



NBG Bank Malta Limited  
(formerly Finansbank (Malta) Limited)

Pillar III Disclosures

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*This report contains 23 pages*

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# 1 Introduction

## 1.1 Basel II – Pillar I requirements

Following the release of the European Union Directive 2006/48/EC, the Malta Financial Services Authority (“the MFSA”) issued Banking Rule 4 – Capital Requirements of Credit Institutions authorised under the Banking Act, 1994 (“BR04”) and Banking Rule 8 - Capital Adequacy of Credit Institutions authorised under the Banking Act, 1994 (“BR08”) which is complementary to BR04.

The scope of these Banking Rules is to standardise the criteria for the compilation of the Capital Requirements Ratio and reporting thereof to the MFSA.

The new capital adequacy framework for credit institutions has been effective since 1 January 2008.

## 1.2 Pillar II requirements – Internal Capital Adequacy Process

One of the essential requirements of the Basel II framework is the implementation of an Internal Capital Adequacy Assessment Process (“ICAAP”). The objective of ICAAP is to ensure that credit institutions have adequate capital to cover all material risk which they are exposed to as a result of their business activities. The ICAAP framework is regulated by Banking Rule 12 – The Supervisory review process of Credit Institutions authorised under the Banking Act, 1994 (“BR12”).

The management and calculation framework for NBG Bank Malta Limited, formerly Finansbank (Malta) Limited (“the Bank”) internal capital utilises methodologies set by Basel II as well as other best practices so as to ensure the highest accuracy in the internal estimation of the Bank’s capital adequacy for the various types and levels of risks based on the Bank’s current and future activities.

The Bank’s capital requirement approach under ICAAP adds the results of the Pillar I calculations to the separate assessment of additional risks not covered under Pillar I, namely concentration risk and interest rate risk arising from non-trading activities.

## 1.3 Pillar III requirements

The aim of this document emanates from the requirements of Pillar III – Market Discipline. The purpose of Pillar III which has been promulgated locally under the provisions of Banking Rule 07 - Publications of annual report and audited financial statements of Credit Institutions authorised under the Banking Act, 1994 (“BR07”), is to complement the minimum capital requirements and the supervisory review process. BR07 aims to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on capital, risk exposures, risk assessment processes, and hence the capital adequacy of the Bank.

This document is to complement the Annual Report of the Bank as at 31 December 2009.

## 2 Regulatory Own Funds and Capital adequacy

### 2.1 Own Funds

The Own Funds of the Bank calculated under Banking Rule 02 are applied to the computation of the Capital Requirement in accordance with BR04.

The Bank's regulatory capital is analysed into two tiers:

- Original own funds which includes ordinary share capital, perpetual non-cumulative preference shares, share premium account, retained earnings, other reserves, minority interests and interim profits; and
- Additional and supplementary capital, which include qualifying fixed term preference shares and subordinated liabilities and collective impairment allowances.

Various limits are applied to elements of the capital base. The amount of Additional own funds cannot exceed Original own funds; and qualifying term subordinated loan capital may not exceed 50 percent of Original own funds.

As at 31 December 2009, the Own Funds of the Bank comprised:

	€ 000's
<b>Original Own Funds:</b>	
Ordinary shares	100,000
Other reserves	796
Profit and loss account	74,827
Interim profits (eligible for inclusion)	<u>29,902</u>
<b>Total Original Own Funds</b>	<b>205,525</b>
<b>Additional Own Funds:</b>	
Subordinated loan capital	<u>10,833</u>
<b>Total Gross Own Funds</b>	<b><u>216,466</u></b>

## 2.2 Capital requirement

The table below presents the capital requirement for the Bank under Pillar I and Pillar II as at 31 December 2009.

	€ (000's)
Credit risk & counterparty risk (Standardised approach)	79,526
Concentration risk	6,362
Market risk (Standardised approach)	
- <i>Foreign exchange risk</i>	179
- <i>Interest rate position risk in trading book</i>	17,764
- <i>Equity risk</i>	370
	18,313
Internal model approach (Value at Risk)	410
Total market risk	18,723
Interest rate risk in the banking book	28,445
Operational risk (Basic Indicator approach)	4,318
Total capital requirement	137,374
Capital ratio	12.6%

### 3 Risk management framework

Risk management is a fundamental part of the Bank's business activity and an essential component of its planning process. To keep risk management at the centre of the executive agenda, it is embedded in the everyday management of business. Risk management objectives are:

- To identify the Bank's material risks and ensure that business profile and plans are consistent with risk appetite;
- To optimise risk/return decisions by taking them closely to business, while establishing strong and independent review;
- To ensure that business growth plans are properly supported by effective risk infrastructure;
- To manage risk profile to ensure that specific financial deliverables remain possible under a range of adverse business conditions; and
- To enhance the Board's control and coordination of risk taking across business areas.

In pursuit of these objectives, risk management involves five processes: direction, assessment, control, report and management/challenge.

#### ***Direction***

Under this process, an understanding of the principal risks to achieve the Bank's strategy will be gained, the risk appetite and risk management framework established and communicated.

The NBG Group risk appetite sets out the level of risk that the Board will be taking in pursuit of its strategic objectives, recognising a range of possible outcomes as business plans are implemented. The risk appetite is calibrated against the Bank's ability to support business growth, desired dividend payout levels and capital ratio targets.

The Board of directors of the Bank is responsible for the approval of the Principal Risks Policy, which sets out responsibilities, authorities and key controls for the management of the Bank's most significant risk exposures.

#### ***Assessment***

Risk management is responsible to establish the process for identifying and analysing business-level risks and to implement measurements and reporting standards and methodologies.

#### ***Control***

Risk management function establishes key control processes and practices, including limit structures appropriate for the business environment; monitors the operations of the controls and adherence to risk direction and limits; and provide early warning of control or risk appetite breaches.

***Reporting***

Local risk management interprets and reports on risk exposures, concentrations, risk-taking outcomes and on sensitivity analysis to senior management and Board. Moreover, on a regular basis reports are also provided to Group risk management division.

***Management and challenge***

At this stage risk management is responsible to assess new risk-return opportunities; to advise on optimising risk profile and to challenge risk management practices.

**Governance structure**

Responsibility for risk management resides at all levels within the Bank, from executives down to each business manager and risk officers. Every business manager is accountable for managing risk in her/his business area; they are expected to understand and control the key risks inherent in the business undertaken. The Bank risk officers provide an independent control function and to support the development of a strong risk management environment. This functional approach is built on formal control processes that rely on individual responsibility and independent oversight.

**Internal audit function**

Group Internal audit has to date been responsible for the independent review of risk management and the control environment. During 2010 the bank is expected to set up an in-house internal audit function which will be reportable to Group internal audit department.

## 3 Credit risk

### 3.1 Credit policy

Credit risk is the risk of suffering financial loss, should any of the Bank's customers or market counterparty fail to fulfil their contractual obligations. The credit risk of the Bank mainly arises from wholesale loans, predominately to corporate customers, money market lending, investments to Turkish treasury bills and counterparty risk from Over-the-counter derivative instruments.

The Board of Directors is responsible of credit risk management which includes:

- *Formulating credit policies*, covering credit assessment, risk grading and reporting, documentary and legal procedures, and compliance with regulatory and statutory requirements.
- *Establishing the authorisation structure* for the approval and renewal of credit facilities. The approval and renewal of credit facilities are under the direct responsibility of the Board of Directors.
- *Reviewing and assessing credit risk*. Group Credit assesses all credit exposures. Renewals and reviews are subject to the same review process.
- *Limiting concentrations of exposure* to counterparties, geographies and industries (for loans and advances), and by issuer, credit rating band, market liquidity and country (for investment securities).

The Bank actively manages its credit exposures with the assistance of its Group credit department. When weaknesses in exposures are detected - either in individual or in group of exposures – the Bank records these exposures on graded watch or substandard list graded in line with the perceived severity of the risk attached to the lending. All credit facilities, regardless of financial health, are subject to a full review on at least an annual basis with more frequent interim reviews undertaken for those graded as watch.

The Bank's exposure to credit risk analysed by geographical distribution, material exposure class, impaired and past due exposures together with the fair value of collaterals as at 31 December 2009 are analysed in detail in Note 29.2 to the financial statements.

### 3.2 Credit risk under the standardised approach

As at 31 December 2009, the capital requirement under Pillar I using the standardised approach amounted to EUR 79.5 million - EUR 79 million for credit risk and EUR 0.5 million with respect to counterparty risk on OTC instruments. The capital requirement was based on total assets in the banking book amounting to EUR 1.4 billion which were risk weighted at EUR 987.3 million as shown in Table 1.

Table 1 - Credit Risk Capital Requirements by exposure class

Exposure class	€ 000s	€ 000s	€ 000s
	Carrying amount	Risk weighted exposure	Capital requirement
Central governments or central Banks	392,752	-	
Corporate exposures	788,248	762,825	61,026
Secured by real estate property	206,345	194,380	15,550
Short-term claims on institutions and corporate	3,860	3,489	279
Other items	26,583	26,583	2,127
	1,417,788	987,277	78,982

### Short-term exposures to institutions

Under the standardised approach, the risk weight of the short-term claims to institutions were risk weighted by their respective short-term credit quality assessment scales as shown below.

#### SHORT TERM MAPPING

Credit Quality Step	Assessments			RISK WEIGHT
	Fitch	Moody's	S&P	
1	F1+,F1	P-1	A-1+,A-1	20%
2	F2	P-2	A-2	50%
3	F3	P-3	A-3	100%
4	Below F3	NP	Below A-3	150%

Short-term exposures to institutions by credit quality step are as follows:

Credit quality step	€ 000s	€ 000s	€ 000s
	Exposure amount before credit risk mitigation	Exposure amount after credit risk mitigation	Risk Weighted exposure
<b>1</b>	1,694	1,694	339
<b>2</b>	98	98	49
<b>4</b>	2,068	2,068	3,101
<b>Total</b>	3,860	3,860	3,489

### Central governments or central Banks

Exposures to EU Member States' central governments and central banks denominated and funded in the domestic currency of that central government and central bank were assigned a risk weight of 0%.

### Other exposures

All other exposure values after credit risk mitigation in accordance with Appendix 2 of BR04 were 100% risk weighted.

### Counterparty credit exposures

Counterparty credit exposures with respect to over-the-counter instruments represent the current replacement cost of all contracts with positive values plus the potential future credit exposure which in turn is calculated by multiplying the principal amounts or underlying values by the following percentages:

Residual maturity	Interest-rate contracts	FX and gold contracts	Equity contracts	Precious metal contracts	Commodity contracts
< 1 yr	0%	1%	6%	7%	10%
1 yr - 5 yrs	0.5%	5%	8%	7%	12%
> 5 yrs	1.5%	7.5%	10%	8%	15%

Table 2 shows the counterparty credit exposure and the respective risk weighted value. The risk weight exposure for the Short-term claim to institutions was subject to a Short-term credit quality step for the External Credit Rating Institutions (ECAI) ratings of 4. Corporate exposures with the exception of an exposure to a related group company (which was 150% risk weighted) were 100% risk weighted.

*Table 2 - Counterparty risk Capital Requirements by exposure class*

Exposure class	€ 000s	€ 000s	€ 000s
	Credit exposure	Risk weighted balance	Capital requirement
Corporate exposures	3,326	3,686	295
Short-term claims on institutions and corporate	2,074	3,111	249
			544



## 4 Market risk

Market risk is the risk that the Bank's earnings or capital, or its ability to meet business objectives, will be adversely affected by changes in the level or volatility of market rates or prices such as interest rates, credit spreads and foreign exchange rates.

The most significant types of Market risk to which the Bank is exposed are foreign exchange risk (FX) and interest rate risk.

### ***Foreign exchange risk***

The Bank is exposed to currency risk through transactions in foreign currencies. These transactional exposures give rise to foreign currency gains and losses that are recognised in the income statement. These exposures comprise the monetary assets and liabilities of the Bank that are not denominated in the functional currency.

The Bank through its treasury function continually assesses its currency risk on a daily basis. Treasury manages its foreign currency positions by matching its assets and liabilities and by entering into overnight and short-term currency swap transactions to hedge its position.

Note 29.4 to the financial statements provide an analysis of the net open position of the Bank into relevant currency rankings as at 31 December 2009.

### ***Interest rate risk***

Interest rate risk stems from the Bank's Trading and AFS security portfolios as well as from the transactions on Over-the-Counter (OTC) derivatives.

The most significant risk which the Bank has to manage is the interest rate risk that derives from the positions it retains in Turkish Government bonds.

### ***Value-at-Risk***

The Bank's risk management, in order to ensure the correct estimation and the efficient management and monitoring of the Market risk that derives from the Bank's activities in the financial markets, calculates on a daily basis the Value-at-Risk ("VaR") of the Bank's Trading and Available-for-Sale portfolios.

The Bank has established a framework of VaR limits in order to control and manage more efficiently the risks to which it is exposed. These limits refer not only to specific types of market risk such as interest rate risk and FX risk but also to the overall market risk of the Bank's Trading and AFS portfolios. Furthermore, Risk management prepares on a daily basis a set of VaR reports in order to inform the senior management about the level of market risk and the sustainability of the respective limits.

## 4.1 Capital requirement

The Bank uses the standardised approach to calculate its capital requirement under Pillar I. The following is an analysis of the capital requirement for Interest rate risk, FX risk and Equity risk as at 31 December 2009:

	€ (000's)
Market risk (Standardised approach)	
- <i>Foreign exchange risk</i>	179
- <i>Interest rate position risk in trading book</i>	17,764
- <i>Equity risk</i>	370
	<hr/>
	18,313
	<hr/>

### *Interest rate position risk in trading book*

Net positions in the Bank's AFS debt instruments are classified according to their denominated currency and divided into two components in order to calculate the capital requirement under Pillar I. The first is its specific risk component, the risk of a price change in the instrument concerned due to factors related to its issuers. The second component covers its general risk, the risk of a price change in the instrument due to a change in the level of interest rates. The general risk capital charge is based maturity-based approach in Annex III of BR08. As at 31 December 2009, the capital charge under Pillar I for the specific and general risk amounted to EUR 17.4 million and EUR 396,000 respectively.

### *Foreign exchange risk*

The capital requirement for foreign currency risk of the Bank under Pillar I is arrived at after calculating the net short or long position in each foreign currency (excluding the base currency, EUR), converted at spot rates into the reporting currency. The net short and long positions, respectively are then summed separately with the higher of these two totals is taken to be the Bank's overall net foreign exchange exposure position. This overall net foreign currency position will carry a capital requirement of 8% thereof.

### *Equity risk*

During the second half of 2009 the Bank has actively traded in units of an equity fund created by a group undertaking which is tracking the Istanbul Stock Exchange Index. The units in the Fund are listed on the Istanbul Stock Exchange and are hedged by short positions in exchange traded futures on the index being tracked.

The Bank calculates its capital requirement in its equity position in accordance with Annex III of BR08. The capital requirement for Specific risk amounting to EUR 123,000 was arrived by

multiplying the Bank's overall gross position by 4% whilst that against General risk amounting to EUR 247,000 was arrived by multiplying the Bank's overall net position by 8%.

Given that the investment in the Fund is hedged by short positions in exchange traded futures on the index being tracked, the effectiveness of the hedge will much depend on the correlation between the returns of the Fund and the index being tracked.

*Internal model approach (Value at Risk)*

For ICAAP, the Bank uses internal models to calculate its daily VaR. More specifically the Bank adopts the variance-covariance methodology with a 99% confidence interval, 1-day holding period and calculations based on and a historical observation period of one year. The variance-covariance methodology could be summarised as follows:

- Collection of transaction data per type of product;
- Identification of the risk factors the price changes of which could affect the value of the portfolio. As risk factors the interest rates and the foreign exchange rates are recognised;
- Collection of market data for the instruments/positions valuation;
- Specification of the confidence interval and the holding period for the VaR calculations: confidence interval of 99% and holding period of 1 day;
- Estimation of the model's parameters which are: the variance of each risk factor, from which the respective volatility derives; the covariance of the risk factors, from which the respective correlation derives;
- Estimation of the VaR per type of risk; and
- Estimation of the Total VaR, taking into consideration the correlation matrix among all risk factors.

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

- The returns on individual risk factors follow a normal distribution;
- The payout of investments is considered to be linear;

The capital charges for market risk are equal the highest of the following:

- a) The VaR of the previous day, with a 10-days holding period; or
- b) The average VaR of the last 60-days, using a 10-days holding period

and multiplied by a factor "k", which varies between three (3) and four (4) based on the number of overshoots.

The following is the capital requirement under Pillar II:

	VaR	Capital requirement
	€ (000's)	€ (000's)
Market risk (VaR)		
- Foreign exchange risk	22	275
- Interest rate position risk in trading book	23	286
- Total VaR	32	410

## 4.2 Stress and scenario tests applied

Supplementary to the VaR model, the Group conducts stress testing on a weekly basis on both the trading and the available-for-sale portfolios based on specific interest rate scenarios. The aim of stress testing is to evaluate the gains or losses that may occur under extreme market conditions. The Group's scenarios used are in compliance with the IMF guidelines and have been approved by Bank of Greece. The Interest rate-related scenarios used are shown in the following tables:

Scenario	0-3 Months	3 Months-	
		5 Years	> 5 Years
Parallel Curve Shift in yield curve	+200 bp	+200 bp	+200 bp
Parallel Curve Shift in yield curve	-200 bp	-200 bp	-200 bp
Steepening of yield curve	0 bp	+100 bp	+200 bp
Flattening of yield curve	+200 bp	+100 bp	0 bp

The impact of the above Interest rate-related scenarios as applied to the Bank's available-for-sale portfolio as at 31 December 2009 are shown below:

Scenario	Description	P & L (€)
1	Parallel Shift	(565,886)
2	Parallel Shift	560,789
3	Steepening	(20,197)
4	Flattening	(545,974)

On the other hand, the foreign exchange stress test was carried out for the open position of the Bank as at 31 December 2009 assuming a 30% devaluation in the base currency.

The result of the stress test as presented in the table below show a positive impact of EUR941,164.

CCY	FX rates	Position in foreign currency	Position in EUR	30% EUR Devaluation	Impact (EUR)
CHF	1.5275	678,618	444,272	634,677	190,405
GBP	0.9281	32,578	35,101	50,145	15,044
USD	1.4352	1,868,505	1,301,365	1,859,830	558,465
TRY	2.1712	897,957	413,582	590,831	177,249
		<b>Total:</b>	<b>2,194,320</b>	<b>3,135,483</b>	<b>941,163</b>

### 4.3 Back-testing

In order to verify the predictive power of the VaR model which is used for the calculation of the capital requirement for Market risk, the Bank conducts back-testing on a daily basis. The aim of back-testing is to examine whether the hypothetical change in the value of the portfolio, due to the actual movements in the prices of the underlying risk factors, is captured by the VaR estimate of the day.

The procedure of back-testing is summarised as follows:

- Calculation of the hypothetical gains/losses on the Bank's trading portfolio between days  $t$  and  $t+1$
- Comparison of the hypothetical gains/losses with the Total VaR estimate, as it was calculated by RiskWatch.

In the case where the back-testing result exceeds the VaR estimate, the model has underestimated the potential loss and is deemed to have failed. Back-testing is applied on the Bank's end of day positions and does not take into account the intra-day transactions.

## 5 Interest rate risk in the Banking book

Interest rate risk in the Banking book is the exposure of the Bank's financial condition to adverse movements in interest rates. Changes in interest rates affect the Bank's earnings by changing the net interest income and the level of others interest sensitive income and operating expenses. Changes in interest rates also affect the underlying value of the Bank's assets, liabilities and off-balance sheet instruments as the present value of future cash flows change when interest rate change.

The sources of interest rate risk are repricing risk, yield curve risk, basis risk, and optionality. The Bank is mainly exposed to repricing risk which arises from timing differences in the maturity (for fixed-rate) and repricing (for floating-rate) of the Bank's assets, liabilities and off-balance sheet positions. Repricing mismatches can also expose the Bank to yield curve risk, the risk resulting from changes in the slope and shape of the yield curve.

Repricing risk is managed principally through monitoring interest rate gaps and by having pre-approved limits for repricing bands. These interest rate gap analysis are reported to the Group treasury and risk management for its day-to-day group monitoring activities.

Note 29.4 to financial statements sets out the carrying amount as at 31 December 2009, by reference to the earlier of the next contractual interest rate repricing date and maturity.

### 5.1 Capital requirement

Under ICAAP, the Bank assesses its interest rate risk on the Banking book from an economic value perspective. The economic value perspective focuses on the potential impact of interest rate changes on the present value of all future cash flows. This provides the Bank with a more comprehensive view of the potential long-term effects of changes in interest rates than is offered by the earnings perspective.

The Economic Value of Equity (EVE) figure is calculated by netting expected cash flows on assets and liabilities and expected net cash flows of off-balance sheet positions under a number of pre-determined time bands to which parallel shifts in the yield curves for both base and stress scenarios are applied.

Correlations between currencies are not explicitly taken into account.

As at 31 December 2009, under Basel II scenario (TRY 1100 bps, FX-TR 350 bps and FX 200 bps increase) the change in net economic value amounted to EUR 28.4 million as shown below.

	In EUR 000's		
	TRY-1100 bps	FX-TR-350 bps	FX-200 bps
0-12 m	(1,198)	(3,356)	(638)
1-2 y	(13)	(8,802)	5,202
2-3 y	-	(10,888)	6,190
3-5 y	-	(20,556)	14,120
5-10 y	-	(21,867)	16,113
10+ y	-	(3,596)	843
<b>TOTAL</b>	<b>(1,211)</b>	<b>(69,064)</b>	<b>41,830</b>
	← (28,445) →		

This amount is equivalent to 13.1% of total own funds. In accordance with the Principles for the Management and Supervision of Interest Rate Risk (July 2004) issued by the Basel Committee on Banking Supervision recommends maximum threshold of 20%.

## 5.2 Stress and scenario tests applied

Base case interest shocks are defined as 1100 bps upwards shift in TRY yield curve, 350 bps upwards shift in Foreign Currency yield curve (i.e. FX denominated financing in for Turkish customers) and 200 bps upwards shift in LIBOR curve.

The following additional scenarios are also used to depict 'stressed' market conditions:

- Scenario 1 (2001 Crisis): TRY : Rates triple, FX-TR: Short term spreads increase +1000 bps, long term spreads increase +1100 bps, FX: Constant;
- Scenario 2 (May 2004): TRY : Short term +200 bps, mid-long term +500 bps, FX-TR: +200 bps, FX: Short term +25 bps, mid-long term +50 bps;
- Scenario 3 (June 2006): TRY : +1000 bps, FX-TR: +200 bps, FX: +50 bps;
- Scenario 4 (2008 Crisis) : TRY : Short-mid term spreads + by 1500bps, Long term spreads + by 2000 bps; FX-TR: Short term spreads + 850 bps, Mid term spreads + 600 bps, Long term spreads + 400 bps; FX: Constant;

The change in net economic value under the above scenarios is presented below:

<b>EURO'000's</b>	<b>TRY</b>	<b>FX-TR</b>	<b>FX</b>	<b>TOTAL</b>
2001 Crisis	(1,806)	(160,210)	0	(162,016)
May 2004	(190)	(41,146)	11,105	(30,231)
June 2006	(1,106)	(41,146)	10,895	(31,357)
2008 Crisis	(1,717)	(113,466)	0	(115,183)

## 6 Credit concentration risk

A risk concentration is any single exposure or group of related exposures with the potential to produce losses large enough to threaten a Bank's health or ability to maintain its core operations.

The Bank has established an aggregate limit for the management and control of individual counterparty or group of counterparties which are in line with the "Large Exposures" Banking Rule (BR/02).

Aggregate limits for the management and control of concentration risk arising from the Bank's lending exist for group of customers in the same geographic region and/or having similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. The Bank's culture purports a risk averse attitude towards credit and concentration risk in that all credit proposals have to be presented for approval to the Board of Directors following a credit recommendation from the Group credit department and after ensuring that all the above limits have been adhered to.

### 6.1 Capital requirement

Under ICAAP, the Bank assesses its capital requirement for credit concentrations risk by calculating a sectoral concentration index (SCI) and an individual concentration index (ICI). In computing the sectoral concentration index, the Bank groups together all its direct risk exposures excluding risk exposures to general government and credit institutions, to the economic sectors prescribed by Banking Rule 6 and Note 29.2 to the financial statements.

The sectoral concentration index is calculated using the formula below:

$$\text{SECTORAL CONCENTRATION INDEX } (\alpha) = \frac{\sum x^2}{(\sum x)^2} \times 100$$

where "x" is the value of risk exposure to each economic sector.

If this index ( $\alpha$ ) is greater than 12, the Bank will multiply the capital requirements for credit risk under Pillar 1 by the following multiplier:

Sectoral concentration index ( $\alpha$ )	Multiplier
$0 < \text{SCI} \leq 12$	1.00
$12 < \text{SCI} \leq 15$	1.02
$15 < \text{SCI} \leq 20$	1.04
$20 < \text{SCI} \leq 25$	1.06
$25 < \text{SCI} \leq 100$	1.08

In computing the individual concentration index, the Bank identifies all exposures, individual or group of connected customers that are defined by Banking Rule 02 as large exposures (that is exposures which are 10% or more of the Bank's own funds) from its total direct risk exposures excluding risk exposures to general government and credit institutions. The individual concentration index ( $\beta$ ) is calculated using the formula:

$$\text{Individual concentration index } (\beta) = \frac{\sum x^2}{(\sum x)^2} \times \frac{\sum x}{\sum y} \times 100$$

where "x" is the total exposure corresponding to each large exposure and "y" is the total direct risk exposure.

If the index exceeds 0.1, the capital requirement for credit risk under Pillar I is multiplied by the relevant multiplier, as follows:

Individual concentration index $\beta$	Multiplier
0.0 < ICI ≤ 0.1	1.00
0.1 < ICI ≤ 0.2	1.02
0.2 < ICI ≤ 0.4	1.04
0.4 < ICI ≤ 1.0	1.06
1.0 < ICI ≤ 100.0	1.08

As at 31 December 2009, the sectoral concentration index (SCI) was 19.02, based on the below risk exposures. The index ( $\alpha$ ) of 19.02 attracted a multiplier of 1.04 therefore the capital requirement for sectoral concentration is equivalent to 4% of the capital requirement for credit risk calculated under Pillar 1, which amounted to EUR 3.18 million.

Economic Sector	Amount of risk exposure to the sector (x)	% of TOTAL
<b>Loans</b>	€	
Agriculture	306,668	0.03%
Community, recreational and personal service activities	13,096,152	1.36%
Construction	139,154,033	14.41%
Education	12,191,020	1.26%
Electricity, gas and water supply	77,598,361	8.04%
Financial intermediation	71,049,528	7.36%
Health and social work	58,455,631	6.05%
Hotels and restaurants	38,992,696	4.04%
Households and individuals	1,079,773	0.11%
Manufacturing	350,995,708	36.34%
Mining and quarrying	14,444,162	1.50%
Real estate, renting and business activities	26,609,712	2.76%
Transport, storage and communication	128,375,359	13.29%
Wholesale and Retail Trade; repairs	33,355,807	3.45%
<b>TOTAL</b>	<b>965,704,608</b>	<b>100%</b>
<b>SECTORAL CONCENTRATION INDEX</b>	<b>19.02</b>	<b><math>\alpha</math></b>

On the other hand, the Individual concentration index ( $\beta$ ) as at 31 December 2009 was 0.23 thus falling in the  $0.2 < ICI \leq 0.4$  bracket thus attracting a multiplier effect of 1.04. The capital requirement for individual concentration which is equivalent to 4% of the capital requirement for credit risk calculated under Pillar 1 amounted to EUR 3.18 million.

The total capital requirement for the Bank's concentration risk as at 31 December 2009, thus amounted to EUR 6.36 million.

## 7 Operational risk

Operational risk is the risk of direct or indirect loss arising from a wide variety of causes associated with the Bank's processes, personnel, technology and infrastructure, and from external factors other than credit, market and liquidity risk such as those arising from legal and regulatory requirements and generally accepted standards of corporate behaviour. Operational risks arise from all of the Bank's operations.

The Bank's objective is to manage its operational risk so as to balance the avoidance of financial losses and damage to the Bank's reputation with overall cost effectiveness and to avoid control procedures that restrict initiative and creativity.

The primary responsibility for the development and implementation of controls to address operational risk is assigned to senior management within each business unit. This responsibility is supported by the development of and compliance to overall NBG Group standards for the management of operational risk in the following areas:

- requirements for appropriate segregation of duties, including the independent authorisation of transactions;
- requirements for the reconciliation and monitoring of transactions;
- compliance with regulatory and other legal requirements;
- documentation of controls and procedures;
- requirements for the periodic assessment of operational risks faced and the adequacy of controls and procedures to address the risks identified;
- requirements for the reporting of operational losses and proposed remedial action;
- development of contingency plans;
- training and professional development;
- ethical and business standards; and
- risk mitigation, including insurance where this is effective.

In view of the fact that the Bank is active in one business line and all income is derived predominately from commercial banking, the Bank adopts the Basic Indicator approach to assess its capital requirement for operational risk under Pillar 1.

Under the Basic indicator approach, the capital requirement is equal to 15% of the relevant indicator which is the average over the last three twelve-monthly observations at the end of the financial year of the sum of net interest income, and net non-interest income as shown below:

(€ 000's)	2006	2007	2008
Interest receivable and similar income	73,004	128,734	141,557
Interest payable and similar charges	(50,649)	(94,766)	(115,632)
Commissions/fees receivable	331	1,806	1,391
Commissions/fee payable	(392)	(101)	(121)
Net profit or net loss on financial operations	2,422	(2,583)	(1,352)
<b>Relevant indicator</b>	24,716	33,090	28,548

The average three year relevant indicator as at 31 December 2009 amounted to EUR28.8 million therefore the capital requirement is 15% thereof, which amounted to EUR4.318 million.

For 2010, the relevant indicator for end of 2009 financial year will amount to EUR 47,550,332 thus yielding an average of the three years 2007 to 2009 of EUR 36.396 million which requires a capital of EUR 5.459 million.

Although the Board acknowledges that the income used in Pillar I under the Basic indicator approach is only a proxy for the scale of operational risk exposure of the Bank, given the Bank's past profitability levels, the Board is confident that the EUR 5.459 million level of capital requirement provides an adequate proxy for potential losses arising from operational risk for 2010. Notwithstanding, the Board stresses the importance of the Bank's sound internal control system and is committed to enhance its operational risk management framework.