.2019</b>	<b>31.3.2019</b>	<b>31.12.2018</b>
Common Equity Tier 1 (CET1) capital	8,495	8,662	8,454	8,090	8,273
CET1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6,943	7,110	6,903	6,541	6,525
Tier 1 capital	8,499	8,666	8,459	8,095	8,279
Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6,943	7,110	6,903	6,541	6,525
Total capital	8,510	8,677	8,469	8,106	8,289
Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6,958	7,125	6,918	6,556	6,540
<b>Risk-weighted assets (amounts)</b>					
Total Risk-weighted assets	47,483	48,105	47,562	47,830	47,640
Total Risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	46,600	47,185	46,632	46,921	46,588
<b>Capital ratios</b>					
Common Equity Tier 1 ratio (%)	17.9%	18.0%	17.8%	16.9%	17.4%
CET1 ratio (%) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	14.9%	15.1%	14.8%	13.9%	14.0%
Tier 1 ratio (%)	17.9%	18.0%	17.8%	16.9%	17.4%
Tier 1 ratio (%) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	14.9%	15.1%	14.8%	13.9%	14.0%
Total ratio (%)	17.9%	18.0%	17.8%	16.9%	17.4%
Total ratio (%) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	14.9%	15.1%	14.8%	14.0%	14.0%
<b>Leverage ratio</b>					
Leverage ratio total exposure measure	63,386	62,821	63,341	62,293	62,015
Leverage ratio	13.2%	13.8%	13.4%	13.0%	13.4%
Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	11.0%	11.6%	11.1%	10.7%	10.8%

\*The above ratios include the audited year end profits.



### 4.3 Capital Buffers

The countercyclical capital buffer (CCyB) is a CRD IV instrument, aiming to counter pro-cyclicality in the financial system. Credit institutions are required to set aside additional CET1 capital during periods of excessive credit growth. This will help maintain the supply of credit and dampen the downswing of the financial cycle. The main purpose of the CCyB is to increase the banks' resilience in good times to absorb potential losses that could arise in a downturn and to support the continued supply of credit to the real economy. For 2019 the Bank of Greece set the countercyclical buffer at 0%. CCyB is also set at currently 0% in all other countries in which Alpha Bank has significant exposures. Total Risk exposure amount in the following tables includes General Credit (excluding CCR) and Securitization exposures.

**Table 5a: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer as of 31.12.2019 <sup>(1)</sup>** (in Euro million)

Countries	General credit exposures	Trading book exposures		Securitisation exposures	Own funds requirements				Own funds requirements weights	Counter-cyclical capital buffer rate
	Exposure value for SA	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for SA	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
United Kingdom	1,156	-	-	-	69	-	-	69	0.02	1.0%
Bulgaria	64	-	-	-	4	-	-	4	0.00	0.5%
Ireland	27	-	-	-	2	-	-	2	0.00	1.0%
France	13	-	-	-	1	-	-	1	0.00	0.3%
Denmark	3	-	-	-	0	-	-	0	0.00	1.0%
Sweden	2	-	-	-	0	-	-	0	0.00	2.5%
Other	43,158	-	-	11	2,799	-	10	2,809	0.98	0.0%
<b>Total</b>	<b>44,422</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>2,876</b>	<b>-</b>	<b>10</b>	<b>2,886</b>	<b>1.00</b>	<b>0.0%</b>

(1) In July and October 2019 the designated Authorities of Ireland, France and Bulgaria announced that their CCyBs were set at 1%, 0.25% and 0.5% respectively



Table 5b: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer as of 31.12.2018									(in Euro million)	
Countries	General credit exposures	Trading book exposures		Securitisation exposures	Own funds requirements				Own funds requirements weights	Counter-cyclical capital buffer rate
	Exposure value for SA	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for SA	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
United Kingdom	1,091	-	-	-	69	-	-	69	0.02	1.0%
Czech Republic	0	-	-	-	0	-	-	0	0.00	1.0%
Hong Kong	0	-	-	-	0	-	-	0	0.00	1.9%
Norway	1	-	-	-	0	-	-	0	0.00	2.0%
Slovakia	0	-	-	-	0	-	-	0	0.00	1.3%
Sweden	2	-	-	-	0	-	-	0	0.00	2.0%
Other	43,505	-	-	8	2,828	-	7	2,835	0.98	0.0%
<b>Total</b>	<b>44,601</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>2,897</b>	<b>-</b>	<b>7</b>	<b>2,904</b>	<b>1.000</b>	<b>0.0%</b>

Table 6: Amount of institution-specific countercyclical capital buffer as of 31.12.2019		(in Euro million)
	Amount	
Total risk exposure amount	47,459	
Institution specific countercyclical capital buffer rate	0.03%	
Institution specific countercyclical capital buffer requirement	12.26	

#### 4.4 Own Funds

The Bank's share capital on 31.12.2019 amounts to Euro 463,109,814 divided by 1,543,699,381 ordinary, registered, with voting rights shares with nominal value of Euro 0.30 and a share premium of Euro 10,801,029. Further analysis on the share capital and share premium is provided in notes 34 and 35 of the Annual Financial Report of 2019, respectively.

Additional Tier I capital mainly consists of hybrid securities. Following the tender offers of 2012, 2013 and 2015, the remaining amount is very limited standing at Euro 15.1 million.

Tier II capital consists of:

- Subordinated loan, which is amortized according to the transitional provisions of CRR 575/2013.
- The portion of hybrid instruments deducted from CET1 is included in Tier II, according to transitional provisions.

Further details of the characteristics consisting Tier I and Tier II capital are provided in note 29viii and 38 of the Group Annual Financial Report of 2019.

Furthermore, for the full implementation of the provisions of the CRR 575/2013, depending on the different type of adjustments concerned, a transitional period of five (5) to ten (10) years is applicable.



#### 4.4.1 Own Funds structure

The following table presents the analysis of Own funds structure:

Table 7: Own funds structure		(in Euro million)		
Type	31.12.2019	30.9.2019(1)	30.9.2019	
Share capital	463	463	463	
Share premium	10,801	10,801	10,801	
Accumulated other comprehensive income (and other reserves)	- 2,754	- 2,653	- 2,653	
Reserves & Retained Earnings	- 3,169	- 3,159	- 3,159	
AFS reserves	415	506	506	
Adjustments due to IFRS 9 transitional adjustments	1,021	1,021	1,021	
Minority interest (transitional)	0	0	0	
PVA	- 9	- 10	- 10	
<b>Common equity tier 1 capital before regulatory adjustments</b>	<b>9,522</b>	<b>9,623</b>	<b>9,623</b>	
Period Profit	94	90	82	
Intangible assets	- 456	- 442	- 442	
DTA amortization	- 656	- 592	- 593	
Irrevocable payment Commitment	- 9	- 9	- 9	
Regulatory adjustments applied to common equity tier 1 due to insufficient additional tier 1 and tier 2 to cover deductions	-	-	-	
<b>Total regulatory adjustments to common equity tier 1</b>	<b>- 1,028</b>	<b>- 953</b>	<b>- 961</b>	
<b>Common equity tier 1 capital (CET1) (1)</b>	<b>8,495</b>	<b>8,671</b>	<b>8,662</b>	
Hybrid instruments	15	15	15	
<b>Additional Tier I before regulatory adjustments</b>	<b>15</b>	<b>15</b>	<b>15</b>	
Hybrid instruments transitional	- 11	- 11	- 11	
(-) Goodwill/Intangible investments	-	-	-	
<i>of which deductible from Additional Tier I</i>	- 11	- 11	- 11	
<i>of which deductible from CET1</i>	-	-	-	
Total regulatory adjustments to additional Tier I	- 11	- 11	- 11	
<b>Additional Tier I</b>	<b>5</b>	<b>5</b>	<b>5</b>	
<b>Tier I Capital (CET1 + AT1)</b>	<b>8,499</b>	<b>8,675</b>	<b>8,666</b>	
Subordinated loan	1	1	1	
Hybrid instruments (transitional)	11	11	11	
<b>Tier II capital before regulatory adjustments</b>	<b>11</b>	<b>11</b>	<b>11</b>	
Total regulatory adjustments to Tier II	- 0	- 0	- 0	
<b>Tier II capital</b>	<b>11</b>	<b>11</b>	<b>11</b>	
<b>Total Capital (TC = Tier I + Tier II)</b>	<b>8,510</b>	<b>8,686</b>	<b>8,677</b>	
<b>Total RWA</b>	<b>47,483</b>	<b>48,107</b>	<b>48,105</b>	
<b>Common equity tier 1 Ratio</b>	<b>17.9%</b>	<b>18.0%</b>	<b>18.0%</b>	
<b>Tier I Ratio</b>	<b>17.9%</b>	<b>18.0%</b>	<b>18.0%</b>	
<b>Capital Adequacy Ratio (Tier I + Tier II)</b>	<b>17.9%</b>	<b>18.1%</b>	<b>18.0%</b>	

(1) Including interim profit of Euro 90 million



## 4.5 Capital requirements under Pillar I

The Group calculates and reports to the designated authorities its capital requirements (Pillar I RWAs) according to the provisions of the CRR and implementing the Technical Standards developed by the EBA on a solo and consolidated basis.

The approaches adopted for the calculation of the capital requirements under Pillar I (advanced or standardized methodologies) are determined by the general policy of the Group in conjunction with factors such as the nature and type of risks the Group undertakes, the level and complexity of the Group's business and other factors such as the degree of readiness of the information and software systems.

Capital Requirements are calculated using the following approaches:

- **Credit Risk:** The Group follows the Standardized Approach (STA). The advanced method is used for the valuation of financial collateral. The calculation of the credit risk weighted assets (RWAs) and capital requirements of the Bank and the Group is performed in accordance with the current regulatory framework, and is supported by a specialized centralized IT system Ambit Capital Manager (ACM), which processes the granular data of the Bank and its Subsidiaries. The system is also used for the calculation of credit risk capital requirements of the Subsidiaries according to their local regulatory framework. It also supports the production of various regulatory reports on solo and consolidated basis (e.g. Large Exposures, IP Losses).
- **Operational Risk:** The Group follows the Standardized Approach (STA).
- **Market Risk:** A Value at Risk (VaR) model developed at a bank level for the significant exposures and approved by the Bank of Greece. Additionally, the Bank uses the Standardized approach to calculate Market Risk for the remaining, non-significant exposures.

The objectives of the Group's capital management policy are to ensure that the Group has sufficient capital to cover the risks of its business, to support its strategy and to comply with regulatory capital requirements, at all times.

The capital adequacy requirements set by the SSM / ECB and economic capital, are used by the Group as the basis for its capital management. The Group seeks to maintain sufficient capital to ensure that these requirements are met.

The minimum capital requirements under Pillar I are calculated as 8% of RWA. RWAs are calculated by applying the IFRS 9 five-year phase-in period. The Euro 47.5 billion are decomposed into: Euro 42.4 billion from Credit Risk, which represents approx. 89% of total capital requirements, Euro 1.5 billion from Market Risk and Euro 3.6 billion from Operational Risk. During the financial year of December 2018 to December 2019, the total risk weighted assets of the Group were reduced by Euro 180 million, mainly due to the decrease of net loans.

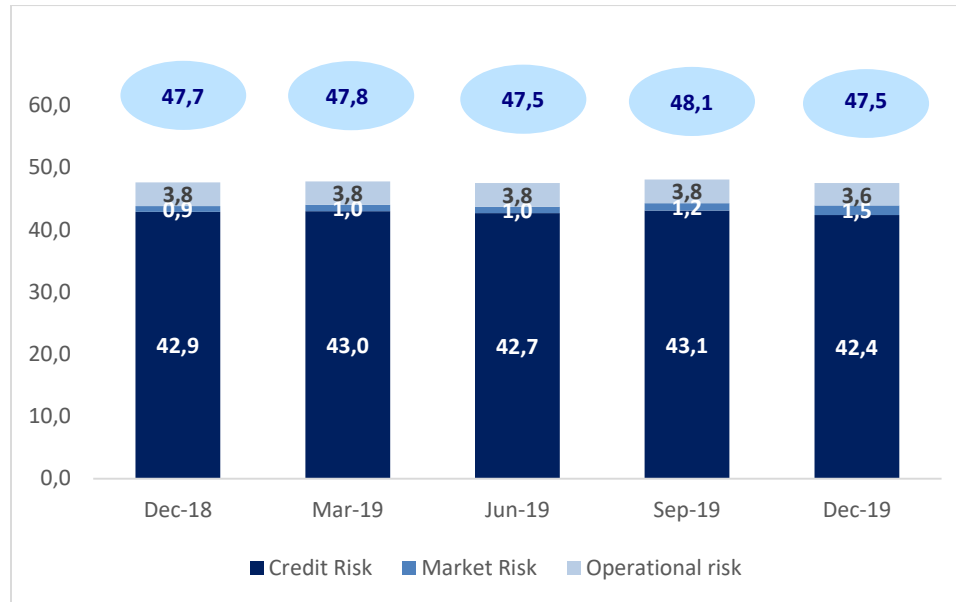
The following table summarizes the RWAs and minimum capital requirements by risk type.

<b>Table 8: EU OV1 – Overview of RWAs</b>		<b>(in Euro million)</b>	
<b>Risk Category</b>	<b>RWAs</b>		<b>Minimum capital requirements</b>
	<b>31.12.2019</b>	<b>30.9.2019</b>	<b>31.12.2019</b>
<b>Credit risk (excluding CCR)</b>	<b>39,733</b>	<b>40,314</b>	<b>3,179</b>
Of which the standardised approach	39,733	40,314	3,179
<b>CCR</b>	<b>386</b>	<b>470</b>	<b>31</b>
Of which mark to market	359	433	29
Of which risk exposure amount for contributions to the default fund of a CCP	-	-	-
Of which CVA	27	38	2
<b>Settlement risk</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Securitisation exposures in the banking book (after the cap)</b>	<b>125</b>	<b>111</b>	<b>10</b>
Of which standardised approach	125	111	10
<b>Market risk</b>	<b>1,513</b>	<b>1,200</b>	<b>121</b>
Of which the standardised approach	14	11	1
Of which IMA	1,499	1,189	120
<b>Large exposures</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Operational risk</b>	<b>3,557</b>	<b>3,812</b>	<b>285</b>
Of which basic indicator approach	-	-	-
Of which standardised approach	3,557	3,812	285
<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	<b>2,146</b>	<b>2,199</b>	<b>172</b>
<b>Total</b>	<b>47,459</b>	<b>48,105</b>	<b>3,797</b>

The figures above are calculated according to the reporting submissions to the regulator.

The participations in insurance undertakings which are not deducted from CET1, as they do not exceed the 10% threshold of the CET1 capital before certain deductions are presented in the table below:

<b>Table 9: EU INS1 – Non-deducted participations in insurance undertakings</b>		<b>(in Euro million)</b>
<b>31.12.2019</b>	<b>Value</b>	
Holdings of own funds instruments of a financial sector entity where the institution has a significant investment not deducted from own funds (before risk-weighting)	55	
<b>Total RWAs</b>	<b>137</b>	



#### 4.6 Internal Capital Adequacy Assessment Process (ICAAP)

The ICAAP process is an integral part of the Internal Control System (ICS) of the Group. It is aligned with the best practices and the general principles and requirements set by the regulatory Framework, including the guidelines provided by SSM and/ or EBA, which allows for:

- The identification, analysis, monitoring and the overall assessment of risks
- The improvement of various systems/ procedures/ policies related to the assessment and management of risks
- The estimation of the necessary level of Internal Capital required for the coverage of all risks and
- Capital planning taking also into consideration the Group's Risk appetite and business plan in a forward looking assessment

As a process, ICAAP is a constant, ongoing and recurring set of actions / streams that are carried out as part of the day to day operation of the Group. The related report is updated at least annually, or at a more frequent basis, whenever there is a change considered material.

The Group identifies the following key components of the ICAAP process:

1. Risk Identification and Materiality Assessment Process, which consists of:
  - a. An annual review of the Risk Inventory comprising of an extensive list of risks within supervisory and Alpha Bank perspective.
  - b. Materiality assessment of the identified risk types, after having carved out the non-relevant to the Group risks, based on quantitative / qualitative criteria.
  - c. A display of all material risks in the Group's Risk Registry, presenting their severity before and after controlling and mitigating actions.



2. Capital Adequacy Assessment, that involves the quantification of internal capital for the risk types that are identified as material. For the determination of the internal capital requirements, the Group uses the Pillar I regulatory capital as a starting point taking also into account additional capital where required by using more sophisticated methodologies and definitions. Internal capital requirements under Pillar II represent better the risk profile of Alpha Bank Group, since it covers a wider range of risks and utilizes more sophisticated approaches. Over and above ICAAP process, Pillar II calculations are performed on a quarterly basis according to supervisory expectations.

3. Capital Planning and Stress Testing, that involves the forward-looking view and assessment of risks, evolution of available capital and capital requirements, under baseline and alternative adverse scenarios, as well as considering a reverse stress scenario.

4. Monitoring and reporting of ICAAP results that involves the on-going and regular monitoring of key ICAAP metrics and relevant reporting to appropriate committees, in line with the ICAAP governance framework.

Considering the multi-year plan on ICAAP and the relevant ECB guidelines in particular, the following overarching principles are defined with respect to the ICAAP setup and implementation by the Group:

- The Board of Directors has the overall responsibility of the ICAAP implementation with a clear and transparent assignment of responsibilities to the Risk Management Committee and Senior Management members.
- ICAAP is an integral part of the management framework of the Bank. The ICAAP is integrated into the business, decision-making and risk management processes of the Group, and is consistent and coherent throughout the Group.
- The ICAAP contributes to the continuity of the Bank by ensuring its capital adequacy from different but complementary perspectives (e.g. the economic perspective and the normative perspective).
  - Under the economic perspective, the Group ensures that any risks that may affect its capital position are adequately covered by internal capital in line with its internal capital adequacy concept. Under this perspective, the institution's assessment covers the full universe of risks that may have a material impact on its capital position, taking into account fair value considerations for its current assets, liabilities and risks.
  - The normative perspective is an assessment of the institution's ability to fulfil all of its capital-related regulatory and supervisory requirements and demands, and to cope with other external financial constraints on an ongoing basis. The capital plan is comprised of baseline and adverse scenarios and covers a forward-looking horizon of at least three years. The Group also conducts reverse stress testing, as per regulatory requirements, leveraging on the outcome of the adverse scenario.
  - Both perspectives mutually inform each other and are integrated into all material business activities and decisions.
- ICAAP assumptions and risk quantification methodologies are proportionate, consistent and thoroughly validated.
- Regular stress testing ensures capital adequacy in adverse circumstances.



## 4.7 Internal Liquidity Adequacy Assessment Process (ILAAP)

The ILAAP is an integral part of the Group's Internal Control System (ICS) and is aligned with the general principles and requirements set by the relevant Regulatory Framework (2013/36/EU, article 86 and EBA/GL/2016/10, Guidelines on ICAAP and ILAAP information collected for SREP purposes).

Following the aforementioned guidelines, the ILAAP report analyses the following areas:

- Funding Strategy and Planning: Description of the risk appetite framework for liquidity and funding risks is presented, and its integration with ILAAP. Moreover, a comprehensive description of the funding strategy and forward looking liquidity & funding position under the normative perspective is provided.
- Liquidity and Funding Risk Management Key Definitions & Concepts. The process of liquidity and funding risk identification, monitoring & materiality assessment, controls & mitigating actions is presented. (Risk Registry)
- Liquidity Stress Testing: Description of the liquidity stress testing framework, analysis and results in different time horizons
- Liquidity Buffer and Collateral Management: Overview of the key policy elements with respect to the determination, management and monitoring of the liquidity buffer. Additionally, a comprehensive description is provided for the asset encumbrance framework, including relevant governance structure, the principles followed for identifying and assessing assets eligible for encumbrance
- Fund Transfer Pricing: Description of the established fund transfer pricing mechanism (FTP) and relevant methodology, along with its objectives and its implementation.

A statement of the level of appropriateness of the liquidity risk management mechanisms and the results of ILAAP, are included as part of the Internal Liquidity Adequacy Assessment Process (ILAAP) approved by the Board of Directors in April 2019.



## 5 Leverage

The leverage ratio, which is defined as Tier 1 capital divided by total exposure, is a binding requirement from the beginning of 2019. The 'risk of excessive leverage' means the risk that results from an institution's vulnerability due to leverage or contingent leverage that may require unintended corrective measures to its business plan, including distressed selling of assets which might result in losses or in valuation adjustments to its remaining assets.

The level of the leverage ratio with reference date 31.12.2019 on consolidated basis was 13.24%, according to the transitional definition of Tier 1 capital, significantly exceeding the 3% minimum applicable regulatory threshold, implying that the Bank is not taking on excessive leverage risk.

The Group's leverage ratio with reference date 31.12.2019 is analysed in the below tables:

<b>Table 10a: Summary reconciliation of accounting assets and leverage ratio exposures</b>		<b>(in Euro million)</b>	
	<b>31.12.2019</b>	<b>30.6.2019</b>	
Total assets as per published financial statements	63,458	62,964	
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	- 437	- 402	
Adjustments for derivative financial instruments 5	- 66	- 92	
Adjustment for securities financing transactions (SFTs)	671	1,081	
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	1,333	1,290	
Other adjustments	- 1,573	- 1,501	
<b>Leverage ratio total exposure measure</b>	<b>63,386</b>	<b>63,341</b>	



Table 10b: Leverage ratio common disclosure		(in Euro million)	
On-balance sheet exposures (excluding derivatives and SFTs)	CRR leverage ratio exposures	CRR leverage ratio exposures	
	31.12.2019	30.6.2019	
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	60,608	60,516	
(Asset amounts deducted in determining Tier 1 capital)	- 11	- 11	
<b>Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)</b>	<b>60,597</b>	<b>60,506</b>	
<b>Derivative exposures</b>			
Replacement cost associated with all derivatives transactions (i.e.: net of eligible cash variation margin)	809	672	
Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	145	206	
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	- 1,335	- 1,319	
<b>Total derivatives exposures (sum of lines 4 to 10)</b>	<b>- 381</b>	<b>- 441</b>	
<b>SFT exposures</b>			
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	1,165	905	
Counterparty credit risk exposure for SFT assets	671	1,081	
<b>Total securities financing transaction exposures (sum of lines 12 to 15a)</b>	<b>1,836</b>	<b>1,986</b>	
<b>Other off-balance sheet exposures</b>			
Off-balance sheet exposures at gross notional amount	7,355	7,180	
(Adjustments for conversion to credit equivalent amounts)	- 6,021	- 5,890	
<b>Other off-balance sheet exposures (sum of lines 17 and 18)</b>	<b>1,333</b>	<b>1,290</b>	
<b>Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off balance sheet)</b>			
(Intragroup exposures (solo basis) exempted in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	-	-	
(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	-	-	
<b>Capital and total exposure measure</b>			
Tier 1 capital	8,395	8,459	
Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	63,386	63,341	
<b>Leverage ratio</b>			
<b>Leverage ratio</b>	13.2%	13.4%	
<b>Choice on transitional arrangements and amount of derecognised fiduciary items</b>			
Choice on transitional arrangements for the definition of the capital measure	Transitional	Transitional	
Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	-	-	

**Table 10c: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)  
(in Euro million)**

	CRR leverage ratio exposures	
	31.12.2019	30.6.2019
<b>Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:</b>	<b>59,273</b>	<b>59,197</b>
Banking book exposures, of which:	59,273	59,197
Exposures treated as sovereigns	12,932	12,421
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	1,220	1,653
Institutions	2,542	2,561
Secured by mortgages of immovable properties	14,056	14,199
Retail exposures	3,549	3,440
Corporate	8,889	8,473
Exposures in default	13,770	14,626
Other exposures (e.g.: equity, securitisations, and other non-credit obligation assets)	2,315	1,823

Alpha Bank monitors and submits to the regulatory authorities the leverage ratio, as defined in Regulation (EU) No 2015/62 of October 10th 2014, on a quarterly basis and monitors the level and the factors that affect the ratio.

## 6 General Information on Risk Management

The Alpha Bank Group is fully committed to applying the best practices and achieving the highest standards of corporate governance in every aspect of its business, including risk management.

Risk management is essential to promoting the Group's strategic, business and financial objectives and forms an integral part of the business strategy-setting process, including the business planning process and the risk appetite policy, as it defines the maximum acceptable risk appetite regarding each type of risk.

The key risk categories for Alpha Bank include credit risk, market risk, liquidity risk, counterparty risk, country risk and operational risk. In order to ensure that the impact of the said risks on the Bank's and the Group's financial results, long-term strategic goals and reputation are minimized, the Group applies identification, forecasting, measurement, monitoring, control and mitigation practices for the highest as well as for emerging risks, through an internal governance process based on the use of credit tools and risk management processes.

The Group's strategy for risk management and risk undertaking, applied in all of the Bank Units' and Group Companies' activities, is strictly aligned with the best international practices, as well as with the current legislation and the regulatory and supervisory rules, while it evolves continuously through the development of a single risk management culture, which is shared across the Bank and the Group.

### 6.1 Risk Management Framework and Principles

The Group has established a comprehensive risk management framework, which has evolved over time and takes into account the common European legislation and banking system rules, the regulatory principles and supervisory guidance and the best international practices. This risk management framework is implemented in the course of day-to-day business enabling corporate governance to remain effective.

The Group's focus throughout 2019 was to maintain the highest operating standards, ensure compliance with regulatory risk rules and retain confidence in the conduct of its business activities through sound provision of sustainable financial services.

The Group Risk Management Framework, as a structural part of the Group's corporate and risk governance framework, is based upon the following guiding principles:

- Development of a sound Group risk culture that incorporates risk awareness, risk taking and risk management and control in the decisions of management and employees during the day-to-day activities considering their impact on the risks they assume.
- Definition of the Group's risk appetite framework (RAF), which is articulated via the risk appetite statement (RAS) and establishes the individual and aggregate levels and types of risk that the Bank is willing to assume in advance of and in order to achieve its strategic business activities within its risk capacity.
- Definition of the Group risk policy that is adherent to the RAS and is supported by appropriate control procedures and processes.
- Development of the processes to ensure that all material risks and associated risk concentrations are identified, measured, limited, controlled, mitigated and reported on a timely and comprehensive basis.
- Monitoring of risk limits with alignment with the Group's business goals.
- Transparency promoted through clear communication lines.



- Active role of contributing staff in Risk Management. The staff is equipped with all the necessary skills and means which are necessary for effective Risk Management and understands its roles and responsibilities related to the Group Risk Management Framework.
- Full documentation of all processes related to risk identification, measurement, monitoring, reporting and control/mitigation.
- Providing adequate information to Group and Business Unit Management.

### **6.1.1 Risk Appetite Framework (RAF)**

The RAF constitutes a major component in the Bank's overall approach to the risk and capital strategy, including policies, processes, controls and systems through which risk appetite is established, communicated throughout the Bank and monitored. The RAF includes the risk appetite statement (RAS), risk limits and an outline of the roles and responsibilities of those overseeing the implementation and monitoring of the RAF, ensuring the alignment of the Bank's corporate and business strategy, the financial and capital planning and the risk management framework. The Risk Appetite is the core tool for better aligning overall corporate strategy, capital allocation, and risk. The Senior Management of the Bank defines and recommends the Risk Appetite at Group level, taking into consideration the business strategy, business plan, risk management framework/culture and internal capital adequacy assessment. At this stage, strategic objectives are translated into risk appetite qualitative statements and risk appetite quantitative measures (Key Risk Indicators-KRIs). The Risk Management Committee reviews and recommends annually to the Board of Directors for approval the Group's RAF and statement, ensuring alignment with the Group's strategic objectives and capital allocation. Overall, Risk Appetite sets out the level of risk that the BoD is willing to take in pursuit of its business objectives.

The effective expression of Risk Appetite will aid the Group in running its business by providing guidance on acceptable levels of risk while pursuing strategic objectives, thus providing a significant link in achieving the most efficient balance between risk and return.

Successful implementation of RAF depends upon effective interactions between the Board, Senior Management, CFO and CRO, risk management and operating business.

### **6.1.2 Risk Governance Structure**

The Group has set a robust internal governance framework, which includes a transparent organizational structure, a management body that is responsible for proper risk management processes and for strong internal control system and ensures that the Group holds sufficient capital to meet both its own funds requirements and its internal capital targets.

The Group's risk strategy and risk management framework are organized according to the principles of three lines of defense, which have a decisive role in the Group's effective operation. They provide a clear set of rules and standards to be applied to a cohesive operating model, one that provides a framework for the articulation of accountabilities and responsibilities for managing risk across the Group.

In particular:

- The Business Units constitute the first line of defense and risk "ownership" which identifies and manages the risks that arise when conducting banking business. This includes assessing and reporting of their exposures for identifying the relevant risks, taking into account the Bank's approved risk appetite, as well as its policies, procedures, controls and limits.

- The second line of defense consists of the Risk Management function and other relevant functions, independent from the first line of defense. These functions complement the business lines' risk activities through monitoring and reporting responsibilities. They are responsible for overseeing the Bank's and the Group's risk-taking activities for the individual risk assessment and the aggregation of risk. The second line of defense, also, includes the independent Compliance function. The Compliance function, among other things, monitors compliance with laws, corporate governance rules, regulations, codes and policies of the Bank and the Group. The BoD approves the compliance policies that are communicated internally. The function ensures compliance with the policies and reports to the senior management and the BoD on how the Bank and the Group manage their compliance risk.
- Internal Audit constitutes the third line of defense. As an independent function, reports to the Audit Committee of the Board of Directors and audits the activities of the Bank and the Group, including the Risk Management function.

The Board of Directors of the Bank as well as the Executive Management and the Committees of the Bank have separate and distinct roles in providing the final and ultimate levels of defense, ensuring the effective implementation of the group-wide risk management Framework and policies within the Group.

## **Board of Directors**

The Board of Directors of the Bank ensures the proper operation and organization of the Group. In accordance with the Corporate Governance Code, the Board of Directors is responsible for the approval of the long-term strategy and the operational objectives of the Bank and the Group, the risk strategy and the risk appetite of the Group and the regular monitoring of their implementation, with the support of the Risk Management Committee. Based on the risk appetite that it defines, the Board of Directors ensures that the levels of risk are well understood and communicated throughout the Group.

The Board of Directors determines the risks that the Group may assume, the size of such risks, the limits on the Group's significant business operations and the basic principles for the calculation and measurement of these risks. The risk profile of the Group covers, among other substantial risks, the following risk types:

- Credit risk
- Market risk
- Liquidity risk
- Operational risk

To this end, it ensures that the executive management carries out appropriately and effectively the Bank's activities in a manner consistent with the business strategy, the risk profile and the risk appetite, while at the same time it oversees that the management is escalating risk issues and involves the appropriate Board Committees in a timely manner.

## **Risk Management Committee**

The Risk Management Committee has been established and operates in accordance with all applicable laws and regulations.

The exact number of the Members of the Risk Management Committee is determined by the Board of Directors. All the Members of the Committee have prior experience in the financial services sector and, individually and collectively, appropriate knowledge, skills and expertise concerning risk management and control practices. At least one Member is familiar with the NPE/NPL management framework, policies, practices and procedures. At least one Member (the NPL Expert) has solid risk and capital management experience as well as familiarity with the local and the international regulatory framework. The Committee convenes at least once a month.

In 2019, the Committee convened thirteen times and the Members' participation rate in the meetings stood at 98% (based on the composition of the Risk Management Committee on 31.12.2019).

The specific duties and responsibilities of the Risk Management Committee are determined in its Charter, which was amended in December 2019.

The Risk Management Committee:

- Reviews and recommends to the Board of Directors for approval the risk and capital management strategy.
- Determines the principles which govern risk management across the Bank and the Group in terms of the identification, measurement, monitoring, control, and mitigation of risks.
- Approves the nature, structure, format and frequency of risk reports to be submitted by the CRO to the Committee, and ensures regular and high-quality reporting by the CRO to the Board of Directors.
- Receives periodic reports from the NPL Units and Management on the Bank's progress against agreed Key Risk Indicators for NPLs/NPEs. In this context, the Committee assists the Board of Directors in ensuring that there are appropriate oversight mechanisms and controls in place for the monitoring and the effective management of troubled assets.
- Reviews the availability of resources for the conduct of firm-wide stress tests at least annually, approves the Bank's firm-wide stress test scenarios, and considers the results of stress tests.

The Risk Management Committee assists the Board of Directors in ensuring the adequacy and effectiveness of the risk management policies and procedures of the Bank and the Group, in terms of the:

- Taking, monitoring, and management of risks (market, credit, interest rate, liquidity, operational, other substantial risks) per category of transactions and customers per risk level (i.e. country, profession, and activity).
- Determination of the applicable maximum risk appetite on an aggregate basis for each type of risk and further allocation of each of these limits per country, sector, currency, business unit, etc.
- Effective and timely proposal to the Board of Directors of the formulation and execution of the NPLs/NPEs strategy, taking into account their paramount importance as the single largest asset source where a multitude of risk factors is combined
- Establishment of stop-loss limits or of other corrective actions.

Furthermore, the Risk Management Committee reviews and assesses the methodologies and models applied pertaining to the measurement of undertaken risks and ensures that there is an adequate level of communication on risk management issues among the Internal Auditor, the External Auditors, the Supervisory Authorities, the Audit Committee and the Board of Directors.

A more detailed analysis of the Risk Management Committee is presented in Appendix 1.



## Management Committees

The Committees composed by Members of the Management of the Bank are the Executive Committee, the Assets-Liabilities Management Committee (ALCo), the Treasury and Balance Sheet Management Committee (TBSCo), the Operational Risk Committee, the Credit Risk Committee and the Troubled Assets Committee.

### 1. Executive Committee

In accordance with Law 4548/2018, the Board of Directors establishes as of 2.12.2019 an Executive Committee.

The Executive Committee acts as a collective corporate body of the Bank. The Committee's powers and authorities are determined by way of a CEO act, delegating powers and authorities to the Committee.

The Committee convenes generally once per week and the CEO chairs the Committee.

The indicative main responsibilities of the Committee include but are not limited to the following:

The Executive Committee prepares the strategy, business plan and annual budget of the Bank and the Group for submission to and approval by the Board of Directors as well as the annual and quarterly financial statements, decides on and manages the capital allocation to the Business Units, prepares the Internal Capital Adequacy Assessment Process (ICAAP) Report and the Internal Liquidity Adequacy Assessment Process (ILAAP) Report, reviews and approves the policies of the Bank, approves and manages any collective program proposed by the Human Resources Division for the Personnel and ensures the adequacy of Resolution Planning governance, process and systems. Further to the above, the Committee is responsible for the implementation of: the overall risk strategy, including the institution's risk appetite and its risk management framework, an adequate and effective internal governance and internal control framework, the selection and suitability assessment process for Key Function Holders, the amounts, types and distribution of both internal capital and regulatory capital and the targets for the liquidity management of the Bank.

2. The Assets-Liabilities Management Committee (ALCo) convenes regularly every quarter under the chairmanship of the CEO. The General Managers, the Executive General Managers and the Managers of the Asset Liability Management Division, the Market and Operational Risk Division, the Analysis and Performance Management Division, the Deposit and Bancassurance Products Division, the Accounting and Tax Division, the Economic Research Division, the Credit Control Division, the Credit Risk Data and Analysis Division, the Trading Division and the Capital Management and Banking Supervision Division participate as Members. The Committee examines and decides on issues related to Treasury and Balance Sheet Management and monitors the course of the results, the budget, the funding plan, the capital adequacy and the overall financial volumes of the Bank and the Group, approving the respective actions and policies. In addition, the Committee approves the interest rate policy, the structure of the investment portfolios and the total market, interest rate and liquidity risk limits.

3. The Treasury and Balance Sheet Management Committee (TBSCo) convenes regularly every month regularly twice every month and/or on an ad hoc basis, as required, under the chairmanship of the General Manager Non Performing Loans and Treasury Management. Members are the CFO (Alternate Chairman), the CRO, the General Managers of Wholesale & Retail Banking, the Executive General Manager Treasury, the Manager of the Asset Liability Management (ALM) Division and the Manager of the Market Risk and Operational Risk Management Divisions. The ALM Division is responsible for the Meeting Agenda and the Minutes, which are copied to its Members.



4. The Operational Risk Committee convenes quarterly under the chairmanship of the CEO and with the participation of the General Managers and the Manager of the Market and Operational Risk Division. The Operational Risk Committee ensures that the appropriate organisational structure, processes, methodologies and infrastructure to manage operational risk are in place. In addition, it is regularly updated on the operational risk profile of the Group and the results of the operational risk assessment process; reviews recommendations for minimising operational risk; assesses forecasts regarding Third Party Lawsuits against the Bank; approves the authorisation limits of the Committees responsible for the management of operational risk events of the Bank and the Group Companies and reviews the operational risk events whose financial impact exceeds the limits of the other Committees.
5. The Credit Risk Committee convenes regularly at least every quarter under the chairmanship of the Managing Director - CEO and with the participation of the General Managers and the Managers of the Credit Control Division, the Credit Risk Data and Analysis Division and the Capital Management and Banking Supervision Division. The Credit Risk Committee assesses the adequacy and the efficiency of the credit risk management policy and procedures of the Bank and the Group with regard to the undertaking, monitoring and management of credit risk per Business Unit (Wholesale Banking, Retail Banking, Private and Investment Banking), geographical area, product, activity, industry et al. and resolves on the planning of the required corrective actions.
6. The Troubled Assets Committee (TAC) reports to the General Manager, Non-Performing Loans and Treasury Management and convenes on a monthly basis or ad hoc under the chairmanship of either the Non-Performing Loans - Wholesale Banking Executive General Manager or the Non-Performing Loans - Retail Banking Executive General Manager while the Managers of the Strategic Planning Division, the Credit Control Division, the Credit Risk Data and Analysis Division, the Capital Management and Banking Supervision Division, the Budgeting and Controlling Division, the Non-Performing Loans Monitoring Division - Retail and the Non-Performing Loans Monitoring Division - Wholesale participate in the meetings. The Committee examines issues related to the portfolios managed by the Divisions under the supervision of the General Manager, Non-Performing Loans and Treasury Management, in order to achieve the operational goals of the Bank and the Group, pertaining to which it may propose further decision-making to the Credit Risk Committee and subsequently to the Board of Directors for the final approval, through the Risk Management Committee of the Board.

Finally, the Bank states that it complies immediately with any additional disclosure requirements which are set by the institutional framework for Credit Institutions.

## **Group Risk Management Unit**

The Group Risk Management Unit is assigned with the responsibility of implementing the Group Risk Management Framework, according to the directions of the Risk Management Committee and operates independently from any executing processes.

Furthermore, the risk management functions that provide an overarching risk control framework for a more comprehensive and effective identification and handling of all risk types linked to the Group's risk appetite are supported by the following Committees: the Assets-Liabilities Committee, the Credit Risk Committee and the Operational Risk Committee.

Under the supervision of the General Manager – Group Chief Risk Officer, the following Risk Management Divisions operate within the Group and are assigned with the responsibility of implementing the risk management framework:

- Credit Control Division
  - Credit Risk Policy and Control Division
  - Credit Risk Methodologies Division
  - Credit Risk Cost Assessment Division
- Credit Risk Data and Analysis Division
  - Credit Risk Data Management Division
  - Credit Risk Analysis Division
- Market and Operational Risk Division
- Risk Models Validation Division
- Wholesale Credit Division
- Wholesale Credit Workout Division
- Retail Credit Division

The General Manager and Chief Risk Officer report on a regular and ad hoc basis to the Assets-Liabilities Management Committee (ALCo), the Credit Risk Committee, the Operational Risk Committee, the Risk Management Committee and the Board of Directors of the Bank.

### **6.1.3 Firm-wide Risk Management Framework**

The Bank's and the Group's business model and operations are regulated and supervised by the relevant authorities in each of the countries where they conduct business. The ECB and the Bank of Greece, as well as, the competent authority that participates in the SSM, act as the Bank's and the Group's primary supervisor to monitor their compliance with the Greek and the European banking legislations, within the supervisory regulations as well as with the Basel III (CRR/CRD) framework.

The risk management programmes of the Group subsidiaries conform in all material respects to the Bank's risk management Framework.

Within this firm-wide risk governance and management Framework, each Risk and Credit Unit of the International Network adapts its risk management Framework and policy to the local regulatory and legal requirements while, at the same time, being coherent with those of the Bank, as established in the risk governance framework.

The Group Credit Policies and Procedures take into account the prevailing institutional framework set by legislation, regulations, ministerial decrees/decisions, etc. and along with the internally defined and established key risk principles and guidelines, they ensure that credit facilities are granted soundly and managed properly and that promote a unified approach on how business financing should be conducted.

To this end, dedicated regional Risk and Credit Division Managers of the International Network have been appointed to establish the enterprise risk management coverage and have a direct reporting line into the Group Chief Risk Officer.

The Group Risk Governance ensures its independency from the front office/business units as depicted in the organisational chart of Alpha Bank, shown in the Appendix IV.



### 6.1.4 Risk Management Policies

The Group Risk Strategy has a structured and documented Group Risk and Capital Strategy in place that is perceived within the organization as an integrated business model that incorporates all the risk management processes, policies, procedures and methodologies adopted and implemented throughout the institution. The Group Risk Strategy objective is to provide a coherent and structured approach towards identifying, assessing and managing risk. It is based on the Risk Policies & Procedures defined by the Risk Management Committee and approved by Alpha Bank S.A. Board of Directors. These Policies & Procedures are applied by all members of the Group, taking into account the local regulatory requirements.

- Risk Policies & Procedures include all central rules of conduct for handling risks and are set out in specific Manuals for each risk. These are reviewed regularly and adapted whenever necessary by the RMU of the Group and approved by the Group Risk Management Committee. The approved Policies are the following:
  - Credit Risk Management Policy
  - Market Risk Management Policy
  - Operational Risk Management Policy and
  - Assets-Liability Risk Management Policy
- The guiding principles are effectively communicated to all organizational levels in order to build a uniform understanding of risk management objectives.
- Internal Audit is responsible for providing an independent review of the integrity of the overall risk management processes and ensuring the appropriateness and effectiveness of the controls applied.

In the pursuit of the Group's strategic business goals, the risk management framework and the relevant policies, procedure and systems are reviewed on a regular basis, to ensure that risk management and regulatory risk reporting are always compliant with the relevant regulatory guidelines as well as with the principles of corporate governance.

## 6.2 Stress Testing

Performing stress tests constitutes a key risk management tool, fully integrated into core risk reporting and capital and liquidity planning at the Bank and Group level, which provides indications of the capital required to absorb losses under the assumption of specific extreme hypothetical scenarios. Stress tests are conducted according to the requirements of the regulatory framework and constitute a fundamental parameter of the Group's Enterprise Risk Management strategy, with the aim of assessing the impact of business decisions on the Group's capital position. Furthermore, the Bank's and the Group's Regulatory Credit Framework and the Credit Risk Management Framework include the institutional and regulatory requirements related to the effective management of loans in arrears and of Non-Performing Loans, including the new requirements and the definitions set out in the supervisory framework.

## 7 Credit Risk

### 7.1 General information

Credit risk arises from the potential weakness of borrowers' or counterparties' to repay their debts as they arise from their loan obligations to the Group. The primary objective of the Group's strategy for the credit risk management in order to achieve the maximization of the adjusted to risk performance risk is the continuous, timely and systematic monitoring of the loan portfolio and the maintenance of the credit risks within the framework of acceptable overall risk limits. At the same time, the conduct of daily business within a clearly defined framework of granting credit is ensured. The framework of the Group's credit risk management is developed based on a series of credit policy procedures, systems and models for measuring, monitoring and validating credit risk. These models are subject to an ongoing review process. This happens in order to ensure full compliance with the current institutional and regulatory framework as well as the international best practices and their adaptation to the requirements of respective economic conditions and to the nature and extent of the Group's business.

The Credit Risk Appetite expresses the level of credit risk that the Bank is willing to assume in order to achieve the business objectives and the expected risk-adjusted return, as defined by a set of minimum quantitative metrics and qualitative standards.

The Credit Risk Appetite is amongst the key contributors in the business planning process, promoting the appropriate alignment of corporate strategy, capital allocation and risk. Top-down risk appetite serves as the limit for risk-taking for the bottom-up planning from the business functions. Risk Limits and policies are calibrated to the credit risk appetite.

The Group identifies and assesses existing and potential risks inherent in any product or activity as the basis for effective credit risk management. The identification, analysis and control of credit risk are achieved through a safety net of internal procedures, policies and controls. The Group uses internal rating/ scoring systems for its portfolios, in order to evaluate and classify both performing and non-performing relationships. Internal rating/scoring systems and the resulting parameters are validated by the "Risk Models Validation Division" and the countries' local respective Unit on a regular basis, as part of the Group's internal assessment process. Furthermore there are in place sets of reporting tools and frameworks which are used on regular intervals (daily, weekly, fortnight, monthly, quarterly and yearly), assisting the network and the management to identify early in some cases, or in due time in some other potential threats, risky portfolio sections and problematic relationships. These are employed on solo and group wide basis. The results of risk identification and assessment are reported by the countries' local Risk Management Units to the Group Risk Management Units which consolidate the results and submit them to the Credit Risk Committee. The results are incorporated in the overall credit risk policy, procedures and limit setting process. The overall process is further aided by the implementation of an appropriate organizational structure with clearly defined roles and responsibilities for its Personnel and Business Units, in order to manage all kinds of credit risk-bearing activities.

Alpha Bank has prepared its operational and system infrastructure in line with the requirements of the Internal Ratings Based approach for credit risk and the International Financial Reporting Standard (IFRS) 9. Alpha Bank's current credit risk management framework consists of a set of governance rules, policies and procedures, as well as rating/scoring systems, covering the whole range of the Bank's portfolio, and is under continuous review and enhancement so as to:

- Include any updates issued by the regulatory authorities;
- Take into consideration the macroeconomic and political environment;
- Facilitate the portfolio management and the decision making processes;



- Contribute to preventing any potential negative effects in the Bank's and Group's financial results.

With main scope to further strengthen and improve the credit risk management framework in 2019, the following actions have been performed:

- Update of Credit Policy Manuals for Wholesale Banking and Retail Banking in Greece and abroad, taking into account the supervisory guidelines for credit risk management issues as well as the Group's business strategy.
- Continuous strengthening of the second line of defense control mechanisms in order to ensure compliance with Credit Risks Policies at Bank and Group level.
- Update of the Group Credit Risk Models Development Framework to align with the current regulatory expectations and international practices.
- Ongoing validation of the risk models in order to ensure their accuracy, reliability, stability and predictive capacity.
- Update of the Group Credit Risk Models Validation Framework to align with the current regulatory expectations and international practices.
- Implementation of the Credit Risk Model Management Policy that includes the framework of the basic principles, rules, criteria and specifications governing the management and monitoring of risks arising from the development and use of Credit Risk Models. This Policy has been developed in accordance with the current European Regulatory and Supervisory Framework.
- Adoption of a new methodology for rating the Business Sectors in risk zones, based on a predictive index that focuses on future perspectives and reflects the risks and prospects of each Business Sector. The new methodology aims to measure and monitor the concentration risk by Business Sector and to define the Credit Risk Appetite level per Business Sector.
- Establishment of a business plan of the Group (2019-2022), based on the Credit Risk Appetite level set by the Business Sector, taking into account the ranking of Business Sectors relative to their credit risk according to the methodology described above, as well as the risk profile and the impact on expected credit loss of the new funding.
- Update of the Credit Risk Early Warning Policy, in terms of its scope and implementation perimeter enhancement, aiming at monitoring evolution and performance of the lending portfolio and ensuring that it is in accordance with the Bank's and Group's Credit Risk Appetite.
- Development of the Significant Risk Transfer Policy, in accordance to the relevant regulatory guidelines, describing the procedures adopted by the Group in order to assess whether significant risk is being transferred in case of securitisation transactions for which are intended to apply the Significant Risk Transfer principle.
- Updating of the process applicable under the framework of the Environmental and Social Risk Policy. During the credit approval process, supplementary to the credit risk assessment, the strict compliance of the principles of an environmentally and socially responsible credit facility is also examined.
- Systematic estimation and assessment of credit risk per counterparty.
- Design and implement initiatives in order to enhance the level of automation, accuracy, comprehensiveness, quality, reconciliation and validation of data, as part of the Bank's strategic objective of a holistic approach for the development of an effective data aggregation and reporting framework, in line with the Basel Committee on Banking Supervision (BCBS) 239 requirements.
- Enhancement of the mechanism for the submission of analytical credit data, credit risk data, and counterparties' data for legal entities financing in order to meet the requirements for the monthly submission of analytical credit risk data according to the European Union regulation 2016/867 and the Bank of Greece Governor's Act 2677/19.5.2017 (AnaCredit).



- Update of the EBA classification mechanism according to EBA Guidelines on management of non-performing and forbore exposures and technical standards amending Commission Implementing Regulation (EU) 680/2014.
- Development of the State Guaranteed Loans Forbearance Policy Manual, which includes the framework of basic principles, rules and criteria governing the assessment of forbearance requests of loans guaranteed by the Greek State for Retail Banking or Wholesale Banking exposures, in accordance with the current legislative framework.
- Periodic stress test exercises as a tool for assessing the impact of various macroeconomic scenarios on business strategy formulation, business decisions and the Group's capital position. Crisis simulation exercises are conducted in accordance with the requirements of the supervisory framework and constitute a key component of the Group's credit risk management strategy.
- Design and implementation of a Program of projects to ensure Bank's compliance with the regulatory requirements deriving from the Guidelines on the application of the definition of default under Article 179 of Regulation (EU) No 575/2013 (EBA GL/2016/07).

Additionally, the following actions are in progress in order to enhance and develop the internal system of credit risk management:

- Continuous upgrade of databases for performing statistical tests in the Group's credit risk rating models.
- Upgrade and automation of the aforementioned process in relation to the Wholesale and Retail banking by using specialized statistical software.
- Reinforcing the completeness and quality control mechanism of crucial fields of Wholesale and Retail Credit for monitoring, measuring and controlling of the credit risk.
- Update of the framework and policies for the management of overdue and non-performing loans, in addition to the existing obligations, which arise from the Commission Implementing Regulation 2015/227 of January 9, 2015 of the European Committee for amending Executive Committee Act (EU) No. 680/2014 of the Committee for establishing executive technical standards regarding the submission of supervisory reports by institutions in accordance with the regulation (EU) No. 575/2013 of the European Parliament and the Council and Executive Committee Act of Bank of Greece, P.E.E. 42/30.5.2014 and the amendment of this with the Executive Committee Acts of Bank of Greece, P.E.E. 47/9.2.2015, and P.E.E. 102/30.8.2016, 134/5.3.2018 and 136/2.4.2018 which define the framework of supervisory commitments for the management of overdue and non-performing loans from credit institutions. This framework develops based on the following pillars:
  - The establishment of an independent operation management for the "Troubled assets" (Troubled Asset Committee). This is achieved by the representation of the Administrative Bodies in the Evaluation and Monitoring of Denounced Customers Committee as well as in the Arrears Councils,
  - The establishment of a separate management strategy for these loans, and
  - The improvement of IT systems and processes in order to comply with the required periodic reporting to management and supervisory mechanisms.



## 7.2 Credit Risk Management Function

The management of credit risk is organized under the supervision of the General Manager and Chief Risk Officer of the Group by multiple Divisions that are responsible for setting the Group-wide credit risk appetite and policies, reviewing the approval and follow-up processes in the Business Units, facilitating the quarterly process of calculating the impairment of credit exposures and monitoring and submitting regulatory and internal reports on the Group's consolidated credit portfolio, including the determination of portfolio limits for specific industries and countries. Dedicated departments develop credit rating and evaluation models and ensure that they are available for day-to-day credit processing at the Business Units and meet regulatory and institutional requirements. A separate Division is responsible for validating the credit risk rating systems and models and has direct reporting line to the General Manager and Chief Risk Officer of the Group.

In addition, the Group has appointed Risk and Credit Managers in the countries of operation, who are responsible for ensuring compliance with the local supervisory rules and regulations.

The Credit Risk Committee of the Bank has an oversight of the credit risk activities and the implementation of relevant strategy. The Committee is responsible for the evaluation of the adequacy and the effectiveness of policies and procedures of Group credit risk management regarding credit risk taking, monitoring and management by business line, geographic area, product activity, sector etc., as well as approving recommendation on necessary structural mitigating actions. The Committee approves the Credit policies for Wholesale and Retail Banking - as well as initially - approves the Impairment Policy and Write-Off Policy which is subsequently submitted to the Board of Directors for final approval through the Risk Management Committee. The basic responsibilities of the Committee are:

- Periodic review of credit risk exposures per sector of activity, geographical area and concentration risk
- Approval of Wholesale and Retail Credit Policy Manuals
- Approval of the Group Credit Risk Policies and the Group Credit Control Framework
- Initial Approval of the Impairment Policy and Write-off Policy
- Approval of the Bank's Write-offs
- Approval of the development and update of the Credit Risk Models and the relevant Governance Framework. Notification of the credit risk models validation results
- Approval of the ECL Methodology
- Notification of the quarterly impairments
- Notification of the credit controls key findings
- Validation of all the reports of the Risk Management Sector addressed to the Board of Directors and the Risk Management Committee
- Review of the Troubled Assets Committee's reports
- Review of evolution of the annual NPE and NPL SSM targets
- Evaluation of the results derived from expected losses exercises performed by the Regulatory authorities in the countries where the Bank operates



- Notification on the Wholesale Banking and Retail Banking Arrears Management Strategy, the Non-Performing Loans Policy and Procedures and the operational framework of the Wholesale Banking and Retail Banking Arrears Committees that have been approved by the Troubled Assets Committee
- Review of the results derived by the Stress Tests
- Evaluation of significant findings included in the reviews that are performed by internal or external auditors related to the credit policy and credit risk management.

The members of the Credit Risk Committee are the following:

- Chief Executive Officer (Chairman of the Committee);
- General Manager –Chief Operating Officer;
- General Manager - Non-Performing Loans and Treasury Management
- BoD Member and Former Deputy CEO - Retail and Wholesale Banking
- General Manager–Chief Risk Officer;
- General Manager–Chief Financial Officer;
- General Manager – Wholesale Banking
- General Manager – Retail Banking
- Manager of the Credit Control Division;
- Manager of the Credit Risk Data and Analysis Division; and
- Manager of the Capital Management and Banking Supervision Division.

### **Credit approval process**

The Bank, following best international practices and taking into account the prevailing institutional framework set by legislation, regulations, ministerial decrees/decisions, etc, has established a robust credit risk framework, where the key principles and guidelines, the procedures and actions followed and the responsibilities of all related Units and Officers are clearly defined based on the four eyes principle.

Within this context, all credit proposals are prepared by the Business Units, are reviewed by the Credit Units and are subsequently forwarded for assessment and final decision to the respective Credit Committee based on the total credit exposure, the borrower risk rating, the provided collaterals and the environmental and social risk evaluation.

### **Wholesale Banking Credit Committees**

The Wholesale Credit Committees with escalating credit approval levels, mainly review and evaluate credit requests:

- For debtors under the competence of Wholesale Banking Units which are current or in temporary arrears up to 60 days and have not been announced to the Non-Performing Loans Wholesale Banking Divisions.
- For debtors in arrears over 60 days if they have not been announced to the Non-Performing Loans Wholesale Banking Divisions provided that the Bank is currently undertaking actions regarding the settlement of such issues in due course and approval of the competent Wholesale Banking Credit Committees.

The Credit Committees according to their approval authority level are divided into the following categories:

- Wholesale Banking Credit Committee I
- Wholesale Banking Credit Committee II
- Wholesale Banking Credit Committee III
- Wholesale Banking Credit Committee IV
- Wholesale Banking Credit Committees V: Committee A and Committee B

### **Wholesale Banking Arrears Committees**

The Wholesale Banking Arrears Committees review and evaluate requests of debtors in arrears managed by the Wholesale Banking NPL Division and its supervised Divisions.

The Arrears Committees are divided into the following categories:

- Wholesale Banking Arrears Committee I
- Wholesale Banking Arrears Committee II
- Wholesale Banking Arrears Committee III
- Wholesale Banking Arrears Committees IV (Arrears Committees under the Special Credit Wholesale Banking Division or the Permanent Arrears - Wholesale Banking Division or the Non-Performing Loans Support – Wholesale Banking Division).

## **7.3 Credit Quality of Exposures**

### **Definitions**

The following definitions of exposures are provided:

#### **1. Performing exposures**

An exposure is considered as performing when the following criteria are met:

- The exposure is less than 90 days past due;
  - No legal actions have been undertaken against the exposure;
  - No unlikeliness to pay is reported on its credit obligation; The exposure is not classified as impaired;
- Or
- The exposure is classified as forborne performing exposure, as defined in the aforementioned commission Implementing Regulation (EU) 2015/227 of 9 January 2015.

#### **2. Past Due Exposures**

An Exposure is past due if the counterparty's credit obligation is materially more than one day past due (the amount due is considered as the sum of the principal, interests and charges / commissions at the account level).

#### **3. Non – Performing Exposures**

An exposure is considered as non-performing when at least one or more events have occurred that adversely affect the expected cash flows. Indicative events that satisfy the classification of an exposure as Non -Performing are the following:



The exposure is more than 90 days past due (NPL); The amount due exceeds Euro 100 for Retail Exposures or Euro 500 for Wholesale Exposures and the amount due exceeds 1% of the total on balance sheet exposures. In particular, for overdraft facilities, an exposure is past due after having exceeded its approved limit.

- Legal actions have been undertaken by the Bank – Legal (NPL)
- The exposure is classified as Forborne Non – Performing Exposure
- It is assessed as Unlikely to Pay (UTP).

When a Wholesale Banking borrower has an exposure that is more than 90 days past due and the amount of this exposure exceeds 20% of total exposures of the borrower, then all exposures of the borrower are considered as non-performing (Pulling Effect).

#### 4. Forborne Exposures

An exposure is considered as Forborne if there is a significant modification of initial contractual terms by granting more favorable terms (Concession) or partial or total refinancing of current outstanding debts (Refinancing) to Borrowers with Financial Difficulty. **Financial Difficulty** is defined as the situation where the borrowers are unable to comply or are about to face difficulties in servicing their credit obligations as per the current loan repayment schedule due to the worsening of their financial status. Forborne exposures incorporate denounced loans and advances amounting to €3.1 bn as at 31.12.2019, that were forborne prior to denouncement.

#### 5. Unlikeliness to Pay

An exposure is flagged as “**Unlikely To Pay**” (UTP) when it is less than 90 days past due and the Bank assesses that the borrower is unlikely to fully meet his credit obligations without the liquidation of collateral, regardless the existence of any past due amount or the number of days past due, with the exception of the cases of collaterals that are part of the production and trade chain of the borrower (e.g. properties for Real Estate companies, corporate shares for Holding companies).

For wholesale Banking, the procedure is distinguished in two pillars: (a) Events are determined which when occur the exposure is identified as Non-Performing (Hard UTP Triggers) without any assessment needed by any Credit Committee, (b) Triggers are determined which when occur, the borrower should be assessed by the relative Wholesale Banking Credit Committee to decide if the borrower’s exposures should be identified as Non-Performing or not (Soft UTP Triggers). This assessment takes place when reviewing borrower’s credit limits depending on its credit ratings and in accordance with Wholesale Banking Credit Manual. If a borrower is flagged as UTP, then his credit risk rating should be D (Default) according to Bank’s rating system or Default for Borrowers assessed using Slotting Models. If a borrower flagged as UTP belongs to a group of companies, then the group should also be assessed by the competent Credit Committee for the existence or not of UTP trigger.

For Wholesale Banking exposures the following Hard UTP Triggers exist:

- Denouncement of loan agreement
- Liquidation of collaterals and initiation of foreclosure measures by the Bank when the borrower does not have operational cash flows for the repayment of his debt obligations (excluding e.g. checks).
- Legal actions, sale or judicial sale in order to collect the claim (e.g. foreclosure instead of debt collection).



- Withdrawal of a license of particular importance in companies that require public authorisation to carry out their activities such as banks and insurance companies. The same applies for technical and construction companies, telecommunications companies, pharmaceutical, mining, transport, food, chemical, petroleum, recycle, media etc.
- Refinancing/Extensions of loans whose lifetime exceeds the economic lifetime of the funded investment.
- There are strong indications that the borrower is unable to meet his debt obligations (e.g. termination of business).
- Fraud cases
- Excess of the minimum acceptable Loan to Value (LTV), as depicted contractually, for loans collateralised with securities, e.g. bonds, shares etc (Margin Financing).
- Disappearance of an active market for the debtor's financial instruments, hold by the Group.
- Write-off because of default
- Debt Forgiveness with or without forbearance (conditional or not) at least for the first 12 months since the debt forgiveness.
- The credit institution or the leader of consortium starts bankruptcy/insolvency proceedings (application for insolvency).
- A credit event is declared under the International Swaps and Derivatives Association - ISDA).
- Out-of-court settlement/negotiation between Banks and Borrower for settlement / debt repayment of borrowers that are under bankruptcy proceedings (application for the bankruptcy).
- The borrower has requested to enter into bankruptcy or insolvency status (application for bankruptcy).
- A Bank has initiated bankruptcy or insolvency proceedings (application for bankruptcy).

Additionally, for Wholesale Banking exposures the following Soft UTP Triggers exist:

- Exposures that were modified by providing a 'balloon' payment while the initial terms of the loan agreement did not include this repayment method, as well as exposures that the initial terms of the loan agreement included 'balloon' payment and were modified by including an increase of the "balloon" amount and simultaneously by reducing the current installment.
- Multiple modifications in the same exposure.
- Deterioration of the leverage ratio (Debt to Equity).
- An exposure was purchased or sold with deep discount that reflects the low credit quality of the borrower.
- The debt service coverage ratio indicates that debt is not viable.
- 5 Years Credit Default Swaps (CDS) above 1.000 bps in the last 12 months.
- Loss of an important customer or lessee representing a significant percentage of entity's turnover or the total property income, respectively.
- A turnover decrease resulting in a significant reduction of cash flows.



- An affiliated customer, which represents a significant percentage of entity's turnover, has applied for bankruptcy.
- An external auditor report with restrictions or reservations that results to significant deterioration of key financial ratios of the borrower and to worsened estimated future cash flows of the borrower.
- It is expected that an exposure with repayment at maturity or a due installment cannot be refinanced under current market conditions.
- Disappearance of an active market for the debtor's financial instruments, not hold by the Bank.
- The borrower has breached the financial terms of the loan agreement.
- There is significant deterioration of the borrower's sector activity prospects.
- Adverse changes in the ownership structure or the management of the company or serious administrative problems.
- A third party (excluding Banks) has started bankruptcy or insolvency proceedings (application for Bankruptcy).
- Overdue payments to Tax Authorities and Social Security Funds.

For Retail Banking the procedure is distinguished in two pillars:

- a. Events are determined which when occur the exposure is identified as Non-Performing (Hard UTP Triggers) without any assessment needed by any Retail Banking Credit Committee,
- b. Triggers are determined which when occur, the borrower should be assessed by the competent Retail Banking Non-Performing Unit to decide if the borrower's exposures should be assessed as Non-Performing or not (**Soft UTP Triggers**).

This assessment takes place at the date of a forbearance request. If an exposure is flagged as UTP, then it should be classified as Non-Performing in the systems of the Group's companies.

For Retail Banking exposures the following Hard UTP Triggers exist:

- A trial date has been set for filing for Bankruptcy L.3869/2010
- Fraud has been confirmed at the expense of the Bank.
- The borrower has passed away.
- Multiple forbearances for the same exposure within a 12 months' time period.
- An out-of-court settlement / negotiation is underway between banks and borrower for settlement / repayment of debts of borrowers who are under bankruptcy proceedings (application for bankruptcy).
- Denouncement of loan agreement.
- Collaterals liquidation and foreclosure procedures have been initiated by the Bank in case the borrower cannot repay its debt obligations with the existing operating cash flows (excluding e.g. checks).
- Legal actions, sale or forced sale actions have been initiated in order to collect the debt (e.g. foreclosure measures against debt collection).
- Debt Forgiveness with or without forbearance (conditional or not), at least for the first 12 months since the debt forgiveness.

Additionally, for Retail Banking exposures the following Soft UTP Triggers exist:



- Multiple forbearances in the same exposure
- The borrower has other exposures in the Bank in default.
- The borrower is unemployed.
- The borrower has applied for bankruptcy or insolvency (application for bankruptcy).
- The borrower is the sole owner of a company with exposures in default and for which he has provided personal guarantees.

#### **6. Curing of Non – Performing Exposures**

For the Curing of a Non-Performing Exposure and reclassification as Performing Exposure, any concerns for the ability of the borrower to meet its contractual obligations should have been eliminated (Absence of Concern).

In general, all the exit criteria are met according to the aforementioned European Commission Implementing Regulation 2018/1627 of 9 October 2018 amending Implementing Regulation (EU) No. 680/2014 of the Commission and Executive Committee Acts of Bank of Greece E.C.A. 42 / 30.05.2014 and modifications thereof E.C.A. 47 / 02.09.2015, 102 / 30.08.2016 and 136 / 2.4.2018.

#### **7. Default Exposures**

An exposure is considered as Default when the criteria specified by the definition of Non – Performing Exposures are met

#### **8. Credit Impaired Exposures**

An exposure is considered as Credit Impaired when the criteria specified by the definition of Non-Performing Exposures are met.

### **Expected Credit Loss Estimation Methodology for Wholesale and Retail Banking**

The Group, at each reporting date, recognizes a provision for expected credit losses on loans and advances to customers not measured at fair value through profit or loss as well as for off-balance sheet exposures (letters of guarantee, letters of credit, and undrawn loan commitments).

The Loan Impairment Methodology is common and applicable for both the Wholesale and Retail Banking Portfolios.

#### **Default definition**

The Group has adopted as default definition for accounting purposes, non-performing exposures (NPE) as defined in the Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014.

The definition of Non-Performing Exposures is consistently used to develop models for estimating credit risk parameters (Probability of Default, Loss Given Default, and Exposure at Default).

In addition, the definition of default is consistent with the one used for internal credit risk management purposes.

### **Portfolio Classification in Stages based on the Credit Risk (Staging)**

Following an exposure's initial recognition, classification to Stages based on its credit risk characteristics. The classification of loans in stages is based on the changes of the credit quality compared to the initial recognition.

Upon initial recognition of an exposure, the Group must determine whether this exposure is considered as credit impaired (Credit Impaired at Initial Recognition).

The POCI category (Purchased or Originated Credit Impaired, POCI) includes the following:

- Exposures that at the time of purchase (Purchased) meet the criteria of non-performing exposures.
- Exposures that as per accounting rules are derecognised and a new exposure is recognised and for which the following apply (Originated): if the exposure was classified as impaired (hence NPE) prior to derecognition, the new exposure will continue to maintain this classification and it will be classified as POCI.

For exposures not classified as POCI, the classification in stages is performed as follows:

- The Stage 1 includes performing credit exposures that have no significant increase in credit risk since the initial recognition date. The expected credit losses calculated are based on the probability of default within the next 12 months and the assessment is carried out on a collective basis with the exception of borrowers assessed on an individual basis
- The Stage 2 includes credit exposures with significant increase in credit risk since the initial recognition date but which are not non-performing. The expected credit losses calculated are lifetime credit losses and the assessment is carried out on a collective basis with the exception of borrowers assessed on an individual basis.
- The Stage 3 includes the non-performing / default exposures. The expected credit losses calculated are the lifetime losses and the assessment is performed on a collective or individual basis.

Concerning the POCI exposures, the expected credit losses calculated are the lifetime losses.

All possible movements between Stages of credit risk are presented below:

- An exposure which has been classified in Stage 1 in previous quarter of reference could be classified either in Stage 1 in the next reporting quarter, if the credit risk has not deteriorated and the exposure is still performing, or in Stage 2, if the exposure is still performing but the credit risk has deteriorated, or in Stage 3 if the exposure is non-performing/default.
- An exposure which has been classified in Stage 2 in previous quarter of reference could be classified either in Stage 1 in the next reporting quarter, if the exposure is performing and does not meet any of the criteria of “Significant increase in credit risk” and in particular, for case of Forborne Performing exposure, if the exit criteria from the 2-years’ probation period are met. It could also remain in Stage 2, if the credit risk has not substantially changed, or be transferred to Stage 3, if the exposure is non-performing/default.
- An exposure which has been classified in Stage 3 in previous quarter of reference could be classified either in Stage 1 in the next reporting quarter, if the exposure is performing and does not meet any of the criteria of “Significant increase in credit risk”, or transferred in Stage 2, if it is no longer considered as non-performing, or remain in Stage 3, if it is still nonperforming/default.

The Group does not make use of the exemption provided by the standard for low credit risk exposures.

For classification purposes, for wholesale banking revolving exposures, initial recognition date is the date of the most recent credit assessment reflecting the annual thorough credit risk review practice of the Bank.



## Significant Increase in Credit Risk

For the timely identification of significant increase in credit risk for an Exposure after the initial recognition (SICR) leading to the calculation of lifetime credit losses of the exposure instead of twelve months credit losses, the risk of default at the reference date is compared to the risk of default at the initial recognition date for all Performing Exposures, including those with no days past due (Delinquencies).

The assessment for deciding if an exposure shows significant increase in credit risk or not is based on the following three types of Indicators:

- **Quantitative Indicators:** They refer to the use of quantitative information and specifically to the comparison between the probability of default (PD) at the reference date and the probability of default at the initial recognition date. The assessment of significant increase in credit risk takes into account the absolute increase of PD between the reporting and the initial recognition date (which can range between 3 and 5 percentage point depending on the asset class of the loans) as well as the relative increase of PD between the reporting and the initial recognition date (doubling or tripling of PD, depending on asset class of the loan). Absolute and relative thresholds determining the significant increase between reporting and initial recognition date are validated on an annual basis, in order to ensure a robust statistical discriminatory power.
- **Qualitative Indicators:** They refer to use of qualitative information which is not necessarily depicted in the probability of default, such as the assessment of an exposure as performing forborne (“FPL” within 2 years’ probation period according to EBA ITS) or as exposure with Financial Difficulty. Additional qualitative indicators for the Wholesale Banking portfolios and the Retail Banking portfolios are included in Early Warning Policy. According to the abovementioned policy and as per the assessment performed, an exposure may be considered to show significant increase in credit risk. Especially for Specialized Lending portfolios additional qualitative indicators are identified.
- **Backstop Indicators:** In addition to the above, and with a view to addressing cases where there is no evidence of significant credit risk deterioration based on the quantitative and qualitative indicators, exposures over 30 days past due are considered by definition to show a significant increase in credit risk.

## Expected Credit Loss estimation

### Exposures assessed on individual basis (Individual Assessment)

The Expected Credit Losses calculation is carried out either on an individual basis, taking into account the significance of the exposure, the fact that certain exposures do not share common credit risk characteristics and the existence or not of sufficient historical data, or on a collective basis.

For companies where the corporate guarantee from the parent company represent 100% of the exposure of the companies, or for other important interdependencies between group of companies, the assessment may be performed at a group level.

Regarding the exposures to Companies, with at least one Non-Performing Exposure, they are individually assessed they exceed the limits set by each Company of the Group (following the permission/approval of the Bank). All other exposures to Companies are collectively assessed.

Specifically for the Bank, exposures to Companies assessed on an individual basis are the following:

- Borrowers with at least one Non-Performing Exposure who’s Customer General Limit in the Bank exceeds the amount of Euro 1.5 million.



- Borrowers of the Shipping Division and the Structured Finance Division with at least one Non-Performing Exposure, regardless the Customer General Limit in the Bank.
- Exposures that do not share common risk characteristics or for which no relevant historical data that enables a collective analysis is available.

Any remaining exposure to Companies is assessed collectively.

Non-Performing Exposures (NPEs) to Individuals are individually assessed, if the exposures of retail banking customers exceed the defined limits according to each Group Company. All other exposures to Individuals are collectively assessed.

Specifically for the Bank, Exposures to Individuals are assessed individually, if they are Non-Performing Exposures (NPE) and if the following threshold, per portfolio, applies:

- Consumer Loans: Accounts of Consumer Credit Borrowers with total on balance exposures over Euro 500 thousand.
- Housing Loans: Accounts of Mortgage Credit Borrowers with total on balance exposures over Euro 2 million.

Any remaining exposure to individuals is assessed collectively.

### **Exposures assessed on collective basis (Collective Assessment)**

Collective Assessment applies to credit exposures which are not assessed individually, i.e. exposures classified in Stage 1 and Stage 2 as well as non-performing exposures that do not meet the above criteria for individual assessment, after having been categorised based on similar credit risk characteristics by portfolio. For the classification of credit facilities into groups with similar credit risk characteristics, the followings are considered:

- Staging according to Credit Risk
- Type of Product
- Days Past Due
- Time in default
- Indication of unlikeliness to pay
- Modification of contractual terms for borrowers showing financial difficulty (Forbearance Measures)
- Modification Type
- Existence of collateral taking into account the type and Loan to Value ratio
- Existence of Greek State Guarantee
- Partial Write-Off
- Credit Risk Rating
- Activity Sector
- Assets held for sale

The groupings are reviewed on a regular basis to ensure that each group is comprised of homogenous exposures.

## Calculation of expected credit losses

Expected Credit Losses are updated at each reporting date to reflect the changes in the credit risk since initial recognition and thus provide timely information on expected credit losses.

The measurement of expected credit losses is made as follows:

- For financial assets, a credit loss is the present value of the difference between:
  - a. the contractual cash flows and
  - b. the cash flows that the Group expects to receive
- For undrawn loan commitments, Expected Credit Losses are equal to the present value of the difference between:
  - a. the contractual cash flows that will be due if the holder of the loan commitment is drawn down and
  - b. the cash flows that the Group expects to receive if this amount is disbursed.
- For letters of guarantee and letters of credit, the loss is equal to the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder.

The Group calculates expected credit losses based on the weighted probability of three scenarios. More specifically, the Economic Research Division produces forecasts for the possible evolution of macroeconomic variables that affect the level of expected credit losses of loan portfolios under a baseline and under alternative macroeconomic scenarios and also generates the cumulative probabilities associated with these scenarios.

## Incorporation of forward-looking information

The Group calculates Expected Credit Losses based on the weighted probability of three alternative scenarios. More specifically, the Economic Research Division produces forecasts for the possible evolution of macroeconomic variables that affect the level of Expected Credit Losses of loan portfolios under a baseline and under two alternative macroeconomic scenarios (an upside and an adverse one) and also produces the cumulative probabilities associated with these scenarios.

The macroeconomic variables affecting the level of expected credit losses are the Gross Domestic product (GDP), the unemployment rate and forward looking prices of residential and commercial real estates.

Especially for the Bank, the yearly average for the period 2020-2023 of macroeconomic variables affecting both the Probability of Default and the expected Loss Given Default for the calculation of expected credit losses as at 31.12.2019 are the following:

<b>Table 11a: Macroeconomic Variables as of 2020-2023</b>			
	<b>Adverse scenario</b>	<b>Base scenario</b>	<b>Upside scenario</b>
<b>Real GDP growth</b>	-0.2%	1.6%	3.4%
<b>Unemployment rate</b>	16.1%	13.9%	11.8%
<b>Change in Residential Real Estate prices (RRE)</b>	0.7%	3.4%	6.3%
<b>Change in Commercial Real Estate prices (CRE)</b>	2.0%	3.6%	5.3%

Respectively, the yearly average for the period 2019-2022 of macroeconomic variables affecting the calculation of expected credit losses as at 31.12.2018 are the following.

	<b>Adverse scenario</b>	<b>Base scenario</b>	<b>Upside scenario</b>
<b>Real GDP growth</b>	-0.2%	1.8%	3.7%
<b>Unemployment rate</b>	18.1%	15.9%	13.7%
<b>Change in Residential Real Estate prices (RRE)</b>	-0.7%	2.6%	5.8%
<b>Change in Commercial Real Estate prices (CRE)</b>	-0.3%	2.7%	5.7%

The production of baseline scenario, supported by a consistent economic description, constitutes the most likely scenario according to the current economic conditions and the Group's basic assessment of the course of the economy.

The cumulative probabilities of the macroeconomic scenarios for the Greek economy will indicate that the economy performs better or worse than forecasts of the baseline scenario and the alternative scenarios, i.e. the upside and downside scenario. For each one of the alternative scenarios, the expected credit loss is calculated and weighted against the probability of each scenario in order to calculate the weighted expected credit loss.

The cumulative probability assigned to the base scenario is 60%, while cumulative probability assigned to the adverse and upside scenario is 20% for each of the scenario.

If the assigned cumulative probability of the adverse scenario was increased from 20% to 40%, Expected Credit Losses would increase by Euro 84.0 million as of 31.12.2019 (31.12.2018: Euro 170.9 million). If the assigned cumulative probability of the upside scenario was increased from 20% to 40%, Expected Credit Losses would decrease by Euro 83.9 million as of 31.12.2019 (31.12.2018: Euro 170.8 million).

## **Credit risk parameters**

Calculation of Expected Credit Loss is based on the following credit risk parameters which are developed parameters, through internal statistical models based on historical data:

- **Probability of Default (PD):** It is an estimate of the probability of a debtor to default over a specific time horizon.

For assessing the probability of default, the credit risk rating models assess a series of parameters that can be grouped as follows:

- Financial Analysis: The Borrower's Financial Capacity (Liquidity Indicators, Debt to Revenue etc.)
- Competitor's analysis: the borrower's comparative position in the market in which operates, mainly in relation to its competitors (mainly applicable to debtors of Wholesale Banking)
- Current and historical debtor's behavioural data either towards the Bank or towards third parties (delinquencies, repayment behavior, etc.), and
- Qualitative characteristics of the debtor (strong and sound management, management succession, appropriate facilities and equipment, etc.).



Credit Ratings constitute the main input in order to determine the probability of default. The Group uses statistical models in order to analyze the collected data and make estimates of the remaining probability of default over the life of the exposures and how they will evolve over time based, among other things, on macroeconomic variables.

- **Exposure at default (EAD):** Exposure at Default is an estimate of the amount of the exposure at the time of the default taking into account: (a) expected changes in the exposure after the reporting date, including principal and interest payments; (b) the expected use of credit limits and (c) accrued interest. The approved credit limits that have not been fully disbursed represent a potential credit exposure and are converted into a credit exposure equal to the approved undrawn credit limit multiplied by a Credit Conversion Factor (CCF). The Credit Conversion factor of credit exposure is calculated based on statistical models. The maximum period for which credit losses are calculated is the remaining contractual maturity of a financial instrument unless the Group has the legal right to recall the financial instrument earlier. In particular, for Credit Cards and revolving exposures to individuals, the maximum period is set at three years, while for revolving loans to Small Businesses, the corresponding maturity is set at four years. Regarding Wholesale Banking revolving exposures, the period is set to one year, given the thorough credit review performed at least once a year. If the residual maturity of the revolving exposures classified in Stage 2 was increased by one year, Expected Credit Losses would increase by € 11.3 million as at 31.12.2019.

The Group uses EAD models that reflect the characteristics of the portfolios.

- **Loss given default (LGD):** Loss given default is an estimate of the loss that will occur if the default occurs at a given time. It is based on the difference between the contractual cash flows due and those expected to be received, including the liquidation of collaterals and cure rate based on historical data or based on the relevant Business Plan, which incorporates the estimated evolution of management actions. For unsecured loans, the estimated expected losses at the time of the default, take into account expected recovery rates which vary throughout the recovery period as well as the probability of curing.

Expected recoveries from tangible collaterals take into account the following inputs: the most recent valuation (updated within the year) for the market value of the collateral, the time required for the liquidation or sale of the tangible collateral (ranging between 1 to 3 years depending on the legal action status of the loan), the expected market value at liquidation /sale date based on the evolution of RRE/ CRE indices for the next 3 years, the expected recoveries through foreclosure process or sale as derived from historical data obtained for foreclosures and sales of collateral. Last, the recovery rate of the group is adjusted to reflect value of preferential claims. Expected cash flows are discounted using the original effective interest rate. Furthermore, in cases that cash flows are expected to derive from the sale of loans, the Expected Credit Losses incorporate the expected sales price as the base scenario.

If the expected sale perimeter of the Retail portfolio classified in Stage 3 was increased by € 330 million, Expected Credit Losses as at 31.12.2019 would increase by € 33 million.

Last, for exposures secured with tangible collaterals, the LGD may vary following changes of macroeconomic scenarios.

## Undrawn commitments

According to IFRS 9, these contracts fall within the scope for expected credit losses recognition.

In estimating the expected credit losses over the life of an undrawn loan commitment, the Group assesses the expected part of the loan commitment that will be used throughout its expected life.



## **Inherent Model Risk**

The Group recognizing the inherent model risk, derived from the model complexity and aggregated model risk, has adopted a Model Risk management framework which includes the principles of credit risk models development policy and risk models validation framework. In this context, the independent Risk Models Validation division validates all credit risk models used for the calculation of IFRS9 expected credit losses.

## **Governance**

The Credit Risk Committee is responsible for approving the Expected Credit Losses as well as the methodologies developed by the Group for calculating the expected credit loss (ECL Methodology) for loan portfolio.

The Board of Directors approves the Group Loan Impairment Policy through the Risk Management Committee.

## **Credit risk measurement systems**

In order to effectively manage credit risk, the Group has developed specific methodologies and credit risk measurement systems in accordance with regulatory and Basel II requirements while incorporating banking industry best practices. These methodologies and systems are continuously evolving to provide the Business Units with timely and effective support in the decision making process and to avoid possible adverse consequences for the Group.

Total and average amount of exposures net of impairments and before any credit risk mitigation (CRM) and any credit conversion factor (CCF) (on and off-Balance-Sheet) by regulatory exposure class as at 31.12.2019 and 31.12.2018 are displayed in the following tables:

<b>Table 12a: EU CRB-B – Total and average net amount of exposures as of 31.12.2019</b>		<b>(in Euro million)</b>
	<b>Net value of exposures at the end of the period</b>	<b>Average net exposures over the period</b>
Central governments or central banks	13,124	12,350
Regional governments or local authorities	32	35
Public sector entities	635	637
Multilateral development banks	249	323
International organisations	304	478
Institutions	3,200	3,148
Corporates	12,743	12,438
<i>Of which: SMEs</i>	2,191	2,214
Retail	5,813	5,783
<i>Of which: SMEs</i>	1,113	1,059
Secured by mortgages on immovable property	14,189	14,249
<i>Of which: SMEs</i>	4,167	3,809
Exposures in default	14,055	14,584
Items associated with particularly high risk	235	244
Covered bonds	171	170
Collective investments undertakings	8	7
Equity exposures	744	566
Other exposures	2,493	2,411
<b>Total</b>	<b>67,994</b>	<b>67,425</b>



Table 12b: EU CRB-B – Total and average net amount of exposures as of 31.12.2018		(in Euro million)
	Net value of exposures at the end of the period	Average net exposures over the period
Central governments or central banks	11,340	10,721
Regional governments or local authorities	38	40
Public sector entities	637	636
Multilateral development banks	382	332
International organisations	589	423
Institutions	2,903	2,758
Corporates	12,126	10,737
<i>Of which: SMEs</i>	2,458	2,375
Retail	5,976	4,810
<i>Of which: SMEs</i>	1,038	1,005
Secured by mortgages on immovable property	14,418	14,492
<i>Of which: SMEs</i>	3,588	3,523
Exposures in default	15,179	16,069
Items associated with particularly high risk	3	2
Covered bonds	77	19
Collective investments undertakings	8	11
Equity exposures	402	242
Other exposures	2,246	2,380
<b>Total</b>	<b>66,324</b>	<b>63,673</b>

Under CRD IV a geographical analysis of credit exposures is required based on exposures in the member states in which the institution has been authorised and member states or third countries in which institutions carry out activities through a branch or subsidiary. The Group's primary market is Greece.



Table 13a: EU CRB-C – Geographical breakdown of exposures as of 31.12.2019 (in Euro million)

Net Values						
Exposure Class	Greece	United Kingdom	Romania	Cyprus	Other Countries	Total
Central governments or central banks	10,359	-	731	454	1,580	13,124
Regional governments or local authorities	31	-	2	-	-	32
Public sector entities	635	-	-	-	-	635
Multilateral development banks	-	-	-	-	249	249
International organisations	-	-	-	-	304	304
Institutions	769	1,230	143	52	1,007	3,200
Corporates	9,810	297	346	221	2,068	12,743
Retail	5,131	4	486	162	30	5,813
Secured by mortgages on immovable property	11,058	503	1,892	420	316	14,189
Exposures in default	12,262	381	118	1,058	235	14,055
Items associated with particularly high risk	10	-	107	118	0	235
Covered bonds	171	-	-	-	-	171
Collective investments undertakings	8	-	-	-	-	8
Equity exposures	731	0	4	9	-	744
Other exposures	2,192	9	127	126	39	2,493
<b>Total</b>	<b>53,167</b>	<b>2,423</b>	<b>3,956</b>	<b>2,620</b>	<b>5,828</b>	<b>67,994</b>



**Table 13b: EU CRB-C – Geographical breakdown of exposures as of 31.12.2018** (in Euro million)

Net Values						
Exposure Class	Greece	United Kingdom	Romania	Cyprus	Other Countries	Total
Central governments or central banks	8,753	-	772	838	976	11,340
Regional governments or local authorities	36	-	2	-	-	38
Public sector entities	637	-	-	-	-	637
Multilateral development banks	-	-	-	-	382	382
International organisations	-	-	-	-	589	589
Institutions	681	1,146	147	7	922	2,903
Corporates	9,249	234	450	432	1,759	12,126
Retail	5,277	6	491	169	32	5,976
Secured by mortgages on immovable property	11,386	489	1,792	346	405	14,418
Exposures in default	13,174	441	131	1,193	239	15,179
Items associated with particularly high risk	3	-	-	-	-	3
Covered bonds	77	-	-	-	-	77
Collective investments undertakings	8	-	-	-	-	8
Equity exposures	397	0	2	3	-	402
Other exposures	2,038	4	97	82	25	2,246
<b>Total</b>	<b>51,717</b>	<b>2,321</b>	<b>3,885</b>	<b>3,071</b>	<b>5,330</b>	<b>66,324</b>

The industry classification in the below tables is based on the activity of the immediate counterparty as at 31.12.2019 and 31.12.2018. Exposures include on and off-Balance-Sheet exposures less allowances/impairments.

Table 14a: EU CRB-D – Concentration of exposures by industry or counterparty types as of 31.12.2019										(in Euro million)
Exposure Class	Manufacturing	Electricity, gas, steam and air conditioning supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Real estate activities	Other sectors (1)	Not stated (2)	Total
Central governments or central banks	-	-	-	-	-	-	-	46	13,078	13,124
Regional governments or local authorities	-	-	-	-	-	-	-	32	-	32
Public sector entities	-	-	-	-	-	-	-	0	635	635
Multilateral development banks	-	-	-	-	-	-	-	0	249	249
International organisations	-	-	-	-	-	-	-	-	304	304
Institutions	-	-	-	-	-	-	-	686	2,514	3,200
Corporates	2,096	1,016	1,384	1,522	2,295	399	338	3,323	370	12,743
Retail	181	17	113	447	54	71	11	4,919	-	5,813
Secured by mortgages on immovable property	1,197	60	475	1,092	131	1,174	987	9,073	-	14,189
Exposures in default	1,273	12	943	2,034	270	505	348	8,669	-	14,055
Items associated with particularly high risk	-	-	225	-	-	-	7	-	3	235
Covered bonds	-	-	-	-	-	-	-	-	171	171
Collective investments undertakings	-	-	-	-	-	-	-	-	8	8
Equity exposures	-	-	-	-	-	-	-	-	744	744
Other exposures	-	-	-	-	-	-	-	-	2,493	2,493
<b>Total</b>	<b>4,747</b>	<b>1,104</b>	<b>3,141</b>	<b>5,095</b>	<b>2,750</b>	<b>2,149</b>	<b>1,692</b>	<b>26,747</b>	<b>20,568</b>	<b>67,994</b>

Table 14b: EU CRB-D – Concentration of exposures by industry or counterparty types as of 31.12.2018										(in Euro million)
Exposure Class	Manufacturing	Electricity, gas, steam and air conditioning supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Real estate activities	Other sectors (1)	Not stated (2)	Total
Central governments or central banks	-	-	-	-	-	-	-	58	11,282	11,340
Regional governments or local authorities	-	-	-	-	-	-	-	38	-	38
Public sector entities	-	-	-	-	-	-	-	2	635	637
Multilateral development banks	-	-	-	-	-	-	-	-	382	382
International organisations	-	-	-	-	-	-	-	-	589	589
Institutions	7	-	1	3	-	-	-	564	2,329	2,903
Corporates	1,976	970	1,569	1,596	1,971	488	211	3,038	306	12,126
Retail	172	17	99	405	46	83	9	5,141	5	5,976
Secured by mortgages on immovable property	1,187	58	617	1,197	114	966	738	9,540	-	14,418
Exposures in default	1,519	17	1,165	2,363	285	554	395	8,882	-	15,179
Items associated with particularly high risk	-	-	-	-	-	-	-	-	3	3
Covered bonds	-	-	-	-	-	-	-	-	77	77
Collective investments undertakings	-	-	-	-	-	-	-	-	8	8
Equity exposures	-	-	-	-	-	-	-	-	402	402
Other exposures	-	-	-	-	-	-	-	-	2,246	2,246
<b>Total</b>	<b>4,861</b>	<b>1,062</b>	<b>3,451</b>	<b>5,564</b>	<b>2,416</b>	<b>2,091</b>	<b>1,353</b>	<b>27,263</b>	<b>18,264</b>	<b>66,324</b>

(1) Other sectors/ counterparties 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 as well as Mortgages, Consumer Loans & Cards.

(2) "Not Stated" includes all exposures to Institutions & Central Banks, Bonds portfolio and Other Assets (Premises, DTA/DTC, and Equity).

The following tables present the Credit risk exposures by contractual residual maturity as at 31.12.2019 and 31.12.2018, including on Balance Sheet exposures less allowances/impairments.

Table 15a: EU CRB-E – Maturity of exposures as of 31.12.2019						(in Euro million)
Exposure Class	Net exposure value					Total
	On demand	<= 1 year	>1 year <= 5 years	>5 years	No stated maturity <sup>(1)</sup>	
Central governments or central banks	1,590	700	1,951	4,011	4,680	12,932
Regional governments or local authorities	-	0	7	25	-	32
Public sector entities	-	-	0	-	635	635
Multilateral development banks	-	57	192	-	-	249
International organisations	-	-	245	60	-	304
Institutions	0	2,221	307	14	-	2,542
Corporates	80	1,889	4,223	2,697	-	8,889
Retail	99	319	1,694	1,436	-	3,549
Secured by mortgages on immovable property	31	1,008	2,175	10,842	-	14,056
Exposures in default	6,502	876	1,141	5,251	-	13,770
Items associated with particularly high risk	3	4	197	28	3	235
Covered bonds	-	171	-	-	-	171
Collective investments undertakings	-	-	-	-	8	8
Equity exposures	-	-	-	-	744	744
Other exposures	419	-	-	-	2,073	2,493
<b>Total</b>	<b>8,725</b>	<b>7,247</b>	<b>12,130</b>	<b>24,363</b>	<b>8,142</b>	<b>60,608</b>



Table 15b: EU CRB-E – Maturity of exposures as of 31.12.2018 (in Euro million)						
Exposure Class	Net exposure value					
	On demand	<= 1 year	>1 year <= 5 years	>5 years	No stated maturity <sup>(1)</sup>	Total
Central governments or central banks	1,514	1,421	1,362	2,067	4,783	11,147
Regional governments or local authorities	-	0	8	29	-	37
Public sector entities	-	0	0	1	635	636
Multilateral development banks	-	64	318	-	-	382
International organisations	-	-	589	-	-	589
Institutions	0	1,931	407	13	-	2,352
Corporates	89	2,002	3,914	2,607	-	8,612
Retail	105	284	1,653	1,600	-	3,643
Secured by mortgages on immovable property	15	1,242	2,339	10,726	-	14,323
Exposures in default	7,496	1,026	1,278	5,107	-	14,908
Items associated with particularly high risk	-	-	-	-	3	3
Covered bonds	-	-	77	-	-	77
Collective investments undertakings	-	-	-	-	8	8
Equity exposures	-	-	-	-	402	402
Other exposures	403	-	-	-	1,843	2,246
<b>Total</b>	<b>9,623</b>	<b>7,971</b>	<b>11,946</b>	<b>22,151</b>	<b>7,674</b>	<b>59,365</b>

(1)The category "No stated maturity" includes exposures included in Other Assets (Premises, DTA/DTC, and Equity).

The tables below present gross carrying values of credit risk exposures and specific credit risk adjustments and accumulated write-offs as at 31.12.2019 and 30.6.2019.

<b>Table 16a: EU CR1-A – Credit quality of exposures by exposure class as of 31.12.2019 (in Euro million)</b>					
<b>Exposure Class</b>	<b>Gross carrying values of</b>		<b>Specific credit risk adjustment (1)</b>	<b>Write-offs</b>	<b>Net Values</b>
	<b>Defaulted exposures</b>	<b>Non-defaulted exposures</b>			
Central governments or central banks	-	13,151	27	-	13,124
Regional governments or local authorities	-	33	0	-	32
Public sector entities	-	635	0	-	635
Multilateral development banks	-	249	0	-	249
International organisations	-	304	0	-	304
Institutions	-	3,207	7	-	3,200
Corporates	-	12,825	82	-	12,743
<i>Of which: SMEs</i>	-	2,207	16	-	2,191
Retail	-	6,008	196	19	5,813
<i>Of which: SMEs</i>	-	1,140	27	-	1,113
Secured by mortgages on immovable property	-	14,378	189	17	14,189
<i>Of which: SMEs</i>	-	4,246	79	-	4,167
Exposures in default	22,243	-	8,188	2,242	14,055
Items associated with particularly high risk	10	229	4	-	235
Covered bonds	-	171	0	-	171
Collective investments undertakings	-	8	-	-	8
Equity exposures	-	744	-	-	744
Other exposures	-	2,493	-	-	2,493
<b>Total</b>	<b>22,253</b>	<b>54,435</b>	<b>8,693</b>	<b>2,278</b>	<b>67,994</b>
<i>Of which: Loans</i>	21,904	29,077	8,586	2,278	42,396
<i>Of which: Debt securities</i>	-	8,072	30	-	8,042
<i>Of which: Off-balance-sheet exposures</i>	349	7,115	78	-	7,386

(1) Specific credit risk adjustment after the application of IFRS9 transitional arrangements set by Regulation (EU) 2395/2017.



Table 16b: EU CR1-A – Credit quality of exposures by exposure class as of 30.6.2019 (in Euro million)

Exposure Class	Gross carrying values of		Specific credit risk adjustment (1)	Write-offs	Net Values
	Defaulted exposures	Non-defaulted exposures			
Central governments or central banks	-	12,640	26	-	12,614
Regional governments or local authorities	-	35	0	-	35
Public sector entities	-	636	0	-	636
Multilateral development banks	-	351	0	-	351
International organisations	-	632	0	-	632
Institutions	-	3,198	8	-	3,191
Corporates	-	12,247	108	3	12,139
<i>Of which: SMEs</i>	-	2,243	18	-	2,225
Retail	-	5,903	148	6	5,755
<i>Of which: SMEs</i>	-	1,103	37	-	1,066
Secured by mortgages on immovable property	-	14,503	170	7	14,333
<i>Of which: SMEs</i>	-	3,792	81	-	3,712
Exposures in default	25,057	-	10,155	1,095	14,901
Items associated with particularly high risk	-	281	17	-	264
Covered bonds	-	170	0	-	170
Collective investments undertakings	-	6	-	-	6
Equity exposures	-	300	-	-	300
Other exposures	-	2,402	-	-	2,402
<b>Total</b>	<b>25,057</b>	<b>53,305</b>	<b>10,632</b>	<b>1,111</b>	<b>67,730</b>
<i>Of which: Loans</i>	24,712	28,800	10,519	1,111	42,994
<i>Of which: Debt securities</i>	-	7,534	28	-	7,505
<i>Of which: Off-balance-sheet exposures</i>	345	6,954	86	-	7,214

(1) Specific credit risk adjustment after the application of IFRS9 transitional arrangements set by Regulation (EU) 2395/2017.

The following tables show the total exposure amounts of the above table broken down by significant industry or counterparty type as at 31.12.2019 and 30.06.2019.

Table 17a: Credit quality of loans and advances by industry as of 31.12.2019						(in Euro million)
	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			
Agriculture, forestry and fishing	453	252	252	453	97	-
Mining and quarrying	115	51	51	115	29	-
Manufacturing	5,281	2,107	2,107	5,256	1,019	0
Electricity, gas, steam and air conditioning supply	1,011	29	29	1,011	40	-
Water supply	45	8	8	45	4	-
Construction	2,990	1,544	1,544	2,990	882	-
Wholesale and retail trade	6,133	3,502	3,502	6,110	1,732	19
Transport and storage	2,818	418	418	2,568	132	45
Accommodation and food service activities	2,318	709	709	2,318	251	-
Information and communication	259	151	151	258	78	1
Financial and insurance activities	0	-	-	0	-	-
Real estate activities	1,792	494	494	1,698	151	22
Professional, scientific and technical activities	451	113	113	451	51	-
Administrative and support service activities	447	162	162	447	86	-
Public administration and defence, compulsory social security	1	0	0	1	0	-
Education	80	43	43	80	13	-
Human health services and social work activities	178	64	64	178	30	-
Arts, entertainment and recreation	334	135	135	334	76	-
Other services	547	191	191	544	148	3
<b>Total</b>	<b>25,253</b>	<b>9,973</b>	<b>9,973</b>	<b>24,856</b>	<b>4,820</b>	<b>90</b>



**Table 17b: Credit quality of loans and advances by industry as of 30.6.2019** (in Euro million)

	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				
Agriculture, forestry and fishing	407	292	292	397	114	0
Mining and quarrying	121	57	57	121	30	-
Manufacturing	5,803	2,648	2,648	5,778	1,337	2
Electricity, gas, steam and air conditioning supply	1,046	31	31	1,046	45	-
Water supply	45	10	10	45	5	-
Construction	3,344	1,954	1,954	3,316	1,145	27
Wholesale and retail trade	6,984	4,227	4,227	6,960	2,177	16
Transport and storage	2,567	445	445	2,270	142	51
Accommodation and food service activities	2,391	824	824	2,391	347	-
Information and communication	405	295	295	403	206	1
Financial and insurance activities	0	-	-	0	-	-
Real estate activities	1,798	603	603	1,758	246	21
Professional, scientific and technical activities	445	128	128	445	59	-
Administrative and support service activities	528	208	208	528	113	-
Public administration and defence, compulsory social security	0	0	0	0	0	-
Education	86	52	52	86	19	-
Human health services and social work activities	207	72	72	207	38	-
Arts, entertainment and recreation	280	148	148	280	85	-
Other services	616	249	249	614	174	3
<b>Total</b>	<b>27,074</b>	<b>12,244</b>	<b>12,244</b>	<b>26,645</b>	<b>6,282</b>	<b>121</b>

The following tables present the credit quality of the Group's exposures broken down by significant geographical area as at 31.12.2019 and 30.06.2019.

Table 18a: Quality of non-performing exposures by geography as of 31.12.2019						(in Euro million)	
	Gross carrying/nominal amount				Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
	Of which non-performing		Of which subject to impairment				
		Of which defaulted					
<b>On-balance-sheet exposures</b>	61,806	21,897	21,897	61,409	9,475		91
Greece	45,348	18,650	18,650	45,187	7,823		39
United Kingdom	3,976	796	796	3,976	457		-
Romania	3,408	218	218	3,370	130		19
Cyprus	3,052	1,830	1,830	3,052	902		-
Other countries	6,021	404	404	5,823	163		33
<b>Off-balance-sheet exposures</b>	7,469	346	346			93	
Greece	6,741	328	328			83	
United Kingdom	38	0	0			0	
Romania	458	4	4			4	
Cyprus	199	14	14			6	
Other countries	33	0	0			0	
<b>Total</b>	<b>69,276</b>	<b>22,244</b>	<b>22,244</b>	<b>61,409</b>	<b>9,475</b>	<b>93</b>	<b>91</b>

Table 18b: Quality of non-performing exposures by geography as of 30.6.2019						(in Euro million)	
	Gross carrying/nominal amount			Of which subject to impairment	Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
	Of which non-performing		Of which defaulted				
<b>On-balance-sheet exposures</b>	63,894	24,745	24,745	63,411	11,394		122
Greece	47,830	21,102	21,102	47,627	9,476		65
United Kingdom	3,789	902	902	3,789	525		-
Romania	3,367	221	221	3,330	125		19
Cyprus	3,178	2,074	2,074	3,178	1,090		-
Other countries	5,730	446	446	5,487	177		38
<b>Off-balance-sheet exposures</b>	7,309	350	350			101	
Greece	6,603	327	327			91	
United Kingdom	62	0	0			0	
Romania	395	7	7			3	
Cyprus	208	15	15			7	
Other countries	41	0	0			0	
<b>Total</b>	<b>71,203</b>	<b>25,095</b>	<b>25,095</b>	<b>63,411</b>	<b>11,394</b>	<b>101</b>	<b>122</b>

The following tables provide an overview of quality of forbearance as at 31.12.2019.

Table 19: Quality of forborne exposures as of 31.12.2019 (in Euro million)	
	Gross carrying amount of forborne exposures
Loans and advances that have been forborne more than twice	9,087
Non - performing forborne loans and advances that failed to meet the non - performing exit criteria	6,818

The following tables provide an overview of the quality of forborne exposures as per Commission Implementing Regulation (EU) No 680/2014 as at 31.12.2019 and 30.06.2019.

Table 20a: Credit quality of forborne exposures as of 31.12.2019								(in Euro million)
	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		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					
Loans and advances	4,321	13,102	13,102	12,913	296	4,538	9,919	6,715
<i>Central banks</i>	-	-	-	-	-	-	-	-
<i>General governments</i>	-	4	4	4	-	0	0	0
<i>Credit institutions</i>	-	-	-	-	-	-	-	-
<i>Other financial corporations</i>	3	8	8	8	1	2	4	4
<i>Non-financial corporations</i>	1,207	5,338	5,338	5,149	99	2,015	3,506	2,644
<i>Households</i>	3,111	7,752	7,752	7,752	196	2,520	6,408	4,068
Debt securities	-	-	-	-	-	-	-	-
Loan commitments given	1	4	4	4	0	0	0	0
<b>Total</b>	<b>4,322</b>	<b>13,105</b>	<b>13,105</b>	<b>12,917</b>	<b>296</b>	<b>4,538</b>	<b>9,920</b>	<b>6,716</b>

**Table 20b: Credit quality of forborne exposures as of 30.6.2019**
**(in Euro million)**

	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		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
Loans and advances	4,721	13,950	13,950	13,734	250	5,356	10,246	6,755
<i>Central banks</i>	-	-	-	-	-	-	-	-
<i>General governments</i>	-	1	1	1	-	0	0	0
<i>Credit institutions</i>	-	-	-	-	-	-	-	-
<i>Other financial corporations</i>	10	8	8	8	1	3	11	3
<i>Non-financial corporations</i>	1,240	6,095	6,095	5,880	121	2,575	3,680	2,810
<i>Households</i>	3,470	7,846	7,846	7,846	128	2,777	6,555	3,941
Debt securities	-	-	-	-	-	-	-	-
Loan commitments given	2	5	5	5	0	0	1	0
<b>Total</b>	<b>4,722</b>	<b>13,955</b>	<b>13,955</b>	<b>13,739</b>	<b>250</b>	<b>5,356</b>	<b>10,246</b>	<b>6,756</b>

The following tables present an overview of credit quality of non-performing exposures, as per Commission Implementing Regulation (EU) No 680/2014 as at 31.12.2019 and 30.06.2019.

**Table 21a: Credit quality of performing and non-performing exposures by past due days as of 31.12.2019**
**(in Euro million)**

	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 year ≤ 5 years	Past due > 5 year ≤ 7 years	Past due > 7 years	Of which defaulted	
<b>Loans and advances</b>	31,826	31,015	811	21,897	7,178	838	825	1,672	2,871	1,599	6,915	21,897
<i>Central banks</i>	1,590	1,590	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	102	102	-	5	4	0	-	0	-	-	1	5
<i>Credit institutions</i>	3,332	3,332	-	70	-	-	-	-	-	-	70	70
<i>Other financial corporations</i>	195	195	1	29	7	0	0	1	5	6	8	29
<i>Non-financial corporations</i>	15,280	15,144	136	9,973	3,623	339	282	606	1,192	562	3,368	9,973
<i>of which SMEs</i>	6,014	5,975	39	6,802	1,908	156	183	426	631	395	3,104	6,802
<i>Households</i>	11,327	10,652	675	11,820	3,544	498	542	1,065	1,673	1,031	3,468	11,820
<b>Debt securities</b>	8,083	8,083	-	-	-	-	-	-	-	-	-	-
<i>Central banks</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	7,090	7,090	-	-	-	-	-	-	-	-	-	-
<i>Credit institutions</i>	555	555	-	-	-	-	-	-	-	-	-	-
<i>Other financial corporations</i>	13	13	-	-	-	-	-	-	-	-	-	-
<i>Non-financial corporations</i>	424	424	-	-	-	-	-	-	-	-	-	-
<b>Off-balance-sheet exposures</b>	7,123			346								346
<i>Central banks</i>	-			-								-
<i>General governments</i>	196			-								-
<i>Credit institutions</i>	556			-								-
<i>Other financial corporations</i>	57			4								4
<i>Non-financial corporations</i>	4,686			342								342
<i>Households</i>	1,628			1								1
<b>Total</b>	<b>47,032</b>	<b>39,098</b>	<b>811</b>	<b>22,244</b>	<b>7,178</b>	<b>838</b>	<b>825</b>	<b>1,672</b>	<b>2,871</b>	<b>1,599</b>	<b>6,915</b>	<b>22,244</b>

**Table 21b: Credit quality of performing and non-performing exposures by past due days as of 30.6.2019**
**(in Euro million)**

	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 ≤ 5 years	Past due > 5 years	Of which defaulted	
<b>Loans and advances</b>	31,605	30,584	1,022	24,745	7,907	654	846	5,500	9,838	24,745
<i>Central banks</i>	1,929	1,929	-	-	-	-	-	-	-	-
<i>General governments</i>	108	108	-	5	-	1	0	0	4	5
<i>Credit institutions</i>	3,022	3,022	-	70	-	-	-	-	70	70
<i>Other financial corporations</i>	384	383	1	36	6	1	0	13	16	36
<i>Non-financial corporations</i>	14,829	14,643	186	12,244	4,276	214	292	2,445	5,018	12,244
<i>of which SMEs</i>	5,745	5,697	47	8,671	2,309	187	131	1,553	4,490	8,671
<i>Households</i>	11,334	10,499	835	12,390	3,625	439	554	3,042	4,730	12,390
<b>Debt securities</b>	7,519	7,519	-	-	-	-	-	-	-	-
<i>Central banks</i>	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	6,629	6,629	-	-	-	-	-	-	-	-
<i>Credit institutions</i>	675	675	-	-	-	-	-	-	-	-
<i>Other financial corporations</i>	10	10	-	-	-	-	-	-	-	-
<i>Non-financial corporations</i>	230	230	-	-	-	-	-	-	-	-
<b>Off-balance-sheet exposures</b>	6,959			350						350
<i>Central banks</i>	-			-						-
<i>General governments</i>	195			-						-
<i>Credit institutions</i>	504			-						-
<i>Other financial corporations</i>	47			4						4
<i>Non-financial corporations</i>	4,463			345						345
<i>Households</i>	1,750			1						1
<b>Total</b>	<b>46,083</b>	<b>38,103</b>	<b>1,022</b>	<b>25,095</b>	<b>7,907</b>	<b>654</b>	<b>846</b>	<b>5,500</b>	<b>9,838</b>	<b>25,095</b>

The following tables provide an overview of the credit quality of non-performing exposures and related impairments, provisions and valuation adjustments by portfolio and exposure class as at 31.12.2019 and 30.06.2019.

	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		
<b>Loans and advances</b>	31,826	25,440	6,233	21,897	-	21,653	566	159	407	8,969	-	8,879	19,718	10,590
<i>Central banks</i>	1,590	1,590	-	-	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	102	101	0	5	-	5	0	0	0	1	-	1	94	1
<i>Credit institutions</i>	3,332	3,332	-	70	-	70	0	0	-	70	-	70	-	-
<i>Other financial corporations</i>	195	173	22	29	-	29	1	0	1	16	-	16	166	10
<i>Non-financial corporations</i>	15,280	13,091	2,036	9,973	-	9,729	257	131	126	4,653	-	4,562	11,040	4,349
<i>of which SMEs</i>	6,014	4,872	1,143	6,802	-	6,767	118	20	98	3,251	-	3,231	4,276	2,844
<i>Households</i>	11,327	7,153	4,174	11,820	-	11,820	307	27	280	4,230	-	4,230	8,419	6,230
<b>Debt securities</b>	8,083	8,060	0	-	-	-	30	30	0	-	-	-	-	-
<i>Central banks</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	7,090	7,081	-	-	-	-	28	28	-	-	-	-	-	-
<i>Credit institutions</i>	555	553	-	-	-	-	0	0	-	-	-	-	-	-
<i>Other financial corporations</i>	13	4	-	-	-	-	0	0	-	-	-	-	-	-
<i>Non-financial corporations</i>	424	423	0	-	-	-	2	2	0	-	-	-	-	-
<b>Off-balance-sheet exposures</b>	7,123	6,995	128	346	-	346	18	16	2	75	-	75	1,081	50
<i>Central banks</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	196	195	1	-	-	-	0	0	-	-	-	-	0	-
<i>Credit institutions</i>	556	556	0	-	-	-	8	8	0	-	-	-	-	-
<i>Other financial corporations</i>	57	55	2	4	-	4	0	0	0	0	-	0	6	-
<i>Non-financial corporations</i>	4,686	4,604	82	342	-	342	9	8	1	75	-	75	1,055	50
<i>Households</i>	1,628	1,585	43	1	-	1	1	1	1	0	-	0	20	0
<b>Total</b>	<b>47,032</b>	<b>40,495</b>	<b>6,361</b>	<b>22,244</b>	<b>-</b>	<b>22,000</b>	<b>614</b>	<b>206</b>	<b>409</b>	<b>9,044</b>	<b>-</b>	<b>8,954</b>	<b>20,800</b>	<b>10,640</b>

**Table 22b: Performing and non-performing exposures and related provisions as of 30.6.2019**
**(in Euro million)**

	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		
<b>Loans and advances</b>	31,605	25,033	6,369	24,745	-	24,465	505	178	327	10,983	-	10,861	18,989	11,307
<i>Central banks</i>	1,929	1,929	-	-	-	-	0	0	-	-	-	-	-	-
<i>General governments</i>	108	107	1	5	-	5	0	0	0	1	-	1	107	4
<i>Credit institutions</i>	3,022	3,022	-	70	-	70	0	0	-	70	-	70	-	-
<i>Other financial corporations</i>	384	308	22	36	-	36	1	0	1	21	-	21	358	10
<i>Non-financial corporations</i>	14,829	12,634	2,046	12,244	-	11,965	302	151	150	6,102	-	5,980	10,018	5,021
<i>of which SMEs</i>	5,745	4,684	1,060	8,671	-	8,637	132	25	108	4,333	-	4,314	3,832	3,481
<i>Households</i>	11,334	7,033	4,301	12,390	-	12,389	201	25	176	4,789	-	4,789	8,504	6,272
<b>Debt securities</b>	7,519	7,518	0	-	-	-	28	28	0	-	-	-	-	-
<i>Central banks</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	6,620	6,620	-	-	-	-	26	26	-	-	-	-	-	-
<i>Credit institutions</i>	669	669	-	-	-	-	0	0	-	-	-	-	-	-
<i>Other financial corporations</i>	1	1	-	-	-	-	0	0	-	-	-	-	-	-
<i>Non-financial corporations</i>	229	228	0	-	-	-	2	2	0	-	-	-	-	-
<b>Off-balance-sheet exposures</b>	6,959	6,692	267	350	-	350	23	17	6	78	-	78	1,076	53
<i>Central banks</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>General governments</i>	195	194	1	-	-	-	0	0	-	-	-	-	0	-
<i>Credit institutions</i>	504	504	0	-	-	-	8	8	0	-	-	-	-	-
<i>Other financial corporations</i>	47	47	0	4	-	4	0	0	0	0	-	0	14	-
<i>Non-financial corporations</i>	4,463	4,234	229	345	-	345	14	8	5	78	-	78	1,045	53
<i>Households</i>	1,750	1,713	37	1	-	1	1	1	1	0	-	0	18	0
<b>Total</b>	46,083	39,243	6,637	25,095	-	24,815	556	223	333	11,061	-	10,939	20,065	11,360

The following tables show the movement in the provision on Loans and Advances to customers, Debt Securities and exposures due from Banks, during the period from 01.01.2019 to 30.06.2019 and from 01.07.2019 to 31.12.2019.

<b>Table 23a: EU CR2-A – Changes in the stock of general and specific risk adjustments</b>		<b>(in Euro million)</b>
	<b>Accumulated specific credit risk adjustment</b>	
<b>Opening balance 1.7.2019</b>	<b>11,495</b>	
Increases due to amounts set aside for estimated loan losses during the period	422	
Decreases due to amounts taken against accumulated credit risk adjustments	- 1,175	
Impact of exchange rate differences	15	
Business combinations, including acquisitions and disposals of subsidiaries	1	
Reclassification to assets held for sale	- 1,201	
Change in present value of the impairment losses	6	
Other adjustments	4	
<b>Closing balance 31.12.2019</b>	<b>9,568</b>	
Recoveries of previously written-off amounts recorded directly to the statement of profit or loss	- 15	
Amounts written-off directly to the statement of profit or loss	-	

<b>Table 23b: EU CR2-A – Changes in the stock of general and specific risk adjustments</b>		<b>(in Euro million)</b>
	<b>Accumulated specific credit risk adjustment</b>	
<b>Opening balance 1.1.2019</b>	<b>12,275</b>	
Increases due to amounts set aside for estimated loan losses during the period	350	
Decreases due to amounts taken against accumulated credit risk adjustments	- 1,145	
Impact of exchange rate differences	12	
Business combinations, including acquisitions and disposals of subsidiaries	0	
Reclassification to assets held for sale	-	
Change in present value of the impairment losses	2	
Other adjustments	3	
<b>Closing balance 30.6.2019</b>	<b>11,495</b>	
Recoveries of previously written-off amounts recorded directly to the statement of profit or loss	- 15	
Amounts written-off directly to the statement of profit or loss	-	

The following tables provides an overview of the movements (inflows and outflows) of non-performing loans and advances during the period from 01.01.2019 to 31.12.2019. Given the fact that the Group has fully aligned Defaulted and impaired exposures with the EBA NPE definition, the disclosure requirement regarding CR2-B (Flow of Defaulted/ Impaired exposures) is covered by the provided NPE flow (Table 24).

<b>Table 24: Changes in the stock of non-performing loans and advances as of 31.12.2019</b>		<b>(in Euro million)</b>
	<b>Gross carrying amount</b>	<b>Related net accumulated recoveries</b>
<b>Initial stock of non-performing loans and advances</b>	25,744	
Inflows to non-performing portfolios	2,912	
Outflows from non-performing portfolios	- 6,759	
Outflow to performing portfolio	- 1,454	
Outflow due to loan repayment, partial or total	- 575	
Outflow due to collateral liquidation	- 345	- 103
Outflow due to taking possession of collateral	- 433	- 169
Outflow due to sale of instruments	- 159	- 49
Outflow due to risk transfer	-	-
Outflow due to write-off	- 1,748	
Outflow due to other situations	- 162	
Outflow due to reclassification as held for sale	- 1,883	
<b>Final stock of non-performing loans and advances</b>	21,897	

## 7.4 Banks' use of external credit ratings under the standardised approach

Alpha Bank Group uses the available credit ratings from Moody's Investors Service, Standard & Poor's Ratings Services and Fitch Ratings, which have been approved from Bank of Greece as eligible External Credit Assessment Institutions (ECAIs) for the use of their credit ratings in regulatory capital calculation (Decision 250/25.9.2007). Credit ratings of the above rating agencies are used, where available, for all Group portfolios.

The asset classes for which ECAIs ratings are used are the following:

- Exposures to Central Governments and Central Banks
- Exposures to Financial Institutions
- Exposures to Multilateral Development Banks
- Exposures to International Organizations
- Exposures to Corporates
- Exposures in the form of covered bonds

For all other asset classes, credit quality bands are assigned to the corresponding risk weights per exposure type, as described in detail in CRR 575/2013.

Credit ratings are assigned to credit quality bands. Then, credit quality bands are assigned to the corresponding risk weights per portfolio type, as described in detail in CRR 575/2013.

**Table 25: Assignment of the credit ratings of the eligible ECAI's to credit quality steps**

Credit Quality Band	Standard & Poor's Ratings Service	Moody's Investor Services	Fitch Ratings
1	AAA to AA-	Aaa to Aa3	AAA to AA-
2	A+ to A-	A1 to A3	A+ to A-
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-
5	B+ to B-	B1 to B3	B+ to B-
6	CCC+ and below	Caa1 and below	CCC+ and below

If for a specific exposure there are two available ratings then the rating leading to the higher risk weight is selected. In case, that there are more than two available ratings, initially the two ratings leading to the lower risk weights are chosen and then from the aforesaid two choices is selected the one corresponding to the higher risk weight.

Exposures to counterparties, for which a credit assessment by a nominated ECAI is not available, shall be assigned a risk weight according to the procedure described to the respective articles of the CRR 575/2013.

Under Standardised approach, credit risk is measured by applying risk weights outlined in CRD IV based on the exposure class to which the exposure is allocated. The following tables outline the Standardised exposure classes by CRD IV prescribed risk weight. Exposures subject to Counterparty Credit Risk are not included in the table.

**Table 26a: EU CR5 - Standardized approach as of 31.12.2019**

(in Euro million)

Exposure classes	Risk Weight															Total	Of which unrated
	0%	2%	4%	10%	20%	25%	35%	50%	70%	75%	100%	150%	250%	370%	1250%		
Central governments or central banks	8,902	-	-	-	19	499	-	-	-	-	3,293	-	803	-	-	13,516	6,402
Regional government or local authorities	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	32	32
Public sector entities	-	-	-	-	338	-	-	-	-	-	297	-	-	-	-	635	635
Multilateral development banks	453	-	-	-	-	-	-	-	-	-	-	-	-	-	-	453	204
International organisations	304	-	-	-	-	-	-	-	-	-	-	-	-	-	-	304	-
Institutions	13	-	-	-	661	-	-	227	-	-	100	5	-	-	-	1,007	391
Corporates	-	-	-	-	-	-	-	62	-	-	9,050	65	-	-	-	9,177	8,860
Retail	-	-	-	-	-	-	-	-	-	3,238	-	-	-	-	-	3,238	3,238
Secured by mortgages on immovable property	-	-	-	-	-	-	7,113	4,068	-	1,343	1,277	-	-	-	-	13,801	13,801
Exposures in default	-	-	-	-	-	-	-	-	-	-	11,938	1,647	-	-	-	13,585	13,585
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	212	-	-	-	212	212
Covered bonds	-	-	-	-	171	-	-	-	-	-	-	-	-	-	-	171	-
Collective investments undertakings	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	8	8
Equity	-	-	-	-	-	-	-	-	-	-	689	-	55	-	-	744	744
Other items	419	-	-	-	-	-	-	-	-	-	2,073	-	-	-	-	2,493	2,493
<b>Total</b>	<b>10,091</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,221</b>	<b>499</b>	<b>7,113</b>	<b>4,356</b>	<b>-</b>	<b>4,582</b>	<b>28,725</b>	<b>1,930</b>	<b>858</b>	<b>-</b>	<b>-</b>	<b>59,375</b>	<b>50,605</b>

**Table 26b: EU CR5 - Standardized approach as of 30.6.2019**

(in Euro million)

Exposure classes	Risk Weight															Total	Of which unrated
	0%	2%	4%	10%	20%	25%	35%	50%	70%	75%	100%	150%	250%	370%	1250%		
Central governments or central banks	8,323	-	-	-	15	553	-	-	-	-	3,346	-	801	-	-	13,038	6,884
Regional government or local authorities	-	-	-	-	35	-	-	-	-	-	-	-	-	-	-	35	35
Public sector entities	-	-	-	-	0	-	-	-	-	-	636	-	-	-	-	636	636
Multilateral development banks	526	-	-	-	-	-	-	-	-	-	-	-	-	-	-	526	175
International organisations	632	-	-	-	-	-	-	-	-	-	-	-	-	-	-	632	-
Institutions	7	-	-	-	701	-	-	278	-	-	34	26	-	-	-	1,044	356
Corporates	0	-	-	-	-	-	-	36	-	-	8,624	28	-	-	-	8,688	8,521
Retail	0	-	-	-	-	-	-	-	-	3,157	-	-	-	-	-	3,157	3,157
Secured by mortgages on immovable property	- 0	-	-	-	-	-	6,985	4,188	-	1,371	1,380	-	-	-	-	13,924	13,924
Exposures in default	0	-	-	-	-	-	-	-	-	-	12,707	1,710	-	-	-	14,418	14,418
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	243	-	-	-	243	243
Covered bonds	-	-	-	-	170	-	-	-	-	-	-	-	-	-	-	170	-
Collective investments undertakings	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	6	6
Equity	-	-	-	-	-	-	-	-	-	-	257	-	44	-	-	300	300
Other items	354	-	-	-	-	-	-	-	-	-	2,048	-	-	-	-	2,402	2,402
<b>Total</b>	<b>9,842</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>920</b>	<b>-</b>	<b>6,985</b>	<b>4,503</b>	<b>-</b>	<b>4,528</b>	<b>29,037</b>	<b>2,007</b>	<b>845</b>	<b>-</b>	<b>-</b>	<b>59,219</b>	<b>51,057</b>

## 7.5 Credit risk mitigation

Credit risk mitigation techniques reduce exposure value and expected loss. According to CRR 575/2013, only specific types of credit risk mitigation are eligible for capital adequacy calculation purposes.

Moreover, the Bank of Greece sets additional criteria which should be satisfied during the collateral management process (market value monitoring, insurance, legal validity) and the terms and conditions of the relevant agreements.

### 7.5.1 Collateral valuation and management policies and procedures

Collateral can be used in order to mitigate the Credit Risk created in case a customer or counterparty to a financial instrument fails to meet their contractual obligations.

Collaterals are holdings or rights of every type provided to the Bank by its debtors or third parties to be used as additional funding sources in case of claim liquidation.

The main collateral types held for retail customers are mortgages, cash, mutual funds and sovereign securities (repos, bonds). Additionally, in case of real estate loans maximum Loan to Value (LTV: loan amount to property commercial value) limits have been set, depending upon loan purpose and collateral. The amount the customer contributes to the asset being financed is a very important factor during the loan approval process since it directly affects customer's repayment ability.

In case the debtor is a private individual, the Group seeks to have her/him insured against death and severe injuries.

As far as wholesale customers are concerned, loan repayment depends upon the viability and growth perspectives of the company, the servicing ability of the company and its owners, the circumstances prevailing at the sectors and markets they are active in, as well as unexpected factors, positively or negatively affecting their operation.

As far as on and off balance sheet netting is concerned, this is conducted only in case there are ISDA agreements.

The Bank estimates collateral value based upon the potential cash flows which will be received in case of liquidation.

During the estimation process the following are taken into consideration:

- Asset quality.
- Commercial / market value.
- Potential difficulties in liquidation.
- Time required for liquidation.
- Liquidation associated costs.
- Existing weights on real estate properties (mortgages, foreclosures).
- Potential senior claims which might occur during the liquidations of corporate assets (government, state organizations, and employees).

The above parameters are taken into consideration while estimating collateral value factors, expressed as a percentage of the market, nominal or weighted collateral value, depending upon collateral type.

Depending on the type of collateral, the assessments of the value of collateral is carried out by partners (Appraisers), with the necessary expertise and specialisation. The selection of the appraiser is subject to specific criteria, while their performance is assessed on an ongoing basis.

Especially for tangible collaterals, the Bank entrusts independent qualified appraisers who have the necessary qualifications, ability and experience in evaluation (as defined in the article 208 paragraph 3 of the EU Regulation No 575/2013).

Regarding the rest of the companies of Alpha Bank Group, apart from the general principles applying to the Group as a whole, additional clauses also exist. To specify, as far as leasing contracts are concerned, apart from the leased property, Alpha Leasing might request additional collateral. Moreover, Factoring customers are subject to collateral limits depending upon debtor's creditworthiness and reexamined according to the Bank's Policy regarding loans to corporate customers.

### **7.5.2 Description of the main collateral types**

Collateral used to mitigate risk, both for mortgage and other lending is diversified. The main types of guarantors are corporates, individuals, financial institutions and sovereigns. Their creditworthiness is assessed on a case by-case basis.

There are two broad categories of collateral: Contractual collaterals – guarantees and tangible collaterals.

Guarantees are the most common collateral type of the first category. A guarantee is a legally enforceable relationship between the Bank and the borrower, through which the guarantor assumes the responsibility of paying the debt. It is documented and presupposes the existence of another legally enforceable relationship between the Bank and the borrower (loan).

The most common types of guarantors are: private individuals, companies, financial institutions, Hellenic State and Credit Guarantee Fund for Small and Very Small Enterprises (KYA & ETEAN).

The most common types of tangible collateral are: mortgages on real estate properties and pledges on commodities, deposits and cheques or claims and receivables.

Tangible collateral value is estimated on a regular basis, at least annually; in case of exceptional/unforeseen events, additional valuation can take place. In case of significant negative changes at collateral values, the Bank seeks to restore the loan to collateral value ratio to the desired levels.

To further improve the effect of credit risk mitigation, the Bank requests that all mortgages are covered by an insurance contract and the compensation is assigned to the Bank. The same might apply, on a case-by-case basis, on other physical collaterals as well.

The following table presents the exposure value covered through eligible collateral and guarantees / credit derivatives for each asset class, based on regulatory standards while it also shows the volume of unsecured and secured exposures. Secured exposures are limited to those exposures against which eligible collateral which meets CRR definitions is held and has been used in the calculation of the Group's capital requirements. Haircuts are applied consistent with CRR requirements.

Exposures where the Group nets derivative mark-to-market positions with certain interbank counterparties against cash collateral placed and received with those counterparties under CSA agreements are excluded. For cash collateral held against derivative exposures refer to the counterparty credit risk section.



Table 27a: EU CR3 – CRM techniques – Overview as of 31.12.2019					(In Euro million)
	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total Loans	12,328	27,903	19,693	800	-
Total debt securities	8,042	-	-	-	-
<b>Total exposures</b>	<b>20,370</b>	<b>27,903</b>	<b>19,693</b>	<b>800</b>	<b>-</b>
of which defaulted	2,666	11,104	8,042	207	-

Table 27b: EU CR3 – CRM techniques – Overview as of 30.6.2019					(In Euro million)
	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total Loans	12,340	28,536	20,280	804	-
Total debt securities	7,505	-	-	-	-
<b>Total exposures</b>	<b>19,846</b>	<b>28,536</b>	<b>20,280</b>	<b>804</b>	<b>-</b>
of which defaulted	2,823	11,802	8,591	223	-

The tables below present the Standardised exposure classes on two different bases, before CCF and CRM and after CCF and CRM, as of 31.12.2019 and 30.6.2019, excluding exposures subject to Counterparty Credit Risk.

<b>Table 28a: EU CR4 - Standardized approach – credit risk exposure and Credit Risk Mitigation (CRM) effects as of 31.12.2019 (in Euro million)</b>						
	<b>Exposures before CCF and CRM</b>		<b>Exposures post CCF and CRM</b>		<b>RWAs and RWA density</b>	
<b>Exposure classes</b>	<b>On-Balance-sheet amount</b>	<b>Off-Balance-Sheet amount</b>	<b>On-Balance-Sheet amount</b>	<b>Off-Balance-Sheet amount</b>	<b>RWAs</b>	<b>RWA density</b>
Central governments or central banks	12,932	192	13,516	0	5,430	40.2%
Regional government or local authorities	32	1	32	0	6	20.0%
Public sector entities	635	0	635	0	365	57.5%
Multilateral development banks	249	0	453	-	-	0.0%
International organisations	304	-	304	-	-	0.0%
Institutions	2,542	659	993	14	353	35.1%
Corporates	8,889	3,854	8,526	650	9,137	99.6%
Retail	3,549	2,264	3,161	78	2,299	71.0%
Secured by mortgages on immovable property	14,056	133	13,756	45	6,620	48.0%
Exposures in default	13,770	284	13,509	76	14,409	106.1%
Items associated with particularly high risk	235	-	212	-	319	150.0%
Covered bonds	171	-	171	-	34	20.0%
Collective investment undertakings	8	-	8	-	8	100.0%
Equity	744	-	744	-	826	111.1%
Other items	2,493	-	2,493	-	2,073	83.2%
<b>Total</b>	<b>60,608</b>	<b>7,386</b>	<b>58,513</b>	<b>862</b>	<b>41,878</b>	<b>70.5%</b>

**Table 28b: EU CR4 - Standardized approach – credit risk exposure and Credit Risk Mitigation (CRM) effects as of 30.6.2019 (in Euro million)**

Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-Balance-sheet amount	Off-Balance-Sheet amount	On-Balance-Sheet amount	Off-Balance-Sheet amount	RWAs	RWA density
Central governments or central banks	12,421	193	13,038	-	5,490	42.1%
Regional government or local authorities	35	1	34	0	7	20.0%
Public sector entities	635	1	635	0	636	100.0%
Multilateral development banks	351	-	526	-	-	0.0%
International organisations	632	-	632	-	-	0.0%
Institutions	2,561	629	1,031	14	351	33.6%
Corporates	8,473	3,666	8,069	619	8,639	99.4%
Retail	3,440	2,315	3,081	76	2,242	71.0%
Secured by mortgages on immovable property	14,199	134	13,878	46	6,795	48.8%
Exposures in default	14,626	276	14,345	72	15,273	105.9%
Items associated with particularly high risk	264	-	243	-	365	150.0%
Covered bonds	170	-	170	-	34	20.0%
Collective investment undertakings	6	-	6	-	6	100.0%
Equity	300	-	300	-	366	121.9%
Other items	2,402	-	2,402	-	2,048	85.2%
<b>Total</b>	<b>60,516</b>	<b>7,214</b>	<b>58,391</b>	<b>828</b>	<b>42,251</b>	<b>71.3%</b>

## 7.6 Concentration Risk on Collaterals

Collaterals are received both for Wholesale and Retail lending in order to mitigate credit risk that may arise from the obligor's inability to fulfill his contractual obligations. Collaterals include all kind of assets and rights which are made available to the Bank either by the debtors or by third parties, in order to be used as complementary liquidity sources of relative loans. The mitigation tools applied by the Bank include two broad categories: intangible and tangible collaterals.

For credit exposures, the most commonly accepted collaterals for credit risk mitigation purposes are real estate assets. Usually, consumer loans are not collateralised, except for car loans where the Bank retains ownership until full loan repayment and some cash collateralized loans. Mortgage loans are fully collateralised with residential real estate properties. Business loans are mainly collateralized with commercial and residential real estate properties.

For treasury transactions the risk due to collaterals is immaterial. For derivative interbank transactions the Bank signed CSA agreements with exchange of cash collateral. For Repo / Reverse Repo transactions the Bank signed GMRA agreements.

The table below discloses collateral valuation and other information on loans and advances as at 31.12.2019.

Table 29: Collateral valuation - Loans and advances as of 31.12.2019 <span style="float: right;">(in Euro million)</span>												
	Loans and advances											
	Performing			Non-performing exposures								
			Of which: past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 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	
Gross carrying amount	53,724	31,826	811	21,897	7,178	14,719	838	825	1,672	2,871	1,599	6,915
<i>Of which secured</i>	38,743	21,384	734	17,359	5,629	11,729	612	623	1,130	2,392	1,395	5,577
<i>Of which secured with immovable property</i>	31,163	15,188	656	15,975	5,050	10,924	575	588	1,041	2,251	1,314	5,155
<i>Of which instruments with LTV higher than 60% and lower or equal to 80%</i>	3,286	2,466		820	379	441						
<i>Of which instruments with LTV higher than 80% and lower or equal to 100%</i>	6,542	3,779		2,763	1,044	1,719						
<i>Of which instruments with LTV higher than 100%</i>	16,990	5,370		11,620	3,275	8,344						
Accumulated impairment for secured assets	6,238	261	23	5,977	1,131	4,846	180	199	446	963	604	2,454
Collateral												
<i>Of which value capped at the value of exposure</i>	28,412	18,154	626	10,258	3,993	6,264	376	389	605	1,318	732	2,844
<i>Of which immovable property</i>	21,864	12,679	535	9,185	3,419	5,766	354	368	571	1,223	690	2,561
Financial guarantees received	1,896	1,565	21	332	111	221	24	8	25	59	27	76

The following table provides an overview of foreclosed assets obtained from non-performing exposures as at 31.12.2019.

<b>Table 30: Collateral obtained by taking possession and execution processes as of 31.12.2019 (in Euro million)</b>		
	<b>Collateral obtained by taking possession</b>	
	<b>Value at initial recognition</b>	<b>Accumulated negative changes</b>
Property, plant and equipment (PP&E)	47	- 11
Other than PP&E	992	- 206
Residential immovable property	271	- 22
Commercial immovable property	716	- 184
Movable property (auto, shipping, etc.)	1	- 0
Equity and debt instruments	4	-
Other	-	-
<b>Total</b>	<b>1,038</b>	<b>- 217</b>

The table below provides an overview of collateral obtained by taking possession (by type and by time since date of foreclosure) as at 31.12.2019.

Table 31: Collateral obtained by taking possession and execution processes-vintage breakdown as of 31.12.2019

(in Euro million)

	Debt balance reduction		Total collateral obtained by taking possession		Foreclosed ≤ 2 years		Foreclosed > 2 years ≤ 5 years		Foreclosed > 5 years		Of which non-current assets held-for-sale	
	Gross carrying amount	Accumulated negative changes	Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes
Collateral obtained by taking possession classified as PP&E	7	-	47	- 11								
Collateral obtained by taking possession other than that classified as PP&E	625	- 71	992	- 206	293	- 13	219	- 28	479	- 166	147	- 74
<i>Residential immovable property</i>	161	-	271	- 22	154	- 3	46	- 4	70	- 15	32	- 2
<i>Commercial immovable property</i>	391	-	716	- 184	135	- 10	173	- 23	408	- 151	114	- 71
<i>Movable property (auto, shipping, etc.)</i>	-	-	1	- 0	-	-	-	-	1	- 0	-	-
<i>Equity and debt instruments</i>	73	- 71	4	-	4	- 0	-	-	-	- 0	-	-
<i>Other</i>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>632</b>	<b>- 71</b>	<b>1,038</b>	<b>- 217</b>	<b>293</b>	<b>- 13</b>	<b>219</b>	<b>- 28</b>	<b>479</b>	<b>- 166</b>	<b>147</b>	<b>- 74</b>



## 8 Counterparty credit risk (CCR)

Counterparty credit risk is the risk of default of a counterparty before the final settlement of all existing transactions' cash flows. An economic loss would occur if the portfolio of transactions with the counterparty has a positive economic value to the Group at the time of counterparty default. According to CRR 575/2013 the term transaction refers to:

- Over the counter (OTC) derivative transactions, such as FX or interest rate derivative transactions
- Repurchase transactions, securities or commodities lending or borrowing transactions or margin lending transactions
- Long settlement transactions

Alpha Bank Group only has the first two types of transactions.

The exposures generating counterparty credit risk are monitored on a daily basis. The Group has set limits per counterparty group, per counterparty and per product.

In order to reduce counterparty credit risk exposure, Alpha Bank Group uses two types of bilateral contracts as far as financial products transactions of financial institutions are concerned, which are:

- ISDA (International Swap and Derivatives Association): defines the general terms governing the conduct of bilateral contracts on derivatives, such as FX Swaps, Interest Rate Swaps, Cross Currency Swaps, etc. CSA (Credit Support Annex), which is an annex to ISDA, defines the conditions under which collateral is exchanged in the context of these derivatives transactions.
- GMRA (Global Master Repurchase Agreement): defines the terms for conducting transactions of interbank lending backed by securities and defines the conditions under which collateral is exchanged in the context of these transactions e.g. Repurchase Agreement, Securities Lending, Collateralized Loan.

Under these contracts (ISDA & CSA, GMRA) contracting parties are obliged to exchange any negative valuation that concerns the sum of all the underlying transactions. Consequently Alpha Bank Group exchanges required collateral as mentioned in the contracts and therefore the existing counterparty credit risk is minimized.

The amount of collateral required is calculated on a regular basis and agreed between counterparties. For transactions that are governed by these contracts, the risk of loss for the Alpha Bank Group is the potential difference between the current value of the collateral and the market value of transactions. As a result, frequent settlement of any difference with collateral exchange eliminates the risk of losses due to counterparty credit risk.

As far as repos and reverse repos are concerned, where Alpha Bank Group exchanges securities for cash for a specific period of time, they are included in counterparty limits as they involve counterparty credit risk. The maximum potential loss of the Group is capped by the difference between the market value of securities held (or assigned) and the respective interbank transaction. Through GMRA Contracts, the aforementioned risk is minimized with the exchange of required collateral.

As far as the derivative transactions with other (non-financial institution) counterparties are concerned, the resulting risk exposure is taken into account as part of the Credit exposure against the customer according to the Credit Policy in force.

Following recent regulatory initiatives designed to reduce systemic risk in the banking system, Alpha Bank Group is directing qualifying OTC derivatives to be cleared through Central Counterparties (CCPs).

Alpha Bank Group has adopted the Mark to Market Method, according to which, as described in article 274, section 3 of CRR 575/2013, the exposure value of each contract is calculated as the sum of the current replacement cost of the contract, given it is positive, and the potential future exposure. The potential future exposure is estimated after multiplying the nominal value with a weight, the size of which depends upon the contractual remaining maturity and the underlying asset.

According to CRR 575/2013 Article 381, financial institutions are required to calculate the own funds requirements for Credit Valuation Adjustment (CVA Risk).

The CVA reflects the current market value of the counterparty credit risk to the institution. Own Funds requirements for CVA risk, are calculated for all derivative transactions with financial institutions all OTC derivative instruments but excluding credit derivatives.

Wrong-way risk is the risk that occurs when a counterparty's exposures are adversely correlated with its credit quality. There are two types of wrong-way risk.

- General wrong-way risk occurs when the probability of counterparty default is positively correlated with general risk factors, for example, where a counterparty is resident and/or incorporated in a higher-risk country and seeks to sell a nondomestic currency in exchange for its home currency.
- Specific wrong-way risk occurs in self-referencing transactions. These are transactions in which exposure is driven by capital or financing instruments issued by the counterparty and occurs where exposure from Alpha Bank's perspective materially increases as the value of the counterparty's capital or financing instruments referenced in the contract decreases.

Alpha Bank uses a range of tools to monitor and control wrong-way risk, including requiring the business to obtain prior approval before undertaking wrong-way risk transactions.

A credit rating downgrade clause in a Master Agreement or a credit rating downgrade threshold clause in a CSA is designed to trigger an action if the credit rating of the affected party falls below specified level. These actions may include the requirement to pay or receive collateral.

The tables below reflect the Group's counterparty credit exposures, including the impact of netting and collateral. Current credit exposures consist of the replacement cost of contracts together with potential future credit exposure.

Approach	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
Mark to market		- 437	243			943	209
Financial collateral comprehensive method (for SFTs)						750	150



Approach	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
Mark to market		- 512	232			863	132
Financial collateral comprehensive method (for SFTs)						1,144	246

According to CRR 575/2013 Article 381, financial institutions are required to calculate the own funds requirements for Credit Valuation Adjustment (CVA Risk).

The CVA reflects the current market value of the counterparty credit risk to the institution. Own Funds requirements for CVA risk, are calculated for all derivative transactions with financial institutions all OTC derivative instruments excluding credit derivatives.

In order to calculate CVA, Alpha Bank incorporates the Standardized methodology according to article 384 of CRR 575/2013. Value at Risk is calculated with a 99% confidence interval and with one-year risk horizon.

The most important factors that influence the capital requirements of CVA are the Weight of the counterparty, the real notional-weighted maturity, the contribution of the exposures to the counterparties as well as the number of the counterparties of the portfolio.

	31.12.2019		30.6.2019	
	Exposure value	RWAs	Exposure value	RWAs
All portfolios subject to the standardised method	38	27	49	35
<b>Total subject to the CVA capital charge</b>	<b>38</b>	<b>27</b>	<b>49</b>	<b>35</b>

	31.12.2019		30.6.2019	
	EAD post CRM	RWAs	EAD post CRM	RWAs
<b>Exposures to QCCPs (total)</b>				
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	28	1	23	0
(iv) Netting sets where cross-product netting has been approved	28	1	23	0

The tables below present the CCR exposures by regulatory portfolio and risk:

**Table 35a: EU CCR3 - Standardized approach – CCR exposures by regulatory portfolio and risk as of 31.12.2019**  
(in Euro million)

Exposure classes	Risk Weight										Total	Of which unrated
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%		
Central governments or central banks	684	-	-	-	-	-	-	-	-	-	684	-
Institutions	-	28	-	-	765	23	-	-	-	-	816	18
Corporates	-	-	-	-	-	-	-	-	194	-	194	194
Retail	-	-	-	-	-	-	-	0	-	-	0	0
<b>Total</b>	<b>684</b>	<b>28</b>	<b>-</b>	<b>-</b>	<b>765</b>	<b>23</b>	<b>-</b>	<b>0</b>	<b>194</b>	<b>-</b>	<b>1,693</b>	<b>213</b>

**Table 35b: EU CCR3 - Standardized approach – CCR exposures by regulatory portfolio and risk as of 30.6.2019**  
(in Euro million)

Exposure classes	Risk Weight										Total	Of which unrated
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%		
Central governments or central banks	676	-	-	-	-	-	-	-	-	-	676	-
Institutions	-	23	-	-	1,110	83	-	-	-	-	1,217	60
Corporates	-	-	-	-	-	-	-	-	114	-	114	114
Retail	-	-	-	-	-	-	-	0	-	-	0	0
<b>Total</b>	<b>676</b>	<b>23</b>	<b>-</b>	<b>-</b>	<b>1,110</b>	<b>83</b>	<b>-</b>	<b>0</b>	<b>114</b>	<b>-</b>	<b>2,007</b>	<b>173</b>

The following tables present the impact of collateral and netting on exposure values as well as the composition of the respective collateral.

**Table 36a: EU CCR5-A - Impact of netting and collateral held on exposure values as of 31.12.2019** (in Euro million)

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	1,008	297	711	10	943
SFTs	7,440	-	7,440	7,440	750
Cross-product netting	921	297	<b>624</b>	10	849
<b>Total</b>	<b>8,448</b>	<b>297</b>	<b>8,151</b>	<b>7,451</b>	<b>1,693</b>

**Table 36b: EU CCR5-A - Impact of netting and collateral held on exposure values as of 30.6.2019 (in Euro million)**

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	941	295	646	15	863
SFTs	7,055	-	7,055	7,026	1,144
Cross-product netting	940	295	646	15	862
<b>Total</b>	<b>7,996</b>	<b>295</b>	<b>7,701</b>	<b>7,041</b>	<b>2,007</b>

**Table 37a: EU CCR5-B - Composition of collateral for exposures to CCR as of 31.12.2019 (in Euro million)**

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	-	10	156	1,189	7,440	-
Sovereign debt	-	870	-	-	-	-
<b>Total</b>	<b>-</b>	<b>880</b>	<b>156</b>	<b>1,189</b>	<b>7,440</b>	<b>-</b>

**Table 37b: EU CCR5-B - Composition of collateral for exposures to CCR as of 30.6.2019 (in Euro million)**

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	-	15	140	1,200	7,026	-
Sovereign debt	-	612	-	-	-	-
<b>Total</b>	<b>-</b>	<b>612</b>	<b>140</b>	<b>1,200</b>	<b>7,026</b>	<b>-</b>

As of 31.12.2019, there was no outstanding exposure to credit derivatives transactions bought or sold.



## 9 Market Risk

### 9.1 Market Risk Management Framework

Market risk is the risk of reduction in economic value arising from unfavorable changes in the value or volatility of interest rates, foreign exchange rates, stock exchange indices, equities and commodities.

Market risk management is conducted in accordance with policies and procedures that have been developed and are implemented by all Group companies.

The Group Risk Management Committee is responsible for supporting and supervising the Market Risk management framework and ensuring the application of all the necessary measures to identify, estimate, monitor and control this type of risk. Group ALCO is responsible for approving the guidelines and the strategy as far as Market Risk is concerned. The Treasury and Balance Sheet Management Committee is responsible for structuring proposals for decisions on Treasury and Asset Liability Management issues to be made by the Group ALCO, or exceptionally by the Group Executive Committee, if immediate decision-making is required.

Market Risk is controlled through the establishment and implementation of a well-structured set of limits, according to the Group Market Risk Appetite while satisfying the relevant customer needs.

Alpha Bank calculates Value at Risk (VaR) for internal risk management purposes since 1999. In 2008, the Bank of Greece validated the Bank's internal model for VaR and approved its application for the calculation of capital requirements for general market risk on a solo level in accordance to the Bank of Greece Governor's Acts 2577/2006 and 2591/2007. From the end of 2011 and in accordance to the Bank of Greece Governor's Act 2646/093093.2011, the Bank became compliant with Basel 2.5 and Stressed VaR was estimated together with VaR for the calculation of capital. After the acquisition of Emporiki Bank in 2013, and following the approval of the Bank of Greece, Alpha Bank applied the internal model on a consolidated basis for the combined trading books for general market risk.

The VaR methodology applied is historical simulation, using a 99% percentile, one tailed confidence interval, a historical observation period of 2 years un-weighted data and a 1 and 10-day holding period. 10 day VaR is calculated with a 10 day horizon and a 1 day fixed step (overlapping periods). Calculation of the value-at-risk value is performed on a daily basis using full valuation across all risk factors and positions. Market and position data are updated on a daily basis. The model uses a mixed approach when applying variations in market rates and prices. For Interest rate and credit spread market risk factors absolute change is performed, while relative changes are used for FX, volatility and equity. The VaR methodology used is the same both for regulatory VaR and internal risk management VaR, with the only difference being that credit spread risk is not addressed for regulatory purposes.

### 9.2 IMA approach for market risk

For the purpose of the calculation of the own fund requirements for the general market risk according to Article 365 the Capital Requirements Regulation (CRR) ((EU) No 575/2013), institutions are expected to calculate at least weekly a "stressed value at risk" of the current Trading book. Historical data is used from a continuous 12-month period of financial stress relevant to the Bank's portfolio. The Stressed Period is reviewed at least annually and the authorities are notified of any changes accordingly. The Stressed VaR methodology is based on the current VaR methodology. All risk factors included in the regulatory VaR model are considered in the Stressed VaR model. The Bank computes the Stressed VaR measure on a daily basis, to coincide with the VaR periodicity.

Currently from December 2019, the stress period used by the Bank is January 2016 – December 2016. The selection of the stress period is based on the assessment of the most volatile period in recent history.

The risk categories covered by Alpha Bank's regulatory internal model are general risk of equity instruments, general risk of debt instruments, foreign exchange risk and commodities risk.

The own fund requirements under the IMA at 31.12.2019 are displayed in the following table:

Table 38: EU MR2-A – Market risk under the IMA			(in Euro million)	
	31.12.2019		30.6.2019	
	RWAs	Capital requirements	RWAs	Capital requirements
<b>VaR (higher of values a and b)</b>	<b>307</b>	<b>25</b>	<b>297</b>	<b>24</b>
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))	85	7	88	7
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	307	25	297	24
<b>SVaR (higher of values a and b)</b>	<b>1,192</b>	<b>95</b>	<b>669</b>	<b>53</b>
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))	280	22	202	16
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)	1,192	95	669	53
<b>Total</b>	<b>1,499</b>	<b>120</b>	<b>966</b>	<b>77</b>

A flow statement explaining the variations in the market RWAs is displayed in the following table:

Table 39a: EU MR2-B – RWA flow statements of market risk exposures under the IMA			(in Euro million)	
	VaR	SVaR	Total RWAs	Total capital requirements
<b>RWAs at 30.9.2019</b>	<b>253</b>	<b>936</b>	<b>1,189</b>	<b>95</b>
<i>Regulatory adjustment (1)</i>	164	585	749	60
<b>RWAs at the previous quarter-end (end of the day)</b>	<b>89</b>	<b>351</b>	<b>439</b>	<b>35</b>
Movement in risk levels	- 2	- 5	- 2	- 0
Bond Prices Movements	- 0	- 2	- 2	- 0
Other	- 1	- 64	- 70	- 6
<b>RWAs at 31.12.2019 (end of the day)</b>	<b>85</b>	<b>280</b>	<b>365</b>	<b>29</b>
<i>Regulatory adjustment (1)</i>	222	912	1,134	91
<b>RWAs at 31.12.2019</b>	<b>307</b>	<b>1,192</b>	<b>1,499</b>	<b>120</b>

(1) The regulatory adjustment takes into account the Bank's multiplier in terms of the Internal Model which is embedded in the calculation of the RWAs.



Table 39b: EU MR2-B – RWA flow statements of market risk exposures under the IMA				(in Euro million)
	VaR	SVaR	Total RWAs	Total capital requirements
<b>RWAs at 30.6.2019</b>	<b>297</b>	<b>669</b>	<b>965</b>	<b>77</b>
<i>Regulatory adjustment (1)</i>	209	467	675	54
<b>RWAs at the previous quarter-end (end of the day)</b>	<b>88</b>	<b>202</b>	<b>290</b>	<b>23</b>
Movement in risk levels	11	124	135	11
Bond Prices Movements	7	25	32	3
Other	- 17	-	- 17	- 1
<b>RWAs at 30.9.2019 (end of the day)</b>	<b>89</b>	<b>351</b>	<b>439</b>	<b>35</b>
<i>Regulatory adjustment (2)</i>	164	585	749	60
<b>RWAs at 30.9.2019</b>	<b>253</b>	<b>936</b>	<b>1,189</b>	<b>95</b>

(1) The regulatory adjustment takes into account the Bank's multiplier in terms of the Internal Model which is embedded in the calculation of the RWAs.

(2) The difference in the RWAs is due to the increase in nominal value of the underlying Greek Government bonds during the rollover of the Total Return with the Group Subsidiary Alpha Life as of 28 June 2019. The position is reflected on the RWAs at the previous quarter-end (end of the day) figure, however it is not reflected on the RWAs at 30.6.2019 which takes into account the average VaR and SVaR during the second quarter.

In order to investigate any extreme market situations, market risk stress tests are performed on the banking and trading book portfolios. Stress Tests are performed by creating scenarios ('what if' hypothesis) to estimate the losses that may occur on the positions from potential unfavorable substantial movements/shocks in the market and in order to identify potential concentration risk within the portfolios.

Stress Tests may be carried out at any time on any position; however, they are carried out on a regular basis at the end of every month on the banking and trading book portfolios as well as in the context of ICAAP and the results are reported to the Risk Management Committee, ALCO, and Treasury and Balance Sheet Management Committees.

Typical stress scenarios consider the following changes in risk factors:

#### Interest rates:

+/-200bp (up/down) parallel movement

+50bp (0 to 1 year); +150bp (1 to 5 years); + 300bp (5-10 years); (up – steepening)

-0bp (0 to 1 year); -100bp (1 to 5 years); -200bp (5-10 years); (down – flattening)

#### FX rates:

+/- 30% against EUR (worst case - depending on the overall position of the portfolio)

#### Prices (e.g. equities and indices):

+/-30% (depending on the portfolio position)

**Volatilities:**

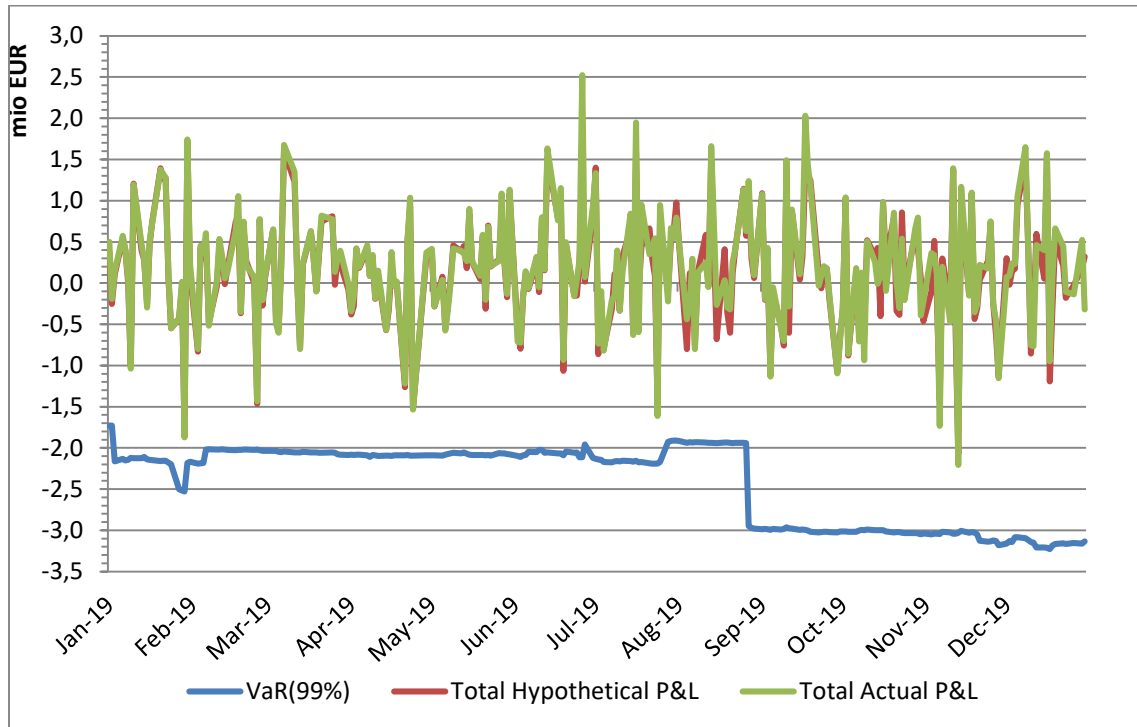
-/+ 50% (depending on the portfolio position)

VaR and SVaR values as estimated during 2019 for the Bank trading portfolio, including the FX position due to participations, are given in the following table:

<b>Table 40: EU MR3 – IMA values for trading portfolios</b>		<b>(in Euro million)</b>
	<b>31.12.2019</b>	<b>30.6.2019</b>
<b>VaR (10 day 99%)</b>	<b>Value</b>	<b>Value</b>
Maximum value	7	7
Average value	7	7
Minimum value	4	4
Period end	7	7
<b>SVaR (10 day 99%)</b>	<b>Value</b>	<b>Value</b>
Maximum value	29	16
Average value	20	15
Minimum value	14	14
Period end	22	16

Additionally, VaR model validation (back testing) is performed on a daily basis. Both actual and hypothetical back testing is conducted in order to comply with the regulatory requirements. In terms of the hypothetical back testing process the daily VaR at a 99% confidence level is compared to the buy-and-hold profit and loss, i.e. the profit and loss impact if the trading portfolio is held constant at the end of the day and re-priced the following day considering the daily change in the underlying risk factors, excluding realized trading revenue, net interest, fees and commissions. Moreover, actual back testing is performed by comparing the daily VaR at 99% confidence interval with the actual daily profit/loss of the Bank's trading portfolio excluding net interest, fees and commissions. In both tests, based on a 99% confidence level of the VaR model, the losses would be expected to exceed the VaR of the portfolio two to three days in any one year. Periods of unstable market conditions could increase the number of back testing exceptions.

A comparison between the results of estimates from the regulatory VaR model with both hypothetical and actual trading outcomes is presented in the following graph:

**Table 41: EU MR4 – Comparison of VaR estimates with gains/losses**


Alpha Bank Group is in compliance with Bank of Greece requirements regarding the systems and controls through which the requirement for the provision of accurate and reliable valuation results is satisfied with, as described in Appendix VII of Directive 2591/20.8.2007.

### 9.3 Standardized approach for market risk

Capital charges for specific risk on a solo basis are calculated with the Standardized approach. Alpha Bank Group uses also the Standardized approach for the measurement of market risk exposure and capital requirements for all its subsidiaries.

The following table summarizes the capital requirements for market risk per risk factor based on Standardized approach at 31.12.2019.



Table 42: EU MR1 – Market risk under the standardised approach			(in Euro million)	
	31.12.2019		30.6.2019	
	RWAs	Capital requirements	RWAs	Capital requirements
<b>Outright products</b>				
Interest rate risk (general and specific)	0	0	0	0
Equity risk (general and specific)	1	0	4	0
Foreign exchange risk	9	1	4	0
Commodity risk	3	0	0	0
<b>Options</b>				
Simplified approach	1	0	0	0
Delta-plus method	-	-	-	-
Scenario approach	-	-	-	-
Securitisation (specific risk)	-	-	-	-
<b>Total</b>	<b>14</b>	<b>1</b>	<b>9</b>	<b>1</b>



## 10 Operational Risk

### 10.1 Definition and objectives

The Group acknowledges the need for managing the operational risk that stems from its business activities, as well as the need for holding adequate capital, in order to absorb potential losses related with this type of risk.

According to the Group's Policy which is based on both industry practices and regulatory requirements, Operational Risk is defined as the risk of financial and qualitative impacts resulting from inadequate or failed internal processes, IT systems, people (intentionally or unintentionally) and external events. The definition includes Legal Risk.

The calculation of capital requirements for operational risk is performed in accordance with the Standardized Approach of the Capital Requirements Regulation 575/2013. Specifically, the Group's gross operating income for 2017, 2018 and 2019 is split into eight business lines.

The Gross Income for operational risk capital requirements is defined as the sum of the following elements:

1. Interest receivable and similar income (used as one of the components for the calculation of Net Interest Income)
2. Interest payable and similar charges (used as one of the components for the calculation of Net Interest Income)
3. Income from shares and other variable or fixed yield securities (used as one of the components for the calculation of Net Interest Income)
4. Commissions/ Fees receivable
5. Commissions/ Fees payable
6. Net profit or loss on financial operations
7. Other operating income

It is e noted that elements 1, 2 and 3 mentioned above comprise the main inputs for the calculation of Net Interest Income (NII) which is one of the main profit drivers related to core banking activities.

Therefore, the Gross Income definition is as follows:

*Gross Income = NII + Net Commissions + Net profit or loss on financial operations + Other operating income.*

The capital requirements for operational risk are the average, over these three years, of the risk-weighted gross income. According to Regulation (EU) No 575/2013, the risk weighted gross income is calculated each year across the eight (8) business lines by using specific beta factors.

In particular, the respective capital charges on a Group basis at 31.12.2019 are presented in the following table:

Table 43a: Capital Charges for Operational Risk			(in Euro million)
	Average 2017 - 2019	Business line beta	Capital Requirements 31.12.2019
<b>Capital Requirements for Operational Risk</b>	-	-	<b>285</b>
<b>Basic Approach Indicator</b>	-	<b>0</b>	-
<b>Standardised Approach</b>	<b>2,144</b>	-	<b>285</b>
<i>For the Standardised Approach:</i>	-	-	-
Corporate Finance	- 1	0	- 0
Trading & Sales	13	0	2
Retail Brokerage	27	0	3
Commercial Banking	842	0	126
Retail Banking	1,135	0	136
Payments and Settlement	18	0	3
Agency Services	7	0	1
Asset Management	103	0	12

Table 43b: Capital Charges for Operational Risk			(in Euro million)
	Average 2016-2018	Business line beta	Capital Requirements 31.12.2018
<b>Capital Requirements for Operational Risk</b>	<b>2,278</b>	-	<b>305</b>
<b>Basic Approach Indicator</b>	-	<b>0</b>	-
<b>Standardised Approach</b>	<b>2,278</b>	-	<b>305</b>
<i>For the Standardised Approach:</i>	-	-	-
Corporate Finance	5	0	1
Trading & Sales	21	0	4
Retail Brokerage	31	0	4
Commercial Banking	971	0	146
Retail Banking	1,156	0	139
Payments and Settlement	12	0	2
Agency Services	7	0	1
Asset Management	76	0	9

## 10.2 Operational Risk Framework

The Group complies with the qualitative criteria required for this approach. Within this context and in order to achieve effective operational risk management, the Group has adopted and implemented an Operational Risk Framework which focuses on the following areas:



- Operational risk events management and collection, including management of Lawsuits filed against the Group
- Operational risk identification and assessment, through a risk and control self-assessment process as well as other assessment techniques
- Definition and monitoring of Key Risk Indicators
- Operational Risk Reporting
- Operational risk mitigation approaches, including both the implementation of Action Plans that improve the existing internal control environment as well as Insurance Policies covering specific types of events and impacts.
- The calculation of capital requirements for operational risk

The Framework is continuously reviewed and various initiatives have been introduced in order to improve it. It is supported by an appropriate organizational structure with clear roles and responsibilities under the core assumption that the prime responsibility for operational risk management remains with the organizational units throughout the Group. The operational risk organizational structure complies with all regulatory requirements and is aligned with the Group's risk culture. This structure includes three lines of defense and interaction with corporate governance, ensuring the coverage of all operational risks and the involvement of the Group's senior management in managing operational risk. Below are described the roles and responsibilities of the Group's committees and units that ensure proper implementation of the operational risk framework:

- Operational Risk Committee, which is delegated by the Risk Management Committee to supervise operational risk management activities. Operational Risk Committees are also established in the Group Companies.
- Group Operational Risk Unit and Operational Risk Units in the Group Companies. The Group Operational Risk Unit develops the appropriate tools, processes, procedures and techniques relevant to operational risk management, monitors the implementation of appropriate action plans for its mitigation at Group level and submits reports to the relevant Committees and Senior Management of the Group. The Group Companies' Operational Risk Units implement the operational risk framework at the Company and local level and ensure its compliance with the national laws and regulations. In addition to the above, the Risk Units of the Banking Entities have the responsibility to co-ordinate and support the implementation of the operational risk framework by the other Group Companies of the same jurisdiction, in accordance with the guidelines provided by the Group Operational Risk Unit.
- Bank Units and Group Company Units, which manage their operational risks and are responsible for the implementation of the Operational Risk Policy. In addition to their own operational risks, some Units may be delegated to manage or have an oversight role in specific areas of operational risk (e.g. Compliance Units, Cybersecurity and Information Security Units, Physical Security Units, and Business Continuity Plan Units). All Units appoint an Operational Risk Coordinator i.e. an Officer with experience and knowledge of the Unit's operations and activities and has the seniority to work closely with other Officers of the Unit. The coordinator is appointed by the Manager and is mainly responsible for providing information and support, raising awareness among the Delegates of the Unit on operational risk issues and participating actively in the implementation of the operational risk management processes/actions within the Unit.
- Internal Audit Unit, which provides an independent review of the integrity, appropriateness and effectiveness of the overall risk management process. In addition, it provides assurance that the internal controls and operational risk mitigation practices implemented by the Units are sufficient and appropriate for the type and complexity of risk-taking activities.



Additionally, the Group's Operational Risk Management Policy adheres to the following principles:

- **Applicability:** The Operational Risk Management Policy is applied to all levels within the Group. Certain modifications may be required at country level in compliance with the local regulatory environment.
- **Accountability:** The Bank and Group Company Units are responsible for managing their operational risk in line with the operational risk management policy. To this extent, they are the owners of the operational risks associated with their activities and they are supported by the Operational Risk Units in the identification, assessment, monitoring and mitigation of their risks.
- **Compliance:** The Group Operational Risk Unit ensures that the Group adheres to the regulatory requirements set by the Group's Regulators. The Operational Risk Units of the Group Companies ensure compliance with the regulatory requirements applicable in their jurisdiction.
- **Transparency and Information Dissemination:** Operational Risk Management is an integral part of the Group's activities. Identification and management of operational risk are performed so as to maintain a constant flow of information and enhance the decision-making process. Transparency and information dissemination is supported by appropriate tools so that Operational Risk Units can generate and provide adequate reports.
- **Risk Mitigation and Transfer:** The Group's primary defenses against operational risk are its policies, procedures and internal controls. The Group provides its employees with training on operational risk issues, in order to increase their awareness and understanding of operational risks. In addition, insurance policies are used for the partial transfer of certain types of operational risk.

### 10.3 Operational risk measurement and assessment

The Group has implemented an internal methodology based on the Advanced Measurement Approach (AMA) for Operational Risk Management as well as for Pillar II purposes. This entailed the development of a robust internal calculation model as well as the enhancement of existing policies, procedures and systems for operational risk management through specific Operational Risk Management Initiatives:

The following initiatives have been completed during 2019:

- a) The update of various acts, circulars and manuals in order to be fully compliant with the revised Operational Risk Management Policy.
- b) Definition of a Model Risk Management Framework

The Group will continue its scheduled initiatives, the main objectives of which, for 2019 – 2020, are as follows:

- a) Enhancement of Systems and Infrastructure, through the implementation of an advanced Operational Risk Platform, including the migration from the current system.
- b) Further specification of the operational risk assessment techniques and general improvement of methodologies and models.
- c) The further increase of KRIs population and the improvement of the existing KRIs framework.



ALPHA BANK

Finally, the Group has established a Business Continuity Management System (BCMS) Framework, which ensures that the business processes continue in the event of a disaster or serious incident. BCMS was certified in 2012 with BS25999 at the Bank level, and in 2013 with ISO22301, expanding also the certification scope to specific Group Companies. Apart from the procedures that have been developed, which require the system to be internally audited at least twice per year, the BCMS is subject to regular external audits by the several delegated authorities and bodies.



## 11 Equity exposures not included in the trading book

Alpha Bank Group equity exposures that are not included in the trading book are equity exposures measured either at fair value through profit or loss or at fair value through other comprehensive income.

### Equity exposures measured at fair value through profit or loss

This category is measured at fair value. Changes in fair value are recognized directly in profit or loss.

### Equity exposures measured at fair value through other comprehensive income

In this category are classified equity instruments that are neither held for trading nor contingent consideration recognised by an acquirer in a business combination and that Group decides, at initial recognition, to measure at fair value through other comprehensive income. This decision is irrevocable. With the exception of dividends, which are directly recognized in profit or loss, all other gains and losses arising from those instruments are directly recognized in other comprehensive income and are not reclassified to profit or loss. For those equity instruments there is no impairment assessment

### Fair value measurement

The fair value of shares measured both at fair value through other comprehensive income and at fair value through profit or loss and which 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.

Table 44: Equity exposures not included in the trading book		(in Euro million)
Type	Book value 31.12.2019	Book value 31.12.2018
Listed	16	16
Non-listed	76	90
<b>Total</b>	<b>92</b>	<b>106</b>

The net amount of unrealized gains in the Group's equity as at 31 December 2019 is Euro 19 million.

## 12 Interest Rate Risk in the Banking Book

### 12.1 Definition

IRRBB refers to the current or prospective risk to the bank's capital and earnings arising from adverse movements in interest rates that affect the bank's book positions.

There are three main sub-types of IRRBB according to Basel Committee on Banking Supervision (BCBS) standards issued in July 2018. Specifically:

- **Gap risk** arises from the term structure of banking book instruments, and describes the risk arising from the timing of instruments' rate changes
- **Basis risk** describes the impact of relative changes in interest rates for financial instruments that have similar tenors but are priced using different interest rates indices (bases) i.e.: an asset priced off Euribor funded by a liability priced off Treasury
- **Option risk** arises from option derivative positions or from optional elements embedded in a bank's assets, liabilities and/or off-balance sheet items, where the bank or the customer can alter the level and timing of the cash flows.

### 12.2 Interest Rate Risk Framework

Alpha Group aims to maximize its profitability in line with its risk appetite and business objectives. Therefore, it recognizes the need to provide a sound framework for the identification, estimation, monitoring, controlling and reporting of interest rate and foreign exchange risks in the Banking Book, in a consistent manner across the Group. In 2016, Alpha Bank has been self-assessed as Level 3 bank in the classification set out by EBA on Interest Rate Risk in the Banking Book (IRRBB).

Interest rate risk management for the Banking Book is performed on a monthly basis and according to Asset and Liability Management Policies & Procedures which have been adopted at Group level.

Interest rate and Foreign Exchange risk management for the Banking Book is performed through effective and timely identification and the estimation of their effects on Alpha Group's earnings and economic value.

### 12.3 Interest Rate Risk Identification and Assessment

For interest rate risk assessment and monitoring the following estimation techniques in line with EBA guidelines are used:

- Static Gap analysis for each currency.
- Scenario analysis for each currency.

When performing Interest Rate Static Gap Analysis, Group assets and liabilities are allocated into time buckets according to their repricing date for variable interest rate instruments, or according to their maturity date for fixed rate instruments Assets or Liabilities with no specific re-pricing schedule (such as revolving loans or savings and sight deposits), are allocated into time buckets according to a specific statistical model, as well as qualitative and quantitative business analysis. Alpha Group Interest Rate Gap Analysis results at 31.12.2019 are presented in the table below:



	<1 Month	1 to 3 Months	3 to 6 months	6 to 12 months	1 to 5 Years	> 5 Years	Non-Interest bearing	Total
Assets	18,945	9,167	3,000	2,018	12,601	8,686	9,040	63,458
Liabilities	17,348	6,111	5,532	6,809	11,915	5,445	1,821	54,982
Equity	-	-	-	-	-	-	8,476	8,476
Total Liabilities and Equity	17,348	6,111	5,532	6,809	11,915	5,445	10,296	63,458
Gap	1,597	3,056	-2,532	-4,791	686	3,240	-1,256	-
<b>Cumulative Gap</b>	<b>1,597</b>	<b>4,653</b>	<b>2,121</b>	<b>-2,670</b>	<b>-1,984</b>	<b>1,256</b>	<b>-</b>	<b>-</b>

	<1 Month	1 to 3 Months	3 to 6 months	6 to 12 months	1 to 5 Years	> 5 Years	Non-Interest bearing	Total
Assets	19,127	6,272	2	1,215	13,972	8,761	9,271	61,008
Liabilities	18,391	6,317	5,028	4,165	12,414	5	1,587	52,864
Equity	-	-	-	-	-	-	8,145	8,145
Total Liabilities and Equity	18,391	6,317	5,028	4,165	12,414	5	9,732	61,008
Gap	736	- 45	- 2,638	- 3	1,557	3,801	- 461	-
<b>Cumulative Gap</b>	<b>736</b>	<b>691</b>	<b>- 1,947</b>	<b>- 4,897</b>	<b>- 3</b>	<b>461</b>	<b>-</b>	<b>-</b>

(1) The above figures are reported under the accounting scope of consolidation

## 12.4 Interest Rate Risk Statement

There are two complementary methods of measuring the potential impact of IRRBB:

- Changes in expected earnings ( $\Delta$ NII) &
- Changes in economic value of equity ( $\Delta$ EVE).

Based on the Interest Rate Gap, a sensitivity analysis under stress test conditions with regards to the Net Interest Income (NII) is examined on a monthly basis. During 2019, Alpha Bank in line with new regulatory requirements set up a set of stress scenarios based on EBA guidelines (EBA/GL/2018/02) on the management of interest rate risk arising from non-trading activities and BIS instructions regarding Interest Rate in the banking book.



### Interest Rate Risk Stress Scenarios

The stress tests which are performed by Group Risk Management Unit/ALM Risk on a monthly basis cover both regulatory requirements and internal needs. The stress scenarios imply the parallel movement, the steepening as well as the flattening of the yield curve by either changing the short-term rates or the long-term rates or both. These scenarios are applied to IRRBB exposures in each currency for which the bank has material positions. Specifically, Group ALM Risk performs six regulatory interest rate shocks for IRRBB measurement purposes according to EBA Guidelines (EBA/GL/2018/02):

- Parallel shock up (+200bps)
- Parallel shock down (-200bps)
- Steepener shock (short rates down and long rates up)
- Flattener shock (short rates up and long rates down)
- Short rates shock up
- Short rates shock down

Furthermore, Group ALM Risk implements additional interest rate shocks for internal purposes:

- Parallel shock up (+25bps);
- Parallel shock down (-25bps);
- Parallel shock up (+50bps);
- Parallel shock down (-50bps);
- Parallel shock up (+100bps);
- Parallel shock down (-100bps);
- Long rates shock up
- Long rates shock down
- Basis Risk shock.

Moreover, the supervisory outlier test shocks are applied to the IRRBB measurement on a monthly basis under the responsibility of Group ALM Risk. They include the standard outlier test shock, i.e. a sudden parallel shift of the yield curve equal to 200bp (upwards and downwards) and four additional interest rate shocks consisting of:

- Parallel shock up (+200bp);
- Parallel shock down (-200bp);
- Short rates shock up;
- Short rates shock down;
- Steepener shock (short rates down and long rates up); and
- Flattener shock (short rates up and long rates down).

ALCo is responsible for approving and reviewing stress test scenarios for their appropriateness on an annual basis. Group Risk Management Unit/ALM Risk is in charge to calculate the impact of the stress scenarios on forecasted earnings as well as on economic value by incorporating assumptions relating to Alpha Group's business developments, customer behavior and future market developments.

The results of the sensitivity analysis with regards to the Net Interest Income (NII) and Economic Value (EV) under stress test conditions are the following:

Table 46a: Sensitivity Analysis - Group Alpha Bank as of 31.12.2019		(in Euro million)
Interest rate changes scenarios (yield curve parallel shift)	Net interest income sensitivity (1 year period)	
-200bps	4,77	
+200 bps	-73,87	

Table 46b: Sensitivity Analysis - Group Alpha Bank as of 31.12.2018		(in Euro million)
Interest rate changes scenarios (yield curve parallel shift)	Net interest income sensitivity (1 year period)	
-200bps	-74.63	
+200 bps	+ 4.82	

## 12.5 Interest Rate Risk Monitoring

Alpha Bank Group has adopted an adequate, timely and accurate information system in order to monitor and report risk in line with its policies and regulatory requirements.

Group ALM and countries' local Treasuries are responsible for managing Alpha Group's positions in compliance with any established limits and escalating any significant issues with respect to the Group's interest rate and foreign exchange positions to Group ALCO and local ALCOs respectively. In addition, Group ALM Unit provides support and input to Group ALCO, regarding Alpha Group's balance sheet management issues.

The Group Risk Management Unit /Asset Liability Risk Management consolidate the information received from countries' local Risk Management Units and communicate a summary report to Group ALCO.

According to BIS standards concerning interest rate limits on banking book, Alpha Bank implements limits on consolidated basis in terms of both economic value and earnings.

## 13 Liquidity Risk

### Definition

Liquidity is the risk arising from the Group's inability to meet its obligations as they become due, or fund new business, without incurring substantial losses as well as the inability to manage unplanned contraction or changes in funding sources. Liquidity risk also arises from the Group's failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value. Liquidity risk is also a Balance Sheet risk, since it may arise from banking book activities.

### Structure

Alpha Bank has set a well-defined organizational structure for the Bank and the Group, with clear roles and responsibilities for the relevant staff and Business Units, concerning all types of ALM activities, including liquidity risk management.

The Risk Management Committee has assigned the overall responsibility for liquidity risk management to the Group ALCO, which oversees the operations of the relevant business units.

### Liquidity Management

Liquidity management is performed through the timely identification of liquidity needs, identification of all available sources to cover these needs, and obtaining liquidity through the most cost-effective way for the Group. Details regarding liquidity risk and funding structure of the Group are included in note 43.3 of the Group Annual Financial Report 2019.

The most important areas under constant monitoring are static liquidity gap, funding structure, evolution and relevant cost, loan-to-deposits ratio, loan disbursements, collateral status, evolution of maturity mismatches and funding needs under stress test conditions.

Both Bank and Subsidiaries monitor closely the evolution of short and long term funding. Respective reports are produced on a daily basis. Furthermore, special attention is given to the monitoring of Liquidity assets and other balance sheet assets that can be used for additional funding.

The credibility of the Greek banking system was further improved following the positive developments in the macroeconomic environment during 2019, improving the liquidity conditions of the Greek banks. In this context, the Bank has eliminated its reliance from ELA already from the beginning of 2019 (February 2019). Furthermore, the Bank within 2019 maintain stable the funding from the ECB, which coming exclusively from the Targeted longer-term refinancing operations (TLTRO-II).

On 1.9.2019 capital controls in the Greek banking system, which were imposed for the first time in June 29th, 2015, were abolished. Already, since October 1, 2018, cash withdrawals from institutions in Greece are permitted without limitation.

The deposit gathering campaigns during the year has led to an increase of customer deposits both at Bank and at Group level by the end of year, thus, within this respective period total Group deposits increased by EUR 1.6 bn, while Bank deposits by EUR 2 bn, mainly due to inflows in both business and households. The above amounts include Greek Government deposits, which decreased from EUR 1.3 bn as of 31.12.2018 to EUR 0.9 bn on 31.12.2019

In June 2019, two of the Alpha Bank's Covered Bonds issuances (issued in 2017 and 2018) amounting to a total of € 2 billion, were upgraded and consequently became eligible for funding through the ECB at improved pricing terms.

In May 2019, the Alpha Bank's subsidiary in Romania successfully completed a € 0.2 billion Covered Bond Issuance. This is the first ever Covered Bond Issue from a Romanian bank, which enhances the liquidity position of the subsidiary and contributes to its business goal of funding diversification.

During 2019, there was an increase of both repurchase agreements (repos transactions) and reverse repurchase agreements (reverse repo transactions) of € 0.13 billion and € 0.62 billion respectively.

Alpha Bank calculates the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR), on a monthly and quarterly basis respectively, according to Regulation (EU) No. 575/2013 in implementation of Basel III at European level and the European supervisory framework harmonization (Single Rulebook) LCR as of YE 2019 is equal to 63.12% on a solo level and equal to 86.13% on a group level. The Bank has a plan for the restoration of its LCR, however, as per the recently announced regulatory measures by EBA and ECB, in view of the COVID-19 outbreak, LCR minimum requirement for European banking institutions have been relaxed allowing Banks to operate temporarily below the level of 100%, allowing the deployment of readily available liquidity into the system during this period of market stress.

During the first semester of 2019, the Bank successfully participated in the ECB Sensitivity analysis of Liquidity risk – stress test 2019 (LiST 2019), within the context of SSM Supervisory Priorities for 2019. The exercise was launched in February 2019 and lasted for six weeks, while the Data Quality Assurance period lasted up to the end of May. The results of the exercise along with the ILAAP results were discussed as part of the SREP Supervisory Dialogue of 2019.

In the context of the above mentioned exercises, the Bank reviewed the policies and procedures of the liquidity stress test scenarios.

The Group has also developed a Contingency Funding Plan as well as a Recovery Plan along with a respective Early Warning Indicators scheme and its corresponding limits, in order to identify liquidity issues and monitor liquidity or funding risk. The Group Risk Management Unit and the countries' local Risk Management Units monitor these indicators against their established limits and report any limit breaches to the appropriate levels of management.

In addition to that, for the monitoring of liquidity risk, stress tests are performed frequently, in order to evaluate the impact of potential adverse market conditions on Bank's and Subsidiaries' Liquidity. These stress tests are performed according to the approved Group's policy for "Liquidity Buffer and Liquidity Stress Scenarios".



## 14 Encumbered and Unencumbered Assets

### Information on Group Asset Encumbrance

The Group is funded through unsecured and secured funding lines. Secured funding lines may involve encumbrance of (a) the assets of the Group, (b) any collateral received by the Group and (c) own debt instruments issued and held by the Group.

The Group adopts and applies the following definition for asset encumbrance, in line with EBA regulatory guidelines:

*“An asset is encumbered if it has been pledged or subject to any form of arrangement to secure, collateralise or credit enhance any on-Balance Sheet or off-Balance Sheet transactions from which they cannot be freely withdrawn.”*

*Assets pledged that are subject to any restrictions in withdrawal, such as assets that require prior approval before withdrawal or replacement by other assets, should be considered encumbered”.*

Asset encumbrance is an integral part of Group’s liquidity, funding and collateral management process. In this context, asset encumbrance risk management framework incorporates and adopts the overarching principles of the Group’s Risk Management Framework as well as the Group’s Risk Appetite Framework.

The overall Group’s encumbrance through 2019 has slightly decreased, attributable to deposits’ inflow, disengagement from ELA financing, as well as to the overall improvement of encumbered assets’ valuations and reduction of haircuts in liquidity transactions.

Given the nature and source of funding or transaction that require Group’s assets to be encumbered, the Group utilises collateral agreements with the respective counterparties, where the terms and conditions clearly stipulate the Group’s and the counterparty’s rights and obligations on collateral posted. Where relevant, widely accepted market standardised agreements are utilized, such as GMRAs, ISDAs and CSAs in the relevant transactions that these apply.

Throughout 2019, Central Bank funding (excluding ELA usage as of 31.12.2018) and interbank repos have remained fairly stable, while an increase has been observed in Covered Bonds transactions, due to the issuance of Alpha Bank Romania Covered Bond of nominal amount of of € 200 mio as of 14 May 2019. Derivative transactions have followed a slightly ascending path, while funding stemming from securitizations has decreased due to the amortisation nature of the deals.

In accordance with the Group’s business model and the nature and scale of activities it undertakes, the Group mainly identifies the following sources of asset encumbrance, prioritized by matching liability amount as of 31.12.2019:

- **Lending through repurchase contracts/agreements in the interbank market:** This source of secured funding involves repo transactions in the interbank market
- **Funding from Central Bank:** This source of secured funding comprises ECB lending facilities and requires the Group to provide eligible collateral to Central Bank
- **Derivative transactions directly with counterparties or through clearing systems:** Collateral is placed by the Group for the market value of derivative transactions or as margin to the clearing system
- **Covered Bonds issuances:** This source of secured funding involves the segregation of the cover pool under Greek Covered Bond Law



- **Securitisation issuances:** This source of secured funding involves the transfer of underlying assets (loans) to a securitization vehicle
- **Funding from Supranational Organisations:** This source of funding refers to collateralized funding from supranational organisations

For each source of funding that generates asset encumbrance, the Group identifies the assets that are encumbered.

The main asset categories that were encumbered as of 31.12.2019, prioritized by carrying amount, are the following:

- Debt securities issued by general governments (Marketable Assets)
- Retail Loan Portfolio (Non marketable assets)
- Wholesale Loan Portfolio (Non marketable assets)
- Loans on demand (Marketable Assets)
- Debt securities issued by credit institutions (Marketable Assets)
- Debt securities issued by non-financial corporations (Marketable Assets)

The majority of asset encumbrance is coming from the assets of the Bank. The main secured funding transaction on a subsidiary level is the Covered Bond issued by Alpha Bank Romania.

Assets that are not considered encumberable as of 31.12.2019 amounted to 14% of the Group Assets and mainly include tangible assets, such as investment property, intangibles, tax assets, non-current assets and disposal groups classified as held for sale. The relevant percentage for 31.12.2018 was the same, i.e. 14%.

As of 31.12.2019, the Group utilized € 1.13 bio of collateral received for ECB funding as well as for repo transactions, whereas the Group did not use as collateral any own securities issued and held by the Group (other than ABSs and Covered Bonds).

As of 31.12.2019, the overall overcollateralization of secured liabilities of the Group (including collateral received) was at the level of 26.4%, with an average haircut of c. 20.9%. The respective percentages for 31.12.2018 were 29.2% and 22.6% respectively.

Further details regarding asset pledged can be found in note 37 “*Contingent Liabilities and Commitments*” par. e “*Assets Pledged*” of the published annual report of the Group for the period from 01.01. - 31.12.2019.



Table 47a - Encumbered and unencumbered assets							in Euro million	
	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
<b>Assets of the reporting institution</b>	15,514	6,558			46,407	8,571		
Equity instruments	-	-			101	-		
Debt securities	5,690	5,463	5,693	1,403	1,921	5,466	1,924	1,407
of which: covered bonds	138	31	138	3	32	31	32	3
of which: asset-backed securities	-	-	-	-	10	-	10	-
of which: issued by general governments	5,348	5,338	5,351	1,299	1,385	5,341	1,388	1,302
of which: issued by financial corporations	270	39	270	93	403	39	403	93
of which: issued by non-financial corporations	134	109	134	-	140	109	140	-
Other assets	9,824	1,095			44,386	3,105		
of which								

Table 47b - Collateral received				in Euro million	
	Fair value of encumbered collateral received or own debt securities issued		Unencumbered		
			Fair value of collateral received or own debt securities issued available for encumbrance		
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA	
<b>Collateral received by the reporting institution</b>	982	669	579	114	
Loans on demand	-	-	-	-	
Equity instruments	-	-	-	-	
Debt securities	982	669	579	114	
of which: covered bonds	-	-	-	-	
of which: asset-backed securities	-	-	-	-	
of which: issued by general governments	643	332	345	19	
of which: issued by financial corporations	357	357	95	93	
of which: issued by non-financial corporations	-	-	-	-	
Loans and advances other than loans on demand	-	-	-	-	
Other collateral received	-	-	-	-	
of which:	-	-	-	-	
<b>Own debt securities issued other than own covered bonds or asset-backed securities</b>	0				
<b>Own covered bonds and asset-backed securities issued and not yet pledged</b>			2,039	-	
<b>TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED</b>	16,496	7,227			

Table 47c - Sources of encumbrance		in Euro million	
	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	
<b>Carrying amount of selected financial liabilities</b>	11,890	16,453	
of which			

## 15 Remuneration Policy

Alpha Bank has established a Remuneration Policy, which is applied within the Bank and the Group, and is in accordance with the Corporate Governance principles.

The Remuneration Policy:

- Complies with the values, the business strategy and targets and with the long-term best interests of the Bank and the Group Companies.
- Motivates personnel for exceptional results within the framework of the performance management system, and at the same time discourages excessive assumption of risk and minimizes situations that do not comply with the sound and consistent risk management
- Seeks to align remuneration with sound performance criteria and existing market dynamics

### 15.1 Legal Framework

Based on the framework defined in the Greek Law 4261/2014 (which transposed European Directive 2013/36/EU – CRD IV), as in force, the EU Regulations regarding remuneration (esp. Regulations (EU) 575/2013 and 604/2014), the BoG Executive Committee's Act 158/10.5.2019 and the BoG GA 2650/19.01.2012, the Remuneration Policy is in line with the Group's corporate strategy and the organization's goals in conjunction with those of interested parties, employees, management and shareholders.

Additionally, the Bank's remuneration practices follow the EBA guidelines on sound remuneration policies (EBA/GL/2015/22) as in force from January 2017, as well as other legislative provisions (e.g. MiFID II, etc).

The Group's remuneration disclosures follow the EBA/GL/2016/11 of 4.8.2017 "Guidelines on disclosure requirements under Part Eight of Regulation (EU) 575/2013", taking into consideration the "materiality" concept. As a consequence, the remuneration disclosures focus on elements that are deemed material.

### 15.2 The Proportionality principle

The policy complies with the regulatory framework and is designed taking into account each unit's size, internal structure, nature and complexity of activities. In particular, the Bank aims to match the Remuneration Policy and practices with the individual risk profile and the strategy of the Bank and the Group.

The application of the proportionality principle, is based on the following indicative criteria and the criteria provided in the EBA/GL/2015/22 guidelines:

1. The size of the Bank e.g. value of assets and liabilities, exposure to risk, level of its regulatory own funds, number of staff and branches of the Bank.
2. The internal organization of the Bank, the use of internal methods for the measurement of capital requirements and its corporate goals.
3. The nature, scope and complexity of its business activities and the associated risks.

### 15.3 Principles of Remuneration Structuring

The remuneration system fully complies with the labor legislation, the Collective Labor Agreements (National, Sector, Corporate) as well as with the Supervisory and Regulatory Authorities, and consists of the following components:



- Fixed remuneration.
- Variable remuneration. The variable part of the total compensation is optional and provided through bonuses or other financial incentives formats that may differ on a year to year basis. Personal efficiency, according to specific assessment criteria and achievement of goals of the Unit and of the Bank as a whole, is taken into account in order to proceed to the aforementioned reward payment.

The balance between fixed and variable remuneration is a major priority in order to assure not only market competitiveness but also the minimization of risk assumption according to Law 4261/2014 (CRD IV).

The ratio between the fixed and variable remuneration components is aimed to be:

- Incentivizing, towards goals' achievement
- Flexible, adjusting to market's trends
- Insightful, reckoning present and future risks. The principle of non-excessive assumption of risk in particular, is evaluated through the existing Committees/ Approval Echelons which are legislated bodies that operate on the basis of specific procedures
- Proactive, having the options of deferring a substantial portion of the variable remuneration component over an appropriate period of time, readjusting and future non-payment or/and clawback.

### **15.3.1 Risk alignment of Remuneration**

The remuneration policy also applies, according to special provisions (Directive 2013/36/EU and Law 4621/2014), to Members of the Board of Directors and Senior Management as well as other Personnel whose professional activities have a material impact on the risk profile of the Bank and the Group Companies in order to prevent excessive risk undertaking and exposure.

Personnel engaged in control functions (Risk Management, Audit and Compliance) are independent from the business units they oversee and are remunerated in accordance with the achievement of the objectives linked to their functions, independent of the performance of the business areas they interact with.

It is pointed out that the remuneration of Non-Executive Members of the Board of Directors can only be fixed.

### **15.3.2 Variable Remuneration**

The variable component of the total compensation is optional and refers to Bonuses or other reward schemes that may vary per year. In order for the variable remuneration to be paid, the achievement of the Bank's/Company's and the Unit's goals as well as personal performance in accordance with the evaluation criteria in force are taken into account. The balance between the fixed and the variable component is a priority which ensures the maintenance of market competitiveness and the minimisation of the risk undertaken. The principle of not undertaking excessive risk is ensured by the existing Committees/Approval authorities which operate according to specific procedures and are established bodies.

The remuneration policy framework, except for the general methodology, has been compiled in a manner that is compatible with the provisions of Law 4261/5.5.2014, which incorporates into the Greek legislation Directive 2013/36/EU. The proper and selected application of a variable remuneration policy is considered a necessary tool for human resources management and for attracting and/or keeping Executives at Bank and Group level, which can contribute significantly to achieving the goals of the Business Plan.

The potential variable remuneration includes a part which can be deferred on the basis of the business cycle, the nature of the business activity, the risks it involves and the activities of the Personnel Members to whom it pertains.

Forms (indicatively):



- Cash
- Shares or equivalent ownership rights
- Other means
- Guaranteed variable remuneration is not included in the remuneration schemes and constitutes an exception applying to new Personnel only and solely for the first year of employment (Law 4261/5.5.2014)
- Optional retirement benefits

### **15.3.3 Pay – out process / ex post risk adjustment of variable remuneration**

The Bank's Remuneration Policy foresees that an appropriate portion, and in any event a minimum proportion of 40% of the variable remuneration component is deferred over a period which is not less than three to five years and is correctly aligned with the nature of the business, its risks and the activities of the Personnel in question.

Without prejudice to the provisions of labor law, up to 100% of the variable remuneration is subject to malus and/or clawback arrangements. The application of malus and clawback covers situations where the staff member: (i) participated in or was responsible for conduct which resulted in significant losses to the Group; (ii) failed to meet appropriate standards of fitness and propriety.

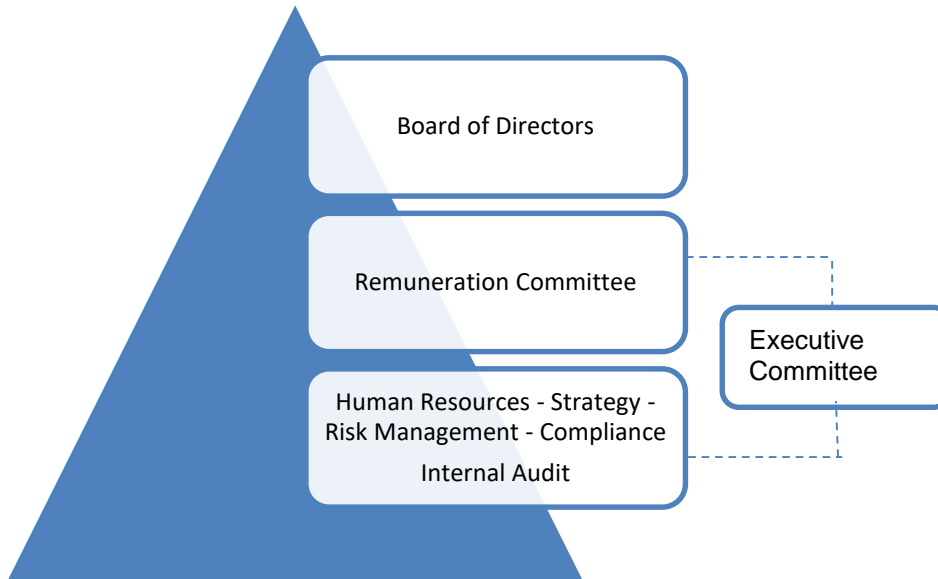
The Bank may suspend, entirely or in part, the implementation of a variable remuneration scheme, if specific thresholds are not met or if the financial situation of the Bank/Group has deteriorated significantly.

### **15.4 Remuneration policy governance and decision making process**

The governance system set up by the Bank ensures a thorough review of its remuneration policy and compliance with the implementation guidelines.

The decision-making process involves multiple stages of design and reviewing by competent Functions of the Bank which is followed by the approval of the Board of Directors on the recommendation of the Remuneration Committee.

The following diagram depicts the remuneration policy governance in force:



### 15.4.1 Remuneration Committee

The Remuneration Committee has been established and operates in accordance with all applicable laws and regulations.

The exact number of the Members of the Committee is determined by the Board of Directors.

The Members of the Committee should have adequate knowledge, skills and experience concerning remuneration policies and practices as well as concerning the incentives and risks that can arise therefrom. At least one Member should have sufficient professional experience in risk management.

The Committee assists the Board of Directors in ensuring that the “Remuneration Policy for Alpha Bank and the Group Companies” as well as the “Remuneration Policy as per the provisions of Law 4548/2018” are consistent with the values, culture, business strategy, risk appetite and strategic objectives of the Bank and the Group.

The Committee convenes at least quarterly per year.

In 2019, the Committee convened ten times and the Members’ participation rate in the meetings stood at 98% (based on the composition of the Remuneration Committee on 31.12.2019).

The specific duties and responsibilities of the Remuneration Committee are determined in its Charter, which was amended in December 2019.



## **15.4.2 Other relevant Stakeholders / Parties**

The Functions of Human Resources, Compliance, Strategy, Risk Management and Internal Audit are also involved in the development, implementation, review and control of the Remuneration Policy, depending on their responsibilities. The implementation of the Policy is assigned to the Human Resources Division and is subject to central and independent internal control carried out on an annual basis by the Internal Audit Division.

Certain issues related to the Remuneration Policy may be outsourced to Consultants, specialized in the HR compensation field.

## **15.5 Quantitative – Qualitative Remuneration data**

Having regard to Law 4261/2014 provisions and Commission Delegated Regulation (EU) No 604/2014, which defines regulatory technical standards, the staff whose professional activities have a material impact on the institution's risk profile has been identified, in collaboration with a consulting firm, with respect to qualitative and appropriate quantitative criteria.

The remuneration data of the Personnel in total, as well as according to its risk profile categorisation, are submitted to BoG annually, within the set deadline, in the form of the IB18-IB24 templates.

## 16 Appendix

### 16.1 Appendix I – Analysis of the Board Committees composition and terms of reference as well as description of the Diversity Policy applied to management, administration and supervision bodies

The Board of Directors establishes permanent or ad hoc Committees to assist in the discharge of its responsibilities, facilitate its operations and effectively support its decision-making. The Committees have an advisory role but may also assume delegated authorities, as determined by the Board. The composition, duties, responsibilities and functioning of the Committees of the Board of Directors are set out in their respective Charters.

#### Audit Committee

The Audit Committee has been established and operates in accordance with all applicable laws and regulations.

The composition of the Audit Committee is designated by the General Meeting of Shareholders. The Audit Committee comprises five Members, out of whom three are Non-Executive Independent Members. The Chair of the Committee is appointed by its Members or elected by the General Meeting of Shareholders and is a Non-Executive Independent Member of the Board of Directors who has the required expertise and experience to oversee the audit, accounting and financial policies and processes within the remit of the Committee. The Members of the Committee possess adequate knowledge of the banking sector and in general the required knowledge, skills and experience to adequately discharge the Committee's responsibilities. At least one Member is a suspended or a retired statutory certified auditor or has accounting/auditing knowledge and experience.

The main responsibilities of the Audit Committee include but are not limited to those presented below.

The Audit Committee:

- Performs the oversight of the financial reporting processes and procedures for drawing up the Annual and the Interim financial statements of the Bank and the Group.
- Reviews the quarterly financial statements of the Bank and of the Group, together with the annual Statutory Auditors' Report and the Board of Directors' Annual Management Report prior to their submission to the Board of Directors for approval.
- Monitors and assesses, on an annual basis, the adequacy, effectiveness and efficiency of the Internal Control System of the Bank and the Group.
- Assists the Board of Directors in ensuring the independent, objective and effective conduct of internal and external audits of the Bank.
- Assists the Board of Directors in overseeing the effectiveness and performance of the Internal Audit Division and the Compliance Division of the Bank.
- Reviews the activity and performance of the Statutory Certified Auditors of the Bank and the Group on a regular basis.
- Is responsible for the procedure pertaining to the selection of the Statutory Certified Auditor of the Bank and the Group and makes recommendations to the Board of Directors on the appointment or dismissal, rotation, tenure and remuneration of the Statutory Certified Auditors, according to the relevant regulatory and legal provisions.



- Monitors the independence of the Statutory Certified Auditors in accordance with the applicable laws, which includes reviewing, inter alia, the provision by them of Non-Audit Services to the Bank and the Group. In relation to this, the Committee examines or approves all proposals regarding the provision by the Statutory Certified Auditor of Non-Audit Services to the Bank and the Group, based on the relevant Bank policy that the Audit Committee oversees and recommends to the Board of Directors for approval.

The Chair of the Audit Committee regularly informs the Board of Directors of the work of the Committee. The Chair also submits to the Board of Directors a formal report on the work of the Committee during the year.

The Committee convenes monthly in general, adding meetings on an as-needed basis and may invite any Member of the Management or Executive as well as external auditors to attend its meetings.

In 2019, the Committee convened thirteen times and the Members' participation rate in the meetings stood at 98% (based on the composition of the Audit Committee on 31.12.2019).

The specific duties and responsibilities of the Audit Committee are determined in its Charter, which was amended in December 2019 and is posted on the Bank's website

(<https://www.alpha.gr/en/group/corporate-governance/committees>).

## Risk Management Committee

The Risk Management Committee has been established and operates in accordance with all applicable laws and regulations.

The exact number of the Members of the Committee is determined by the Board of Directors.

The Risk Management Committee comprises four Members, out of whom three are Non-Executive Independent Members. One of the Independent Members is appointed Chair of the Committee. The Members of the Committee have prior experience in the financial services sector and, individually and collectively, appropriate knowledge, skills and expertise concerning risk management and control practices. At least one Member is familiar with the NPE/NPL management framework, policies, practices and procedures and at least one Member (the NPL Expert) has solid risk and capital management experience as well as familiarity with the local and the international regulatory framework.

The main responsibilities of the Risk Management Committee include but are not limited to those presented below.

The Risk Management Committee:

- Assists the Board of Directors in promoting a sound risk culture at all levels throughout the Bank and the Group, fostering risk awareness and encouraging open communication and challenge across the Organization.
- Assists the Board of Directors in monitoring the achievement of objectives in risk management, especially in the areas of NPEs and capital ratio.
- Reviews and recommends to the Board of Directors for approval the risk and capital management strategy.



- Reviews and recommends annually to the Board of Directors for approval the Group's risk appetite framework and statement.
- Determines the principles which govern risk management across the Bank and the Group in terms of the identification, measurement, monitoring, control, and mitigation of risks.
- Evaluates on an annual basis or more frequently, if necessary, the appropriateness of risk identification and measurement systems, methodologies and models, including the capacity of the Bank's IT infrastructure to record, report, aggregate and process risk-related information.
- Reviews regularly, at least annually, the Group's ICAAP/ILAAP and related target ratios and recommends their approval to the Board of Directors.
- Assesses the overall effectiveness of capital planning, allocation processes and systems, and the allocation of capital requirements to risk types.

The Chair of the Risk Management Committee regularly informs the Board of Directors of the work of the Committee. The Chair also submits to the Board of Directors a formal report on the work of the Committee during the year.

The Committee convenes at least once a month and may invite any Member of the Management or Executive to attend its meetings.

In 2019, the Committee convened thirteen times and the Members' participation rate in the meetings stood at 98% (based on the composition of the Risk Management Committee on 31.12.2019).

The specific duties and responsibilities of the Risk Management Committee are determined in its Charter, which was amended in December 2019 and is posted on the Bank's website (<https://www.alpha.gr/en/group/corporate-governance/committees>).

## Remuneration Committee

The Remuneration Committee has been established and operates in accordance with all applicable laws and regulations.

The exact number of the Members of the Committee is determined by the Board of Directors.

The Remuneration Committee comprises four Members, out of whom two are Non-Executive Independent Members. One of the Independent Members is appointed Chair of the Committee. The Members of the Committee have adequate knowledge, skills and experience concerning remuneration policies and practices as well as concerning the incentives and risks that can arise therefrom. At least one Member has sufficient professional experience in risk management.

The main responsibilities of the Remuneration Committee include but are not limited to those presented below.

The Remuneration Committee:

- Assists the Board of Directors in ensuring that the Remuneration Policies are consistent with the values, culture, business strategy, risk appetite and strategic objectives of the Bank and the Group.
- Provides its support and advice to the Non-Executive Members of the Board of Directors on the design of the Remuneration Policies for the Bank and the Group Companies according to the relevant legislative and regulatory provisions.



- Is responsible for the preparation of decisions on the remuneration of the Members of the Board of Directors to be taken by the Non-Executive Members.
- Reviews the variable remuneration framework. Advises on variable remuneration schemes, where these are permitted, for Personnel and Executives across the Bank and the Group, and proposes the total envelope for variable remuneration across the Bank and the Group.
- On an annual basis, reviews and reports findings on remuneration data from the Bank and the Group to the Board of Directors, with a view to monitoring the consistent application of the Remuneration Policies, assessing alignment with corporate goals and ensuring that the remuneration program is completely aligned with the risk profile and ambition.
- Assesses the mechanisms and programs adopted to ensure that the remuneration system properly takes into account all types of risks, liquidity and capital levels and that the overall Remuneration Policies are consistent with and promote sound and effective risk management and are in line with the business strategy, objectives, corporate culture, values and long-term interests of the Bank.
- Oversees the evaluation process for Senior Executives and Key Function Holders, ensuring that it is implemented adequately and in accordance with the provisions of the Bank's Policy.

The Chair of the Remuneration Committee regularly informs the Board of Directors of the work of the Committee. The Chair also submits to the Board of Directors a formal report on the work of the Committee during the year.

The Committee convenes at least quarterly per year and may invite any Member of the Management or Executive to attend its meetings.

In 2019, the Committee convened ten times and the Members' participation rate in the meetings stood at 98% (based on the composition of the Remuneration Committee on 31.12.2019).

The specific duties and responsibilities of the Remuneration Committee are determined in its Charter, which was amended in December 2019 and is posted on the Bank's website (<https://www.alpha.gr/en/group/corporate-governance/committees>).

## **Corporate Governance and Nominations Committee**

The Corporate Governance and Nominations Committee has been established and operates in accordance with all applicable laws and regulations.

The exact number of the Members of the Committee is determined by the Board of Directors.

The Corporate Governance and Nominations Committee comprises four Members, out of whom two are Non-Executive Independent Members. One of the Independent Members is appointed Chair of the Committee. The Members of the Committee collectively possess the required knowledge, skills and experience relating to the business of the Bank to assess the appropriate composition of the Board of Directors and, among others, the selection process and suitability requirements to adequately discharge the Committee's responsibilities..

The main responsibilities of the Corporate Governance and Nominations Committee include but are not limited to those presented below.

The Corporate Governance and Nominations Committee:

- Assists the Board of Directors in establishing the conditions required for effective succession and continuity in the Board of Directors.
- Ensures that the corporate governance principles of the Bank and the Group, as embedded in the Corporate Governance Code of the Bank, as well as the implementation of these principles reflect the legislation in force, regulatory expectations and international corporate governance best practices.
- Regularly reviews the Corporate Governance Code of the Bank and makes appropriate recommendations to the Board of Directors on its update.
- Facilitates the regular review of the Charters of Board Committees, in consultation with the relevant Committees, by providing input to each Committee in order to ensure that the Charters remain fit-for-purpose and align with the Bank's Corporate Governance Code as well as with corporate governance best practices.
- Develops and regularly reviews the selection criteria and the appointment process for the Members of the Board of Directors.
- Identifies and recommends for the approval of the Board of Directors candidates to fill vacancies, evaluates the balance of knowledge, skills, diversity and experience of the Board of Directors and prepares a description of the roles and capabilities for a particular appointment and assesses the time commitment expected.
- Assesses periodically, and at least annually, the structure, size, composition and performance of the Board of Directors and makes recommendations to the Board of Directors with regard to any changes.
- Assesses periodically, and at least annually, the knowledge, skills and experience of each Member of the Board of Directors and of the Board of Directors collectively and reports to the Board of Directors accordingly.
- Oversees the design and implementation of the induction program for the new Members of the Board of Directors as well as the ongoing knowledge and skills development for Members that support the effective discharge of their responsibilities.

The Chair of the Corporate Governance and Nominations Committee regularly informs the Board of Directors of the work of the Committee. The Chair also submits to the Board of Directors a formal report on the work of the Committee during the year.

The Committee convenes at least quarterly per year and may invite any Member of the Management or Executive to attend its meetings.

In 2019, the Committee convened ten times and the Members' participation rate in the meetings stood at 100% (based on the composition of the Corporate Governance and Nominations Committee on 31.12.2019).

The specific duties and responsibilities of the Corporate Governance and Nominations Committee are determined in its Charter, which was amended in December 2019 and is posted on the Bank's website (<https://www.alpha.gr/el/omilos/etairiki-diakubernisi/sumboulia-kai-epitropes>).

## Composition of the Board of Directors and the Board of Directors' Committees for the year 2019

Board of Directors	Gender	Age	Tenure	Term ends	Committees			
					Audit	Risk Management	Remuneration	Corporate Governance and Nominations
<b>Chair</b> (Non-Executive Member)								
Vasileios T. Rapanos	M	72	5	2022	-	-	-	-
<b>Executive Members</b>								
Vassilios E. Psaltis <sup>1</sup>	CEO	M	51	1	2022	-	-	-
Spyros N. Filaretos	General Manager	M	61	14	2022	-	-	-
Artemios Ch. Theodoridis	General Manager	M	60	14	2022	-	-	-
George C. Aronis <sup>2</sup>		M	62	8	2022	-	-	-
<b>Non-Executive Members</b>								
Efthimios O. Vidalis		M	65	5	2022	<b>M</b>	-	<b>M</b>
Demetrios P. Mantzounis <sup>3</sup>		M	72	24	2022	-	-	-
<b>Non-Executive Independent Members</b>								
Jean L. Cheval		M	70	1	2022	<b>M</b>	-	<b>M</b>
Carolyn G. Dittmeier		F	63	2	2022	<b>C</b>	<b>M</b>	-
Richard R. Gildea		M	67	3	2022	-	<b>M</b>	<b>C</b>
Shahzad A. Shahbaz		M	59	5	2022	-	-	<b>C</b>
Jan A. Vanhevel		M	71	3	2022	<b>M</b>	<b>C</b>	-
<b>Non-Executive Member</b> (pursuant to the provisions of Law 3864/2010)								
Johannes Herman Frederik G. Umbgrove		M	58	1	2022	<b>M</b>	<b>M</b>	<b>M</b>
<b>C: Chair</b> <b>M: Member</b> <b>-: The Member does not participate in this Committee</b>								
<sup>1</sup> CEO as of 2.1.2019								
<sup>2</sup> Member of the Board of Directors until 31.1.2020								
<sup>3</sup> CEO until 2.1.2019 and Non-Executive Member until 31.12.2019								



## **Description of the Diversity Policy applied to management, administration and supervision bodies**

Alpha Bank has adopted the Diversity Policy that sets the principles and the approach for the achievement of diversity in both the Board of Directors and the Personnel in accordance with the legislative and regulatory framework in force as well as with European best practices.

The objectives of the Policy are to support and promote diversity as well as to engage a broad set of qualities and competences when recruiting Members of the Board of Directors and Personnel, to achieve a variety of views and experiences and to facilitate independent opinions.

### **1. Board of Directors**

Taking into account the existing framework, the Bank embraces the benefits of having a diverse Board of Directors. It recognizes that diversity can help achieve maximum team performance and effectiveness, enhance innovation and creativity and promote critical thinking and team cooperation within the Board. In this context, a diversified Board of Directors fosters constructive challenge and discussion on the basis of different points of view. It can help improve decision-making regarding strategies and risk-taking by encompassing a broader range of views, opinions, experience, perception, values and backgrounds. It reduces the phenomena of “group think” and “herd behavior”.

A truly diverse Board of Directors allows and makes good use of differences in skills, regional and industry experience, background, abilities, qualifications, professional training, gender and other distinctions between the Members. All Board appointments at Alpha Bank are made on merit in the context of the skills, experience, knowledge and independence which the Board as a whole requires in order to be effective.

The Board of Directors’ actual target in relation to the female gender representation on the Board is to reach at least 30% in the next three years, while always considering industry trends and best practices. The Corporate Governance and Nominations Committee has informed the Board of Directors accordingly and has made the achievement of the said target a priority when nominating candidates.

All the candidates for the Board of Directors are assessed on the basis of the same criteria, irrespective of gender, since the eligible Members for the Board of Directors must fulfil all the conditions set in relation to their qualifications. In this context, men and women have equal opportunities to be nominated under the condition that they fulfil all the other prerequisites. The Bank does not nominate Members to the Board of Directors with the sole purpose of increasing diversity to the detriment of the functioning and suitability of the Board of Directors collectively or at the expense of the suitability of individual Members of the Board of Directors.

### **2. Personnel**

To Alpha Bank, the provision of equal opportunities for employment and advancement to all its Employees is not merely a legal obligation, but also a cornerstone of its Human Resources policy. This Policy is incorporated in the Human Resources management procedures and practices and ensures the implementation thereof in every country where the Bank is present.

Seeking to implement gender equality in action and to address the issue of the low percentage of women in positions of responsibility, issues which are typical of the Greek labour market, the Bank takes a number of measures which help its Employees balance their professional and family life, while also promoting equitable treatment and merit-based Personnel advancement, with equal advancement opportunities for female Employees.

The Bank applies a uniform, gender-neutral salary policy to all categories of Personnel.

The Bank respects and defends the diversity of its Employees irrespective of gender, age, nationality, political and religious convictions or any other discrimination. Further to the above-mentioned principles, the Bank recognizes the need for diversity pertaining to skills, background, knowledge and experience in order to facilitate constructive discussion and independent thinking. It ensures top-quality work conditions and opportunities for advancement that are based on merit and equitable treatment. It offers fair remuneration, based on contracts which are in agreement with the conditions of the corresponding national labor market and ensures compliance with the respective national regulations, inter alia, on minimum pay, working hours and the granting of leave.

Further to the above, the Bank defends human rights and opposes all forms of child, forced or compulsory labor. The Bank respects employee rights and is committed to safeguarding them fully, in accordance with the national and the European Union Law and the Conventions of the International Labor Organization.

#### Employees in Management positions \* as of 31.12.2019:

Gender	18-25	26-40	41-50	51+	Total	Percentage
Male	0	32	229	182	443	62.9%
Female	0	18	171	72	261	37.1%
<b>Total:</b>	<b>0</b>	<b>50</b>	<b>400</b>	<b>254</b>	<b>704</b>	<b>100.0%</b>
<b>Percentage %</b>	<b>0.0%</b>	<b>7.1%</b>	<b>56.8%</b>	<b>36.1%</b>	<b>100.0%</b>	

Educational level	Breakdown as of 31.12.2019	Percentage %
Postgraduate Studies (Master's, PhD)	312	44.3%
Tertiary Education (graduates of Universities or Technological Education Institutes)	206	29.3%
High School (Lyceum) graduates	186	26.4%
<b>Total</b>	<b>704</b>	<b>100.0%</b>

\*Management positions are defined as the positions from Branch Manager and above.

The percentage and number of Employees in managerial positions per educational level point out that Employees in managerial positions holding postgraduate degrees represent in 2019 the highest percentage, i.e. 44%.

## 16.2 Appendix II - CVs of the Members of the Board of Directors

### Chair

#### **Vasileios T. Rapanos (Non-Executive Member)**

He was born in Kos in 1947. He is Professor Emeritus at the Faculty of Economics of the University of Athens and has been an Ordinary Member of the Academy of Athens since 2016. He studied Business Administration at the Athens School of Economics and Business (1975) and holds a Master's in Economics from Lakehead University, Canada (1977) and a PhD from Queen's University, Canada. He was Deputy Governor and Governor of the Mortgage Bank (1995-1998), Chairman of the Board of Directors of the Hellenic Telecommunications Organization (1998-2000), Chairman of the Council of Economic Advisors at the Ministry of Economy and Finance (2000-2004), and Chairman of the Board of Directors of the National Bank of Greece and the Hellenic Bank Association (2009-2012). He has been the Chair of the Board of Directors of the Bank since May 2014.

### Executive Members

#### CEO

#### **Vassilios E. Psaltis (CEO as of 2.1.2019)**

He was born in Athens in 1968 and holds a PhD and an MBA from the University of St. Gallen in Switzerland. He has worked as Deputy (acting) Chief Financial Officer at Emporiki Bank and at ABN AMRO Bank's Financial Institutions Group in London. He joined Alpha Bank in 2007. In 2010 he was appointed Group Chief Financial Officer (CFO) and in 2012 he was appointed General Manager. Through these posts, he spearheaded capital raisings of several billions from foreign institutional shareholders, diversifying the Bank's shareholder base, as well as significant mergers and acquisitions that contributed to the consolidation of the Greek banking market, reinforcing the position of the Bank. He was voted seventh best CFO among European banks (2014 and 2018) by institutional investors and analysts in the Extel international survey. He has been a Member of the Board of Directors of the Bank since November 2018 and Chief Executive Officer since January 2019.

### General Managers

#### **Spyros N. Filaretos**

He was born in Athens in 1958. He studied Economics at the University of Manchester and at the University of Sussex. He joined the Bank in 1985. He was appointed Executive General Manager in 1997 and General Manager in 2005. In October 2009 he was appointed Chief Operating Officer (COO). He has been a Member of the Board of Directors of the Bank since 2005.

#### **Artemios Ch. Theodoridis**

He was born in Athens in 1959. He studied Economics at the Athens University of Economics and Business and holds an MBA from the University of Chicago. He joined the Bank as Executive General Manager in 2002 and was appointed General Manager in 2005. As of 2017, he has been supervising the Non-Performing Loans and the Treasury Business Units. He has been a Member of the Board of Directors of the Bank since 2005.



## Senior Advisor to the CEO

### **George C. Aronis** (Executive Member until 31.1.2020)

He was born in Athens in 1957. He studied Finance and holds an MBA from the Athens Laboratory of Business Administration. He has worked in ABN AMRO BANK both in Greece and abroad and he served for five years as General Manager Consumer Banking. In 1999 he joined the National Bank of Greece Group and served in managerial positions and in 2002 he was appointed General Manager Retail Banking. He joined Alpha Bank in 2004 as Retail Banking Manager. In 2006 he was appointed Executive General Manager and in 2008 General Manager, supervising the Retail and Wholesale Banking Business Units. He was a Member of the Board of Directors of the Bank from 2011 to January 2020.

## Non-Executive Members

### **Efthimios O. Vidalis**

He was born in 1954. He holds a BA in Government from Harvard University and an MBA from the Harvard Graduate School of Business Administration. He held several leadership positions for almost 20 years at Owens Corning, where he served as President of the Global Composites and Insulation Business Units. He joined S&B Industrial Minerals S.A. in 1998 as Chief Operating Officer (1998-2001), became the first non-family Chief Executive Officer (2001-2011) and served on the Board of Directors for 15 years. He was a member of the Board of Directors of Future Pipe Industries (Dubai, U.A.E.) from 2008 to 2019, Chairman of the Board of Directors of the Greek Mining Enterprises Association (2005-2009) and member of the Board of Directors of the Hellenic Federation of Enterprises (SEV) from 2006 to 2016, where he served as Vice Chairman (2010-2014) and as Secretary General (2014-2016). Furthermore, he is the founder of the SEV Business Council for Sustainable Development and was the Chairman thereof from 2008 to 2016. He is a non-executive member of the Board of Directors of TITAN CEMENT COMPANY S.A. and Fairfield-Maxwell Ltd (U.S.A.). He has been a Member of the Board of Directors of the Bank since May 2014.

### **Demetrios P. Mantzounis** (CEO until 2.1.2019 and Non-Executive Member until 31.12.2019)

He was born in Athens in 1947. He studied Political Sciences at the University of Aix-Marseille. He joined the Bank in 1973. In 2002 he was appointed General Manager and from 2005 to 2018 he served as Managing Director. Based on the annual international survey conducted by Extel, he was voted among the 20 best CEOs of European banks at a Pan-European level in 2014, 2016 and 2018. Moreover, based on the same survey, he was voted Best CEO in Greece in 2014 and in 2016 and Second Best CEO in Greece in 2018. He was a Member of the Board of Directors of the Bank from 1995 to 2019.

## Non-Executive Independent Members

### **Jean L. Cheval**

He was born in Vannes, France in 1949. He studied Engineering at the École Centrale des Arts et Manufactures, while he holds a DES (Diplôme d'Études Spécialisées) in Economics (1974) from the University of Paris I. After starting his career at BIPE (Bureau d'Information et de Prévisions Économiques), he served in the French public sector (1978-1983) and then worked at BANQUE INDOSUEZ-CRÉDIT AGRICOLE INDOSUEZ (1983-2001), wherein he held various senior management positions. He served as CEO and then as Chairman of the Banque Audi France (2002-2005), while he was Head of France at the Bank of Scotland (2005-2009). As of 2009 he has been working at Natixis in various senior management positions. He is currently a member of the Board of Directors of HIME-SAUR, France and of EFG-Hermès, Egypt. He has been a Member of the Board of Directors of the Bank since June 2018.



#### **Carolyn G. Dittmeier**

She was born in 1956. She holds a BSc in Economics from the Wharton School of the University of Pennsylvania. She is a statutory auditor, a certified public accountant, a certified internal auditor and a certified risk management assurance professional focusing on the audit and risk management sectors. She commenced her career at the auditing and consulting firm KPMG and subsequently assumed managerial responsibilities in the Montedison Group as Financial Controller and later as Head of Internal Audit. Subsequently, she took on the role of Chief Internal Audit Executive of the Poste Italiane Group. She has carried out various professional and academic activities focusing on risk and control governance and has written two books. She was Vice Chair and Director of the Institute of Internal Auditors (IIA), Chair of the European Confederation of Institutes of Internal Auditing (ECIIA) and Chair of the Italian Association of Internal Auditors. Furthermore, she served as Independent Director and Chair of the Risk and Control Committee of Autogrill SpA as well as of Italmobiliare SpA. She is currently President of the Statutory Audit Committee of Assicurazioni Generali SpA and a member of the Boards and/or the Audit Committees of some non-financial privately held companies. She has been a Member of the Board of Directors of the Bank since January 2017.

#### **Richard R. Gildea**

He was born in 1952. He holds a BA in History from the University of Massachusetts (1974) and an MA in International Economics, European Affairs from the Johns Hopkins University School of Advanced International Studies (1984). He served in JP Morgan Chase from 1986 to 2015, wherein he held various senior management positions throughout his career. He was Emerging Markets Regional Manager for the Central and Eastern Europe Corporate Finance Group, London (1993-1997) and Head of Europe, Middle East and Africa (EMEA) Restructuring, London (1997-2003), as well as Senior Credit Officer in EMEA Emerging Markets, London (2003-2007). From 2007 to 2015 he was Senior Credit Officer for JP Morgan's Investment Bank Corporate Credit in EMEA Developed Markets, London and was appointed Senior Risk Representative to senior committees within the Investment Bank. He is currently a member of the Board of Advisors at the Johns Hopkins University School of Advanced International Studies, Washington D.C., where he chairs the Finance Committee as well as a member of Chatham House (the Royal Institute of International Affairs), London and of the International Institute of Strategic Studies, London. He has been a Member of the Board of Directors of the Bank since July 2016.

#### **Shahzad A. Shahbaz**

He was born in 1960. He holds a BA in Economics from Oberlin College, Ohio, U.S.A. He has worked at various banks and investments firms, since 1981, including the Bank of America (1981-2006), from which he left as Regional Head (Corporate and Investment Banking, Continental Europe, Emerging Europe, Middle East and Africa). He served as Chief Executive Officer (CEO) of NBD Investment Bank/Emirates NBD Investment Bank (2006-2008) and of QInvest (2008-2012). He is currently the Group CIO of Al Mirqab Holding Co. He has been a Member of the Board of Directors of the Bank since May 2014.



### **Jan A. Vanhevel**

He was born in 1948. He studied Law at the University of Leuven (1971), Financial Management at Vlekho (Flemish School of Higher Education in Economics), Brussels (1978) and Advanced Management at INSEAD (The Business School for the World), Fontainebleau. He joined Kredietbank in 1971, which became KBC Bank and Insurance Holding Company in 1998. He acquired a Senior Management position in 1991 and joined the Executive Committee in 1996. In 2003 he was in charge of the non-Central European branches and subsidiaries, while in 2005 he became responsible for the KBC subsidiaries in Central Europe and Russia. In 2009 he was appointed CEO and implemented the Restructuring Plan of the group until 2012, when he retired. From 2008 to 2011 he was President of the Fédération belge du secteur financier (Belgian Financial Sector Federation) and a member of the Verbond van Belgische Ondernemingen (Federation of Enterprises in Belgium), while he has been the Secretary General of the Institut International d'Études Bancaires (International Institute of Banking Studies) since May 2013. He was also a member of the Liikanen Group on reforming the structure of the EU banking sector. Currently, he is a Board member of two private industrial multinational companies and of a private equity company. He has been a Member of the Board of Directors of the Bank since April 2016.

**Non-Executive Member** (Pursuant to the provisions of Law 3864/2010)

### **Johannes Herman Frederik G. Umbgrove**

He was born in Vught, the Netherlands in 1961. He holds an LL.M. in Trade Law (1985) from Leiden University and an MBA from INSEAD (The Business School for the World), Fontainebleau (1991). He worked at ABN AMRO Bank N.V. (1986-2008), wherein he held various senior management positions throughout his career. He served as Chief Credit Officer Central and Eastern Europe, Middle East and Africa (CEEMEA) of the Global Markets Division at The Royal Bank of Scotland Group (2008-2010) and as Chief Risk Officer and member of the Management Board at Amsterdam Trade Bank N.V. (2010-2013). From 2011 until 2013 he was Group Risk Officer at Alfa Bank Group Holding and as of 2014 he has been a Risk Advisor at Sparrenwoude B.V. He has been a member of the Supervisory Board of Demir Halk Bank (Nederland) N.V. since 2016 and in 2018 he became the Chairman thereof. Furthermore, he has been a Member of the Supervisory Board of Lloyds Bank GmbH since December 2019. He has been a Member of the Board of Directors of the Bank, representing the Hellenic Financial Stability Fund, since April 2018.

## **16.3 Appendix III – Group's subsidiaries and associates**

The following tables list Alpha Bank Group's subsidiaries and associates, according to the consolidation method followed for regulatory purposes.



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
ALPHA BANK LONDON LTD	Full consolidation	x				Credit institution
ALPHA BANK CYPRUS LTD	Full consolidation	x				Credit institution
ALPHA BANK ROMANIA S.A.	Full consolidation	x				Credit institution
ALPHA BANK ALBANIA SH.A.	Full consolidation	x				Credit institution
ALPHA LEASING A.E.	Full consolidation	x				Financial corporations other than credit institutions
ABC FACTORS A.E.	Full consolidation	x				Financial corporations other than credit institutions
ALPHA FINANCE A.E.P.E.Y.	Full consolidation	x				Financial corporations other than credit institutions
ALPHA ASSET MANAGEMENT A.E.D.A.K	Full consolidation	x				Financial corporations other than credit institutions
ALPHA VENTURES A.E.	Full consolidation	x				Financial corporations other than credit institutions
ALPHA ASTIKA AKINITA A.E.	Full consolidation	x				Non-financial corporations
ALPHA REAL ESTATES MANAGEMENT AND INVESTMENTS S.A.	Full consolidation	x				Non-financial corporations
ALPHA GROUP JERSEY LIMITED	Full consolidation			x		Non-financial corporations
ALPHA INSURANCE AGENTS A.E.	Full consolidation		x			Non-financial corporations
ALPHA BANK LONDON NOMINEES LTD	Full consolidation				x	Non-financial corporations
ABL INDEPENDENT FINANCIAL ADVISERS LTD	Full consolidation				x	Financial corporations other than credit institutions



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
APE FIXED ASSETS A.E.	Full consolidation	x				Non-financial corporations
SSIF ALPHA FINANCE ROMANIA S.A.	Full Consolidation	x				Financial corporations other than credit institutions
ALPHA CREDIT GROUP PLC	Full Consolidation	x				Non-financial corporations
Alpha Group Investments Ltd	Full Consolidation	x				Non-financial corporations
Καφέ Alpha AE	Full Consolidation		x			Non-financial corporations
Alpha Real Estate Bulgaria E.O.O.D.	Full Consolidation	x				Non-financial corporations
Alpha Supporting Services A.E	Full Consolidation		x			Non-financial corporations
Ionian Equity Participations Ltd	Full Consolidation	x				Non-financial corporations
Alphalife AAEZ	Full Consolidation				x	Non-financial corporations
Alpha Trustees Ltd	Full Consolidation	x				Non-financial corporations
Alpha Insurance Brokers Srl	Full Consolidation		x			Non-financial corporations
Alpha A.E. Ventures Capital Management - AKES	Full Consolidation	x				Financial corporations other than credit institutions
Real Car Rental AE	Full Consolidation		x			Non-financial corporations
ALPHA LEASING ROMANIA IFN S.A.	Full Consolidation	x				Financial corporations other than credit institutions
Chardash Trading E.O.O.D.	Full Consolidation	x				Non-financial corporations
Irida Plc	Full Consolidation	x				Non-financial corporations
AGI-BRE PARTICIPATION S 1 L.T.D.	Full Consolidation	x				Non-financial corporations
AGI-RRE Participations 1 Srl	Full Consolidation	x				Non-financial corporations
ALPHA REAL ESTATE SERVICES S.R.L.	Full Consolidation	x				Non-financial corporations



**Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)**

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
AGI - RRE PARTICIPATION S 1 S.R.L.	Full Consolidation	x				Non-financial corporations
Stockfort Ltd	Full Consolidation	x				Non-financial corporations
Alpha Group Ltd	Full Consolidation			x		Non-financial corporations
Zerelda Ltd	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY I A.E.	Full Consolidation	x				Non-financial corporations
Alpha Investment Property Attikis AE	Full Consolidation	x				Non-financial corporations
Alpha Investment Property Attikis II AE	Full Consolidation	x				Non-financial corporations
AGI - RRE ATHENA LTD	Full Consolidation	x				Non-financial corporations
AGI - RRE POSEIDON LTD	Full Consolidation	x				Non-financial corporations
AGI - RRE HERA LTD	Full Consolidation	x				Non-financial corporations
UMERA LTD	Full Consolidation	x				Non-financial corporations
S.C. ROMFELT REAL ESTATE S.A.	Full Consolidation	x				Non-financial corporations
EMPORIKI VENTURE CAPITAL DEVELOPED MARKETS LTD	Full Consolidation	x				Financial corporations other than credit institutions
EMPORIKI VENTURE CAPITAL EMERGING MARKETS LTD	Full Consolidation	x				Financial corporations other than credit institutions
EMPORIKI MANAGEMENT A.E.	Full Consolidation	x				Non-financial corporations
EMPORIKI DEVELOPMENT & REAL ESTATE MANAGEMENT A.E.	Full Consolidation	x				Non-financial corporations
AGI - RRE Zeus Srl	Full Consolidation	x				Non-financial corporations



**Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)**

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
AGI - RRE POSEIDON SRL	Full Consolidation	x				Non-financial corporations
AGI - RRE HERA SRL	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 2 L.T.D.	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 3 L.T.D.	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 4 L.T.D.	Full Consolidation	x				Non-financial corporations
Alpha Real Estate Services LLC	Full Consolidation	x				Non-financial corporations
AGI - RRE ARES LTD	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 2 E.O.O.D.	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 2BG E.O.O.D.	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 3 E.O.O.D.	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 4 E.O.O.D.	Full Consolidation	x				Non-financial corporations
AGI - RRE VENUS LTD	Full Consolidation	x				Non-financial corporations
AGI - RRE ARTEMIS LTD	Full Consolidation	x				Non-financial corporations
AGI - BRE PARTICIPATION S 5 L.T.D.	Full Consolidation	x				Non-financial corporations
SC Cordia Residence Srl	Full Consolidation	x				Non-financial corporations
AGI - RRE CLEOPATRA LTD	Full Consolidation	x				Non-financial corporations
AGI - RRE HERMES LTD	Full Consolidation	x				Non-financial corporations
AGI - RRE ARSINOE LTD	Full Consolidation	x				Non-financial corporations
AGI - SRE ARIADNI LTD	Full Consolidation	x				Non-financial corporations



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
SC Carmel Residential Srl	Full Consolidation	x				Non-financial corporations
AGI-RRE CLEOPATRA SRL	Full Consolidation	x				Non-financial corporations
AGI-RRE HERMES SRL	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY NEAS KIFISSIAS S.A.	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY KALLIROIS S.A.	Full Consolidation	x				Non-financial corporations
AGI-CYPRE ALAMINOS LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE TOCHINI LTD	Full Consolidation	x				Non-financial corporations
AGI-Cypre Evagoras Ltd	Full Consolidation	x				Non-financial corporations
AGI-CYPRE TERSEFANOUE LTD	Full Consolidation	x				Non-financial corporations
AGI-Cypre Mazotos Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Ermis Ltd	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY LEVADIAS S.A.	Full Consolidation	x				Non-financial corporations
Alpha Shipping Finance Ltd	Full Consolidation	x				Non-financial corporations
Asmita Gardens Srl	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY KEFALARIOU A.E.	Full Consolidation	x				Non-financial corporations
ALPHA BANK DEBT NOTIFICATION SERVICES S.A.	Full Consolidation		x			Non-financial corporations
Asstrom Residents Srl	Full Consolidation	x				Non-financial corporations



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
Cubic Center Development S.A.	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY NEAS ERYTHRAIAS S.A.	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENT PROPERTY CHANION S.A.	Full Consolidation	x				Non-financial corporations
CEPAL HELLAS HOLDINGS S.A.	Equity Method		x			Non-financial corporations
AGI SRE PARTICIPATION S 1 LTD	Full Consolidation	x				Non-financial corporations
AGI SRE PARTICIPATION S 1 DOO	Full Consolidation	x				Non-financial corporations
Alpha Proodos DAC	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENTS PROPERTY SPATON S.A.	Full Consolidation	x				Non-financial corporations
TH Top Hotels Srl	Full Consolidation		x			Financial corporations other than credit institutions
ALPHA INVESTMENTS PROPERTY KALLITHEAS S.A.	Full Consolidation	x				Non-financial corporations
BEROE REAL ESTATE EOOD	Full Consolidation	x				Non-financial corporations
KESTREL ENTERPRISE EOOD	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENTS PROPERTY IRAKLEIOU S.A.	Full Consolidation	x				Non-financial corporations
ALPHA INVESTMENTS PROPERTY GI I S.A.	Full Consolidation	x				Non-financial corporations



**Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)**

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
AGI-Cypre Property 1 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 2 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 3 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 4 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 5 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 6 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 8 Ltd	Full Consolidation	x				Non-financial corporations
AGI-Cypre Property 7 Ltd	Full Consolidation	x				Non-financial corporations
ABC RE L1 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 9 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 10 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 11 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 12 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 13 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 14 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 15 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 16 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 17 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 18 LIMITED	Full Consolidation	x				Non-financial corporations



**Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)**

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
AGI-CYPRE PROPERTY 19 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 20 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE RES PAFOS LIMITED	Full Consolidation	x				Non-financial corporations
AGI-Cypre P&F Nicosia Ltd	Full Consolidation	x				Non-financial corporations
ABC RE P1 LIMITED	Full Consolidation	x				Non-financial corporations
ABC RE P2 LIMITED	Full Consolidation	x				Non-financial corporations
ABC RE P3 LIMITED	Full Consolidation	x				Non-financial corporations
ABC RE L2 LIMITED	Full Consolidation	x				Non-financial corporations
ABC RE P4 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE RES NICOSIA LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE P&F LIMASSOL LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 21 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 22 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 23 LIMITED	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 24 LIMITED	Full Consolidation	x				Non-financial corporations
ABC RE L3 LTD	Full Consolidation	x				Non-financial corporations
ABC RE P5 LTD	Full Consolidation	x				Non-financial corporations
ABC RE P&F LIMASSOL LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 25 LTD	Full Consolidation	x				Non-financial corporations



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
AGI-CYPRE PROPERTY 26 LTD	Full Consolidation	x				Non-financial corporations
ABC RE COM PAFOS LTD	Full Consolidation	x				Non-financial corporations
ABC RE RES LARNACA LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE P&F PAFOS LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 27 LTD	Full Consolidation	x				Non-financial corporations
ABC RE L4 LTD	Full Consolidation	x				Non-financial corporations
ABC RE L5 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 28 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 29 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 30 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE COM PAFOS LTD	Full Consolidation	x				Non-financial corporations
AEP INDUSTRIAL PROPERTY M. AE	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 31 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 32 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 33 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 34 LTD	Full Consolidation	x				Non-financial corporations
ALPHA GROUP REAL ESTATE LTD	Full Consolidation	x				Non-financial corporations
ABC RE P&F PAFOS LTD	Full Consolidation	x				Non-financial corporations



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
ABC RE P&F NICOSIA LTD	Full Consolidation	x				Non-financial corporations
ABC RE RES NICOSIA LTD	Full Consolidation	x				Non-financial corporations
FIERTON LTD	Full Consolidation	x				Non-financial corporations
AIP INDUSTRIAL ASSETS ROG S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP ATTICA RESIDENTIAL ASSETS I S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP THESSALONIKI RESIDENTIAL ASSETS S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP CRETAN RESIDENTIAL ASSETS S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP AEGEAN RESIDENTIAL S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP IONIAN RESIDENTIAL ASSETS S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP ATTICA COMMERCIAL ASSETS S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP THESSALONIKI COMMERCIAL ASSETS S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP COMMERCIAL ASSETS ROG S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP ATTICA RETAIL ASSETS I S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP ATTICA RETAIL ASSETS II S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP ATTICA RESIDENTIAL ASSETS II S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP RETAIL ASSETS ROG S.M.S.A.	Full Consolidation	x				Non-financial corporations
AIP LAND II S.M.S.A.	Full Consolidation	x				Non-financial corporations
ABC RE P6 LTD	Full Consolidation	x				Non-financial corporations



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

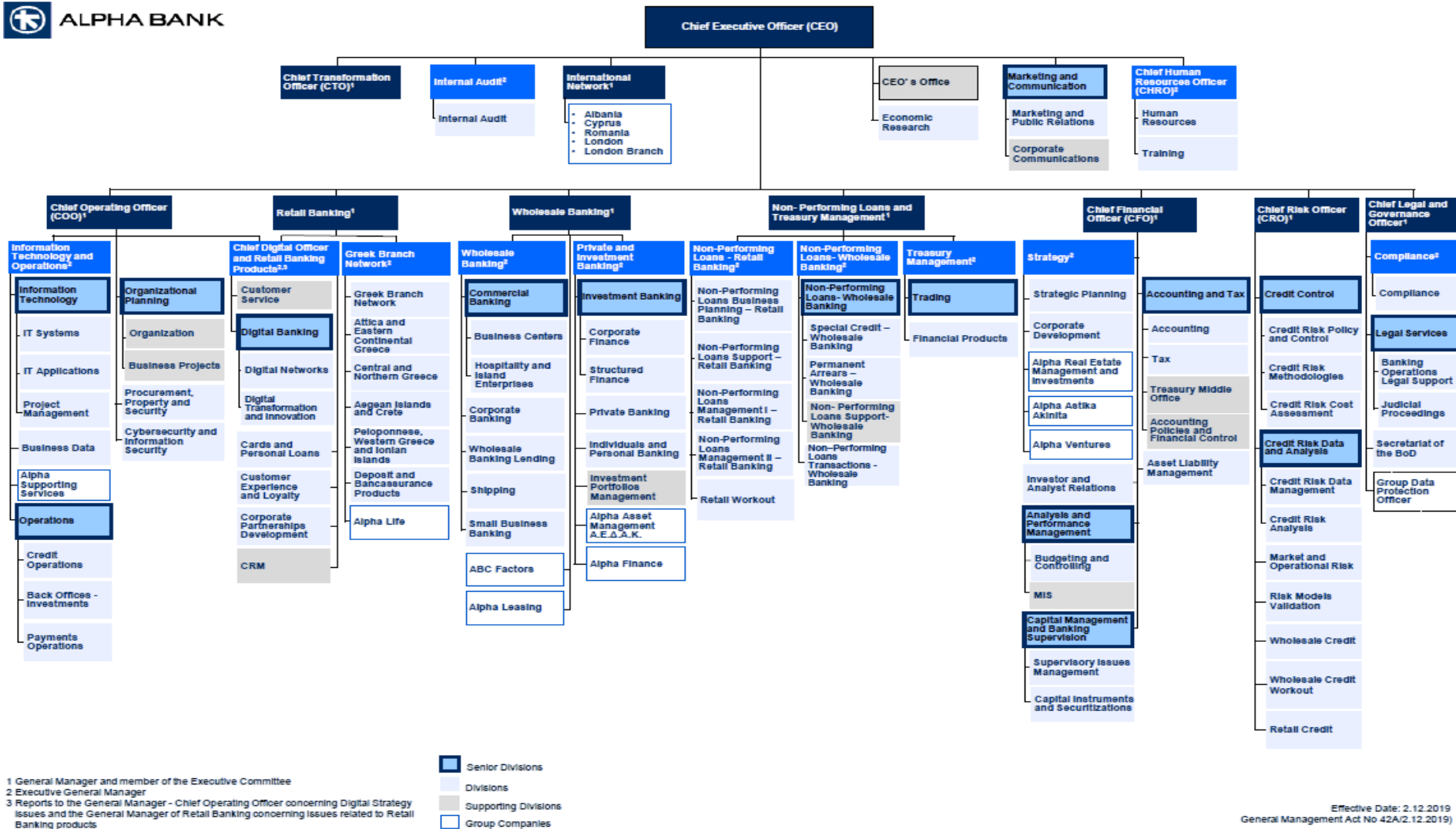
Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
AGI-CYPRE PROPERTY 35 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE P&F LARNACA LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 37 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE RES AMMOCHOSTOS LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 36 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 38 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE RES LARNACA LTD	Full Consolidation	x				Non-financial corporations
ABC RE P7 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 42 LTD	Full Consolidation	x				Non-financial corporations
ABC RE P&F LARNACA LTD	Full Consolidation	x				Non-financial corporations
KRIGEO HOLDINGS LTD	Full Consolidation	x				Non-financial corporations
ALPHA CREDIT ACQUISITION COMPANY LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 43 LTD	Full Consolidation	x				Non-financial corporations
AGI-CYPRE PROPERTY 44 LTD	Full Consolidation	x				Non-financial corporations
ALPHA INTERNATIONAL HOLDING COMPANY SA	Full Consolidation	x				Non-financial corporations
APE COMMERCIAL PROPERTY A.E.	Equity Method		x			Non-financial corporations
APE Investment Property A.E	Equity Method		x			Non-financial corporations
ALPHA TANEOS A.K.E.S.	Equity Method		x			Non-financial corporations
Rosequeens Properties Ltd.	Equity Method		x			Non-financial corporations
Panarae Saturn LP	Equity Method		x			Non-financial corporations
Alpha Investment Property Commercial Stores A.E.	Equity Method		x			Non-financial corporations



Table 50: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Equity method	Solo Consolidation	Risk weighed at 25 %	
ALPHA INVESTMENT PROPERTY ELEONA A.E.	Equity Method		x			Non-financial corporations
OLGANOS A.E.	Equity Method		x			Non-financial corporations
AEDEP Thessalias and Steras Ellados	Equity Method		x			Non-financial corporations
ALC Novelle Investments Ltd	Equity Method				x	Non-financial corporations
Banking Information Systems A.E.	Equity Method		x			Non-financial corporations
Propindex A.E.D.A.	Equity Method		x			Non-financial corporations
Rosequeens Properties Srl.	Equity Method		x			Non-financial corporations

## 16.4 Appendix IV – Organizational Chart



1 General Manager and member of the Executive Committee

2 Executive General Manager

3 Reports to the General Manager - Chief Operating Officer concerning Digital Strategy Issues and the General Manager of Retail Banking concerning issues related to Retail Banking products

■ Senior Divisions

■ Divisions

■ Supporting Divisions

□ Group Companies