



EUROBANK ERGASIAS S.A.

CONSOLIDATED PILLAR 3 REPORT

FOR THE YEAR ENDED

31 DECEMBER 2012

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Index to the Eurobank Group Pillar 3 Report

Section	Page
1 General information	3
1.1 Basel II framework	
1.2 Implementation of the Basel II framework at Eurobank Group	
1.3 Scope of Pillar 3	
1.4 National Bank of Greece S.A. Voluntary Tender Offer (VTO)	
1.5 Regulatory versus accounting consolidation	
1.6 Impediments to the prompt transfer of capital	
1.7 Compliance with Basel II Pillar 3 disclosures	
2 Capital management	6
2.1 Regulatory capital - definition	
2.2 Preferred securities	
2.3 Impairment losses on Greek sovereign exposure	
2.4 Capital base	
2.5 Capital requirement under Pillar 1	
2.6 Internal Capital Adequacy Assessment Process	
3 Risk management overview	11
3.1 Risk management	
3.2 Risk management policies	
3.3 Types of risk	
3.4 Organisation	
4 Credit risk	12
4.1 Definition of credit risk	
4.2 Credit risk organisation and processes	
4.3 Credit risk reporting	
4.4 Credit exposures	
4.5 Past due and impaired loans	
4.6 Provision for impairment losses	
4.7 Standardised approach	
4.8 Internal Ratings Based (IRB) approach	
4.9 Credit risk mitigation	
4.10 Asset Backed Securities	
5 Market risk	29
5.1 Definition and policies	
5.2 Internal model - Value at Risk (VaR) model & Credit Risk (IRC)	
5.3 Standardised approach for market risk	
5.4 Equity exposures not included in the trading book	
5.5 Interest rate risk not included in the trading book	
5.6 Counterparty risk	
6 Operational risk	33
6.1 Governance	
6.2 Operational risk management framework	
6.3 Operational risk measurement	
7 Remuneration policy	34
7.1 Introduction	
7.2 Remuneration policy scope	
7.3 Remuneration policy basic principles	
7.4 Remuneration policy governance	
7.5 Remuneration Committee	
7.6 Remuneration	
7.7 BoD members remuneration	
7.8 Targeted population remuneration	

1. General information

1.1 Basel II framework

In 1988, the Basel Committee on Banking Supervision developed a set of rules (the Basel Capital Accord, or Basel I) regarding the capital adequacy requirements for Banks. The main focus of Basel I was on credit risk with banks being required to hold capital of at least 8% of the risk weighted assets and off balance sheet commitments. Additional rules related to trading risk were added in 1996, in a European directive related to market risk.

The need for a more risk sensitive approach to capital requirements, as well as the need to enhance the soundness and stability of the international banking system, led the Basel Committee on Banking Supervision to design a new worldwide framework known as Basel II. The new framework introduced a three pillar concept that seeks to align regulatory requirements with the economic principles of risk management.

The Basel II framework is based on three mutually re-inforcing pillars:

- Pillar 1 defines the minimum regulatory capital requirements, based on principles, rules and methods specifying and measuring credit, market and operational risk. These requirements are covered by regulatory own funds, according to the rules and specifications of Pillar 1.
- Pillar 2 addresses the internal processes for assessing overall capital adequacy in relation to risks (Internal Capital Adequacy Assessment Process - ICAAP). Pillar 2 also introduces the Supervisory Review & Evaluation Process (SREP), which assesses the internal capital adequacy of credit institutions.
- Pillar 3 deals with market discipline by developing a set of disclosure requirements, which allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes and hence the capital adequacy of credit institutions.

In June 2006 the European Parliament and the Council, published in the Official Journal of the European Union the Capital Requirements Directive (CRD), which comprises of the following two directives:

- Directive 2006/48/EC on the taking up and pursuit of the business of credit institutions; and
- Directive 2006/49/EC on the capital adequacy of investment firms and credit institutions.

In August 2007 and following adoption of the Banking Law, which transposed the above Directives into Greek law, the Bank of Greece (BoG) issued a series of acts specifying the provisions of the above law and transposing the remaining provisions of the above Directives into the New Legal and Regulatory Framework.

In November 2010 the European Parliament and the Council, published the Directive 2010/76/EU, effective from 31 December 2011, amending the Directives 2006/48/EC and 2006/49/EC regarding capital requirements for the trading book, for re-securitisations and the supervisory review and disclosures of remuneration policies.

Based on the above, during 2011 BoG issued the following Governor's Acts:

- BoG Governor's Act 2645/2011 regarding capital requirements for securitisations, effective from 31.12.2011
- BoG Governor's Act 2646/2011 regarding capital requirements for the trading book, effective from 31.12.2011; and
- BoG Governor's Act 2650/2012 regarding remuneration policy, effective from 1.1.2011.

During 2012 Bank of Greece issued the Governor's Act 2655/2012 amending the technical criteria on disclosure requirements.

1.2 Implementation of the Basel II framework at Eurobank Group

1.2.1 Credit risk

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

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

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

The implementation of IRB covers approximately 83% of the Group's lending portfolio, excluding portfolio segments which are immaterial in terms of size and risk profile. Further increase of the coverage depends on certification by BoG of the IRB application for the loan portfolios of Romanian and Bulgarian subsidiaries.

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

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

The Standardised approach is applied for these exposures.

1.2.2 Market risk

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

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

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

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

1.2.3 Operational risk

Capitalising on the provisions of Directive 2006/48/EC (Annex X, part 4.2), the Group uses the Standardised approach (STA) to calculate the Pillar 1 regulatory capital charge for operational risk for its consolidated operations.

1. General information

1.3 Scope of Pillar 3

Eurobank Ergasias S.A. is a credit institution based in Greece. Until 23 July 2012, the Bank was a member of EFG Group and its ultimate parent company was Private Financial Holdings Limited.

On 23 July 2012, 43.55% of the ordinary shares and voting rights held by EFG Group were transferred to ten legal entities. As a result, from 23 July 2012, onwards, Eurobank ceased to be under EFG Group's control. In addition, the Bank's corporate name was amended on 2 August 2012 from "EFG Eurobank Ergasias S.A." to Eurobank Ergasias S.A.", following the Annual General Meeting's resolution on 29 June 2012.

The Bank is supervised on a stand alone and consolidated basis by the Bank of Greece.

Pillar 3 disclosures are provided on a consolidated basis based on Bank of Greece Act 2655/2012 and according to the regulatory consolidation framework, which is described in the following paragraph.

1.4 National Bank of Greece S.A. Voluntary Tender Offer (VTO)

On 15 February 2013, the National Bank of Greece S.A. (NBG) acquired 84.35%, of Eurobank's voting shares following the successful completion of a Voluntary Tender Offer (VTO). NBG is the largest bank in Greece and has significant operations in the South Eastern European region. Its ordinary shares are listed on the Athens Stock Exchange while ADRs and USD preference shares trade on the New York Stock Exchange (for more details, see www.nbg.gr).

NBG's intention to launch a voluntary exchange offer to acquire all Eurobank shares offering 58 new ordinary voting shares of NBG for every 100 ordinary voting shares of Eurobank tendered was announced on 5 October 2012. NBG also stated that Eurobank shareholders holding 43.6% of Eurobank's ordinary share capital had committed to tender their shares in the tender offer.

The General Meeting of the shareholders of NBG approved, on 23 November 2012, the increase of NBG's share capital, and the issuance of new ordinary shares to be offered to Eurobank's ordinary shareholders who would accept NBG's VTO at the offered exchange ratio. Following the approval of relevant offering documentation by the Greek Capital Market Commission, the VTO was launched on 11 January 2013. The Bank's Board of Directors, assisted by its financial advisers, considered the merits of the business combination in the interest of all stakeholders, including employees, customers, shareholders and the Greek economy, and the terms and conditions of the exchange offer and issued its reasoned opinion thereon as required by Law 3461/2006 on 11 January 2013.

All required approvals and/or clearances by the Bank of Greece, the Greek Competition Commission, the Hellenic Financial Stability Fund and the European Commission – DG Competition (State Aid) were obtained by 14 February 2013. The VTO acceptance period ended on 15 February 2013 at which date 466,397,790 shares were tendered.

As stated in the VTO documentation and the NBG General Meeting approval, the VTO will be followed by the merger of the two banks. In line with this, on 19 March 2013, the boards of Eurobank and NBG resolved to initiate the merger process, with NBG absorbing Eurobank, and set 31 December 2012 as the merger reference date. The merger is expected to be completed in a few months.

1.5 Regulatory versus accounting consolidation

1.5.1 Accounting consolidation

The accounting consolidation of the Group is based on the International Financial Reporting Standards (IFRS) and more specifically IAS 27 Consolidated and Separate Financial Statements, IAS 28 Investments in Associates, IAS 31 Interests in Joint Ventures, as well as SIC-12 Consolidation - Special Purpose Entities.

Subsidiary undertakings are all entities over which the Group, directly or indirectly, has the power to exercise control over the financial and operating policies generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

Investments in joint ventures (contractual arrangements whereby the Group and other parties undertake an economic activity that is subject to joint control) and investments in associates (investments in which the Group has a significant influence, but which it does not control, generally holding between 20% and 50% of the voting rights) are also part of the accounting consolidation scope, but are accounted for using the equity method.

The Group sponsors the formation of special purpose entities, which may or may not be directly owned subsidiaries for the purpose of asset securitisation. The entities may acquire assets directly from the Bank. These companies are bankruptcy-remote entities and are consolidated in the Group's Financial Statements when the substance of the relationship between the Group and the entity indicates that the entity is controlled by the Group.

1.5.2 Regulatory consolidation

The regulatory consolidation applied for reporting to the Bank of Greece follows the principles used for the accounting consolidation with certain differences, which are described below:

- Participations in insurance companies are excluded from regulatory consolidation and are accounted for using the equity method and under certain conditions partly deducted from equity (refer to paragraph 2.1).
- Participations in financial institutions with a holding percentage of more than 10% but less than 20% are deducted from equity for the calculation of Basel II regulatory capital.

The following table presents a list of the Group's subsidiaries and associated undertakings at 31 December 2012 for which regulatory consolidation is different compared to the accounting consolidation:

	Regulatory consolidation			Accounting consolidation		Description of Business
	Full consolidation	Equity method	Deduction from equity	Full consolidation	Equity method	
Subsidiary undertakings						
Eurolife ERB General Insurance S.A. (100%)		x	x	x		Insurance services
Eurolife ERB Life Insurance S.A. (100%)		x	x	x		Insurance services
ERB Insurance Services S.A. (100%)		x		x		Insurance brokerage
ERB Eurolife Asigurari De Viata S.A (100%)		x	x	x		Insurance services
Eurolife ERB Asigurari Generale S.A (100%)		x	x	x		Insurance services

1. General information

Above listed insurance services companies are deducted from equity, based on the application of the method "Deduction and aggregation", which is referenced as method 2 in Law 3455/2006, article 25, chapter V (Bank of Greece Governor's Act 2630/29.10.2010). There are no insurance companies where capital falls below of the minimum required capital.

Based on law 3601/1.8.2007 article 32 (solo consolidation), ERB Hellas Funding Ltd and ERB Hellas Plc are included in the calculation of the non-consolidated capital requirements and regulatory own funds of the Bank.

Based on the terms of the Investment Agreement signed with Raiffeisen Bank International AG (RBI) in February 2011, the Group has recorded the disposal of its Polish operations as of 31 March 2011. On 30 April 2012, the Group transferred 70% of its Polish banking subsidiary (Polbank) to RBI and exercised its put option on its remaining 13% stake in combined Polbank and RBI Poland.

On 21 December 2012, the Group disposed Eurobank Tekfen A.S. and its subsidiaries to Burgan Bank of Kuwait. Under the terms of the transaction, which was announced on 9 April 2012, Burgan Bank has acquired 99.3% of Eurobank Tekfen, from Eurobank and Tekfen Group.

Additional information regarding discontinued operations in Poland and Turkey can be found in the Consolidated Financial Statements Note 17.

List of all subsidiary undertakings can be found in the Consolidated Financial Statements Note 27.

1.6 Impediments to the prompt transfer of capital

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

1.7 Compliance with Basel II Pillar 3 disclosures

The Bank has issued an internal "Policy on compliance with Basel II Pillar 3 Disclosures" in order to ensure consistent and continuous compliance with the Pillar 3 disclosures requirements, as these have been specified by the Bank of Greece. Within this framework the Bank operates as follows:

- Pillar 3 disclosures are provided on a consolidated basis, including all those subsidiaries supervised by the Bank of Greece on that basis.
- The Bank includes in its disclosures all information deemed necessary to provide to users with a clear, complete and accurate view of the Group's structure, capital management, risk management system and remuneration policy and practices.
- The Bank has opted to present the full set of Pillar 3 disclosures in a separate document "Consolidated Basel II Pillar 3 Disclosures", which is published annually on the Bank's website.
- The Bank re-examines the extent and type of information provided at each disclosure date and revises its policy as necessary.
- The Bank appraises the usefulness of more frequent Pillar 3 disclosures, taking into consideration factors such as its activities, their extension, and its footprint in other countries.
- The Audit Committee of the Bank is responsible for the procedures concerning the collection, processing and presentation of Pillar 3 disclosures, while the Board of Directors of the Bank is responsible for the accuracy of them.
- The aforementioned responsibilities are equivalent to those in respect of the Bank's Consolidated Financial Statements.

2. Capital management

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

2.1 Regulatory capital - definition

The Pillar 1 regulatory capital of the Group at consolidated level is calculated on the basis of IFRS figures and according to the rules set by the Bank of Greece, in line with the CRD.

The available regulatory capital is classified under two main categories: Tier I and Tier II capital. Tier I consists of Core and Supplementary Tier I capital.

EBA Core Tier I capital is composed of Ordinary shareholders' equity, Preference shares issued under Law 3723/2008 "Greek Economy Liquidity Support Programme", HFSF advance payment and regulatory minority interest, after deduction of:

- fixed assets' revaluation reserve formed after 31 December 2003 (transition to IFRS);
- proposed dividends;
- unrealised gains and losses on market valuation of available-for-sale (AFS) bonds and cash flow hedge derivatives;
- unrealised gains on market valuation of AFS equities;
- unrealised gains and losses on market valuation of liabilities designated as fair-value-through-profit-or-loss attributable to own credit risk;
- part of minority interest where the regulatory capital of the subsidiary exceeds significantly its capital requirements;
- goodwill;
- intangible assets;
- 50% of participating interests and subordinated loans (and other capital instruments qualifying as own funds) of more than 10% in not fully consolidated credit or other financial institutions;
- 50% of participating interests and subordinated loans (and other capital instruments qualifying as own funds) of more than 20% in insurance companies acquired or established after 31 December 2006; and
- 50% of loan impairment allowances' shortage compared to IRB measurement of Expected Loss.

Expected Losses (EL) derived under Basel II rules represent losses that would be expected in a downturn scenario over a 12 month period. This definition differs from loan impairment allowances, which only address losses incurred within the lending portfolios at the balance sheet date and are not permitted to recognise the additional level of conservatism that the regulatory measure requires by the adoption of through-the-cycle, downturn conditions that may not exist at the balance sheet date.

Supplementary Tier I capital consists of Preferred shareholders' equity.

In case that deductions of Tier II exceed positive amounts of Tier II capital, then the difference is deducted from Tier I capital.

Tier II capital is composed of the following items:

- long term subordinated liabilities that meet certain regulatory specified criteria;
- fixed assets' revaluation reserve formed after 31 December 2003 (transition to IFRS); and
- 45% of unrealised gains on market valuation of AFS equities.

Further to the above the following items are deducted from Tier II capital:

- 50% of participating interests and subordinated loans (and other capital instruments qualifying as own funds) of more than 10% in not fully consolidated credit or other financial institutions;
- 50% of participating interests and subordinated loans (and other capital instruments qualifying as own funds) of more than 20% in insurance companies acquired or established after 31 December 2006;
- 50% of loan impairment allowances' shortage compared to IRB measurement of Expected Loss; and
- 100% of participating interests of more than 20% in insurance companies acquired or established before 31 December 2006.

2.2 Preferred securities

On 18 March 2005, the Group, through its Special Purpose Entity, ERB Hellas Funding Limited, issued € 200 million preferred securities which represent Lower Tier I capital for the Group (Tier I Series A). The preferred securities have no fixed redemption date and give the issuer the right to call the issue at par on 18 March 2010 and annually thereafter. All obligations of the issuer in respect of the preferred securities are guaranteed on a subordinated basis by the Bank. The securities pay fixed non-cumulative annual dividend of 6.75% for the first two years and non-cumulative annual dividends that are determined based on the ten year Euro swap rate plus a spread of 0.125% capped at 8% thereafter. The rate of preferred dividends for the Tier 1 Issue series A has been determined to 2.50% for the period March 18, 2012 to March 17, 2013. The preferred dividend must be declared and paid if the Bank declares a dividend. The preferred securities are listed on the Luxembourg and Frankfurt Stock Exchanges.

On 2 November 2005, the Group, through its Special Purpose Entity, ERB Hellas Funding Limited, issued € 400 million preferred securities which represent Lower Tier I capital for the Group (Tier I Series B). The preferred securities have no fixed redemption date and give the issuer the right to call the issue at par on 2 November 2015 and quarterly thereafter. All obligations of the issuer in respect of the preferred securities are guaranteed on a subordinated basis by the Bank. The securities pay fixed non-cumulative annual dividend of 4.57% for the first ten years and non-cumulative annual dividends that are determined based on the 3month Euribor plus a spread of 2.22% thereafter. The preferred dividend must be declared and paid if the Bank declares dividend. The preferred securities are listed on the London Stock Exchange.

On 9 November 2005, the Group, through its Special Purpose Entity, ERB Hellas Funding Limited, issued € 150 million preferred securities which represent Lower Tier I capital for the Group (Tier I Series C). The preferred securities have no fixed redemption date and give the issuer the right to call the issue at par on 9 January 2011 and quarterly thereafter. All obligations of the issuer in respect of the preferred securities are guaranteed on a subordinated basis by the Bank. The securities pay fixed non-cumulative dividend on a quarterly basis at a rate of 6% per annum. The preferred dividend must be declared and paid if the Bank declares dividend. The preferred securities are listed on the London, Frankfurt and Euronext Amsterdam Stock Exchanges.

On 21 December 2005, the Group, through its Special Purpose Entity, ERB Hellas Funding Limited, issued € 50 million preferred securities which are consolidated and form a single series with the existing € 150 million preferred securities issued on 9 November 2005.

On 29 July 2009, the Group, through its Special Purpose Entity, ERB Hellas Funding Limited, issued € 300 million preferred securities which represent Tier I capital for the Group (Tier I Series D). This is in accordance with the decision of the Annual General Meeting on 30 June 2009 which allows the Bank to issue in tranches up to € 500 million of such securities. The preferred securities have no fixed redemption date and give the issuer the right to call the issue after five years from the issue date and quarterly thereafter. In addition the securities, subject to certain conditions, are convertible at the option of the bondholder and the issuer after October 2014 into Eurobank ordinary shares at a 12% discount to the share market price during the period preceding the exchange. All obligations of the issuer in respect of the preferred securities are guaranteed on a subordinated basis by the Bank. The securities pay fixed non-cumulative dividend on a quarterly basis at a rate of 8.25% per annum. The preferred dividend must be declared and paid if the Bank declares a dividend. The preferred securities are listed on the London Stock Exchange.

On 30 November 2009, the Group, through its Special Purpose Entity, ERB Hellas Funding Limited, issued € 100 million preferred securities which represent Tier I capital for the Group (Tier I Series E). The terms and conditions of the issue are similar to preferred securities issued on 29 July 2009 and the conversion option applies from February 2015. The preferred securities are listed on the London Stock Exchange.

As at 31 December 2012, the outstanding amount of preferred securities was € 367 million classified as Supplementary Tier I capital. Under Basel III they qualify as grandfathered instruments.

In February 2012, the Group invited the holders of the preferred securities, series A, B and C to tender existing securities. The Group has repurchased an aggregate principal amount of € 325 million (Series A: € 71 million, Series B: € 147 million, Series C: € 107 million). The repurchase of preferred securities has generated a gain for the Group increasing its Core Tier I capital by € 188 million.

Detailed information regarding Preferred securities can be found in the Consolidated Financial Statements Note 39.

2. Capital management

2.3 Impairment losses on Greek sovereign exposure

2.3.1 Greek sovereign debt exchange programme

On 21 February 2012, Euro Area finance ministers agreed on a bail out program for Greece, including financial assistance from the official sector and a voluntary debt exchange agreed with the Private Sector.

The key terms and conditions of the final voluntary debt exchange package (PSI+) were as follows:

- For every bond selected to participate in PSI+, 53.5% of the face amount was forgiven, 31.5% of the face amount was exchanged with new bonds of equal face amount issued by Greece and the remaining 15% was exchanged with short-term securities issued by the European Financial Stability Facility (EFSF),
- The coupon on the new Greek Government Bonds (nGGBs) was 2% from 2012 to 2015, rising to 3% from 2015 to 2020, 3.65% for 2021 and 4.3% until 2042,
- Accrued interest on the exchanged bonds was settled through the issue of short-term EFSF securities,
- The nGGBs were issued in 20 separate tranches with staggered bullet maturities commencing in 2023 and ending in 2042 to replicate an amortisation of 5% per annum on the aggregate amount of the nGGBs,
- The nGGBs ranked pari passu with the EFSF € 30 bn loan to Greece contributing to the PSI+ exercise,
- nGGBs were subject to English Law,
- Each new bond was accompanied by a detachable GDP-linked security of the same notional amount as the face amount of the new bond.

The support program aimed at ensuring debt sustainability and restoring competitiveness, allowing Greece to achieve strict fiscal consolidation targets and the implementation of privatization plans and structural reforms.

The invitation for tender was launched on 24 February 2012 and the bonds invited to participate in PSI+ had an aggregate outstanding face amount of approximately € 206 bn. Greek and foreign law bonds of approximately € 199 bn were eventually exchanged.

Under Law 4046/2012, the tax losses arising from the bond exchange under the PSI+ program will be tax deductible in equal instalments over the life of the new bonds received, irrespective of the holding period of the bonds.

The exchange program of Greek Government bonds and other eligible securities (PSI+) provided evidence of a concession granted to the borrower (the Greek State) by the lender relating to the borrower's financial difficulty that the lender would not otherwise consider. Therefore, following the Bank's participation in the program, the Group recognised an impairment loss of € 5,779 million before tax, as of 31 December 2011, for GGBs and other securities of face value € 7,336 million exchanged in 2012 under PSI+.

Under this exchange, in March/April 2012, the Group received a) new Greek government bonds (nGGBs) with face value equal to 31.5% of the face amount of the old bonds, b) EFSF notes having a face amount of 15% of the face value of the old bonds and c) GDP-linked securities. All exchanged bonds were derecognised and the new GGBs, classified in the Held to Maturity portfolio, recognised at fair value. In 2012 and, following the international financial community's view that the market for nGGBs is active, the Group recognised an additional valuation loss of € 428 million based on market quotes at the date of recognition. GDP-linked securities were classified as derivatives. Furthermore, the Group incurred additional costs (extra funding cost, cost relating to old GGBs hedging instruments) amounting to € 12 million due to its participation in the PSI+ exchange program. As at 31 December 2012, and considering 2011 impact, total loss from PSI+ has amounted to € 6.2 bn.

Following the Eurogroup's decisions on 27 November 2012 as part of debt reduction measures, the Greek State announced on 3 December 2012 an invitation to eligible holders of nGGBs to submit offers to exchange such securities for six months zero coupon notes to be issued by the European Financial Stability Fund (EFSF). On 18 December 2012, pursuant to the above invitation, nGGBs of aggregate face amount of € 31.9 bn were eventually exchanged for EFSF notes of face amount of € 11.3 bn.

Under its participation to the Greek state's debt buyback program, the Group submitted for exchange the 100% of its nGGBs portfolio of total face value € 2.3 bn (carrying amount € 0.6 bn) and received EFSF notes of total face value € 0.8 bn. The transaction resulted in a pre tax gain of € 192 million recorded in the fourth quarter of 2012.

Greek sovereign exposure

As at 31 December 2012, the total carrying value of other Greek sovereign exposure amounted to € 6,041 million. This includes a) Treasury Bills of € 3,053 million, b) GGBs of € 904 million maturing in 2014 and issued for the Greek State's subscription to the Preference Shares issued under Law 3723/2008 "Greek Economy Liquidity Support Program". These GGBs are expected to be repaid in full c) other non PSI+ eligible GGBs of € 832 million, d) derivatives with the Greek State of € 724 million, e) exposure of € 187 million relating with Greek Sovereign risk financial guarantee, f) loans guaranteed by the Greek State of € 182 million, g) loans to Greek public sector of € 154 million and h) nGGBs of € 5 million included in trading portfolio.

As at 31 December 2012, the Group recognised a loss of € 115 million before tax relating with valuation losses for derivatives with the Greek State and for a Greek sovereign risk financial guarantee. As at 31 December 2011, the Group recognised an impairment loss of € 233 million before tax relating with exposure to Greek government and quasi-governmental bodies, such as loans to Local and Regional authorities and loans guaranteed by the Greek state.

2.3.2 Recapitalization Framework and Process

Given the severity of the impact of the Greek Government Bond exchange program (PSI+), on 21 February 2012 the Euro Area finance ministers allocated a total of € 50 bn of the second support program for Greece specifically for the recapitalisation of the Greek banking system. These funds are directed to the Hellenic Financial Stability Fund (HFSF) whose mandate has been extended and enhanced accordingly. € 23 bn of these funds were remitted to Greece in the second quarter of 2012 and € 16 bn in December 2012 and the final € 11 bn is expected within the next months.

The Bank of Greece (BoG) has assessed the viability of each Greek bank and estimated its capital needs based on the more demanding of (a) a minimum Core Tier I ratio of 9% under the baseline scenario and (b) 7% under the adverse stress scenario, throughout the period to end of 2014. Capital needs of each bank were assessed based on, inter alia, the impact of its participation in the PSI+ program, the results from the BlackRock loan diagnostic exercise, the viability of its business plan, and a detailed timetable of mitigating actions to restore solvency. BoG and the European Central Bank assessed that the € 50 bn is adequate to cover the capital needs, as above, of the viable Greek Banks and the resolution of the non viable ones.

In the meantime, the impact of Greek banks participation in the Greek Government Bonds exchange program (PSI+) is such that they require a temporary financial support from the HFSF, subject to the requirements provided by law and the presubscription agreement signed by each bank, the HFSF and the EFSF (see below).

The HFSF was established in 2010, in order to maintain the stability of the Greek banking system through ensuring that adequate resources are available to support viable banks' recapitalisation needs and participating in the capital increases for any non-subscribed part.

Banks considered viable have been given the opportunity to apply for and receive Core Tier I-eligible capital from the HFSF under a certain process. Capital may take the form of ordinary shares, contingent convertible financial instruments or ordinary shares with restricted voting rights. Ordinary shares with restricted voting rights will only be available if private investors contribute 10% of the capital raising at the rights issue. The voting rights of the HFSF for the ordinary shares it holds, if the 10% threshold mentioned above is met, will be strictly limited to specific strategic decisions on the condition that the bank adheres to its restructuring plan and as long as contingent convertible financial instruments (CoCos) are not mandatorily converted to ordinary shares (see below under (b)). HFSF is obliged to dispose, fully or partly, of all the shares it acquires within five years from the initial rights issue covered by HFSF, if the required 10% private participation is met and within two years if not. In both cases the disposal period may be extended by the Minister of Finance.

A Cabinet Act on 9 November 2012, agreed in consultation with the Troika (European Commission, ECB and IMF), provided the technical details of the banks' recapitalisation framework, as follows:

- Issue of ordinary shares in order to reach, as a minimum, Core Tier I capital 6%, without including, for the purpose of this calculation the preference shares issued under Law 3723/2008 and the contingent convertible financial instruments issued under the current Act (see (b) below). The new shares, the uncovered part of which will be covered by HFSF, will be priced at the lower of i) the average price of the last 50 trading days prior to the date the offering price of the shares is determined, discounted by 50% and ii) the market price at the last date prior to the date the offering price of the shares is determined.

2. Capital management

- (b) Issue of contingent convertible financial instruments (CoCos) in order to cover the gap between the rights' issue amount and the total capital needs of the Bank as set by BoG. The CoCos will be fully paid by the HFSF and will give banks the right to call the issue at par plus interest subject to the relevant approval by BoG, following capital action or capital surplus. The CoCos will carry an annual interest rate of 7%, which will increase by 0.5% per annum. If consolidated profits for the previous year do not suffice and BoG assesses that payment may jeopardize CAD ratios, coupon will be payable in kind through issuance of ordinary shares at average market price of the last 50 trading days prior to the payment date.

The CoCos will convert immediately to ordinary shares if the required 10% private participation in rights issue is not met, at 50% of the average market price of the last 50 trading days prior to the issue of the CoCos, provided that their issue will take place prior to the issue of ordinary shares. On the assumption that 10% private participation is met, the CoCos will convert to ordinary shares under the following conditions: i) if the Bank decides not to pay coupon, at 65% of average market price of the last 50 trading days prior to the interest cut off date, ii) if Core Tier I or Basel III Common Equity Tier I falls below 7% or 5.125% respectively, at 50% of the price of the initial rights issue covered by HFSF and iii) after five years, at 50% of the price of the initial rights issue covered by HFSF.

- (c) Issue of warrants on all ordinary shares acquired by HFSF provided that the requirement for 10% private participation in rights issue is achieved. The warrants are issued to the private participants in the rights' issue and are listed and tradable instruments which provide the shareholders/ warrant holders i) the right to purchase the shares from HFSF within 4.5 years, twice a year at a strike price equal to the principal amount plus 4%, which steps up by 1% per annum (warrant strike price), ii) the pre-emption right to purchase from HFSF the shares at the lower of warrant strike price and market value of last 50 days from HFSF's notice, in case HFSF intends to sell them, following a 3 year minimum holding period.

Non viable Banks will be resolved by the HFSF, in an orderly manner and at the lowest cost to the State, in a way that ensures financial stability.

To ensure that the system remains well-capitalized, the Bank of Greece has initiated, in March 2013, as previously committed, a follow-up stress-test exercise, based on macro assumptions and performance through June 2013, and using a methodology determined in consultation with the Troika (European Commission, ECB, IMF), to be concluded by end-December 2013.

Eurobank's capital requirements

The Bank of Greece, after assessing the business plan and the capital needs of Eurobank (the "Bank") has concluded on 19 April 2012 that Eurobank is a viable bank and, on 8 November 2012, notified the Bank that its Tier I capital should increase by € 5,839 million. The Bank, the HFSF and the European Financial Stability Facility ("EFSF") signed on 28 May 2012 and on 21 December 2012 a trilateral presubscription agreement (PSA) for the advance to the Bank of EFSF notes of face value of € 3,970 million and € 1,341 million (total € 5,311 million) as advance payment of its participation in the future share capital increase of the Bank. In addition, HFSF provided to the Bank a commitment letter for additional capital support of € 528 million up to the total level of recapitalisation needs of € 5,839 million. Proforma with the full recapitalisation amount of € 5,839 million, on 31 December 2012 the Group's regulatory capital stands at € 4.4 bn, the Core Tier I capital at € 4.1 bn, its Capital Adequacy ratio at 11.6% and the Core Tier I ratio at 10.8%.

Throughout 2012, the Group continued the implementation of its medium term internal capital generating plan, which includes initiatives generating or releasing Core Tier I capital and/or reducing Risk Weighted Assets. A total of € 1.9 bn of capital has been created/released since the onset of the crisis. In addition, the Group is preparing for a capital raising, whose timing and structure will be finalised with National Bank of Greece (see Consolidated Financial Statements note 47).

Restructuring plan

The 28 May 2012 PSA (see above) was assessed as State Aid by the European Commission. Therefore, along with the other viable banks, on 31 October 2012, Eurobank submitted a draft five year restructuring plan to the HFSF, the Ministry of Finance and the European Commission. Following the announcement of the NBG VTO, the European Commission asked that the Greek banks' plans are revisited and resubmitted for approval in the second quarter of 2013.

Monitoring Trustee

On 22 February 2013, the Bank appointed Grant Thornton as its Monitoring Trustee (MT). The MT will monitor compliance with commitments on corporate governance and commercial operational practices, and the implementation of the restructuring plan and report to the European Commission.

2.4 Capital base

The table below shows the Group's capital base at 31 December 2012 and 2011:

	31 December 2012		31 December 2011	
	Pro-forma ⁽¹⁾ € million	€ million	Pro-forma ⁽²⁾ € million	excluding PSI € million
Ordinary shareholders' equity	3,624	3,096	2,872	3,711
Preference Shares	950	950	950	950
Add: Regulatory Minority Interest	209	209	210	210
Less: Goodwill	(258)	(258)	(299)	(299)
Less: Intangible assets	(147)	(147)	(165)	(165)
Less: Other regulatory adjustments	(276)	(276)	(145)	(145)
EBA Core Tier I	4,102	3,574	3,423	4,262
Preferred Securities	367	367	745	745
Less: Other regulatory adjustments	(48)	(48)	-	-
Total Tier I capital	4,421	3,893	4,168	5,007
Tier II capital - subordinated debt	290	290	468	468
Less: Other regulatory adjustments	(290)	(290)	(259)	(259)
Total Regulatory Capital	4,421	3,893	4,377	5,216
Risk Weighted Assets	37,999	37,999	43,647	43,647
Ratios				
EBA Core Tier I	10.8%	9.4%	7.8%	9.8%
Tier I	11.6%	10.2%	9.5%	11.5%
Capital Adequacy Ratio	11.6%	10.2%	10.0%	12.0%

Loan impairment allowances' shortage amounts to € 684 million (2011: €516 million), which is 50% deducted from Core Tier I capital and 50% from Tier II capital.

Other than the risks related to Greek sovereign exposure and capital erosion resulting from their impairment (PSI+), the Group has sought to maintain an actively managed capital base to cover risks inherent in the business.

The Group, excluding the impact of PSI+, has complied with all externally imposed capital requirements throughout the year.

(1) Includes HFSF's payment of € 528m

(2) Includes PSI impact and HFSF's advance payment of € 3.97bn.

2. Capital management

During the last three years the Group focused on the organic strengthening of its capital position and, excluding the impact of PSI+, managed to maintain capital ratios at levels comfortably above minimum required. This was achieved by active derisking of lending portfolios through tighter credit policies and change in the portfolio mix in favour of more secured loans. In addition, it proceeded to several strategic initiatives, namely the disposal of Polish and Turkish operations (see Consolidated Financial Statements note 17), the liability management exercise of buying back preferred securities and Lower Tier II unsecured subordinated notes (see Consolidated Financial Statements note 34 and 39) and the merger with Dias S.A.

2.5 Capital requirement under Pillar 1

The table below shows the Group's capital requirements at 31 December 2012 and 2011. The capital requirement under Pillar 1 is calculated as 8% of risk weighted assets:

	2012 € million	2011 € million
Credit risk (pursuant Standardised approach)		
Central governments and central banks	95	167
Regional governments and local authorities	0	0
Administrative bodies & non-commercial undertakings	6	9
Credit and financial institutions	79	105
Corporate customers (excluding past due and secured by real estate property)	299	430
Retail customers (excluding past due and secured by real estate property)	171	214
Secured by real estate property (excluding past due)	66	86
Past due items	80	84
Exposures in the form of covered bonds	5	3
Shares in undertakings for collective investment in transferable securities (UCITS)	6	5
Exposures belonging to high risk regulatory categories	85	66
Other items (*)	217	202
Credit risk total, Standardised approach	1,109	1,371
Credit risk (pursuant IRB approach)		
Corporate customers	1,001	1,107
Retail exposures		
- Residential real estate property retail exposures	204	152
- Qualifying revolving retail exposures	83	128
- Other retail exposures	137	151
Equities (**)	6	6
Asset backed securities	44	19
Credit risk total, IRB approach	1,475	1,563
Credit risk total	2,584	2,934
Counterparty risk	37	52
Market risk (pursuant Standardised approach)		
- Interest rate instruments in the trading book	2	14
- Equity instruments in the trading book	1	0
- Currencies and gold	75	45
Internal model approach (Value at Risk)	37	96
Market risk total	115	155
Operational risk	304	351
Total capital requirement 31 December	3,040	3,492
Regulatory Capital 31 December	3,893	5,216
Pro-forma Regulatory Capital 31 December including HFSF's payment of € 528m.	4,421	4,377

(*) Other items include mainly fixed assets, equity and participations, weighted according to Standardised approach, and other assets.

(**) Equity exposures are calculated according to Simple risk weight method (§2a, section Z of BoG Governors' Act 2589/20.8.2007).

2. Capital management

2.6 Internal Capital Adequacy Assessment Process

The Internal Capital Adequacy Assessment Process (ICAAP) aims to identify and assess risks that are inherent in the Group's business model, determine their materiality and allocation on an entity level, evaluate risk monitoring and mitigation processes and quantify the relevant internal capital charge where appropriate so as to ensure the ongoing capital adequacy of the Group versus its risk profile. To accomplish these objectives, the ICAAP leverages upon and integrates well-established activities of the Group on risk, capital, performance and liquidity management, including in particular planning and monitoring, while also continuously refining its approach to ensure high standards of capital assessment and management.

Oversight and ultimate responsibility for the ICAAP is held with the Board of Directors, which has assumed a leading role in developing a risk conscious organization and maintaining the Group's risk management at high levels of sophistication. Its vision and guidance are distilled in the Group's risk appetite, which describes the risk boundaries within which the Group is willing to operate. The risk appetite is:

- Structured as a series of statements, both on an overall level and per risk type, the objective of which is to ensure adherence to regulatory requirements, guide the organization's business growth and balance the advantages of a strong capital position with those of higher returns on equity through greater leverage;
- Revisited formally once a year, or more frequently if the Board of Directors deems it necessary;
- A means of communication across units and functions in the institution.

As part of the ICAAP process, the Group benchmarks its status versus pre-defined risk appetite limits on a continuous basis.

Moreover, acting as an evaluation mechanism of the Group's entire risk management framework, an integral component of ICAAP is the identification and assessment of current and emerging risks in terms of their materiality at Group level, thus allowing the organization to focus its resources and management attention to those risks that could potentially threaten its business or capital standing and ensuring that all material risks are properly managed and monitored. To the extent possible, the metrics used in day-to-day decision-making, e.g. product pricing, incorporate risk-adjusted returns and capital consumption.

Material risks are evaluated qualitatively and quantitatively, as appropriate. The aggregation of the individual capital charges comprises the Group's total internal capital requirement, meaning the amount of capital the Group needs to hold for the purpose of absorbing unexpected losses deriving from its risk profile. All categories of material risk are continuously managed and the relevant frameworks are constantly evaluated in order to identify ways of strengthening the risk management structure, enhance existing policies, establish new mitigation techniques or improve the internal capital charge calculation. Risk and capital management responsibility, including compliance with regulatory requirements and corporate policies, lies with the Group's management.

The Group has decided to use the regulatory calculation of its required capital ("Pillar I required capital") as a starting point for setting its internal capital, adjusting for additional capital where appropriate. Internal capital better represents the Group's risk profile, compared to regulatory capital, since it takes into account a wider range of risks. This approach allows the Group to leverage its advanced infrastructure and also cover a wider range of risks. Capital is allocated to cover potential impacts arising from the risk exposures of the Group over a 1-year horizon and a 3-year capital planning horizon is adopted under the ICAAP. Regular scenario-based simulations and stress tests are also being used to assess specific risks as well as the overall risk profile. Stress tests can be classified as follows:

- Risk specific stress tests (including stress tests for credit, market, operational and liquidity risks in Greece and in International operations), where model parameters are based on the severity and frequency of historic market downturns as well as ad hoc scenarios selected by management;
- Integrated stress tests across risks, which evaluate the resilience of the Group's capital position in case of a systemic deterioration of the business environment in a macroeconomic downturn.

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

The conclusion of the 2012 internal capital adequacy assessment process is that the Group maintains adequate pre-provision earnings in the medium term and robust risk management practices while the capital actions already executed or underway and the recapitalization by the Hellenic Financial Stability Fund will allow the Group to meet both regulatory and internal capital requirements. As a result, the Group will be in a position to support the risk profile of its balance sheet and its business operations going forward, even under further extreme adverse conditions, should they materialize.

3. Risk management overview

3.1 Risk management

Effective risk management is a top priority, as well as a major competitive advantage, for the Group. The Group has allocated ample resources for upgrading its policies, methods and infrastructure, in order to ensure compliance with best international practices and the guidelines of the Basel Committee for Banking Supervision. The Group implements a well defined credit approval process, independent credit reviews and overall effective risk management policies for credit, market and operational risk, both in Greece and in each country of International operations. The risk management policies implemented by the Bank and its subsidiaries, as well as by the Internal Audit and Compliance units, are reviewed annually.

3.2 Risk management policies

The Group's risk management policies are formulated by the Board's Risk Committee.

The Risk Committee is appointed by the Board of Directors and is composed of the Chairman of the Board of Directors, the Chief Executive Officer, the Deputy Chief Executive Officer Wholesale Banking, the Deputy Chief Executive Officer Retail Banking, the Deputy Chief Executive Officer Risk Executive (Chairman of the Risk Committee) two non-executive Directors and one HFSF representative.

The Risk Committee makes strategic risk management decisions to maximise risk adjusted earnings. The Risk Committee meets quarterly and reports directly to the Board of Directors, while the local Risk Committees, which meet with the same frequency in each country of International operations, report to the Risk Committee.

3.3 Types of risk

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

The most important types of risk are:

- credit risk;
- market risk; and
- operational risk.

The individual risk types are defined in the subsequent sections.

3.4 Organisation

The risk management functions of the Risk Committee are performed by the Group's three operating sectors, which cover the following areas:

- Credit risk;
- Market, Counterparty and Liquidity risk;
- Operational risk.

Deputy Chief Executive Officer Risk Executive (Member of the Board of Directors)		
Credit Risk	Market, Counterparty & Liquidity Risk	Operational Risk
<ul style="list-style-type: none"> • Basel II IRB approach compliance for significant part of Group loan portfolios; • Advanced IRB for all retail portfolios (consumer, mortgage, small business) and Foundation IRB for Corporate; • Basel II IRB projects for New Europe countries in progress; • Independent and centralised approval system; • Systematic follow up of credits; • Differentiated credit scoring system for consumer and small business banking, full financial and sectoral analysis for corporates; • Disciplined provisioning policy based on independent credit rating (wholesale) and statistical portfolio behaviour (retail); • Regular and ad hoc reporting to Senior Management (Executive Committee, Board of Directors, Executive Risk Committee) regarding progress of portfolios and evolution of provisions. 	<ul style="list-style-type: none"> • First Greek bank with complete and validated market risk management system by local regulator (Bank of Greece), which covers both trading and banking books; • Compliance with new CRD III rules for Trading book (stressed VaR and IRC); • All market risks monitored daily against approved VaR limits; • VaR methodology used for business decisions; • Considerable stress testing development for non normal market conditions; • Liquidity ratios and liquidity stress test results monitored on a continuous basis; • Daily monitoring of credit risk of derivatives' positions using PFE methodology; • Interbank credit risk monitored daily through the implementation of netting and margining agreements (ISDA/CSA, GMRA); • Counterparty and Issuer Risk monitored daily on a Group level through a centralized counterparty risk monitoring tool; • CVA modelling; • International operations: market risk for all International subsidiaries managed centrally in Greece. 	<ul style="list-style-type: none"> • Basel II Standardised approach; • Documented and functioning operational risk framework & risk management system implemented Group-wide; • Risk & control self assessment program in progress; • Operational risk events collection system; • Key Risk Indicator (KRI) program in progress; • Operational risk scenario analysis (stress testing); • Operational risk reporting system (internal & external); • A number of operational risk mitigation programs under way throughout the Group. • Center of competence for counter fraud activity coordinating & monitoring respective initiatives.

4. Credit Risk

4.1 Definition of credit risk

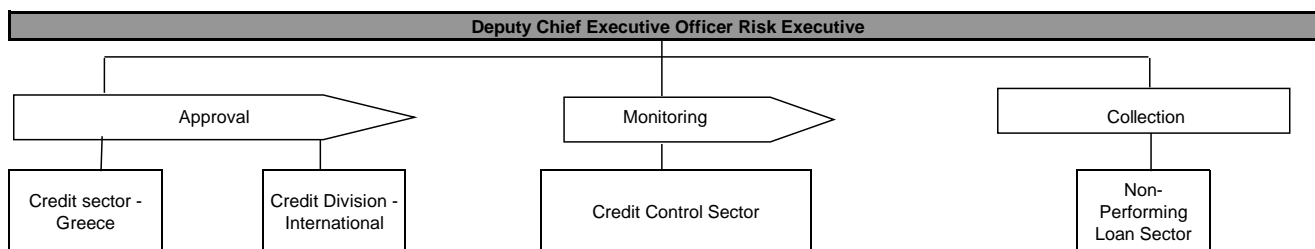
Credit risk is the risk of losses because counterparties fail to meet all or part of their payment obligations towards the Group. Credit risk also includes country, dilution and settlement risk.

Country risk is the risk of losses arising from economic difficulties or political unrest in a country, including the risk of losses following nationalisation, expropriation and debt restructuring.

Settlement risk is the risk arising when payments are settled, for example for trades in financial instruments, including derivatives and currency transactions. The risk arises when the Group remits payments before it can ascertain that the counterparties' payments have been received.

4.2 Credit risk organisation and processes

4.2.1 Credit risk organisation



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

The organisation of the credit risk divisions of the Group's subsidiary banks in International operations (Bulgaria, Romania, Serbia, Cyprus, Luxembourg and Ukraine) also follows the model of the Bank depicted above. The Risk Executive of each subsidiary bank reports directly to Deputy Chief Executive Officer Risk Executive.

4.2.2 Credit approval process

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

Since 2004, the Bank has been analysing corporate customer creditworthiness by using, for the big majority of the portfolio, the Moody's Risk Advisor ('MRA') model, which categorises customers according to 11 grades on a borrower rating scale. Since 2007, the overall evaluation of wholesale lending customers is based on a 14 grade rating system that takes into account the characteristics of both the obligor (borrower's rating) and the collateral or the guarantees provided.

The Credit approval process in Wholesale Banking is centralised through credit committees with escalating approval levels, depending on total customer exposure, customer risk category (high, medium, low), tenor and security value and type.

The Credit Sector independently reviews credit proposals for large and medium size corporate entities and prepares an assessment (risk opinion) prior to their submission to the appropriate Credit Committees, in which it participates with a voting right. It also approves credits for retail customers (small business lending and mortgages) in case the total customer exposure exceeds a predefined threshold.

The loan approval process for small business lending customers (turnover up to € 2.5 million) is based on a framework of centralised procedures, clear guidelines on collateral and the 'four-eyes' principle. The evaluation is based on an analysis of the customer's financial position, past relationship with the Bank and statistical scorecards.

The consumer lending approval process is also centralised. The Bank uses advanced application and behavioral credit scoring models, as well as underwriting criteria based on sophisticated data monitoring and analysis. Each area of the Consumer Lending Business Unit and the respective products have been analysed externally to develop bespoke credit scoring models.

The mortgage lending approval process is centralised as well and is based on the customer's global exposure and income, the value of the property and the 'four eyes' underwriting standard. The Bank implements a comprehensive set of underwriting criteria, along with a statistical model for evaluating new mortgage loan applications.

Lending approval processes in all bank subsidiaries throughout International operations comply in full with the standards applicable to the parent Bank in Greece. In order to ensure full harmonisation with Group standards and in the light of increased credit risk management demands for the corporate business in International operations countries, International Credit Division was established in April 2008. The primary activities of the Division are:

- analysis and approval of all International operations corporate credits in excess of the country's approval authority level, as well as review of all credit proposals submitted for approval to the Regional Credit Committee (RCC);
- creation and maintenance of all management acts relating to credit approval levels and credit processes;
- creation, implementation and maintenance of uniform International Credit Policy in line with the Group's credit policy;
- monitoring of corporate borrowers classified credits; and
- provision of training on corporate banking credit policies and procedures.

4. Credit Risk

4.2.3 Credit monitoring

Following approval, the quality of the Group's wholesale and retail banking loans in Greece and in International operations is monitored and assessed by the Credit Control Sector. The Credit Control Sector operates independently from all the business units of the Bank and reports to the Deputy Chief Executive Officer Risk Executive.

The main activities of the Credit Control Sector include:

- reviewing and monitoring the performance of all loan portfolios of the Bank and those of the Group's subsidiaries;
- conducting field reviews of the loan portfolios of all business units;
- supervising and directly controlling the risk management functions in subsidiary banks and financial institutions in International operations;
- participating in the development, review, approval and implementation of various models designed according to the characteristics of each portfolio;
- independently validating the models and regularly monitoring and reporting on their performance;
- supervising, supporting and maintaining the Moody's Risk Advisor (MRA), which is used for the analysis of corporate customer's borrower rating (creditworthiness);
- creating, monitoring and supporting the Transactional Rating System, the system that measures the overall risk of the relationship (approved limit) taking into consideration both customer's creditworthiness and required collaterals;
- regular monitoring and quarterly reporting of the risk exposures to the Board of Directors and the Risk Committee, as well as producing various analyses;
- forming the provisioning policy and regularly reviewing the adequacy of provisions for all portfolios;
- approving credit policies and new lending products;
- attending meetings of Credit Committees, as well as the Non-Performing Loans Committee, with a voting member right in cases of customer downgrading or upgrading; and
- the responsibility for the implementation of the Basel II IRB approach in the Group, in accordance with the roll out plan, as well as for the post implementation monitoring and reporting on IRB portfolios.

The Bank has set limits and controls regarding the concentration of risk to individual parties, groups or industries. Such risks are monitored on a revolving basis and are subject to quarterly or semi annual reviews and approvals by the Board of Director's Risk Committee.

4.2.4 Collections

Each business unit employs a dedicated department to monitor and collect past due loans that are not yet in non-performing status. The target is to reinstate customers' solvency, reduce overall handling costs for delinquent accounts and improve the portfolio profitability by maintaining low portfolio delinquency rates and facilitating negotiations with delinquent customers. This approach is supported by a combination of experienced personnel and statistical analysis which highlights the trends and the high risk areas.

The consumer lending collections operation has become a key area of focus for the Bank in recent years, and significant investments have been made both in expertise, as well as technology. As a result, subsidiary company, Financial Planning Services S.A. ('FPS'), established in 2006, is responsible for the collections of overdue consumer lending products. FPS ensures that internal and external collection resources are focused and allocated appropriately and efficiently. The installation of a customised collections management system and an automated dialer has enhanced the operational efficiency of collections.

Non-performing loans are managed by the Non-Performing Loans' Sector, which reports to the Deputy Chief Executive Officer Risk Executive. It handles all the loans that have been transferred to a denounced status. This applies for all portfolios (corporate, small business and mortgage lending), with the exception of non-performing consumer loans that are 90 days past due, which are managed by FPS.

Since the advent of the financial crisis, the Bank has also initiated a number of strategic initiatives with respect to collections and remedial management. Such initiatives include:

- Debt Remedial Management meetings at top management level on a monthly basis defining strategies and monitoring performance;
- Creation and/or reinforcement of centralised units in Retail : specialised collectors, dedicated "pre-legal" operations;
- Monitoring and handling of watchlisted and problematic Corporate portfolio by dedicated centralised Unit at the pre-legal stage;
- Reinforcement of FPS and use of risk based collections at customer level for Retail;
- Increased Network involvement for Retail and of Relationship Managers at the Business Centers to follow up and reduce early delinquencies;
- Rigorous real estate property search and mechanisms for converting unsecured lending to secured;
- Development of restructuring policies and remedial actions based on credit analysis for viable customers; standardised restructuring products for Retail;
- Processes and IT systems enhancements;
- Re-organisation and reinforcement of NPL Sector including system improvements (collections system and legal monitoring system) as well as improvement of the framework of cooperation with the legal division and external lawyers.

4.2.5 Recent developments

The financial crisis in the Greek economy (2012 was the fourth consecutive year of recession) has resulted to the increase of unemployment rate and the reduction of consumers' disposable income. Also, the profitability of small and medium companies has deteriorated. Regarding our Bank's portfolio the segments that presented deterioration in their performance were mainly the Consumer lending and the Small and Medium business banking. The recent developments in the Greek economy are further analysed in the Report of the Directors in section Business Outlook and Risks.

In order to protect asset quality and mitigate risk in the context of these adverse developments the Bank has taken a number of actions :

- Tightening of credit underwriting criteria;
- Full implementation of Risk adjusted pricing for all portfolios;
- Increase of portfolios collateralisation and reduction of consumer lending portfolio;
- Extensive use of "Early Warning Systems" as risk detection and prevention mechanisms;
- Establishment of additional review bodies to allow for more frequent monitoring of watchlisted and high risk customers in Wholesale Banking;
- Portfolio reviews on a segmental basis in Wholesale and focused field reviews in high risk areas in Retail;
- More frequent collaterals valuation updates;
- Active limits management and proactive limits reduction/ blocking based on risk;
- Frequent reviews and calibration of risk models and related risk parameters (PD, LGD and EAD), as needed;
- Intensified collections and development of a Debt Remedial Management framework, as described above under 4.2.4.

4. Credit Risk

4.3 Credit risk reporting

Credit Control Sector regularly prepares a detailed analysis of information to quantify, monitor and evaluate risks, as well as provides support to implement the Risk Committee's risk management decisions. It has a fixed reporting cycle to ensure that the relevant management bodies, including the Board of Directors, the Strategic Planning and the Risk Committees, are updated on an ongoing basis on the developments in the credit portfolio.

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

The quality of the Bank's portfolio:	Analysis of provisions for impairment and losses by business unit. Portfolio breakdowns and evolution by rating category, size, delinquency, industry, tenor, vintage and collateralisation (e.g. LTV bands) etc. Separate reporting on restructured portfolio performance.
Large exposures:	An overview of the twenty largest exposures (for Greece and International subsidiaries), as well as the credit limits above € 60 million.
The Bank's risk management models and parameters:	Update on the use of risk models, including risk parameters applied and the key results of the models' validation.
	Update on capital adequacy.
	Stress testing scenarios.

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

4.4 Credit exposures

Credit exposures for regulatory purposes before any credit risk mitigation are significantly differentiated from equivalent balances presented in IFRS financial statements, due to different basis of consolidation (refer to par. 1.4.2), inclusion of off balance sheet exposures and potential future exposures for derivative financial instruments, as well as inclusion of repos' collaterals.

The table below shows the Group's credit exposures (before any credit risk mitigation) for regulatory purposes at 31 December 2012 and 2011:

	Average of 2012 € million	2012 € million	Average of 2011 € million	2011 € million
Credit risk (pursuant Standardised approach)				
Central governments and central banks	29,111	30,295	42,944	37,733
Administrative bodies & non-commercial undertakings	391	530	1,148	323
Credit and financial institutions	8,890	7,440	11,136	10,551
Multilateral development banks	545	758	159	260
International organisations	2,884	5,491	-	-
Corporate customers (excluding past due and secured by real estate property)	5,520	4,359	6,076	5,931
Retail customers (excluding past due and secured by real estate property)	3,262	2,817	4,087	3,514
Secured by real estate property (excluding past due)	2,490	2,061	3,184	2,660
Past due items	1,039	950	982	1,013
Exposures in the form of covered bonds	167	286	205	141
Shares in undertakings for collective investment in transferable securities (UCITS)	63	68	180	58
Exposures belonging to high risk regulatory categories	701	902	790	675
Other items (*)	5,417	6,028	3,774	4,836
Credit risk exposures relating to off balance sheet items	676	466	696	702
Credit risk total, Standardised approach	61,156	62,451	75,361	68,397
Credit risk (pursuant IRB approach)				
Corporate customers				
- Corporate exposures (Foundation IRB approach)	14,788	14,640	15,401	15,166
- Retail exposures that exceed € 1 million (Advanced IRB approach)	457	453	478	463
Retail exposures				
- Residential real estate property retail exposures	10,514	10,603	10,208	10,432
- Qualifying revolving retail exposures	2,595	2,420	3,211	2,848
- Other retail exposures	8,082	7,923	8,472	8,263
Equity	26	31	50	28
Asset backed securities	564	516	693	611
Credit risk exposures relating to off balance sheet items	1,631	1,527	2,099	1,926
Credit risk total, IRB approach	38,657	38,114	40,612	39,737
Credit risk total	99,813	100,565	115,973	108,134

Refer to par.4.7 for exposures after credit risk mitigation

The off balance sheet items included in the above exposures consist of the credit equivalent of:

- letters of guarantee;
- standby letters of credit; and
- undrawn credit facilities after the application of credit conversion factors (refer to paragraph 4.8.3).

Central governments and central banks exposures above include bonds issued by the Bank € 16,276 million under the second stream of Liquidity Support Program and covered bonds € 3,800 million. Both issues are fully retained by the Bank and are used as repos' collaterals or pledged to central banks and international financial institutions.

(*) Other items include mainly cash, fixed assets and other assets.

4. Credit Risk

4.4.1 Geographic analysis

The table below shows the geographical break down of the Group's credit exposures at 31 December 2012 and 2011, as disclosed for IFRS purposes, according to the debtor's country of domicile:

	31 December 2012				
	Greece € million	Other Western European countries € million	Eastern and Southeastern European countries € million	Other countries € million	Total € million
Loans and advances to banks	39	3,452	988	214	4,693
Derivative financial instruments	925	595	4	364	1,888
Loans and advances to customers:					
- Wholesale lending	14,007	825	4,478	432	19,742
- Mortgage lending	12,051	62	2,089	19	14,221
- Consumer lending	5,020	3	1,355	0	6,378
- Small business lending	6,470	0	1,030	0	7,500
Debt securities	5,154	2,191	2,015	203	9,563
Other assets	1,196	41	68	3	1,308
Total exposures	44,862	7,169	12,027	1,235	65,293

	31 December 2011				
	Greece € million	Other Western European countries € million	Eastern and Southeastern European countries € million	Other countries € million	Total € million
Loans and advances to banks	93	4,588	2,099	208	6,988
Derivative financial instruments	740	678	32	368	1,818
Loans and advances to customers:					
- Wholesale lending	15,347	913	5,880	345	22,485
- Mortgage lending	11,793	67	2,150	19	14,029
- Consumer lending	5,568	0	1,470	10	7,048
- Small business lending	6,683	0	1,246	0	7,929
Debt securities	6,208	1,947	2,976	187	11,318
Other assets	740	35	102	1	878
Total exposures	47,172	8,228	15,955	1,138	72,493

4.4.2 Industry analysis

The table below shows the industry break down of the Group's credit exposures, as disclosed for IFRS purposes at 31 December 2012 and 2011:

	31 December 2012						
	Commerce and services € million	Private individuals € million	Manufacturing € million	Shipping € million	Construction € million	Other € million	Total € million
Loans and advances to banks	4,693	-	-	-	-	-	4,693
Derivative financial instruments	926	0	35	52	70	805	1,888
Loans and advances to customers:							
- Wholesale lending	11,285	473	4,254	970	2,005	755	19,742
- Mortgage lending	0	14,221	-	-	-	-	14,221
- Consumer lending	0	6,378	-	-	-	-	6,378
- Small business lending	6,276	152	617	-	416	39	7,500
Debt securities	1,425	-	66	-	51	8,021	9,563
Other assets	334	8	1	-	1	964	1,308
Total exposures	24,939	21,232	4,973	1,022	2,543	10,584	65,293

	31 December 2011						
	Commerce and services € million	Private individuals € million	Manufacturing € million	Shipping € million	Construction € million	Other € million	Total € million
Loans and advances to banks	6,988	-	-	-	-	-	6,988
Derivative financial instruments	1,014	1	50	77	60	616	1,818
Loans and advances to customers:							
- Wholesale lending	12,918	548	4,922	1,033	2,294	770	22,485
- Mortgage lending	-	14,029	-	-	-	-	14,029
- Consumer lending	-	7,048	-	-	-	-	7,048
- Small business lending	6,563	257	631	-	414	64	7,929
Debt securities	1,502	-	11	0	54	9,751	11,318
Other assets	435	3	0	-	0	440	878
Total exposures	29,420	21,886	5,614	1,110	2,822	11,641	72,493

Credit exposure to other industry sectors includes mainly sovereign assets.

4. Credit Risk

4.4.3 Maturity analysis

The table below shows the maturity break down of the Group's credit exposures (before any provisions for impairment losses on loans or OTC derivative transactions) for regulatory purposes, at 31 December 2012 and 2011. Items without contractual maturities (i.e. overdraft loans) are presented in the "less than 1 month" time bucket.

	31 December 2012				
	Up to 1 month € million	1 to 3 months € million	3 months to 1 year € million	> 1 year € million	Total € million
Cash and balances with central banks	2,065	-	-	-	2,065
Loans and advances to banks	739	107	49	1,584	2,479
Loans and advances to customers	12,010	1,187	3,151	31,493	47,841
Debt securities	1,679	498	958	10,202	13,337
Other assets	202	17	75	734	1,028
Credit risk exposures relating to on balance sheet assets:	16,695	1,809	4,233	44,013	66,750
Contracts under ISDA and CSA (Derivatives) and contracts under GMRA (repos and reverse repos)	1,439	-	-	-	1,439
Other Contracts (derivatives and repos outside ISDA, CSA,GMRA)	7	16	8	69	100
Credit risk exposures relating to off balance sheet items	1,446	16	8	69	1,539
Total exposures	18,141	1,825	4,241	44,082	68,289

	31 December 2011				
	Up to 1 month € million	1 to 3 months € million	3 months to 1 year € million	> 1 year € million	Total € million
Cash and balances with Central banks	3,286	-	-	-	3,286
Loans and advances to banks	731	2,954	-	660	4,345
Loans and advances to customers	14,043	1,289	3,573	32,588	51,493
Debt securities	746	2,089	1,692	11,160	15,687
Other assets	67	40	179	493	779
Credit risk exposures relating to on balance sheet assets:	18,873	6,372	5,444	44,901	75,590
Contracts under ISDA and CSA (Derivatives) and contracts under GMRA (repos and reverse repos)	1,241	-	-	-	1,241
Other Contracts (derivatives and repos outside ISDA, CSA,GMRA)	39	23	33	207	302
Credit risk exposures relating to off balance sheet items	1,280	23	33	207	1,543
Total exposures	20,153	6,395	5,477	45,108	77,133

Credit exposures shown above include the excess collateral posted by the Bank under credit mitigation contracts (initial margins, independent amounts, extra collateral due to haircut imposed by counterparties under the CSAs, GMRA, GMSLAs) and uncollateralised exposure from derivatives and repurchase transactions. The above exposures do not include deferred tax, fixed assets, intangible assets and goodwill. Equities in Available-for-sale portfolios are also excluded since they are presented in par. 5.4.

Finally, securities obtained by EFSF due to recapitalisation are included in category debt securities and increase the exposure by € 5.3 billion.

4.5 Past due and impaired loans

4.5.1 Past due exposures

A financial asset is past due if a counterparty has failed to make a payment when contractually due. Exposures more than 90 days past due presented in the table below (refer to paragraph 4.5.2) include the assets for which counterparties have failed to make a contractual payment for more than 90 days, irrespective of whether the asset is considered as impaired or not.

4.5.2 Impaired exposures

The Group assesses at each balance sheet date whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset

- (a) significant financial difficulty of the issuer or obligor;
- (b) a breach of contract, such as a default or delinquency in interest or principal payments;
- (c) the Group granting to the borrower, for economic or legal reasons relating to the borrower's financial difficulty, a concession that the lender would not otherwise
- (d) it becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- (e) the disappearance of an active market for that financial asset because of financial difficulties; or
- (f) observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of
 - adverse changes in the payment status of borrowers in the group; or
 - national or local economic conditions that correlate with defaults on the assets in the group.

The Group first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant and individually or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognised are not included in a collective assessment of impairment.

4. Credit Risk

4.5.3 Non-performing loans

Non-performing loans are defined as the loans delinquent for a given period determined in accordance with the Group's policy. Mortgages are considered as non-performing when they are delinquent for more than 180 days and consumer loans for more than 90 days. Loans to corporate entities are considered as non-performing when they are transferred to non accrual status which occurs when the loans are delinquent for more than 180 days or earlier in the case of a material credit event.

The table below presents as at 31 December 2012 and 2011, analysis of credit exposures, broken down by major asset class, as disclosed for IFRS purposes:

	31 December 2012			31 December 2011		
	Credit exposure			Credit exposure		
	Total loans and advances to customers € million	Past due more than 90 days € million	Impaired exposures € million	Total loans and advances to customers € million	Past due more than 90 days € million	Impaired exposures € million
Wholesale	19,742	3,315	3,404	22,485	2,293	2,264
Mortgage	14,221	2,017	1,788	14,029	1,383	1,193
Consumer	6,378	2,516	2,545	7,048	1,975	1,999
Small business	7,500	3,070	3,250	7,929	2,247	2,397
Total	47,841	10,918	10,987	51,491	7,898	7,853

The following table presents the geographic break down of total, past due, impaired and non performing loans and advances to customers at 31 December 2012 and 2011:

	31 December 2012				31 December 2011			
	Total loans and advances to customers € million	Past due more than 90 days € million	Impaired exposures € million	Non performing loans € million	Total loans and advances to customers € million	Past due more than 90 days € million	Impaired exposures € million	Non performing loans € million
Greece	38,487	9,309	9,329	7,411	40,440	6,476	6,384	5,112
International Operations	9,354	1,610	1,658	1,318	11,051	1,422	1,469	1,112
Total	47,841	10,919	10,987	8,729	51,491	7,898	7,853	6,224

4.5.4 Past due but not impaired exposures

Loans that are past due may not be impaired in case there is no objective evidence substantiating such an action. Based on past experience, consumer and small business loans less than 90 days past due - for mortgage loans and fully collateralised wholesale loans 180 days past due - are not considered impaired, unless specific information indicates to the contrary.

4.6 Provision for impairment losses

If there is objective evidence that an impairment loss on loans and receivables carried at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognised in the income statement. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

The calculation of the present value of the estimated future cash flows of a collateralised financial asset reflects the cash flows that may result from foreclosure less costs for obtaining and selling the collateral, whether or not foreclosure is probable.

For the purposes of a collective evaluation of impairment, financial assets are grouped on the basis of similar credit risk characteristics (i.e., on the basis of the Group's grading process that considers asset type, industry, geographical location, collateral type, past due status and other relevant factors). Those characteristics are relevant to the estimation of future cash flows for groups of such assets by being indicative of the debtors' ability to pay all amounts due according to the contractual terms of the assets being evaluated.

Future cash flows in a group of financial assets that are collectively evaluated for impairment are estimated on the basis of the contractual cash flows of the assets in the group and historical loss experience for assets with credit risk characteristics similar to those in the group. Historical loss experience is adjusted on the basis of current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not exist currently.

Estimates of changes in future cash flows for groups of assets should reflect and be directionally consistent with changes in related observable data from period to period (for example, changes in unemployment rates, property prices, payment status, or other factors indicative of changes in the probability of losses in the group and their magnitude). The methodology and assumptions used for estimating future cash flows are reviewed regularly by the Group to reduce any differences between loss estimates and actual loss experience.

When a loan is uncollectible, it is written off against the related provision for loan impairment. Such loans are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off decrease the amount of the provision for loan impairment in the income statement.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the previously recognised impairment loss is reversed by adjusting the allowance account. The amount of the reversal is recognised in the income statement.

4. Credit Risk

The table below presents as at 31 December 2012 and 2011, analysis of provisions for impairment losses, broken down by major asset class, as disclosed for IFRS purposes:

	31 December 2012		31 December 2011		
	Provision for impairment losses		Provision for impairment losses		
	Balance of impairment € million	Impairment charges € million	Balance of impairment € million	Impairment charges € million	Additional collective provision for Greek sovereign risk € million
Wholesale	1,182	430	903	233	157
Mortgage	425	192	268	131	-
Consumer	1,846	584	1,356	636	-
Small business	1,217	449	870	333	1
Total	4,670	1,655	3,397	1,333	158

The table below presents the movement of the provision for impairment losses on loans and advances to customers for the year ending 31 December 2012 and 2011:

	31 December 2012		
	Individual impairment € million	Collective impairment € million	Total impairment € million
Balance at 1 January 2012	1,490	1,907	3,397
Impairment losses on loans and advances charged in the year	788	867	1,655
Amounts recovered during the year	8	17	25
Loans written off during the year as uncollectible	(95)	(15)	(110)
Foreign exchange differences and other movements	(130)	(131)	(261)
Disposal of foreign operations	(35)	(1)	(36)
Balance at 31 December 2012	2,026	2,644	4,670

	31 December 2011		
	Individual impairment € million	Collective impairment € million	Total impairment € million
Balance at 1 January 2011	913	1,416	2,329
Impairment losses on loans and advances charged in the year	550	783	1,333
Additional collective provision for Greek sovereign risk	158	-	158
Amounts recovered during the year	37	27	64
Loans written off during the year as uncollectible	(69)	(131)	(200)
Foreign exchange differences and other movements	(78)	(123)	(201)
Disposal of foreign operations	(21)	(65)	(86)
Balance at 31 December 2011	1,490	1,907	3,397

The table below presents the geographic break down of the provision for impairment losses on loans and advances to customers for the year ending 31 December 2012 and 2011:

	2012 € million	2011 € million
Greece	3,870	2,781
International Operations	800	616
Total	4,670	3,397

4.7 Standardised approach

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

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

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

In the case of corporate bond issues, the corresponding issue rating by these agencies is used. In case that an issue rating is not available, rating for other issues by the same issuer can be used, if: (a) the corporate bond under review has equal or better seniority with these rated bonds or (b) the resulting risk weight is lower than the applicable risk weight of unrated bonds.

4. Credit Risk

The table below presents the credit exposures (before credit risk mitigation, i.e. collaterals, and after the application of credit conversion factors) for which the standardised approach is applied, at 31 December 2012 and 2011, broken down by supervisory risk weights:

	Supervisory risk weightings - 31 December 2012							Total € million
	0% € million	10% - 20% € million	35% € million	50% € million	75% € million	100% € million	150% € million	
Credit risk (pursuant Standardised approach)								
Central governments and central banks	28,997	34	-	203	-	1,061	-	30,295
Administrative bodies & non-commercial undertakings	-	476	-	-	-	54	-	530
Credit and financial institutions	2,237	3,227	-	1,856	-	108	31	7,459
Multilateral development banks	758	-	-	-	-	-	-	758
International organisations	5,491	-	-	-	-	-	-	5,491
Corporate customers	-	30	-	19	-	4,364	201	4,614
Retail customers	-	-	-	-	2,996	-	-	2,996
Secured by real estate property	-	-	1,414	658	-	-	-	2,072
Past due items	-	-	-	3	-	828	121	952
Exposures in the form of covered bonds	-	276	-	-	-	9	-	285
Shares in undertakings for collective investment in transferable securities (UCITS)	-	-	-	-	-	68	-	68
Exposures belonging to high securitisation positions	-	-	-	3	-	570	329	902
Other items	3,264	74	-	-	-	2,691	0	6,029
Total	40,747	4,117	1,414	2,742	2,996	9,753	682	62,451

	Supervisory risk weightings - 31 December 2011							Total € million
	0% € million	10% - 20% € million	35% € million	50% € million	75% € million	100% € million	150% € million	
Credit risk (pursuant Standardised approach)								
Central governments and central banks	35,318	34	-	215	-	2,068	98	37,733
Administrative bodies & non-commercial undertakings	-	201	-	5	-	120	-	326
Credit and financial institutions	2,619	6,762	-	956	-	260	38	10,635
Multilateral development banks	260	-	-	-	-	-	-	260
International organisations	-	-	-	-	-	-	-	-
Corporate customers	-	54	-	-	-	6,087	195	6,336
Retail customers	-	-	-	-	3,703	-	-	3,703
Secured by real estate property	-	-	1,790	891	-	-	-	2,681
Past due items	-	-	-	1	-	908	104	1,013
Exposures in the form of covered bonds	-	127	-	-	-	14	-	141
Shares in undertakings for collective investment in transferable securities (UCITS)	-	-	-	-	-	58	-	58
Exposures belonging to high securitisation positions	-	-	-	-	-	363	312	675
Other items	2,237	85	-	-	-	2,513	1	4,836
Total	40,434	7,263	1,790	2,068	3,703	12,391	748	68,397

Credit exposures shown in the above table do not include goodwill, intangible assets and participations in insurance companies that are deducted from regulatory own funds.

4. Credit Risk

The table below presents the credit exposures (after credit risk mitigation, i.e. collaterals) for which the standardised approach is applied, at 31 December 2012 and 2011, broken down by supervisory risk weights:

	Supervisory risk weightings - 31 December 2012							Total € million
	0% € million	10% - 20% € million	35% € million	50% € million	75% € million	100% € million	150% € million	
Credit risk (pursuant Standardised approach)								
Central governments and central banks	12,131	34	-	239	-	1,066	0	13,491
Administrative bodies & non-commercial undertakings	0	160	-	0	-	55	0	215
Credit and financial institutions	2,313	1,882	-	1,328	-	117	31	5,671
Multilateral development banks	559	-	-	-	-	-	-	559
International organisations	5,491	-	-	-	-	-	-	5,491
Corporate customers	-	39	-	20	-	3,431	201	3,691
Retail customers	-	-	-	-	2,852	-	-	2,852
Secured by real estate property	-	-	1,414	658	-	-	-	2,072
Past due items	-	-	-	3	-	827	117	947
Exposures in the form of covered bonds	-	277	-	-	-	9	-	286
Shares in undertakings for collective investment in transferable securities (UCITS)	-	-	-	-	-	68	-	68
Exposures belonging to high securitisation positions	-	-	-	3	-	570	327	900
Other items	3,264	74	-	-	-	2,690	0	6,028
Total	23,758	2,466	1,414	2,251	2,852	8,833	676	42,250

	Supervisory risk weightings - 31 December 2011							Total € million
	0% € million	10% - 20% € million	35% € million	50% € million	75% € million	100% € million	150% € million	
Credit risk (pursuant Standardised approach)								
Central governments and central banks	13,443	34	-	239	-	1,840	98	15,654
Administrative bodies & non-commercial undertakings	-	36	-	5	-	117	-	158
Credit and financial institutions	2,813	4,935	-	552	-	272	37	8,609
Multilateral development banks	102	0	-	0	-	0	0	102
International organisations	-	-	-	-	-	-	-	-
Corporate customers	-	61	-	5	-	5,138	195	5,399
Retail customers	-	-	-	-	3,568	-	-	3,568
Secured by real estate property	-	-	1,791	891	-	-	-	2,682
Past due items	-	-	-	1	-	908	94	1,003
Exposures in the form of covered bonds	-	127	-	-	-	14	-	141
Shares in undertakings for collective investment in transferable securities (UCITS)	-	-	-	-	-	58	-	58
Exposures belonging to high risk regulatory categories	-	-	-	-	-	364	311	675
Other items	2,238	85	-	-	-	2,513	1	4,837
Total	18,596	5,278	1,791	1,693	3,568	11,224	736	42,886

Credit exposures shown in the above table do not include goodwill, intangible assets and participations in insurance companies that are deducted from regulatory own funds.

4. Credit Risk

4.8 Internal Ratings Based (IRB) approach

4.8.1 Risk classifications

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

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

(a) Rating of large corporate and medium size customers

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

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

MRA is a rating system that aggregates quantitative and qualitative information on individual obligors to perform the assessment of their creditworthiness and determine the credit rating for the obligor. It takes into account the company's past and forecasted financial performance, its cashflows, industry sector trends, peers' performance, as well as qualitative assessment of management, the company's status, market and industry structural factors.

The table below shows the mapping of MRA internal rating to ICAP (ECAI) ratings:

Mapping of internal (MRA) ratings to ECAIs	
ICAP ratings	MRA ratings
AA, A	1 - 2,3
BB, B	2,4 - 3,1
C, D	3,2 - 4,4
E	4,5 - 6,5
F	6,6 - 8,8
G, H	8,9 - 9,9

MRA is used for the assessment of all legal entities with full financial statements' availability irrespective of their legal form, for both obligors and corporate guarantors. Certain types of companies cannot be analysed with MRA due to the special characteristics of their financial statements such as insurance companies, state owned organisations, brokerage firms and start ups.

In such cases an internal credit rating system is applied. It is an expert judgment borrower rating system and, similarly to MRA, it combines quantitative and qualitative assessment criteria (such as size, years in business, credit history, industry sector etc).

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

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

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

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

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

The rating systems described above are an integral part of the corporate banking decision making and risk management processes. The ratings and associated probabilities of default are crucial in:

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

(b) Credit scores assigned to retail customers

The Bank assigns credit scores to its retail customers. A number of statistically based models have been developed to predict, on the basis of available information, the probability of default, loss given default and credit exposure as defined for regulatory purposes.

Apart from the application scorecards that are in use for over a decade by the Bank in retail lending, behavioral scoring models have been developed per product category as follows:

- Credit cards
- Open line (consumer lending unsecured revolving credits)
- Car loans
- Personal loans
- Small business loans
- Mortgages

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

The models are used in the credit approval process, in credit limit management, as well as in the collections' process for the prioritisation of the accounts in terms of handling. Furthermore, the models have been often used for the risk segmentation of the customers for various activities. They are also utilised for risk based pricing in particular segments or new products introduced.

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

Retail exposures are grouped into homogeneous pools (refer to credit risk measurement in paragraph 4.8.3(e)).

4. Credit Risk

4.8.2 Rating process and models' monitoring

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

Credit exposure is subject to detailed reviews by the appropriate approval level of the Bank based on the respective ratings. Low risk corporate customers are reviewed at least once a year, whereas higher risk customers are reviewed either on a semi annual (watchlist, e.g., deterioration of financial conditions of the customer or market, delays in payments of principal/interest) or quarterly basis (substandard and distressed). Moreover, corporate customers rated as watchlist, substandard and distressed with an exposure over € 1 million are monitored by the business units with the collaboration of the Corporate Risk Monitoring Division, which is under Corporate Banking Sector. All high risk corporate customers with exposures over € 5 million are reviewed by the Special Handling Committees (EPIX 1 and EPIX2) on a weekly basis.

The credit rating process is also monitored by the Credit Control Sector in the following ways: with a member's voting right, in cases of downgrading or upgrading the customer's rating (thus ensuring its accuracy) while attending Credit Committees and with post approval control and evaluation of all credit portfolios. Credit Control Sector evaluates the quality of the portfolios through field reviews (case by case) for corporate lending and statistical analysis and field reviews for retail lending.

Credit Control Sector also independently monitors the capacity of rating models and scoring systems to classify customers according to risk, as well as to predict the number of defaults, loss given default and credit exposure as defined for regulatory purposes.

The Bank's validation policy follows a procedure that complies with the recommendations of the Committee of European Banking Supervisors (CEBS). The Bank verifies the validity of the rating models and scoring systems on an annual basis and the validation includes both quantitative and qualitative aspects.

The quantitative validation includes statistical tests relating to the following:

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

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

Procedures are documented and regularly reviewed. Group Internal Audit reviews the validation yearly.

4.8.3 Credit risk measurement

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

- EL is the expected annual credit loss over an economic cycle.
- UL is defined as the volatility (or one standard deviation) of annual losses. If losses always equalled their expected levels then there would be no uncertainty. UL outlines the risk arising from volatility in loss levels and thus in earnings.

The core credit risk parameters included in the estimation of expected loss, unexpected loss and credit risk weighted assets are: Probability of Default (PD), Loss

(a) Probability of Default (PD)

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

The Bank's historical default data have been used in developing PD estimates. For each grade or pool, the long term average default rate expanding over a 6 years period is used as reference when assessing the PD values.

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

(b) Loss Given Default (LGD)

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

The first step in the development process of behavioral LGD models or segments for the Retail portfolios of the Bank was to calculate realised (historical) LGD. Data was collected from 1997 and realised losses were calculated taking into account the concept of economic loss. To calculate historical LGD values for retail exposures, the workout LGD method was employed.

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

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

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

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

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

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

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

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

4. Credit Risk

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

(d) Effective Maturity (M)

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

(e) Pools (retail asset classes)

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

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

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

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

Back testing and comparison analysis with external data, where available, are conducted at least annually to validate the risk parameters' estimations and pools, as described in rating process and models' monitoring in paragraph 4.8.2.

The Group has received approval for using the internal rating models and all detailed validations of the parameters were submitted to and reviewed by the regulator, as part of the IRB approval process and also as part of the ongoing supervisory monitoring. Annual validation results and actions taken (redevelopment or refit of scorecards; calibration of risk parameters of PD, LGD and EAD) are also independently reviewed by Internal Audit as part of the annual recurring Basel II compliance audit in accordance with BoG Governor's Act 2577. During 2012, the Bank has performed all required adjustments and incorporated in the capital calculations upwardly revised through the cycle (TTC) risk parameters to reflect continued recession and loss severities affecting the portfolios.

4.8.4 Exposures subject to IRB approach

The following table shows the credit exposures after guarantees' deduction as defined for regulatory purposes, subject to the IRB approach, broken down by supervisory asset classes at 31 December 2012 and 2011:

	2012 € million	2011 € million
Credit risk (pursuant IRB Approach)		
Corporate exposures		
- Corporate exposures (Foundation IRB approach) and specialised lending (Slotting methodology)	14,723	15,438
- Retail exposures that exceed € 1 million (Advanced IRB approach)	453	460
Retail exposures		
- Residential real estate property retail exposures	10,603	10,432
- Qualifying revolving retail exposures	3,405	3,955
- Other retail exposures	7,894	8,111
Equity	31	28
Asset backed securities	516	611
Credit risk total, IRB approach	37,625	39,035

The following table shows corporate credit exposures after guarantees' deduction as defined for regulatory purposes and the corresponding weighted average risk

PD bands	31 December 2012				31 December 2012		
	Corporate exposures (Foundation IRB)				Retail exposures that exceed € 1 million (Advanced IRB)		
	Weighted average PD %	€ million	Weighted average risk weight %	Weighted average LGD %	€ million	Weighted average risk weight %	Weighted average EL %
0.00% - 0.03%	0.03%	153	15%	44%	-	-	-
0.03% - 0.10%	0.06%	1,098	21%	42%	-	-	-
0.10% - 0.50%	0.41%	765	64%	44%	0	21%	0.05%
0.50% - 1.00%	0.79%	863	78%	42%	6	30%	0.16%
1.00% - 2.00%	1.71%	791	84%	38%	2	39%	0.35%
2.00% - 3.00%	2.33%	982	112%	43%	15	33%	0.33%
3.00% - 4.00%	3.45%	1,182	119%	42%	9	46%	0.62%
4.00% - 5.00%	-	-	-	-	27	44%	0.76%
5.00% - 10.00%	6.95%	1,446	138%	40%	25	50%	1.17%
10.00% - 20.00%	13.05%	1,539	164%	41%	69	65%	2.23%
20.00% - 30.00%	22.78%	794	190%	39%	92	75%	3.73%
30.00% - 50.00%	-	-	-	-	16	66%	5.45%
50.00% - 99.99%	-	-	-	-	37	61%	10.20%
Sub total - non defaulted	5.93%	9,613	110%	41%	298	62%	3.44%
100.00%		3,158	-	41%	155	-	29.89%
Total		12,771	83%	41%	453	40%	12.51%

4. Credit Risk

PD bands	31 December 2011				31 December 2011		
	Corporate exposures (Foundation IRB)				Retail exposures that exceed € 1 million (Advanced IRB)		
	Weighted average PD %	€ million	Weighted average risk weight %	Weighted average LGD %	€ million	Weighted average risk weight %	Weighted average EL %
0.00% - 0.03%	0.03%	356	15%	45%	-	-	-
0.03% - 0.10%	0.05%	1771	20%	44%	-	-	-
0.10% - 0.50%	0.37%	681	54%	40%	0	24%	0.06%
0.50% - 1.00%	0.80%	1,021	76%	41%	22	27%	0.13%
1.00% - 2.00%	1.64%	695	80%	37%	6	34%	0.30%
2.00% - 3.00%	2.31%	901	107%	43%	36	34%	0.34%
3.00% - 4.00%	3.50%	1,812	114%	42%	27	39%	0.52%
4.00% - 5.00%	-	-	-	0%	26	39%	0.68%
5.00% - 10.00%	6.82%	1,720	132%	40%	71	50%	1.26%
10.00% - 20.00%	12.84%	1,965	154%	38%	113	66%	2.57%
20.00% - 30.00%	22.76%	736	188%	39%	12	72%	3.89%
30.00% - 50.00%	-	-	-	-	11	68%	5.50%
50.00% - 99.99%	-	-	-	-	29	54%	9.78%
Sub total - non defaulted	5.53%	11,658	101%	41%	353	52%	2.33%
100.00%	-	1,706	-	40%	104	-	25.92%
Total	-	13,364	88%	41%	457	40%	7.65%

The table below presents the specialised lending credit exposures (shipping, real estate and project finance) broken down by supervisory risk weights:

Weights	2012 € million	2011 € million
0%	224	116
50%	96	131
70%	315	374
90%	592	689
115%	655	748
250%	69	15
Total	1,951	2,073

The following table shows retail credit exposures as defined for regulatory purposes and the corresponding weighted average risk weight and weighted average expected loss (EL), broken down by PD band at 31 December 2012 and 2011:

PD bands	31 December 2012			31 December 2012			31 December 2012		
	Residential real estate property retail exposures			Qualifying revolving retail exposures			Other retail exposures		
	€ million	Weighted average risk weight %	Weighted average EL %	€ million	Weighted average risk weight %	Weighted average EL %	€ million	Weighted average risk weight %	Weighted average EL %
0.00% - 0.03%	983	2%	0.005%	19	1%	0.02%	140	2%	0.005%
0.03% - 0.10%	2,081	3%	0.01%	493	2%	0.03%	252	4%	0.01%
0.10% - 0.50%	2,314	8%	0.04%	421	9%	0.16%	422	11%	0.06%
0.50% - 1.00%	587	18%	0.12%	167	20%	0.47%	392	24%	0.20%
1.00% - 2.00%	669	31%	0.27%	482	32%	0.87%	282	31%	0.39%
2.00% - 3.00%	684	43%	0.48%	129	48%	1.51%	350	30%	0.50%
3.00% - 4.00%	6	43%	0.50%	130	63%	2.20%	195	37%	0.87%
4.00% - 5.00%	321	57%	0.78%	49	69%	2.50%	516	29%	0.82%
5.00% - 10.00%	637	72%	1.24%	232	96%	4.22%	570	36%	1.71%
10.00% - 20.00%	634	101%	2.62%	93	143%	8.53%	495	43%	3.21%
20.00% - 30.00%	176	104%	4.12%	51	180%	14.71%	286	49%	4.79%
30.00% - 50.00%	131	112%	7.38%	48	200%	24.35%	407	56%	8.97%
50.00% - 99.99%	118	43%	13.97%	47	162%	40.31%	845	42%	11.39%
100%	1,262	-	21.62%	1,044	-	72.93%	2,740	-	38.16%
Total	10,603	24%	3.21%	3,405	30%	24.36%	7,892	22%	15.55%

4. Credit Risk

	31 December 2011			31 December 2011			31 December 2011		
	Residential real estate property retail exposures			Qualifying revolving retail exposures			Other retail exposures		
PD bands	€ million	Weighted average risk weight %	Weighted average EL %	€ million	Weighted average risk weight %	Weighted average EL %	€ million	Weighted average risk weight %	Weighted average EL %
0.00% - 0.03%	1,121	1%	0.004%	10	1%	0.02%	171	1%	0.004%
0.03% - 0.10%	2,466	2%	0.01%	495	2%	0.04%	269	2%	0.01%
0.10% - 0.50%	2,571	5%	0.02%	465	9%	0.16%	606	11%	0.05%
0.50% - 1.00%	503	12%	0.08%	236	20%	0.48%	798	23%	0.19%
1.00% - 2.00%	513	21%	0.17%	665	33%	0.90%	437	29%	0.37%
2.00% - 3.00%	514	30%	0.31%	217	49%	1.53%	517	29%	0.46%
3.00% - 4.00%	216	41%	0.53%	207	65%	2.25%	217	36%	0.86%
4.00% - 5.00%	-	0%	0.00%	65	72%	2.61%	568	28%	0.82%
5.00% - 10.00%	726	63%	1.05%	359	98%	4.30%	632	34%	1.63%
10.00% - 20.00%	605	73%	1.83%	158	147%	8.73%	452	43%	3.13%
20.00% - 30.00%	264	103%	4.77%	83	186%	15.13%	612	51%	5.08%
30.00% - 50.00%	88	80%	5.52%	66	203%	25.48%	267	54%	7.32%
50.00% - 99.99%	107	40%	10.55%	81	157%	42.99%	634	40%	12.33%
100%	739	-	14.39%	849	-	68.94%	1,931	-	35.77%
Total	10,433	18%	1.52%	3,956	41%	17.60%	8,111	23%	10.56%

The following table shows undrawn credit facilities before Credit Conversion Factors (CCF) and the corresponding CCF.

	31 December 2012		31 December 2011	
	Off Balance Sheet before CCF € million	Credit Conversion Factor (CCF%)	Off Balance Sheet before CCF € million	Credit Conversion Factor (CCF%)
Qualifying revolving retail exposures	10,570	9%	10,355	11%
Other retail exposures	886	7%	1,116	7%
Retail exposures that exceed € 1 million	12	12%	16	12%

The following table presents the impairment losses, by asset class subject to the IRB approach, charged in the year ending 31 December 2012 and 2011:

	Residential real estate property retail exposures € million	Qualifying revolving retail exposures € million	Other retail exposures € million	Corporates / Retail exposures that exceed € 1 million € million	Total € million
31 December 2012	131	204	396	314	1,045
31 December 2011	95	267	290	164	816

The following table presents the equity exposures, broken down by risk weights at 31 December 2012 and 2011:

Weights	2012 € million	2011 € million
190%	12	10
290%	19	18
370%	0	0
Total	31	28

4. Credit Risk

4.9 Credit risk mitigation

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

4.9.1 Types of collateral commonly accepted by the Bank

Internal policies include specific instructions for the collateral types that could be accepted:

- residential real estate, commercial real estate and land;
- receivables (trade debtors) and post dated cheques;
- financial collateral, listed shares, listed bonds and other specific securities accepted;
- deposits;
- guarantees and letters of support;
- insurance policies; and
- machinery and equipment, vehicles and vessels.

For each collateral type, a specific coverage ratio is specified in our policies.

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

4.9.2 Valuation principles of collateral

For loan products, the valuation principle for collateral is regarded as a conservative approach, taking long term market value and volatility into account when defining the maximum collateral ratio. Valuation and hence eligibility is based on the following principles:

- Market value is assessed; markets must be liquid, quoted prices must be available and the collateral is expected to be liquidated within a reasonable time frame.
- A reduction of the collateral value is considered if the type, location or characteristics (such as deterioration and obsolescence) of the asset indicate uncertainty regarding the sustainability of the market value.
- Forced sale principle; assessment of market value or the collateral value must reflect that realisation of a collateral in a distressed situation is initiated by the Bank.
- No collateral value is assigned if a pledge is not legally enforceable.

Real estate properties for all units are valued by Eurobank Property Services S.A., a subsidiary of the Bank, that reports to the Deputy Chief Executive Officer Risk Executive. Internal or external qualified appraisers are used in accordance with the standards set by the subsidiary. All appraisals take into account, among other things, the region, age and marketability of the property, and are further reviewed and countersigned by experienced staff of the subsidiary. The centralisation and standardisation of the property collateral valuation process ensures maximum objectivity. In 2006, we initiated a project in collaboration with other banks in Greece to develop a real estate property index (Prop. Index) for residential property. The methodology, which was developed by an independent specialised statistical company, has been approved by the Bank of Greece and its use enables a dynamic monitoring of residential property values and market trends. For commercial real estate, re-valuations are performed by qualified property valuers within two to three years. More frequent re-valuations either on site or desktop are performed for material exposures, borrowers downgraded to watchlist/high risk area and for borrowers active in the Real Estate sector.

For the monitoring of post dated cheques valuation, the Bank uses advanced statistical reports on a monthly basis with detailed information regarding recoverability of cheques, referrals and bounced cheques, per issuer broken down by business unit (corporate and small business banking).

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

4.9.3 Collateral policy and documentation

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

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

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

4.9.4 Guarantees and credit derivatives

The guarantees used as credit risk mitigation by the Group are largely issued by central and regional governments in the countries in which it operates. The Public Fund for very small businesses (TEMPME), banks and insurance companies are also important guarantors of credit risk.

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

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

The table below shows guarantees received broken down by primary type of guarantee as at 31 December 2012 and 2011:

	2012 € million	2011 € million
Guarantees issued by Central Banks or Central Governments	207	191
Guarantees issued by Banks	135	275
	342	466

4.9.5 Netting agreements

The Group further restricts its exposure to credit losses by entering into master netting arrangements with counterparties with which it undertakes a significant volume of transactions. Master netting arrangements do not generally result in an offset of balance sheet assets and liabilities, as transactions are usually settled on a gross basis. However, the credit risk is reduced by a master netting agreement to the extent that if an event of default occurs, all amounts with the counterparty are terminated and settled on a net basis. The Group's overall exposure to credit risk on derivative instruments subject to master netting arrangements can change substantially within a short period, as it is affected by each transaction subject to the arrangement.

For treasury exposures the Group uses standardised ISDA (International Swaps and Derivatives Association) contracts and GMRA contracts for the application of netting agreements on derivatives and repos, respectively. An exposure measurement system is used for the daily monitoring of the net exposure after netting application and collateral exchange.

4. Credit Risk

4.9.6 Concentration risk on collaterals

For loan products, the most commonly accepted collaterals for credit risk mitigation purposes is real estate and post dated cheques. The corporate and small business banking portfolios are covered at 49% and 70% respectively. Consumer loans are not collateralised, except for car loans where the Bank retains ownership until full loan repayment. Mortgage loans are fully collateralised.

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

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

4.9.7 Analysis of collaterals

The table below show collateral received broken down by primary type of collateral at 31 December 2012 and 2011:

	31 December 2012					Total € million
	Recognized financial collateral € million	Real estate property € million	Guarantees € million	Other collaterals € million	Credit Derivatives € million	
Credit risk (pursuant Standardised approach)						
Central governments and central banks	17,032	-	-	-	-	17,032
Administrative bodies & non-commercial undertakings	375	-	-	-	-	375
Credit and financial institutions	2,014	-	-	-	-	2,014
Multilateral development banks	331	-	-	-	-	331
Corporate customers (excluding past due and secured by real estate property)	894	-	43	-	-	937
Retail customers (excluding past due and secured by real estate property)	110	-	34	-	-	144
Secured by real estate property (excluding past due)	-	3,206	0	-	-	3,206
Past due items	1	313	4	-	-	318
Exposures belonging to high risk regulatory categories	0	136	2	-	-	138
Credit risk total, Standardised approach	20,757	3,655	83	-	-	24,495
Credit risk (pursuant IRB approach)						
Corporate exposures						
- Corporate exposures	518	4,077	163	1,718	-	6,476
- Retail exposures that exceed € 1 million	16	384	2	5	-	407
Retail exposures						
- Residential real estate property retail exposures	25	10,578	-	-	-	10,603
- Other retail exposures	338	4,722	94	80	-	5,234
Credit risk total, IRB approach	897	19,761	259	1,803	-	22,720
Credit risk total	21,654	23,416	342	1,803	-	47,215
	31 December 2011					Total € million
	Recognized financial collateral € million	Real estate property € million	Guarantees € million	Other collaterals € million	Credit Derivatives € million	
Credit risk (pursuant Standardised approach)						
Central governments and central banks	23,127	-	0	-	-	23,127
Administrative bodies & non-commercial undertakings	202	-	0	-	-	202
Credit and financial institutions	2,444	-	0	-	-	2,444
Multilateral development banks	168	-	-	-	-	168
Corporate customers (excluding past due and secured by real estate property)	908	-	54	-	-	962
Retail customers (excluding past due and secured by real estate property)	109	-	26	-	-	135
Secured by real estate property (excluding past due)	-	4,190	0	-	-	4,190
Past due items	4	366	7	-	-	377
Exposures belonging to high risk regulatory categories	0	109	1	-	-	110
Credit risk total, Standardised approach	26,962	4,665	88	-	-	31,715
Credit risk (pursuant IRB approach)						
Corporate exposures						
- Corporate exposures	753	4,193	139	1,758	0	6,843
- Retail exposures that exceed € 1 million	21	419	5	5	0	450
Retail exposures						
- Residential real estate property retail exposures	27	10,406	0	0	0	10,433
- Other retail exposures	436	4,439	234	144	0	5,253
Credit risk total, IRB approach	1,237	19,457	378	1,907	-	22,979
Credit risk total	28,199	24,122	466	1,907	-	54,694

Note:

1. The value of collaterals shown above is the allocated value of securities.
2. Financial collaterals are presented after regulatory haircuts.
3. For real estate property the lower between market value and the pledged amount is considered.
4. The "Other collaterals" category includes vessels of € 701 million (2011: € 697 million) securing shipping exposures under the slotting-specialised lending category.

4. Credit Risk

4.10 Asset Backed Securities

4.10.1 Bank's objectives and role

The Bank has securitised various financial assets. Up to August 2007 the objective of the Bank in each of its securitisation transactions was to convert illiquid receivables to "tradeable" securities, to be placed with investors for long-term funding. Since then the objective of the Bank in each securitisation transaction is to convert illiquid receivables to 'tradeable' securities that are eligible for financing.

In all the securitisation transactions the Bank acts, among other, as the Originator, the Servicer, the Sponsor, the Cash Manager and the Account Bank. The Bank also provides the issuer with the subordinated reserve loan in order to fund the reserve account up to the initial required amount.

The Bank has not proceeded with any synthetic securitisation and re-securitisation.

4.10.2 Methodology for risk weightings

For the purchased securities exposures the Bank applies the Ratings Based Approach (RBA) for the risk weighting of asset backed securities. According to this approach the risk weight factor that applies is a function of the rating and seniority of the security.

4.10.3 Accounting policies

The Group sponsors the formation of special purpose entities, which may or may not be directly owned subsidiaries for the purpose of asset securitisation. The entities may acquire assets directly from the Bank. These companies are bankruptcy-remote entities and are consolidated in the Group's Financial Statements when the substance of the relationship between the Group and the entity indicates that the entity is controlled by the Group.

The Group securitises various financial assets, which generally results in the sale of the assets to special purpose entities, which, in turn issue debt securities to investors. Interests in the securitised financial assets may be retained in the form of subordinated tranches or other residual interests.

The Bank under the current securitisation framework does not transfer any credit risk. The securitised loan portfolios are accounted for, according to the same methodology as non securitised portfolios.

For more information about asset backed securities refer to Consolidated Financial Statements Note 34.

4.10.4 Securitised exposures

The following table presents the risk weights of the purchased securitised exposures of the Group, based on the IRB approach, at 31 December 2012 and 2011:

	2012 € million	2011 € million
Risk weight: to 10%	245	390
Risk weight: over 12% to 18%	29	112
Risk weight: over 20% to 35%	165	67
Risk weight: over 40% to 75%	1	9
Risk weight: over 75% under 250%	30	-
Risk weight: 425%	21	30
Risk weight: 1250%	25	3
Total	516	611

For securitisation exposures the Group uses one or more of the following external rating agencies: Moody's, Standard & Poor's and Fitch (refer to par. 4.7).

5. Market Risk

5.1 Definition and policies

Market risk is the potential loss occurring from changes in interest and foreign exchange rates, equities and commodity prices, as well as market volatilities.

In order to ensure the efficient monitoring of market risks that emanate from its overall activities, the Group adheres to certain principles and policies. The objectives of the market risk policies applied by the Group are to:

- establish an effective market risk monitoring and management framework at Group level;
- ensure regulatory compliance; and
- create a competitive advantage over competition through more accurate assessment of the risks assumed.

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

The Bank uses its own, validated by the Bank of Greece since 2005, internal VaR model in order to calculate capital requirements for market risk in its trading book, for the Bank's activities in Greece. VaR is a statistical risk measure of the maximum loss that the Bank may, under normal market conditions, incur over a certain period of time with a certain confidence level. For example, a 99% 1 day VaR of € 1 million means that there is a 99% probability that the Bank will not lose more than € 1 million within the next day.

The internal model described above covers the following risks:

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

Market risk of the Group, with the exclusion of International operations, is managed and monitored using Value at Risk (VaR) methodology. Market risk in International operations is managed and monitored using mainly sensitivity analyses. Information from International operations is presented separately as it originates from significantly different economic environments with different risk characteristics.

The internal VaR model is based on the Monte Carlo simulation. The VaR is calculated on 99% confidence level and for a 1 day holding period. Full repricing is applied on every position of the portfolio. This means that the model covers all types of non linear instruments (i.e. options).

VaR models are designed to measure market risk under normal market environment. It is assumed that any changes in the risk factors follow a normal distribution.

Since VaR constitutes an integral part of the Group's market risk control regime, VaR limits have been established for all (trading and non trading portfolio) operations and actual exposure is reviewed daily by management. From 31.12.2011 the Bank implemented the Stressed VaR and Incremental Risk Charge (IRC) using the internal model as requested by Basel 2.5 framework. IRC is computed on all fixed income positions in Bank's trading activities in Greece. It estimates the incremental risk arising from rating migrations and defaults, using Monte Carlo simulation, to a 99.9% confidence level over a one year holding period. The model was approved by Bank of Greece on 31.12.2011.

The Bank's exposure to commodities and volatilities is immaterial.

The following table presents the VaR figures, performed on 99% confidence interval for 1 day holding period, by risk type, for trading and banking book in Greece, Cyprus and Luxembourg for 2012 and 2011:

TRADING AND BANKING BOOK VaR	2012				2011			
	Average € million	Min. ² € million	Max. ² € million	31 Dec. € million	Average € million	Min. ² € million	Max. ² € million	31 Dec. € million
Interest Rate Risk ¹	42	13	82	13	32	13	65	49
Foreign Exchange Risk	2	2	3	2	3	1	4	2
Equities Risk	5	3	7	4	9	4	13	4
Total VaR	42	12	83	12	36	17	68	49

The aggregate VaR of the interest rate, foreign exchange and equities VaR benefits from diversification effects.

Below you may find the VaR and Stressed VaR figures for Trading book in Greece for 2012 and 2011, performed on a 99% confidence interval for 1 day holding period, by risk type, that was taken into account in the capital charge calculation using the internal model:

TRADING BOOK VaR	2012				2011			
	Average € million	Min. ² € million	Max. ² € million	31 Dec. € million	Average € million	Min. ² € million	Max. ² € million	31 Dec. € million
Interest Rate Risk	1	0	4	1	2	0	6	1
Foreign Exchange Risk	1	0	2	0	2	1	4	2
Equities Risk	0	0	1	0	0	-	1	0
Total VaR	2	1	5	1	3	2	6	2

TRADING BOOK STRESSED VaR	2012				2011			
	Average € million	Min. ² € million	Max. ² € million	31 Dec. € million	Average € million	Min. ² € million	Max. ² € million	31 Dec. € million
Interest Rate Risk	2	1	4	1	1	1	1	1
Foreign Exchange Risk	1	0	4	0	3	3	3	3
Equities Risk	1	0	1	1	1	1	1	1
Total VaR	2	1	5	2	4	4	4	4

5. Market Risk

The following table presents the capital requirements for the trading book in 2012 and 2011 per risk factor, in relation to VaR and Stressed VaR and after the application of the relevant multiplier and the addition of IRC. According to regulatory requirements the VaR and Stressed VaR calculation is performed on 99% confidence level, for a 10 day holding period. The IRC is added to the Interest Rate Risk.

CAPITAL REQUIREMENTS	2012				2011			
	Average € million	Min. ³ € million	Max. ³ € million	31 Dec. € million	Average € million	Min. ³ € million	Max. ³ € million	31 Dec. ⁴ € million
Interest Rate Risk	47	30	71	30	34	24	43	43
Foreign Exchange Risk	29	12	54	12	31	21	60	60
Equity Risk	12	11	14	11	7	5	13	13
Volatility Risk	4	2	6	2	6	7	6	6
Total capital requirements on total diversified position of which Incremental Risk Charge (IRC)	65 14	37 9	95 18	37 9	58 N/A	42 N/A	96 18	96 18

Notes:

¹ Interest rate volatility applied to all portfolios. Credit spread volatility applied to Trading and Available-for-sale positions

² Min and Max refer to each separate risk factor

³ Min and Max of the risk factors are based on the statistics of the respective Total capital requirements

⁴ Capital charge figures as at 31 December 2011 include the Stressed VaR and IRC surcharge

Total Capital requirements figure is less than the sum of the individual figures for Foreign Exchange, Interest Rate, Equities and Volatility, due to diversification.

5.2.1 Stress testing

Given that the VaR approach does not cover extreme market conditions, the Group has been applying stress tests, to simulate the effect of many standard deviation movements of risk factors and the breakdown of historical correlations.

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

5.2.2 Back testing

The Bank employs back testing controls in order to test the calibration and predictive capabilities of its internal risk assessment model. Back testing is applied through comparison of daily VaR readings to portfolio value changes. Back testing for 2012 revealed one (1) exception out of a total of 250 working days, which was statistical. According to the regulatory framework this number of exceptions results to a multiplier equal to three (3) for capital adequacy calculations for market risk. For 2011 two (2) were attributed to FX rates, four (4) to EUR benchmark interest rates, four (4) to Greek credit spreads and one (1) was statistical, which according to the regulatory framework this number of exceptions resulted for 2011 to a multiplier four (4) for capital adequacy calculations for market risk.

5.3 Standardised approach for market risk

The Bank uses the Standardised approach for the measurement of market risk exposure and capital requirements of its subsidiaries in Greece and in International operations. The following table summarises the capital requirements for market risk per risk factor, based on the Standardised approach, at 31 December 2012 and 2011:

	2012 € million	2011 € million
General risk of traded debt instruments	1	12
Specific risk of traded debt instruments	1	2
General and specific risks of equities	1	0
Foreign exchange risk	75	45
Total	78	59

Moreover, the Bank holds insignificant position in ABS/RMBS in its Trading Book, for which the calculation of capital requirements is based on the VaR method and not the standardised approach.

5.4 Equity exposures not included in the trading book

Available-for-sale equity investments are those intended to be held for an indefinite period of time, which may be sold in response to needs for liquidity or changes in equity prices. Purchase and sales of equity available-for-sale investments are recognised on trade date, the date on which the Group commits to purchase or sell the equity investment. Initial recognition is at fair value plus transaction costs. Derecognition occurs when the rights to receive cash flows from those investments have expired or where the Group has transferred substantially all risks and rewards of ownership.

Available-for-sale equity investments are subsequently carried at fair value. Gains and losses arising from changes in fair value are recognised directly in equity until the financial asset is derecognised or impaired at which time the cumulative gain or loss previously recognised in equity is recognised in profit or loss.

The fair values of quoted investments in active markets are based on current bid prices. If the market for an equity is not active (and for non-listed securities), the Group establishes fair value by using valuation techniques. These include the use of recent arm's length transactions, reference to the current fair value of another instrument that is substantially the same, a discounted cash flow analysis, option pricing models and other valuation techniques commonly used by market participants.

In case of equities classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the assets are impaired. If any such evidence exists for available-for-sale equities, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that equity investment previously recognised in profit or loss – is removed from equity and recognised in the income statement. Impairment losses recognised in the income statement on equity investments are not reversed through the income statement.

As at 31 December 2012, the Group has recognized impairment losses amounting to € 78 million on equity securities (including mutual funds, listed and non listed equities), for which the decline in fair value below cost is considered to be significant and/or prolonged, as a result of the continuing deterioration in the equity markets. As at 31 December 2011, the Group recognised impairment losses amounting to € 410 million on equity securities, the main part of which was listed in the Athens Stock Exchange, for which the decline in their fair value below cost is considered to be significant or prolonged.

5. Market Risk

The following table presents equity holdings belonging to the available-for-sale portfolio and included in regulatory exposures at 31 December 2012 and 2011:

	2012 € million	2011 € million
Held for:		
Strategic investments	14	18
Equity investments for capital appreciation	205	238
Total	219	256
Listed	103	97
Non-listed	24	75
Other (MF & other type of funds)	92	84
Total	219	256

The table below presents the realised gains/(losses) after tax from disposal of available-for-sale equity investments, as well as the unrealised gains/(losses) from revaluations, at 31 December 2012 and 2011:

	2012 € million	2011 € million
Realised gains/(losses)	1	(0)
Unrealised gains/(losses)	19	(63)

The amount of unrealised losses of available-for-sale equity investments, recognised in reserves as at 31 December 2012 and 2011 is deducted from Tier I capital.

5.5 Interest rate risk not included in the trading book

The Bank calculates and monitors the interest rate risk of the banking book for the Bank's operations in Greece and Cyprus on a daily basis, using the internal VaR model. For the International operations (Romania, Bulgaria, Serbia, Ukraine) the Group applies sensitivity analysis and is preparing to implement the VaR methodology.

The system takes into account all assets, liabilities and off balance sheet items, which are sensitive to interest rates. The interest rate exposure is calculated using the contractual maturity dates or the next repricing dates in case of floating rate instruments. This is also applied to lending instruments, where no prepayment adjustments are made since this type of risk is immaterial. The major part of non maturity accounts has a short term repricing structure and therefore treated accordingly.

At end of year 2012 and 2011 the average interest rate VaR for a 99% confidence level and a holding period of 1 day for Greece, Cyprus and Luxembourg, was as follows:

	2012 € million	2011 € million
Interest rate VaR of the banking book ¹	42	32
Total interest rate VaR (trading and banking book ¹)	42	32

¹ Interest rate volatility applied to all portfolios. Credit spread volatility applied to Trading and Available-for-sale positions

Furthermore, the Bank calculates sensitivity on interest rates applying 100 bps parallel shifts on interest rates. The following table presents sensitivity analysis by currency for the Bank at 31 December 2012 and 2011:

	2012									
	TOTAL € million	EUR € million	CHF € million	JPY € million	PLN € million	RON € million	TRY € million	USD € million	OTHERS € million	
Interest rate risk (banking book):	187	191	(4)	0	(0)	(0)	0	(1)	1	
+100 bps parallel shift										
Interest rate risk (trading and banking book):	183	189	(4)	0	(0)	(0)	0	(3)	1	
+100 bps parallel shift										

	2011									
	TOTAL € million	EUR € million	CHF € million	JPY € million	PLN € million	RON € million	TRY € million	USD € million	OTHERS € million	
Interest rate risk (banking book):	256	273	(6)	2	0	(1)	0	(13)	0	
+100 bps parallel shift										
Interest rate risk (trading and banking book):	250	265	(5)	2	0	(1)	0	(12)	0	
+100 bps parallel shift										

The following table presents the sensitivity analysis for interest rate sensitive position of the banking book in the major International subsidiaries (Romania, Bulgaria, Serbia, Ukraine), at 31 December 2012 and 2011, by applying a 100bps upward parallel shifts:

	31 December 2012		
	Sensitivity trading book	Sensitivity banking book	Total sensitivity
	€ million	€ million	€ million
Romania	(1)	(3)	(4)
Bulgaria	(1)	4	3
Serbia	-	(8)	(8)
Ukraine	(1)	(7)	(8)

	31 December 2011		
	Sensitivity trading book	Sensitivity banking book	Total sensitivity
	€ million	€ million	€ million
Romania	(1)	(5)	(6)
Bulgaria	(1)	6	5
Serbia	(0)	(7)	(7)
Turkey	(0)	(5)	(5)
Ukraine	(0)	0	(0)

5. Market Risk

5.6 Counterparty risk

5.6.1 Definition

Counterparty risk is the risk that a counterparty in an off balance sheet transaction (i.e. derivative transaction) defaults prior to maturity and the Bank has a claim over the counterparty (the market value of the contract is positive for the Bank).

5.6.2 Mitigation of counterparty risk

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

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

5.6.3 Counterparty risk monitoring

The current exposure for counterparty risk at 31 December 2012 and 2011 is presented in the table below:

	31 December 2012				
	Current exposure before netting € million	Current exposure after netting € million	Netting effect € million	Collateral received / (paid) € million	Total exposure after netting and margin collateral € million
Contracts under ISDA and CSA (derivatives)	1,844	925	919	(1,958)	1,110
Contracts under GMRA (repos and reverse repos)	286	283	3	(48)	329
Other contracts (derivatives and repos outside ISDA and CSA, GMRA)	99	99	-	-	99
Total	2,229	1,307	922	(2,006)	1,538

	31 December 2011				
	Current exposure before netting € million	Current exposure after netting € million	Netting effect € million	Collateral received / (paid) € million	Total exposure after netting and margin collateral € million
Contracts under ISDA and CSA (derivatives)	1,505	579	926	(2,167)	749
Contracts under GMRA (repos and reverse repos)	406	356	51	(216)	492
Other contracts (derivatives and repos outside ISDA and CSA, GMRA)	302	302	-	-	302
Total	2,213	1,237	977	(2,383)	1,543

Notes:

1. Netting and collateral posting is applied per counterparty only for contracts under ISDA, CSA or GMRA.
2. Repo and reverse repos with central banks (Bank of Greece, European Central Bank, etc) are excluded.
3. In case of exposure calculation on transactions under GMRA, haircuts are taken into account and increase the exposure.
4. In case of exposure calculation on transactions under CSA threshold & independent amounts are taken into account and increase the exposure.

5.6.4 Wrong way risk

The Bank prevents the initiation of derivative transactions in cases that the value of the underlying instrument is highly correlated with the credit quality of the counterparty.

5.6.5 Implications under rating downgrade

The Bank's financial collateral agreements (CSAs covering derivative transactions) with other banks contain in some cases rating triggers. For these agreements, the minimum exposure level (threshold amount) for further posting of collateral will be lowered in case of a downgrading. Given the Bank's current rating, the additional effect is immaterial.

5.6.6 Credit derivatives

The Group has a limited portfolio of Credit Default Swaps (CDSs) which are mainly used for trading purposes.

The Bank does not have any brokerage activity in this market. Furthermore, the Bank does not hedge its loan portfolio with CDSs as this market in Greece is not developed.

The following table summarises the notional amount per type of protection:

- Protection Buyer : € 86 million (2011: € 111 million)
- Protection Seller : € 35 million (2011: € 48 million)

The current credit exposure of the CDS positions was € 1.1 million at 31 December 2012 (2011: € 1.1 million)

6. Operational risk

6.1 Governance

Acknowledging the fact that operational risk is embedded in every business activity undertaken, the organisational governance stems from the Board of Directors through the Executive Committee and Senior Management to the Heads and staff of every business unit. The organisational governance is applicable to all jurisdictions accordingly.

Each Group banking subsidiary has established an Operational Risk Unit which is responsible for applying the Group's operational risk strategy and framework in the jurisdiction the bank operates.

The Board of Directors monitors, through the Risk Committee, the operational risk level and profile including the level of operational losses, their frequency and severity, and through the Audit Committee, the status of operational risk-related control issues. The Operational Risk Committee assesses the operational risks arising from the activities of the Group, ensures that each business entity has appropriate policies and procedures for the control of its operational risk and that prompt corrective action is taken whenever a high risk area is identified.

The Deputy Chief Executive Officer-Risk Executive is the sponsor of any operational risk related initiative and ensures implementation of the operational risk policy. The Deputy Chief Executive Officer-Risk Executive has the overall responsibility and oversight of the operational risk units in every country where Eurobank operates.

The prime responsibility for operational risk management lies with the respective Heads of each business unit. To this end, every business unit:

- identifies, evaluates and monitors its operational risks and implements risk mitigation techniques;
- assesses control efficiency;
- reports all relevant issues; and
- has access to and uses the common methods and tools introduced by Operational Risk Sector, in order to facilitate identification, evaluation and monitoring of operational risk.

The Operational Risk Sector is responsible for defining and rolling out the methodology for the identification, assessment, reporting of operational risk within Board/Risk Committee decisions, implementing regulatory requirements and Group guidelines, monitoring the operational risk level and profile and reporting thereon to the Risk Committee, and defining and rolling out the methodology for the calculation of the regulatory capital charge for operational risk.

6.2 Operational risk management framework

The Group Operational Risk Framework is built on four elements:

- Principles
- Governance & Organisation
- Processes
- Infrastructure

The operational risk management framework and related policies are designed to:

- establish the operational risk framework and governance, aligning our structure and processes with best international banking practices;
- introduce risk identification processes such as risk assessment, key risk indicators where appropriate and historic risk events collection;
- establish a common definition and consistent approach for operational risk to enable common identification and aggregation of operational risk across our business;
- establish a proactive operational risk management culture across our business, linking business operations with the objectives of risk control;
- establish comprehensive and integrated operational risk reporting;
- adhere to the Group guidelines and meet local regulatory requirements and practices relating to operational risk of the jurisdictions in which we operate;
- allow us to achieve a competitive advantage in terms of operational risk management through risk-based decision making; and
- leverage international knowledge and best practices on operational risk management.

Operational risk processes consist of risk identification, assessment (including measurement and valuation), control management & risk mitigation and reporting & performance improvement. These processes are supported by and implemented with the operational risk tools/methods, which are the following:

- Risk & Control Self Assessment (RCSA) is a technique aiming to identify, assess and ultimately mitigate operational risk. Risks are assessed using the methodology adopted and then processed in order to rank identified operational risks, reveal high operational risk areas activities/processes, create operational risk profiles and support capital adequacy calculations. The approach adopted by the Group is risk oriented – controls are evaluated as supplementary elements of specific operational risks. The RCSA exercise is carried out annually if however major changes take place, the exercise is performed more often.

- Operational risk indicators are metrics based on historical data relevant to specific and measurable activities indicating operational risk exposures. They are developed in every area according to its unique characteristics. Operational risk indicators are quantifiable and expressed as an amount, a percentage or a ratio, assigned to specific operational risks and linked with tolerance.

- Operational risk events are identified and reported with the purpose to populate the internal risk event tracking/reporting database. Operational risk events are classified according to their owner, cause, risk category, consequence, impact, and business line.

- Operational risk scenario analysis is the structure within which scenarios are identified, documented and selected for analysis, the analysis process itself and the measurement of results.

- Operational risk reporting, whereby reports are produced for internal and regulatory purposes.

- Operational risk capital charge calculation and allocation, using the appropriate methodology and assumptions.

- Fraud risk management constitutes a major commitment of the Group to mitigate fraud risk and reduce fraud losses. The Group strategy for combating fraud is based on three main directions: 1) Organizational Initiatives to strategically focus in the fight against fraud and improve coordination, 2) Staff Related Initiatives to raise awareness and to create an anti-fraud culture, and 3) Fraud Prevention and Detection Environment Initiatives to strategically enhance the Group's control environment against fraud.

6.3 Operational risk measurement

As required by Basel II for the use of the Standardised Approach, the Group's business activities have been divided into eight business lines and the annualised gross operating income for 2010, 2011 and 2012 is calculated for each business line. The required business line beta factors are then applied to the relevant business line gross operating income, to establish the required regulatory capital per business line, with these numbers summed together to establish the overall Pillar 1 regulatory capital requirements for operational risk.

This calculation represents a revenue based proxy of the Group's operational risk.

7. Remuneration policy

7.1 Introduction

The Bank's Remuneration Policy ("Remuneration Policy") forms an integral part of the Bank's corporate governance practice and is developed in accordance with its operational model and business strategy. Consequently, its main aim is to align individual employees' objectives with the Bank's long-term business objectives and strategy, as well as the long-term value creation for shareholders.

Accordingly, the operating standards and mechanisms which have been adopted ensure that the levels of rewards are directly linked to results and desired behaviors.

Remuneration Policy and Disclosures have been drafted in line with Bank of Greece Act 2650/2012.

7.2 Remuneration policy scope

The Remuneration Policy is applied to all Bank employees.

More specifically, the Remuneration Policy is also applied to top management executives, risk takers, individuals whose total remuneration takes them into the same remuneration level as the aforementioned categories, individuals who perform control duties, individuals whose professional activities have a significant impact on the Bank's risk profile and individuals who render their services to the Bank as employees or members of staff based in an off-shore company or third country or a company which is not supervised by the BoG (if any).

The above employee categories fall into the scope of the Remuneration Policy and in particular their remuneration is subject to the rules set in section 7.6 below.

The Remuneration Policy covers employees' total remuneration.

7.3 Remuneration policy basic principles

The Bank has established a competitive compensation framework in order to attract, engage and retain its employees. Its basic principles are to:

- Safeguard that the compensation is sufficient to retain and attract executives with appropriate skill and experience;
- Monitor that internal equity between Business Units is applied;
- Avoid excessive risk behavior; and
- Link compensation with long-term performance.

7.4 Remuneration policy governance

Non-executive members of the Bank's Board of Directors ("BoD") adopt the Remuneration Policy, following the proposal from the Remuneration Committee. For this purpose, the BoD has delegated to the Supervisory Remuneration Committee the responsibility to approve, maintain and oversee the implementation of the remuneration policy both at Bank and Group level. The Supervisory Remuneration Committee consists of up to four non executive members of the BoD. The members are appointed biennially by the BoD. The Supervisory Remuneration Committee meets and reaches valid decisions when the majority of the members are present, while the Chairperson's presence is mandatory. Decisions are adopted by majority of votes of members present. In case of a tie, the Chairperson of the Committee has a casting vote.

For the drafting of the Remuneration policy, the Remuneration Committee collaborates with BoD Committees (Risk Committee and Audit Committee) and ensures that the appropriate input is provided by Risk Management, Compliance, Internal Audit, Human Resources and Strategy Units.

The Supervisory Remuneration Committee may appoint, when necessary, external consultants regarding advice or support on remuneration issues. For the development of the current Remuneration Policy no external consultant was involved.

The Remuneration Policy is subject to annual internal audit review from Internal Audit Unit. Internal Audit's findings and proposals for potential revision of the Remuneration Policy are reported to the Remuneration Committee. The Supervisory Remuneration Committee reviews and approves the Remuneration Policy following the proposal from the Remuneration Committee.

The continuous monitoring of market trends and best practices at local and international level creates a competitive Remuneration Policy that is transparent and promotes internal equity. In this context, data from Compensation and Benefits Surveys, provided from external consultants, are used as benchmark.

The remuneration of CEO, Deputy CEOs and BoD members is approved by the General Assembly, as requested by law, following the proposal from Supervisory Remuneration Committee.

The remuneration of the non-executive members of the BoD is fixed and linked to their responsibilities, the time dedicated to performing the duties assigned, and should not be determined by the individual financial performance of the business area they monitor. Incentive based mechanisms are excluded from the remuneration of non-executive members of the BoD. If such mechanisms are to be provided for, they must be strictly tailored to the assigned monitoring and control tasks, reflecting the individual's capabilities and achieved results. If instruments are granted appropriate measures should be taken, such as retention periods until the end of the mandate, in order to preserve the independent judgment of those members of the BoD.

The remuneration of top management executives and highest paid individuals are approved by Supervisory Remuneration Committee following recommendations of the Remuneration Committee.

The basic principles of the Remuneration Policy are accessible to all employees through the Bank's intranet site.

7.5 Remuneration committee

The BoD has delegated to the Remuneration Committee the responsibility to provide specialized and independent advice for matters relating to remuneration policy and its implementation at Bank and Group level.

The Remuneration Committee, in carrying out its duties, is accountable to Supervisory Remuneration Committee.

The Remuneration Committee consists of up to four non executive members of the BoD. The majority of the members are independent directors. One member has sufficient expertise and professional experience concerning risk management and control activities, namely with regard to the mechanism for aligning the remuneration structure to institutions' risk and capital profiles. The members are appointed biennially by the BoD.

The Chairperson of the Remuneration Committee is appointed by the BoD and must be a non-executive independent director.

The Remuneration Committee meets and reaches valid decisions when all members are present. Decisions are adopted by majority of votes. In case of a tie, the Chairperson of the Remuneration Committee has a casting vote. The members of the Remuneration Committee are not allowed to hold positions and conduct transactions through which a conflict regarding the Remuneration Committee's mission might arise. The members of the Remuneration Committee can participate in other BoD Committees.

No individual is present when their own remuneration is being considered.

The Remuneration Committee appoints its secretary.

The Remuneration Committee's key responsibilities are presented in the Corporate Governance Code which is available at the Bank's official website.

7. Remuneration policy

7.6 Remuneration

Remuneration plays a significant role in attracting and retaining talent whose contribution in the Bank's result is deemed critical. Remuneration mechanisms incorporate principles that take into account employees' skills and performance while supporting at the same time long term business objectives. Employees' total remuneration consists of **fixed and variable components**.

Fixed remuneration reflects the educational level, experience, accountability, position evaluation in comparison with peers, and the position's functional requirements.

In this context, the Bank has developed fixed remuneration ranges that differ among hierarchical levels and nature of business. Ranges are reviewed annually taking into consideration market trends and current legal requirements.

Salary and other fixed remuneration elements represent significant proportion of total remuneration.

Potential fixed remuneration increases are accommodated during the Annual Salary Review Process.

Individual increases proposals are based on market data and employee performance.

Variable remuneration is designed to ensure total remuneration competitiveness and to reward employee performance in alignment with unit and / or Bank performance taking into consideration the general principles set below.

It is upon Bank's discretion to award variable remuneration to employees as long as financial sustainability is maintained. The Bank has the right to partly or fully revoke the distribution of variable remuneration to its employees.

The Bank ensures alignment between employees' personal objectives and the desirable risk appetite. In this context, the incentives schemes that are in place for employees in the Bank's networks (branch network, business centers, private banking units, etc.), have incorporated drivers linked to assessment of the business results over time, as well as risk related goals (i.e. maximum level of bad debt provisions) which are set in collaboration with risk management units. If the risk requirements are not met, no amount can be cashed out through these schemes. Moreover, qualitative targets are in place, such as compliance to internal audit findings, etc.

The Bank's total variable remuneration pool as well as the distribution parameters used for its allocation among different business units, are approved by the Remuneration Committee based on the following rules:

- To avoid excessive risk taking by ensuring that total remuneration consists of a higher proportion of fixed versus variable component which is linked to specific performance;
- To determine the variable component based on the following:
 - > The Bank's and business units' profitability;
 - > The cost of tied-up capital which is associated to risks undertaken (credit risk, market risk, operational risk) and is calculated based on Basel II regulatory framework;
 - > Key developments in terms of credit risk, liquidity risk, market risk further adjust the Bank's total variable remuneration pool; and
 - > Additional criteria for measuring effectiveness and efficiency including risk management principles and qualitative factors (qualifications, skills, contribution to the unit's performance, and personal competencies such as business thinking, continuous improvement, initiative, adaptability, customer orientation, team spirit and people management).

The variable remuneration pool allocated to each business unit, is adjusted through additional risk parameters (i.e. provisions for non performing loans, Value at Risk, credit, market and liquidity risk, losses incurred by fraud, etc.).

- More specifically for the employee categories of section 7.2, and provided that variable remuneration is awarded to them, subject to current laws and regulations, the following rules should apply:

> At least 40% of the variable remuneration awarded is deferred over a period of no less than 3 years and no more than 5, in order to ensure that the risks undertaken have been assessed over a multi – year framework and to avoid short term benefits;

At least 50% of the variable remuneration is paid in shares or other instruments in order to ensure that performance as well as current and future risks related to the award, are assessed over several years;

Variable remuneration (deferred and non deferred) is awarded or vested when the financial performance of the Bank as well as the individual and business unit performance are considered satisfactory;

When the Bank has declining or negative financial performance, the deferred remuneration can be reduced (malus). Maluses are applied after taking into consideration Bank and individual performances and assessing the impact of imprudent risk taking. Additionally, the Bank can revoke any vested part of the deferred remuneration.

- > Remuneration is directly linked to performance and as a result no guaranteed variable remuneration is awarded to employees;
- > The remuneration of individuals who perform control duties is based on function specific objectives and not determined by the individual financial performance of the area they monitor; and
- > It is prohibited to use personal hedging strategies or insurance to undermine the risk alignment effects embedded in the remuneration arrangements.

- The Bank can request the refund of any variable remuneration that was awarded if it is proven afterwards that it derived from unethical / criminal actions, acts of negligence, non compliant behaviors to the internal code of conduct or the Remuneration Policy.

7.7 BoD members remuneration

The following table depicts the remuneration received by the non-executive members of the BoD for duties performed during 2012. The remuneration of the executive members of the BoD is included in the tables of section 7.8.

Function	2012	
	No of Directors	Fixed Remuneration € million
Non-Executive Members of the BoD	14*	0.74

For 2012 there was no variable remuneration in the form of cash, shares or other instruments and no deferred variable remuneration for the Non-Executive Members of the BoD.

* Out of 16 Non-Executive Members of the BoD, 14 received fees for their participation as BoD members and / or BoD Committees members for 2012. Three Non- Executive Members of the BoD resigned on 23.7.2012 and three were appointed on 1.10.2012. Moreover, one representative of the Hellenic Financial Stability Fund was appointed as Non-Executive member under Law 3864/2010 on 6.6.2012.

7. Remuneration policy

7.8 Targeted population remuneration

In compliance with specific regulatory guidelines and as approved by the Supervisory Remuneration Committee upon Remuneration Committee proposal, the employees who fall under the scope of the Remuneration Policy are identified as follows:

- Executive members of the BoD;
- Executive Committee members that are not members of the BoD;
- Individuals whose total remuneration takes them into the same remuneration level as the aforementioned categories;
- Executive positions in Control Functions (Audit, Compliance); and
- Members of staff with material impact on the Bank's risk profile.

The following table depicts the aggregated quantitative information on remuneration, broken down by business areas for 2012:

Business Area	2012			
	Number of executives*	Total remuneration € million	Number of Executives that received severance amounts	Severance amounts € million
Central units	23	5.03	12	3.05
Retail	9	2.25	4	0.92
Risk	8	1.65	4	0.93
Wholesale	12	3.80	2	0.30

* includes employees whose remuneration, including severance amounts paid, takes them in the same remuneration bracket as executive members of the BoD and Executive Committee members / Senior management

The following table depicts the aggregated quantitative information on remuneration for the targeted population, broken down by staff category for 2012:

Function	2012				
	Number of Executives	Fixed Remuneration € million	Variable Remuneration Cash € million	New sign-on and severance payments awarded* € million	Amounts of severance payments awarded* € million
Executive members of the BoD	5	1.86	-	-	-
Executive Committee members / Senior management that are not members of the BoD	10	3.50	-	-	-
Members of staff with material impact on the Bank's risk profile	3	0.80	-	-	-
Members of staff responsible for independent control functions	2	0.40	-	-	-
Employees, whose total remuneration (including severance payments) takes them into the same remuneration bracket as executive members of the BoD and Executive Committee members / Senior management	32	6.15	0.01	0.86*	4.33*

For 2012 there was no variable remuneration in the form of shares or other instruments and no deferred variable remuneration for the aforementioned employees.

* The highest amount of severance payment awarded to a single person was € 0,4 million and was equal to the legal indemnity