

Alpha Bank Group

**Pillar III Disclosures Report for
June 30, 2018**



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1 Introduction

This Report provides Pillar III disclosures on the consolidated level as required by the regulatory framework for capital and liquidity, established by the Basel Committee on Banking Supervision, also known as Basel 3.

The 30.6.2018 Pillar III Report provides an update to the risk weighted assets, own funds, leverage ratio, credit & market risk information in line with the recommendations provided by the European Banking Authority (“EBA”) in its “Final Report on the Guidelines on Disclosure Requirements under Part Eight of Regulation (EU) No 575/2013” (“EBA Guideline”, EBA/GL/2016/11, version 2*) and based on uniform disclosures regarding the transitional period for mitigating the impact of the introduction of IFRS 9 on own funds that were published in January 2018 (EBA Guideline, EBA/GL/2018/01).

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 law 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.

2 Pillar III Disclosures Overview

2.1 Background on Pillar III Disclosures 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").

Disclosures enhancements

In January 2015, the Basel Committee on Banking Supervision published the Revised Pillar 3 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 575/2013 and with the Basel Committee, and are effective from 31.12.2017. Alpha Bank Group made an effort to incorporate the enhancements to the extent possible.

Approval and publication

In the context of the Group's robust internal governance framework, an "internal disclosures policy" has been designed and implemented in order to ensure consistent and continuous compliance with the Pillar III 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.

It is noted that the data included in this report may be different than the respective accounting data, mainly due to differences between the regulatory consolidation and the accounting 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 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.

Based on the above policy, the Bank publishes the Pillar III report via its website, within the applicable deadlines.

The disclosures included within this report were verified and approved internally in line with the board-approved "internal disclosures policy". Business units attest to the accuracy and 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

Single Supervisory Mechanism (SSM)

The SSM is a system of financial supervision composed of the European Central Bank (ECB) and national competent authorities (NCAs). Since November 2014, Alpha Bank Group is supervised in accordance with the SSM framework and as such is directly supervised by the ECB, having been assessed as “Other Systemically Important Institution” (O-SII).

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 January 1, 2014.

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

- 4.5% for the Common Equity Tier I ratio (CET 1)
- 6% for the Tier I ratio
- 8% for the Total Capital Adequacy ratio

On top of the minimum own funds requirements, capital buffers will be gradually implemented from 1.1.2016 until 31.12.2019.

In particular:

- Capital Conservation buffer from 0.625% to 2.5%
- O-SII buffer (Other systemically important institutions buffer) from 1% to 3%
- Countercyclical buffer from 0% to 2.5%

Regarding O-SII buffer, Bank of Greece conducts a scoring process, yearly, based on the consolidated FINREP/COREP data. According to this process the Bank, should comply with a buffer of 1% by 2022, applying 0.25% phase-in percentages starting from 2019.

For 2017 and 2018 the Bank of Greece, as National Competent Authority, set both the O-SII and the countercyclical buffer at zero per cent (0%).

3 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.

The Group remains focused on reducing its reliance to Eurosystem funding and the efficient implementation of its NPE 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.

3.1 Capital Ratios

The Capital Adequacy Ratio is calculated as the result of the Group's regulatory capital (own funds) to its risk-weighted assets. Regulatory capital includes Common Equity Tier 1 (CET1) capital (share capital, reserves, and minority interests), Additional Tier 1 capital (hybrid securities) and Tier 2 capital (subordinated debt). Risk-weighted assets 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.

As of 30.6.2018, Alpha Bank's CET1 stood at approx. Euro 8.9 billion, RWAs amounted to Euro 48.1 billion resulting in a CET1 ratio of 18.5%, up by 25 bps, impacted positively affected by the reduction of Credit risk. Deferred Tax Assets (DTAs) stood at Euro 4.7 billion with the eligible amount to be converted to tax credit claims at Euro 3.3 billion.

Table 1: Capital Adequacy Ratios (%)		(in Euro million)	
Capital Type	30.6.2018	31.3.2018	
CET1	8,891	8,875	
Tier 1 Capital	8,897	8,881	
Tier 2 Capital	9	10	
Total Regulatory Capital for C.A.R. calculation	8,906	8,891	
Risk Weighted Assets	48,079	48,684	
Capital Ratios			
CET1 Ratio	18.5%	18.2%	
Tier 1 Ratio	18.5%	18.2%	
Capital Adequacy Ratio (Tier 1 + Tier 2)	18.5%	18.3%	

On December 8, 2017, the ECB informed Alpha Bank that according to its Supervisory review and Evaluation Process (SREP) assessment the Overall Capital Requirement (OCR) for 2018 is set at 12.875% increased by 0.625% due to the gradual increase of the capital conservation buffer. OCR includes, in addition to the Total SREP Capital Requirements (TSCR), the combined buffers requirements (CBR) defined in point (6) of Article 128 of Directive 2013/36/EU as applicable.

The TSCR is composed of the minimum total own fund requirements (8%) and the additional Pillar 2 Requirement (P2R), according to article 16(2) (a) of the Regulation 1024/2013/EU.

The above minimum ratios should be maintained on a phase-in basis under applicable transitional rules under CRR/CRD IV, at all times.

3.2 EBA 2018 Stress testing

Alpha Bank successfully concluded the 2018 Stress Test which was conducted in the first half of 2018 based on a static balance sheet approach under a baseline and an adverse macro scenario with a 3 year forecasting horizon (2018-2020). The starting point was December 31, 2017, restated to account for IFRS 9 impact. Impact was assessed in terms of CET1 ratio. No hurdle rate or capital thresholds were applied for this exercise.

Under the baseline scenario, 2020 CET1 ratio reached 20.4%, following an aggregate impact of +212 bps mainly driven by a strong pre provision income generation. Under the adverse scenario, 2020 CET1 ratio stood at 9.7%, down by 856bps, post IFRS 9, largely driven by the negative impact of Credit Risk resulting from the stressed macro environment and methodological constraints. Based on feedback received by the Single Supervisory Mechanism (SSM), the Stress Test outcome, along with other factors, have been assessed by its Supervisory Board, pointing to no capital shortfall. Therefore, no capital plan was required, as a result of the exercise.

Table 2: Stress test Results			(in Euro million)
	31.12.2017	31.12.2020	31.12.2020
		Baseline Scenario	Adverse Scenario
CET1	8,987	10,380	4,745
RWAs	49,240	50,949	48,982
CET1 (%)	18.3%	20.4%	9.7%

3.3 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 2nd, 0.7 in 3rd, 0.5 in 4th 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.

Table 3: Comparison of own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 (in Euro million)		
	30.6.2018	31.3.2018
Available capital (amounts)		
Common Equity Tier 1 (CET1) capital	8,891	8,875
CET1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7,296	7,321
Tier 1 capital	8,897	8,881
Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7,302	7,327
Total capital	8,906	8,891
Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7,311	7,337
Risk-weighted assets (amounts)		
Total Risk-weighted assets	48,079	48,684
Total Risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	47,257	47,710
Capital ratios		
Common Equity Tier 1 ratio (%)	18.5%	18.2%
CET1 ratio (%) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.4%	15.3%
Tier 1 ratio (%)	18.5%	18.2%
Tier 1 ratio (%) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.5%	15.4%
Total ratio (%)	18.5%	18.3%
Total ratio (%) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.5%	15.4%
Leverage ratio		
Leverage ratio total exposure measure	59,703	59,481
Leverage ratio	14.9%	14.9%
leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	12.5%	12.6%

3.4 Own Funds structure

The Group has high quality capital since 99.8% of the total capital as of 30.6.2018 is Common Equity Tier 1 (CET1).

The following table presents the analysis of Own funds structure:

Table 4: Own funds structure		(in Euro million)		
Type	30.6.2018	31.3.2018	31.3.2018 ¹	
Share capital	463	463	463	
Share premium	10,801	10,801	10,801	
Accumulated other comprehensive income (and other reserves)	-2,915	-2,890	-2,890	
Reserves & Retained Earnings	-3,143	-3,164	-3,164	
AFS reserves	229	274	274	
Adjustments due to IFRS 9 transitional adjustments	1,140	1,140	1,140	
Minority interest (transitional)	0	0	0	
PVA	-7	-7	-7	
Common Equity Tier 1 capital before regulatory adjustments	9,482	9,507	9,507	
Period Profit	7	0	59	
Intangible assets	-374	-366	-366	
DTA amortization	-224	-266	-266	
Regulatory adjustments applied to common equity tier 1 due to insufficient additional tier 1 and tier 2 to cover deductions	0	0	0	
Total regulatory adjustments to Common Equity Tier 1	-591	-632	-572	
Common Equity Tier 1 capital (CET1)	8,891	8,875	8,934	
Hybrid instruments	15	15	15	
Additional Tier I before regulatory adjustments	15	15	15	
Hybrid instruments transitional	-9	-9	-9	
(-) Goodwill/Intangible investments	0	0	0	
<i>of which deductible from Additional Tier I</i>	-9	-9	-9	
<i>of which deductible from CET1</i>	0	0	0	
Total regulatory adjustments to additional Tier I	-9	-9	-9	
Additional Tier I	6	6	6	
Tier I Capital (CET1 + AT1)	8,897	8,881	8,940	
Subordinated loan	1	3	3	
Hybrid instruments (transitional)	9	9	9	
Tier II capital before regulatory adjustments	10	12	12	
Total regulatory adjustments to Tier II	0	-2	-2	
Tier II capital	9	10	10	
Total Capital (TC = Tier I + Tier II)	8,906	8,891	8,951	
Total RWA	48,079	48,684	48,699	
Common Equity Tier 1 Ratio	18.5%	18.2%	18.3%	
Tier I Ratio	18.5%	18.2%	18.4%	
Capital Adequacy Ratio (Tier I + Tier II)	18.5%	18.3%	18.4%	

¹ Including interim profits € 59 mn

3.5 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 575/2013 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.
- **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 following template summarises RWA and minimum capital requirements by risk type. Minimum capital requirement is calculated at 8% of RWA.

Risk Category	RWAs		Minimum capital requirements
	30.6.2018	31.3.2018	30.6.2018
Credit risk (excluding CCR)	43,149	43,722	3,452
Of which the standardised approach	43,149	43,722	3,452
CCR	294	271	24
Of which mark to market	133	138	11
Of which risk exposure amount for contributions to the default fund of a CCP	0	0	0
Of which CVA	48	45	4
Settlement risk	0	0	0
Securitisation exposures in the banking book (after the cap)	89	97	7
Of which standardised approach	89	97	7
Market risk	572	605	46
Of which the standardised approach	2	3	0
Of which IMA	570	602	46
Large exposures	0	0	0
Operational risk	3,935	3,935	315
Of which basic indicator approach	10	10	1
Of which standardised approach	3,925	3,925	314
Amounts below the thresholds for deduction (subject to 250% risk weight)	41	54	3
Total	48,079	48,684	3,847

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

Table 6: EU INS1 – Non-deducted participations in insurance undertakings		(in Euro million)
30.6.2018		Value
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)		16
Total RWAs		41

As of 30.6.2018 the total risk weighted assets were reduced by 1.2% compared to 31.3.2018 or Euro 0.6 billion, from Euro 48.7 billion to Euro 48.1 billion. Credit risk capital requirement represents approx. 90.4% of total capital requirements while RWAs are further adjusted due to impairments, DTA and market risk capital requirements shrinkage.

4 Leverage

The leverage ratio, which is defined as Tier 1 capital divided by total exposure, is a binding requirement from the beginning of 2018. 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 30.6.2018 on consolidated basis was 14.9%, according to the transitional definition of Tier 1 capital, significantly over the 3% minimum threshold applied by the competent authorities, implying that the Bank is not taking on excessive leverage risk.

In the table below, the Group's leverage ratio is presented:

Table 7a: Summary reconciliation of accounting assets and leverage ratio exposures (in Euro million)		
	30.6.2018	31.12.2017
Total assets as per published financial statements	59,013	60,813
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-291	-271
Adjustments for derivative financial instruments	0	-21
Adjustment for securities financing transactions (SFTs)	566	448
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	986	1,072
Other adjustments	-571	-1,859
Leverage ratio total exposure measure	59,703	60,182

Table 8b: Leverage ratio common disclosure		(in Euro million)	
	30.6.2018	31.12.2017	
	CRR leverage ratio exposures	CRR leverage ratio exposures	
On-balance sheet exposures (excluding derivatives and SFTs)			
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	58,444	59,557	
(Asset amounts deducted in determining Tier 1 capital)	-9	-371	
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	58,435	59,186	
Derivative exposures			
Replacement cost associated with all derivatives transactions (i.e.: net of eligible cash variation margin)	554	461	
Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	164	144	
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-1,000	-1,170	
Total derivatives exposures (sum of lines 4 to 10)	-283	-565	
SFT exposures			
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	0	40	
Counterparty credit risk exposure for SFT assets	566	448	
Total securities financing transaction exposures (sum of lines 12 to 15a)	566	488	
Other off-balance sheet exposures			
Off-balance sheet exposures at gross notional amount	4,095	4,573	
(Adjustments for conversion to credit equivalent amounts)	-3,109	-3,501	
Other off-balance sheet exposures (sum of lines 17 and 18)	986	1,072	
Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off balance sheet)			
(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))	-	-	
Capital and total exposure measure			
Tier 1 capital	8,897	8,994	
Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	59,703	60,182	
Leverage ratio			
Leverage ratio	14.9%	14.9%	
Choice on transitional arrangements and amount of derecognised fiduciary items			
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 8c: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)		
	(in Euro million)	
	30.6.2018	31.12.2017
	CRR leverage ratio exposures	CRR leverage ratio exposures
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	57,443	58,386
Banking book exposures, of which:	57,443	58,386
Exposures treated as sovereigns	10,324	10,107
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	1,336	894
Institutions	2,065	879
Secured by mortgages of immovable properties	14,321	14,664
Retail exposures	3,367	3,966
Corporate	8,273	8,132
Exposures in default	16,309	16,639
Other exposures (e.g.: equity, securitisations, and other non-credit obligation assets)	1,448	3,105

The bank submits to the regulatory authorities the leverage ratio on a quarterly basis and monitors the level and the factors that affect the ratio.

5 Credit Risk

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 return relative to the 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. The framework of the Group's credit risk management is developed based on a series of credit policy procedures, systems and measurement models by monitoring and auditing models of credit risk which are subject to an ongoing review process.

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.

The Group identifies and assesses existing and potential risks inherent in any product or activity as the basis for effective credit risk management.

On January 1, 2018, the Group implemented the requirements of IFRS 9 'Financial Instruments'. Contrary to IAS 39, under which an entity recognizes only incurred credit losses, the new standard requires the recognition of expected credit losses.

The Group has adopted as default definition non-performing exposures (NPE), as defined in the EBA Guidelines (GL/2016/07), thus harmonizing the definition of default used for accounting purposes with the one used for regulatory purposes.

Tables dated on 30.6.2018 are reported according to IFRS9 standards, while tables dated on 31.12.2017 are reported according to IAS39 standards.

Tables EU CR1-A EU, CR1-B and CR1-C provide asset quality information of the Group's on- and off balance sheet exposures subject to the credit risk framework broken down by regulatory exposure classes, industries or counterparty type and significant geographical area respectively.

Table 8a: EU CR1-A – Credit quality of exposures by exposure class as of 30.6.2018 (in Euro million)

Exposure Class	Gross carrying values of		Specific credit risk adjustment ²	Write-offs	Impairment Charge	Net Values
	Defaulted exposures	Non-defaulted exposures				
Central governments or central banks	0	10,553	35	0	0	10,517
Regional governments or local authorities	0	42	0	0	0	41
Public sector entities ³	0	636	0	0	0	636
Multilateral development banks	0	312	0	0	0	312
International organisations	0	349	0	0	0	349
Institutions	0	2,694	4	0	0	2,691
Corporates	0	10,545	162	0	27	10,383
<i>Of which: SMEs</i>	0	2,492	56	0	0	2,436
Retail	0	4,460	271	0	2	4,189
<i>Of which: SMEs</i>	0	1,069	68	0	0	1,002
Secured by mortgages on immovable property	0	14,733	266	0	-16	14,467
<i>Of which: SMEs</i>	0	3,641	118	0	0	3,522
Exposures in default	29,208	0	12,614	915	708	16,594
Collective investments undertakings	0	12	0	0	0	12
Equity exposures	0	161	0	0	0	161
Other exposures	0	2,275	0	0	0	2,275
Total	29,208	46,773	13,353	915	722	62,628
<i>Of which: Loans</i>	28,857	28,347	13,238	915	722	43,966
<i>Of which: Debt securities</i>	0	5,157	40	0	0	5,117
<i>Of which: Off-balance-sheet exposures</i>	352	3,909	76	0	0	4,184

² Specific credit risk adjustment after the application of IFRS9 transitional arrangements set by Regulation (EU) 2395/2017.

³ The difference compared to 31 December 2017, is due to the reclassification of Hellenic Deposit and Investment Guarantee Fund (HDIGF) from "Other exposures" to "Public Sector entities".

Table 8b: EU CR1-A – Credit quality of exposures by exposure class as of 31.12.2017 (in Euro million)

Exposure Class	Gross carrying values of		Specific credit risk adjustment	Write-offs	Net Values
	Defaulted exposures	Non-defaulted exposures			
Central governments or central banks	0	10,108	2	0	10,106
Regional governments or local authorities	0	44	0	0	44
Public sector entities	0	2	0	0	2
Multilateral development banks	0	361	0	0	361
International organisations	0	489	0	0	489
Institutions	0	1,613	0	0	1,613
Corporates	0	10,660	145	0	10,515
<i>Of which: SMEs</i>	0	2,336	23	0	2,313
Retail	0	5,095	122	0	4,973
<i>Of which: SMEs</i>	0	1,139	18	0	1,121
Secured by mortgages on immovable property	0	15,177	345	0	14,832
<i>Of which: SMEs</i>	0	3,510	57	0	3,453
Exposures in default	29,718	0	12,720	2,450	16,998
Collective investments undertakings	0	6	0	0	6
Equity exposures	0	434	0	0	434
Other exposures	0	3,835	0	0	3,835
Total	29,718	47,824	13,334	2,450	64,208
<i>Of which: Loans</i>	29,314	29,016	13,290	2,450	45,040
<i>Of which: Debt securities</i>	0	5,422	0	0	5,422
<i>Of which: Off-balance-sheet exposures</i>	404	4,293	45	0	4,652

The following table shows the total exposure amounts broken down by significant industry or counterparty type.

Table 9a: EU CR1-B – Credit quality of exposures⁴ by industry or counterparty types as of 30.6.2018
(in Euro million)

	Gross carrying values of		Specific credit risk adjustment	Write-offs	Impairment Charge	Net values ⁵
	Defaulted exposures	Non-defaulted exposures				
NON FINANCIAL CORPORATIONS	15,762	18,263	8,523	406	391	25,502
Agriculture, forestry and fishing	309	211	127	2	-26	393
Mining and quarrying	61	71	30	1	3	102
Manufacturing	2,957	3,944	1,440	136	81	5,461
Electricity, gas, steam and air conditioning supply	42	1,080	47	0	-8	1,075
Water supply	14	29	7	0	0	37
Construction	3,018	2,540	1,787	80	29	3,770
Wholesale and retail trade	4,915	3,973	2,616	102	100	6,272
Transport and storage	537	2,097	274	4	-1	2,361
Accommodation and food service activities	1,182	1,503	502	12	-21	2,184
Information and communication	401	237	273	2	19	365
Real estate activities	1,003	971	593	29	59	1,381
Professional, scientific and technical activities	269	418	160	13	25	528
Administrative and support service activities	359	411	184	3	20	586
Education	65	41	28	0	1	78
Human health services and social work activities	102	156	48	11	4	210
Arts, entertainment and recreation	180	156	100	6	12	237
Other services	348	423	307	5	96	464
CENTRAL BANKS	0	1,527.169	0	0	0	1,527
CREDIT INSTITUTIONS	70	2,442	74	0	0	2,438
GENERAL GOVERNMENTS	5	4,867	40	0	0	4,832
OTHER FINANCIAL CORPORATIONS	68	422	31	0	-6	459
HOUSEHOLDS	13,319	13,901	5,759	509	338	21,461
Total	29,224	41,422	14,427	915	722	56,219

⁴ Excluding Debt instruments held for sale

⁵ Exposures Net of Impairment allowance and Fair Value adjustment, including Loans & Advances, Debt Instruments, Financial Guarantees Given and Loan Commitments Given.

9b: EU CR1-B – Credit quality of exposures by industry or counterparty types as of 31.12.2017 (in Euro million)

	Gross carrying values of		Specific credit risk adjustment	Write-offs	Net values
	Defaulted exposures	Non-defaulted exposures			
NON FINANCIAL CORPORATIONS	16,262	17,649	7,801	1,422	26,110
Agriculture, forestry and fishing	313	194	147	33	360
Mining and quarrying	60	169	27	9	202
Manufacturing	3,065	3,332	1,360	289	5,037
Electricity, gas, steam and air conditioning supply	41	1,074	36	0	1,079
Water supply	15	19	7	1	27
Construction	3,117	2,552	1,699	171	3,970
Wholesale and retail trade	5,043	3,328	2,415	576	5,956
Transport and storage	533	1,894	228	70	2,199
Accommodation and food service activities	1,291	1,267	487	35	2,071
Information and communication	418	198	250	99	366
Real estate activities	1,028	945	540	41	1,433
Professional, scientific and technical activities	282	268	137	11	413
Administrative and support service activities	333	328	135	13	526
Education	49	31	23	12	57
Human health services and social work activities	115	145	53	4	207
Arts, entertainment and recreation	173	141	80	32	234
Other services	386	1,764	176	27	1,974
CENTRAL BANKS		1,203			1,203
CREDIT INSTITUTIONS	42	2,207	42		2,207
GENERAL GOVERNMENTS	4	4795	4		4,795
OTHER FINANCIAL CORPORATIONS	85	322.2	60	86	347
HOUSEHOLDS	13,318	12,897	5,432	942	20,783
Total	29,711	39,072	13,338	2,450	55,445

The following table presents the credit quality of the Group's exposures broken down by significant geographical area.

Table 10a: EU CR1-C – Credit quality of exposures by geography⁶ as of 30.6.2018 (in Euro million)						
	Gross carrying values of		Specific credit risk adjustment	Write-offs	Impairment Charge	Net values
	Defaulted exposures	Non-defaulted exposures				
Greece	24,515	30,506	11,725	698	570	43,296
United Kingdom	982	1,830	560	96	30	2,252
Romania	290	3,337	182	5	5	3,445
Cyprus	2,797	1,659	1,626	108	120	2,830
Other countries	640	4,091	335	8	-2	4,396
Total	29,224	41,422	14,427	915	722	56,219

Table 10b: EU CR1-C – Credit quality of exposures by geography as of 31.12.2017 (in Euro million)					
	Gross carrying values of		Specific credit risk adjustment	Write-offs	Net values
	Defaulted exposures	Non-defaulted exposures			
Greece	25,045	28,992	10,852	2,072	43,185
United Kingdom	949	1,780	467	-	2,262
Romania	289	3,052	171	30	3,170
Cyprus	2,832	1,284	1,604	227	2,512
Other countries	596	3,965	244	121	4,317
Total	29,711	39,072	13,338	2,450	55,445

The following template provides an ageing analysis of past due exposures broken down by past due bands.

Table 11a: EU CR1-D – Ageing of past-due exposures as of 30.6.2018 (in Euro million)						
Gross carrying values						
	>=1 day ≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
Loans and advances	3,981	1,228	1,665	988	1,059	17,741

Table 11b: EU CR1-D – Ageing of past-due exposures as of 31.12.2017 (in Euro million)						
Gross carrying values						
	>=1 day ≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
Loans and advances	4,434	1,520	1,754	732	875	18,183

⁶ Amounts shown by country in this table are based on the country of residence of the counterparty.

The following table provides an overview of non-performing and forborne exposures.

Table 12a: EU CR1-E – Non-performing and forborne exposures as of 30.6.2018													(in Euro million)	
	Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received		
		Of which performing but past due > 30 days and <= 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures	
					Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne			
Debt securities	5,157	-	-	-	-	-	-	-40	-	-	-	-	-	
Loans & advances	58,732	953	5,237	28,856	28,856	28,528	15,107	-794	-387	-13,503	-6,235	13,202	10,985	
Off-balance-sheet exposures	6,758			368	368			-15		-75		35		

Table 12b: EU CR1-E – Non-performing and forborne exposures as of 31.12.2017													(in Euro million)	
	Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received		
		Of which performing but past due > 30 days and <= 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures	
					Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne			
Debt securities	5,422	-	-	-	-	-	-	-	-	-	-	-	-	
Loans & advances	59,574	1,019	5,309	29,314	29,314	29,167	14,323	-602	-290	12,735	-5,143	12,769	10,226	
Off-balance-sheet exposures	3,787			397	397			0		1		23		

The Table 13 shows the movements in provisions regarding credit losses for debt instruments measured at amortized cost and debt instruments carried at fair value through other comprehensive income (FVTOCI), for which Expected Credit Loss (ECL) is calculated.

Table 13: EU CR2-A – Changes in the stock of general and specific risk adjustments (in Euro million)	
	Accumulated specific credit risk adjustment
Opening balance 1.1.2018	14,609
Increases due to amounts set aside for estimated loan losses during the period	664
Decreases due to amounts taken against accumulated credit risk adjustments	-955
Impact of exchange rate differences	17
Business combinations, including acquisitions and disposals of subsidiaries	0
Reclassification to assets held for sale	0
Change in present value of the impairment losses	-62
Other adjustments	-12
Closing balance 30.6.2018	14,262
Recoveries of previously written-off amounts recorded directly to the statement of profit or loss	-13
Amounts written-off directly to the statement of profit or loss	0

The Table 14 shows the changes in stock of on balance sheet amounts of defaulted and impaired loans.

Table 14: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities (in Euro million)	
	Gross carrying value defaulted exposures
Opening balance 1.1.2018	29,314
Loans and debt securities that have defaulted or impaired since the last reporting period	1,048
Returned to non-defaulted status	-621
Amounts written off	-908
Other changes	23
Closing balance 30.6.2018	28,856

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 15a: EU CR5 - Standardized approach as of 30.6.2018															(in Euro million)	
Exposure classes	Risk Weight														Total	Of which unrated
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%		
Central governments or central banks	6,281	0	0	500	0	0	0	0	0	3,436	0	775	0	0	10,991	5,964
Regional government or local authorities	0	0	0	0	40	0	0	0	0	0	0	0	0	0	40	0
Public sector entities	0	0	0	0	0	0	0	0	0	635	0	0	0	0	635	634
Multilateral development banks	312	0	0	0	0	0	0	0	0	0	0	0	0	0	312	0
International organisations	349	0	0	0	0	0	0	0	0	0	0	0	0	0	349	0
Institutions	1,003	0	0	0	521	0	250	0	0	98	0	0	0	0	1,873	213
Corporates	0	0	0	0	0	0	0	0	0	8,409	85	0	0	0	8,494	8,407
Retail	0	0	0	0	0	0	0	0	3,157	0	0	0	0	0	3,157	3,154
Secured by mortgages on immovable property	0	0	0	0	0	7,223	3,988	0	1,512	1,311	0	0	0	0	14,034	14,034
Exposures in default	0	0	0	0	0	0	0	0	0	13,979	2,113	0	0	0	16,093	16,082
Equity	0	0	0	0	0	0	0	0	0	144	0	16	0	0	161	153
Other items	365	0	0	0	12	0	0	0	0	1,910	0	0	0	0	2,288	2,288
Total	8,310	0	0	500	574	7,223	4,238	0	4,670	29,924	2,198	791	0	0	58,428	50,928

Table 15b: EU CR5 - Standardized approach as of 31.12.2017

(in Euro million)

Exposure classes	Risk Weight														Total	Of which unrated
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%		
Central governments or central banks	6,589	0	0	0	2	0	0	0	0	3,555	0	698	0	0	10,844	2,442
Regional government or local authorities	0	0	0	0	43	0	0	0	0	0	0	0	0	0	43	0
Public sector entities	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Multilateral development banks	361	0	0	0	0	0	0	0	0	0	0	0	0	0	361	0
International organisations	489	0	0	0	0	0	0	0	0	0	0	0	0	0	489	0
Institutions	225	0	0	0	446	0	180	0	0	59	1	0	0	0	911	221
Corporates	0	0	0	0	0	0	0	0	0	8,354	101	0	0	0	8,455	8,352
Retail	0	0	0	0	0	0	0	0	3,762	0	0	0	0	0	3,762	3,762
Secured by mortgages on immovable property	0	0	0	0	0	7,327	3,877	0	1,743	1,455	0	0	0	0	14,402	14,401
Exposures in default	0	0	0	0	0	0	0	0	0	14,716	1,713	0	0	0	16,428	16,419
Equity	0	0	0	0	0	0	0	0	0	416	0	19	0	0	434	405
Other items	1,382	0	0	0	6	0	0	0	0	2,454	0	0	0	0	3,841	2,906
Total	9,046	0	0	0	497	7,327	4,056	0	5,504	31,010	1,815	717	0	0	59,972	48,907

5.1 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.

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 are mortgages, cash, mutual funds and sovereign securities (repos, bonds).

5.1.1 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: guarantees / credit derivatives and physical collaterals. The most common types of physical collateral are mortgages on real estate properties.

The table below shows the volume of unsecured and secured exposures. Secured exposures are limited to those exposures against which eligible collateral which meets CRR 575/2013 definitions is held and has been used in the calculation of the Group's capital requirements. Haircuts are applied consistent with CRR 575/2013 requirements.

	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total Loans	13,411	28,856	21,247	671	0
Total debt securities	5,117	0	0	0	0
Total exposures	18,529	28,856	21,247	671	0
of which defaulted	3,614	12,695	9,462	233	0

Template 16b: EU CR3 – CRM techniques – Overview as of 31.12.2017					(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	14,634	28,683	20,454	756	0
Total debt securities	5,422	0	0	0	0
Total exposures	20,057	28,683	20,454	756	0
of which defaulted	4,067	12,572	11,520	246	0

The table below presents Standardised exposures before Credit Conversion Factor (CCF) and Credit Risk Mitigation (CRM) and after CCF and CRM at 30.6.2018, excluding exposures subject to counterparty credit risk.

Table 17a: EU CR4 - Standardized approach – credit risk exposure and Credit Risk Mitigation (CRM) effects as of 30.6.2018							(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	10,324	194	10,991	0	5,423	49.3%	
Regional government or local authorities	40	1	40	0	8	20.0%	
Public sector entities	635	1	635	0	635	100.0%	
Multilateral development banks	312	0	312	0	0	0.0%	
International organisations	349	0	349	0	0	0.0%	
Institutions	2,065	625	1,853	20	328	17.5%	
Corporates	8,273	2,110	7,862	633	8,497	100.0%	
Retail	3,367	822	3,081	76	2,236	70.8%	
Secured by mortgages on immovable property	14,321	146	13,985	50	6,814	48.6%	
Exposures in default	16,309	285	16,024	68	17,150	106.6%	
Collective investment undertakings	12	0	12	0	12	100.0%	
Equity	161	0	161	0	185	115.2%	
Other items	2,275	0	2,275	0	1,900	83.5%	
Total	58,444	4,184	57,580	847	43,189	73.9%	

Table 17a: EU CR4 - Standardized approach – credit risk exposure and Credit Risk Mitigation (CRM) effects as of 31.12.2017 (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	10,107	0	10,844	0	5,300	48.9%
Regional government or local authorities	43	1	43	0	9	20.0%
Public sector entities	1	1	1	0	1	100.0%
Multilateral development banks	361	0	361	0	0	0.0%
International organisations	489	0	489	0	0	0.0%
Institutions	879	734	897	13	239	26.3%
Corporates	8,132	2,383	7,783	672	8,462	100.1%
Retail	3,966	1,007	3,691	70	2,689	71.5%
Secured by mortgages on immovable property	14,665	167	14,335	67	7,100	49.3%
Exposures in default	16,639	359	16,340	88	17,285	105.2%
Collective investment undertakings	6	0	6	0	6	100.0%
Equity	434	0	434	0	462	106.4%
Other items	3,835	0	3,835	0	2,449	63.9%
Total	59,557	4,652	59,061	911	44,002	73.4%

6 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 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 ISDA (International Swap and Derivatives Association) and GMRA (Global Master Repurchase Agreement) bilateral contracts for financial products transactions with financial institutions.

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.

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		-69	247			655	133
Financial collateral comprehensive method (for SFTs)						566	113

Table 18b EU CCR1 - Analysis of CCR exposure by approach as of 31.12.2017							(in Euro million)
Approach	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
Mark to market		-438	212			538	145
Financial collateral comprehensive method (for SFTs)						448	90

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.

The following table present the CVA calculation of Alpha Bank Group:

Table 19a: EU CCR2 - CVA capital charge as of 30.6.2018			(in Euro million)
	Exposure value	RWAs	
All portfolios subject to the standardised method	83	48	
Total subject to the CVA capital charge	83	48	

Table 19b: EU CCR2 - CVA capital charge as of 31.12.2017			(in Euro million)
	Exposure value	RWAs	
All portfolios subject to the standardised method	91	56	
Total subject to the CVA capital charge	91	56	

Table 20a: EU CCR8 - Exposures to CCPs as of 30.6.2018 (in Euro million)		
	EAD post CRM	RWAs
Exposures to non-QCCPs (total)		
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	13	0
(iv) Netting sets where cross-product netting has been approved	13	0

Table 20b: EU CCR8 - Exposures to CCPs as of 31.12.2017 (in Euro million)		
	EAD post CRM	RWAs
Exposures to non-QCCPs (total)		
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	6	0
(iv) Netting sets where cross-product netting has been approved	6	0

The table below shows the CCR exposures by regulatory portfolio and risk.

Table 21a: EU CCR3 - Standardized approach – CCR exposures by regulatory portfolio and risk as of 30.6.2018 (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	461	0	0	0	0	0	0	0	0	0	461	0
Institutions	0	13	0	0	595	52	0	0	0	2	662	0
Corporates	0	0	0	0	0	0	0	0	98	0	98	0
Retail	0	0	0	0	0	0	0	0	0	0	0	0
Total	461	13	0	0	595	52	0	0	98	2	1,221	0

Table 21b: EU CCR3 - Standardized approach – CCR exposures by regulatory portfolio and risk as of 31.12.2017 (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	338	0	0	0	0	0	0	0	0	0	338	0
Institutions	0	6	0	0	464	73	0	0	0	2	545	0
Corporates	0	0	0	0	0	0	0	0	101	0	101	0
Retail	0	0	0	0	0	0	0	1	0	0	1	0
Total	338	6	0	0	464	73	0	1	102	2	986	0

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

Table 22a: EU CCR5-A - Impact of netting and collateral held on exposure values as of 30.6.2018
(in Euro million)

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	672	219	453	62	655
SFTs	3,403	0	3,403	3,439	566
Cross-product netting	660	219	441	60	382
Total	4,075	219	3,857	3,501	1,221

Table 22b: EU CCR5-A - Impact of netting and collateral held on exposure values as of 31.12.2017
(in Euro million)

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	589	196	393	68	538
SFTs	2,336	0	2,336	2,294	448
Cross-product netting	581	196	385	68	317
Total	2,925	196	2,730	2,362	986

Table 23a: EU CCR5-B - Composition of collateral for exposures to CCR as of 30.6.2018
(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	0	62	32	974	3,439	0
Sovereign debt	0.	390	0	0	0	0
Total	0	452	32	974	3,439	0

Table 23b: EU CCR5-B - Composition of collateral for exposures to CCR as of 31.12.2017
(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	0	68	7	940	2,294	0
Sovereign debt	0	300	0	0	0	0
Total	0	368	7	940	2,294	0

As of 30.6.2018, there was no outstanding exposure to credit derivative transactions bought or sold.

7 Market Risk

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.

Alpha Bank calculates Value at Risk (VaR) for internal risk management purposes since 1999. 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. 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, the stress period used by the Bank is January 2013 – December 2013 and was last reviewed in August 2017. The selection of the stress period is based on the assessment of the most volatile period in recent history.

7.1 IMA approach for market risk

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 30.6.2018 are displayed in the following table:

Table 24a: EU MR2-A – Market risk under the IMA as of 30.6.2018		(in Euro million)
	RWAs	Capital requirements
VaR (higher of values a and b)	156	12
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))	59	5
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	156	12
SVaR (higher of values a and b)	414	33
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))	195	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)	414	33
Total	570	46

Table 24b: EU MR2-A – Market risk under the IMA as of 31.12.2017		(in Euro million)
	RWAs	Capital requirements
VaR (higher of values a and b)	302	24
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))	89	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	302	24
SVaR (higher of values a and b)	386	31
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))	112	9
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)	386	4
Total	688	55

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

Table 25a: EU MR2-B – RWA flow statements of market risk exposures under the IMA (in Euro million)				
	VaR	SVaR	Total RWAs	Total capital requirements
RWAs at 31.3.2018	203	399	602	48
<i>Regulatory adjustment</i> ⁷	159	290	449	36
RWAs at the previous quarter-end (end of the day)	44	108	153	12
Movement in risk levels	26	81	107	9
Model updates/changes	2	6	8	1
Other ⁸	-14	0	-14	-1
RWAs at 30.6.2018 (end of the day)	59	195	254	20
<i>Regulatory adjustment</i>	97	219	316	25
RWAs at 30.6.2018	156	414	570	46

⁷ 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.

⁸ During the second quarter of 2018 there was a decrease in the Greek government bond prices volatility as used by the VaR model that affected the VaR figures while the level of the SVaR did not change

Table 25b: EU MR2-B – RWA flow statements of market risk exposures under the IMA (in Euro million)				
	VaR	SVaR	Total RWAs	Total capital requirements
RWAs at 31.12.2017	302	386	688	55
<i>Regulatory adjustment</i>	213	274	486	39
RWAs at the previous quarter-end (end of the day)	89	112	201	16
Movement in risk levels	15	-5	10	0.8
Model updates/changes	-	-	-	-
Other	-60	0.7	-59	-5
RWAs at 31.12.2017 (end of the day)	44	108	153	12
<i>Regulatory adjustment</i>	159	290	449	36
RWAs at 31.3.2018	203	399	602	48

VaR and SVaR values as estimated during the first semester of 2018 for the Bank trading portfolio, including the FX position due to participations, are given in the following table:

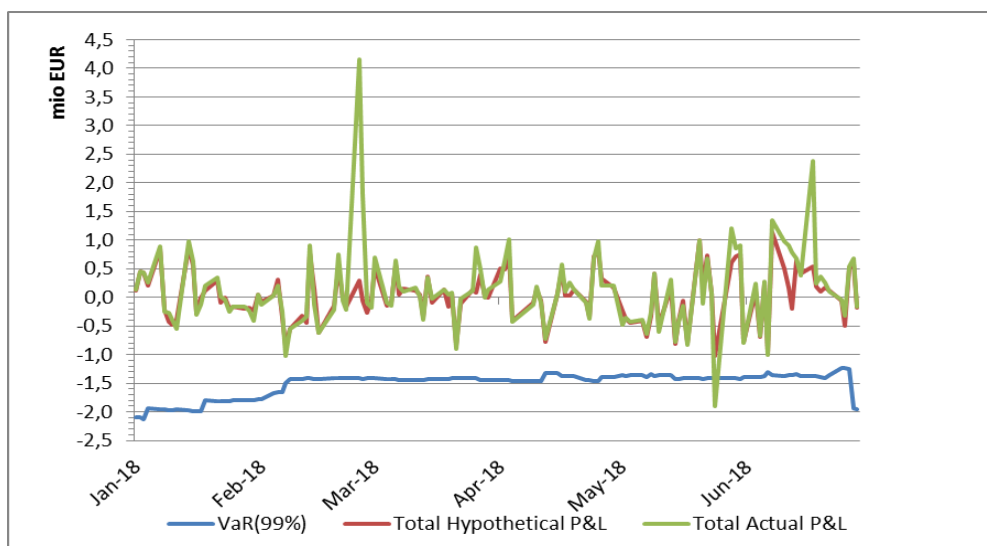
Table 26a: EU MR3 – IMA values for trading portfolios as of 30.6.2018		(in Euro million)
VaR (10 day 99%)		Value
Maximum value		8
Average value		4
Minimum value		3
Period end		5
SVaR (10 day 99%)		Value
Maximum value		16
Average value		9
Minimum value		9
Period end		16

Table 26b: EU MR3 – IMA values for trading portfolios as of 31.12.2017		(in Euro million)
VaR (10 day 99%)		Value
Maximum value		7
Average value		4
Minimum value		1
Period end		7
SVaR (10 day 99%)		Value
Maximum value		13
Average value		8
Minimum value		3
Period end		9

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. 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 27: EU MR4 – Comparison of VaR estimates with gains/losses



One overshooting was observed on the actual back-testing, on 25.05.2018 and the competent authorities were notified accordingly.

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.

7.2 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 30.6.2018.

Table 28a: EU MR1 – Market risk under the standardised approach as of 30.6.2018 (in Euro million)		
	RWAs	Capital Requirements
Outright products		
Equity risk (general and specific)	2	0
Foreign exchange risk	0	0
Total	2	0

Table 28b: EU MR1 – Market risk under the standardised approach as of 31.12.2017 (in Euro million)		
	RWAs	Capital Requirements
Outright products		
Equity risk (general and specific)	3	0
Foreign exchange risk	33	3
Total	36	3