



**INFORMATION ON CAPITAL ADEQUACY  
OF THE  
BANK MILLENNIUM SA GROUP**

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**as at 31 December 2012**

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Warszawa, 10<sup>th</sup> May, 2013

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## I. Introduction

In accordance with the Information Policy requirements defined by Resolution no. 385/2008 of the Polish Financial Supervision Authority of 17 December 2008, as later amended, this document presents qualitative and quantitative information on the capital adequacy of the Capital Group ("Group") of Bank Millennium S.A. ("Bank") as at 31 December 2012.

The data on the capital requirements for credit risk have been prepared for appropriate portfolios in accordance with Appendix 4 and Appendix 5 to Resolution 76/2010 adopted by the Polish Financial Supervision Authority (KNF) on 10 March 2010, as amended.

A comprehensive description of the Group's risk management principles and the list of consolidated companies is provided in the consolidated financial statements of the Group for 2012.

The Bank, which is the Group's parent company, is a subsidiary of an EU parent company, i.e. Banco Comercial Portugues S.A., and therefore the information presented below in Sections II and III exhausts the scope of information set forth in § 3 and § 4 of Appendix 1 to the KNF Resolution no. 385/2008, as amended, and has been prepared based on the highest domestic consolidation level (Bank Millennium SA Group).

Information provided in Section IV refers to the internal ratings based approach for calculating the capital requirements for credit risk and is presented in accordance with Appendix 2 to the KNF Resolution no. 385/2008, as amended.

Information based on data from the annual consolidated financial statements of the parent company is disclosed separately.

All figures are stated in thousands of PLN.

## II. Own funds<sup>1</sup>

The Group's own funds consist of capital and funds created in accordance with the applicable law, relevant legislative acts and the articles of association.

Own funds (basic and supplementary) consist of: share capital, share premium account, revaluation reserve, retained profit and subordinated debt.

### Share capital

Share capital is measured at nominal value in the amount stated in the articles of association and as entered in the commercial register.

If a company acquires its own equity instruments then the amount paid, including all the related direct costs, is captured as a change in equity. Acquired own shares are classified as treasury shares and recognized as reduction of share capital until they are retired.

### Share premium account

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<sup>1</sup> Information published pursuant § 3 of Appendix 1 to the KNF Resolution no. 385/2008, as amended

Share premium account (the surplus of issue price over nominal price) is created from the share premium received on a share issue, minus any related direct costs.

#### Revaluation reserve

Revaluation reserve includes differences from the valuation of financial assets available for sale.

#### Retained profit

Retained profit is created from charges to profit and is earmarked for purposes set forth in the articles of association or other legal regulations (the remaining part of the reserve capital, additional reserve capital, including general banking risk fund) or consists of profits/losses carried forward from previous years and also net financial result of the current period.

The Bank's funds for general banking risks are created with after-tax profit according to the provisions of the Banking Law Act of 1997, as later amended.

The net financial result of the current period is the result from the Profit and Loss Account of the current year, adjusted by the corporate income tax charge. For the calculation of own funds under prudential norms, the Bank uses the financial result of the current period (and profit in the course of being approved) verified by an auditor and reduced by the expected encumbrances and dividends.

#### Subordinated debt

Pursuant to a decision of the Polish Financial Supervision Authority, the Bank (and the Group) classifies as supplementary own funds the liabilities on account of subordinated securities issues maturing in December 2017 (EUR 150 million as at 31 December 2012).

#### Reductions and adjustments of basic and supplementary own funds

The Group makes adjustments to the value of own funds according to the regulations applicable in this respect, while taking the following factors into account:

- intangible assets held;
- exposure on account of securitization positions;
- reductions resulting from the application of the IRB approach.

The following figures showing the structure of the Group's own funds have been prepared according to the above description as at 31 December 2012.

Table 1 Structure of own funds as at 31 December 2012

000s PLN

<b>Basic own funds (Tier I)</b>	<b>4,630,146</b>
<i>Primary funds</i>	<i>2,863,596</i>
Share capital	1,213,117
Share premium account	1,147,502
Other reserve capital components	502,977
<i>Reserve funds</i>	<i>1,537,648</i>
Additional reserve capital with retained profit from previous years	1,393,882
Net profit of the current period and profit under approval (verified by the auditor)	143,766
Revaluation reserve	0
<i>General risk fund for unidentified risk of banking activity</i>	<i>228,902</i>

<i>Reduction of basic funds</i>	-144,256
Intangible assets measured at book value	-43,694
50% of the exposure due to securitization items (risk weight of 1250%)	-7,863
Reductions resulting from the application of the IRB approach.	-92,699
<b>Basic own funds after reductions</b>	<b>4,485,890</b>
<b>Supplementary own funds (Tier II)</b>	<b>647,324</b>
Subordinated debt	613,230
Adjustment of revaluation reserve transferred to supplementary own funds	34,094
<i>Reduction of supplementary own funds</i>	-100,562
50% of the exposure due to securitization items (risk weight of 1250%)	-7,863
Reductions resulting from the application of the IRB approach.	-92,699
<b>Supplementary own funds after reductions</b>	<b>546,762</b>
<b>OWN FUNDS</b>	<b>5,032,652</b>

### III. Capital requirements

#### III.1 Description of the approach used by the bank to assess adequacy of internal capital supporting the bank's current and future activity<sup>2</sup>

The Group carries out the internal capital adequacy assessment process (ICAAP) in reliance on the internal model of economic capital.

The Group defines economic capital as the amount of capital which is needed to cover all the unexpected economic losses that may occur during a specified future period and that are estimated with specific probability, without jeopardizing interests of the Group's depositors/creditors. Internal capital calculations incorporate all the material risk types to which the Group is exposed and are based on a set of parameters developed on the basis of the individual features and characteristics of the Polish market. The model quantifies the value of expected and unexpected losses on account of the risk types considered to be material, at the assumed confidence level and in a one-year time horizon.

When calculating its internal capital, the Group takes into account the following risk types:

1. Credit risk
2. Market risk
  - a. Items in the trading book
  - b. Interest rate risk in the banking book
3. Business and strategic risk, including the aspect of volatile financing costs
4. Operational risk

The Group has taken a conservative approach to the correlation between individual risk types (the fact that different risk types do not convert to losses simultaneously)

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<sup>2</sup> Information published pursuant to § 4.1 of Appendix 1 to the KNF Resolution no. 385/2008, as amended

and calculates the effect of diversification on the entire loss distribution (including also high-value losses, if any).

In line with the recommendations issued by the banking supervision authority, individual risk types and the diversification effect are subject to stress tests. The total diversified internal capital is subject to economic assessment of capital adequacy, by a comparison with "risk bearing capacity" (available financial resources). Currently, the Group conservatively assumes that the available financial resources are equivalent to regulatory own funds which form the basis for calculating the solvency ratio.

The internal capital adequacy assessment process following the Group's approach is closely linked to the risk, capital and business management processes in place in the Group. It consists of the following stages:

1. Classification and assessment of materiality of risk types, to determine the method for incorporating them in the risk management process and in the ICAAP process,
2. Measurement (quantification) of risk,
3. Aggregation of internal capital to secure material risk of the Bank's operations, while taking into account correlation between risk types,
4. Assessment of capital adequacy by comparing the Bank's economic risk (internal capital) to its capacity to cover the risk,
5. Allocation of internal capital to business lines/areas of operation,
6. Use of allocated internal capital to measure risk-based efficiency, set risk limits, reallocate capital while taking into account risk-weighted returns,
7. Control and monitoring of the risk level, available financial resources, capital limits and objectives.

Capital adequacy assessment in the "Pillar 2 of Basel II" (Supervisory Review Process) carried out at the end of 2012 indicates a high level of this adequacy, which is shown in a significant surplus of capital resources (equivalent to regulatory own funds) as compared to economic risk (internal capital value) and risk calculated on the basis of supervisory regulations (the value of minimum capital requirements to cover risk. Internal capital as at the end of 2012 is lower than I Pillar capital requirements, both under standard and IRB method.

Both the Bank and the Group meet the statutory requirements regarding the level of own funds and the internal capital set forth in Article 128 of the Banking Law Act.

### III.2 Amounts equal to 8% of risk-weighted exposure, calculated separately for each exposure class defined in § 6 par. 1 of Appendix 5 to the Capital Adequacy Resolution<sup>3</sup>

The Group has obtained a permission from the Banco de Portugal and the Polish Financial Supervision Authority (hereinafter: Regulatory Authorities) to apply the Advanced Internal Ratings Based Approach to a part of the retail exposure portfolio. Detailed information on this matter is provided in item IV.

The table below presents the capital requirement amounts calculated according to the permission received from the Regulatory Authorities to apply the IRB approach.

Table 2 Capital requirements as at 31 December 2012 000s PLN

No.	Exposure class	Capital requirements	Regulatory adjustments(**)
1	Sovereigns and central banks	324	
2	Institutions	80,177	
3	Corporates	664,224	
4	Retail exposures, including:	701,838	1,037,131
4.1	- Residential Retail exposures	414,271 (*)	1,053,683
4.2	- Qualified revolving retail exposures	65,696 (*)	(16,551)
4.3	- Other retail exposures	221,871	
5	Equity exposures	0	
6	Securitization positions	0	
7	Other non credit-exposure assets	50,851	
8	CAPITAL REQUIREMENTS FOR CREDIT RISK, COUNTERPARTY CREDIT RISK, RISK OF DILUTION AND DELIVERY OF INSTRUMENTS TO BE SETTLED AT A LATER DATE	1,497,413	1,037,131
9	CAPITAL REQUIREMENT FOR MARKET RISK	24,819	
10	CAPITAL REQUIREMENT FOR OPERATIONAL RISK	226,460	
11	CAPITAL REQUIREMENTS FOR RISK - TOTAL (without regulatory adjustments)	1,748,692	
12	CAPITAL REQUIREMENTS FOR RISK - TOTAL (with regulatory adjustments)	2,785,823	

(\*) Capital requirements calculated using the IRB Approach

(\*\*) Additional requirement coming from regulatory temporary constraint, explanation in the point IV.1

<sup>3</sup> Information published pursuant to § 4.3, 4.4 and 4.5 of Appendix 5 to the KNF Resolution no. 385/2008, as amended

**III.2.1 Capital requirements to market risk, settlement risk, delivery risk, counterparty credit risk, breach of exposures' concentration limits and large exposures' limits, breach of capital concentration threshold, operational risk**

- Market risk

The Group uses standard methods to calculation of capital requirements for market risk subtypes. Exposure to market risk is not material. Capital requirements for market risk are ca. 0,9% of total capital requirements as at 31.12.2012.

- Settlement and delivery risk, breach of exposures' concentration limits and large exposures' limits, breach of capital concentration threshold

Capital requirements for above risk types were not present as at 31.12.2012.

- Counterparty credit risk

Capital requirements for above risk concern derivatives and repo transactions in trading book.

- Operational risk

Capital requirements for operational risk are calculated according to standard method. They are ca. 8,1% of total capital requirements as at 31.12.2012.

The below table shows another - except these calculated for credit risk - capital requirements.

*Table no 3 Capital requirements to market risk, settlement risk, delivery risk, counterparty credit risk, breach of exposures' concentration limits and large exposures' limits, breach of capital concentration threshold, operational risk, as at 31.12.2012*

000s PLN

Capital requirements to market risk, settlement risk, delivery risk, counterparty credit risk, breach of exposures' concentration limits and large exposures' limits, breach of capital concentration threshold, operational risk	Amount
Capital requirements for market risk, including:	24 819
- Currency risk	0
- Goods' price risk	0
- Price of equity securities risk	49
- Debt instruments price specific risk	48
- General interest rate risk	24 722
Capital requirements for settlement risk	0
Capital requirements for delivery risk	0
Capital requirements for counterparty credit risk (*)	19 218
Capital requirements for breach of exposures' concentration limits and large exposures' limits	0
Capital requirements for breach of capital concentration threshold	0
Capital requirements for operational risk	226 460

(\*) Capital requirements for counterparty credit risk is included in capital requirements presented in rows 1-8 of the Table no 24



### III.2.2 Capital adequacy as at the end of 2012

As at the end of 2012, capital adequacy of the Bank Millennium Group is strong in all aspects (standard method of credit risk capital requirements calculation, internal rating based method of credit risk capital requirements calculation, economic capital adequacy). In the opinion of Management Board, it can serve as a solid base of a safe development of activity. The below table presents the main capital adequacy ratios under consolidated approach.

Table 4 Main capital adequacy ratios in %

Capital adequacy ratio	Value
Capital Adequacy Ratio under IRB method for exposures under permission from Regulatory Authorities - with regulatory adjustment (*)	14,5%
Core Tier 1 Ratio under IRB method for exposures under permission from Regulatory Authorities - with regulatory adjustment (*)	12,9%
Capital Adequacy Ratio under IRB method for exposures under permission from Regulatory Authorities - without regulatory adjustment (*)	23,0%
Core Tier 1 Ratio under IRB method for exposures under permission from Regulatory Authorities - without regulatory adjustment (*)	20,5%
Capital Adequacy Ratio for comparison purposes (under standard method)	13,2%
Core Tier 1 Ratio for comparison purposes (under standard method)	11,6%
Capital Buffer (**)	239%
Capital Buffer under stressed conditions (***)	162%

(\*) Explanation in point IV.1

(\*\*) Capital Buffer - Own Funds/Internal Capital

(\*\*\*)Capital Buffer in stressed conditions - Own Funds/Internal Capital Buffer under stressed conditions

## IV. Information on the use of Internal Rating Based Approaches<sup>4</sup>

### IV.1 Permission from Regulatory Authorities<sup>5</sup>

The Banco Comercial Portugues Group (the parent company of Bank Millennium SA) has obtained a permission for Bank Millennium SA (and its consolidated group) to use the IRB approach starting on 31 December 2012 for calculating the minimum capital requirements for credit risk for the Bank's retail exposures in the following segments of the portfolio:

- retail exposures for private individuals secured on residential real estate (RRE),
- qualifying revolving retail exposures (QRRE).

The decision was issued by Banco de Portugal (the consolidating regulator of the Banco Comercial Portugues Group) in cooperation with the Polish Financial Supervision Commission, on the basis of Article 129 par. 2 of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006.

The decision is conditional, which means that the Regulatory Authorities have set a number of conditions. Until all the mandatory conditions are satisfied, the Bank's capital requirements calculated using the IRB approach for RRE and QRRE portfolios must be kept at the level no less than 80% of the relevant requirements calculated using the standardized approach (*regulatory temporary constraint*).

### IV.2 Structure of internal rating systems<sup>6</sup>

The Bank defines a rating system as a collection of PD rating models, LGD, CCF-EAD models, risk evaluation principles, rules for assigning a client to an appropriate pool with a specified risk level, rules for overriding risk grades, the hierarchy of the rating models, if applicable, and also control processes and mechanisms used to award ratings to clients and to create pools.

All the customers to whom the Bank has a credit exposure should have a previously awarded rating and should be assigned to an appropriate homogenous pool. The rating and the pools are used uniformly throughout the Bank.

Evaluation of the client's credit risk in the probability of default (PD) area is based on a uniform rating scale, referred to as the "Master Scale" (hereinafter: the MS).

A rating is awarded or a homogenous pool is assigned to a client segment using rating models. Each rating model is calibrated to MS based on the observed or estimated probability of default<sup>7</sup>.

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<sup>4</sup> Information published pursuant to Appendix 2 to the KNF Resolution no. 385/2008, as amended

<sup>5</sup> § 1 item 1 of Appendix 2 to the KNF Resolution no. 385/2008, as amended

<sup>6</sup> § 1 item 2a of Appendix 2 to the KNF Resolution no. 385/2008, as amended

<sup>7</sup> This principle does not apply to specialized lending

MS has 15 risk grades, where ratings 1 to 3 are equivalent to a high credit quality, ratings 4-6: good credit quality, ratings 7-12 average and low credit quality and ratings 13-15 are procedural ratings used for exposures of reduced quality.

The table below shows relationships between internal and external risk grades. The Bank uses for comparison purposes the following external rating agencies: Standard & Poors, Moody's, Fitch.

*Table 5 The Bank's Master Scale vs. ratings used by external rating agencies*

MS risk grade	Fitch	Moody's	S&P
1	AAA	Aaa	AAA
1	AA+	Aa1	AA+
2	AA	Aa2	AA
2	AA-	Aa3	AA-
3	A+	A1	A+
3	A	A2	A
4	A-	A3	A-
5	BBB+	Baa1	BBB+
6	BBB	Baa2	BBB
7	BBB-	Baa3	BBB-
8	BB+	Ba1	BB+
9	BB	Ba2	BB
10	BB-	Ba3	BB-
11	B+	B1	B+
12	B or lower	B2 or lower	B or lower

### **IV.3 Extent of application of internal estimates for purposes other than capital requirement calculation<sup>8</sup>**

The Bank acts in accordance with the IRB principles for the application of "use test" criteria. This means that the risk parameters used to calculate capital requirements for credit risk are also the parameters that are used for other internal purposes, in particular in the risk management process. Internal rating or internal loss estimation models play a major role in the risk management process and in the decision process at different risk management levels, i.e. for the purposes of defining the Bank's credit risk strategy, for approving and monitoring credit risk and for allocating economic capital.

The Bank has many years of experience in using internal rating models, since individual rating systems have been used to evaluate client risk since the 1990s. Ever since that time, the methodologies have been developed, improved and, to an increasing extent, incorporated in business processes, thus boosting risk management "culture" and awareness in the management process.

<sup>8</sup> § 1 item 2b of Appendix 2 to the KNF Resolution no. 385/2008, as amended

- Management information system

Internal estimates are used broadly in the management information system in the areas of risk and operating activity. The individual management levels (Supervisory Board, Management Board, specialized committees) receive detailed information about exposure to individual risks types and about the risk profile, including estimated risk parameters. This allows for effective risk management.

- Risk Appetite

Internal estimates have been used to determine the "risk appetite" of the Bank and the Bank Millennium Group. The risk appetite incorporates measures, buffers and quantitative limits which, along with qualitative guidelines on managing individual risk types, determine the Bank's risk tolerance. Risk parameters are also an important element of the risk strategy being pursued, which includes objectives and guidelines for managing different risk types.

- Concentration limits

In the area of credit concentration risk and risk of significant exposures, internal estimates have been used to develop exposure limits for individual segments of the credit portfolio. For this purpose, a risk level calculated using risk parameters is compared to the available financial resources, which may be used to secure the risk, including a buffer for a potential increase in risk.

- Decision-making powers

Credit decision-making powers are an important area where internal estimates are applied. The levels of limits for decision-making powers rely on the client's MS risk grade and the total exposure to its economic group (and the group of related entities in which the client is a member).

- Evaluation of borrowing capacity and creditworthiness

Internal estimates affect significantly the evaluation of the client's borrowing capacity and creditworthiness. The rating affects the borrowing capacity through the following activities: (a) verification of "cut-off point" criteria which determine the minimum acceptable rating for each segment/product; (b) calculation of the client's credit limit.

- Loan prices and pricing policy

Risk parameters are also used for pricing credit transactions, by reflecting the cost of risk and the cost of capital in the price.

- Economic capital

Credit and market risk parameters are used as one of the elements that allow the Bank to calculate economic capital corresponding to the risk. Economic capital in turn is used to evaluate the safety of operations, to allocate and reallocate capital to business lines, to evaluate risk-based efficiency and to determine concentration limits.

## IV.4 Management and recognition of credit risk mitigation methods<sup>9</sup>

The Bank's activity on the asset side is based on granting loans in amounts and on the terms that will allow clients to repay them in a regular, consistent manner, without any need to recover due amounts from collateral.

Collateral is used to ensure that the Bank receives the repayment of principal, interest, commissions and fees if the client fails to make the payments in contractual amounts and on contractual dates. Collateral should correspond to the credit risk incurred by the Bank, while taking into account the specific features of each individual credit transaction.

The Bank's internal regulations define the principles governing the types and legal forms of collateral accepted by the Bank, the rules for valuating collateral and the requirements that must be satisfied when collateral is accepted, the rules of measuring and monitoring collateral.

Collateral accepted by the Bank has been divided into the following categories:

- 1) basic collateral: collateral that has a recognized value from the Bank's standpoint, classified as part of collateral mitigating the risk of a credit transaction or of the minimum and actual protection level; requires valuation in order to be accepted;
- 2) additional collateral: collateral having a zero value from the Bank's standpoint, not classified as part of collateral mitigating the risk of a credit transaction or of the minimum and actual protection level; does not require valuation in order to be accepted; Its purpose is to strengthen the Bank's position toward a customer;
- 3) supplementary collateral: collateral accepted as a complementary form of collateral to the basic or additional collateral; its purpose is to facilitate execution or increase probability of satisfaction from a given collateral type.

If collateral is to be recognized as basic collateral then in any case it must be valuated during the credit application review process. The valuation must be conservative and must consider all the aspects of significance for this type of collateral.

The Bank regularly assesses the value of collateral, i.e. updates the value of real estate and updates the value of material collateral. The Bank monitors a collateral in order to:

- update the base value of the collateral,
- ensure that the contractual terms of collateral are satisfied,
- verify that the collateral exists (local visits).

More detailed information concerning credit risk mitigation techniques is described in the chapter V.

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<sup>9</sup> § 1 item 2c of Appendix 2 to the KNF Resolution no. 385/2008, as amended

## IV.5 Rating system controls<sup>10</sup>

The Bank has implemented the principle of strict separation of commercial functions generating credit risk (which are performed in the Business Area) and client risk and exposure evaluation functions (which are performed by units in the Risk Area). As what regards retail exposures, assignment of a final risk assessment (rating) is done in automated way. Regarding corporate exposures, assignment of a customer risk rating, as well monitoring and possible rating update belongs to specialized entity - Rating Department.

In order to ensure the appropriate monitoring of the rating systems (adequate estimation of risk parameters and correct course of the rating and credit decision process), a validation process has been introduced, which is performed by a unit independent from the organizational units responsible for developing the models.

The following units have been established in connection with the validation process:

- the Bank's Validation Committee which is responsible for confirming the results stemming from risk models validation and for continuing the implementation of the measures prescribed by the Validation Team at the Risk Department.
- The Validation Team, which is responsible for validating and monitoring all the credit risk models used in the Bank, for developing special competence in this area and for setting a regular validation schedule that ensures a continuous evaluation of model performance.
- Model Owners and Rating System Owners responsible for the development function which involves the following: new model development, recalibration of existing models, management of factors affecting the use of a model, implementation of Validation Committee recommendations on its own and in cooperation with the IT team.

Post-audit reports and recommendations issued by the Validation Team, later approved by the Validation Committee, form grounds for taking corrective action, if required.

The Chairman of the Validation Committee is obliged to submit to the Risk Committee and, if necessary, to other committees responsible for controlling credit risk, requests from the Validation Committee regarding all the credit risk models and rating systems and the implementation status of corrective action, if exists.

The Bank stores the documentation of implemented models, rating systems, validation reports and the methodologies used to prepare validation reports; minutes on decisions made by the Validation Committee.

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<sup>10</sup> § 1 item 2d of Appendix 2 to the KNF Resolution no. 385/2008, as amended

## **IV.6 Awarding of internal risk grades<sup>11</sup>**

### **IV.6.1 *Sovereigns and central banks***

This exposure class is excluded permanently from the IRB approach.

### **IV.6.2 *Institutions***

This exposure class is excluded permanently from the IRB approach.

### **IV.6.3 *Corporates, including small and medium enterprises, specialized lending and purchased corporate receivables***

This exposure class is subject to the plan of gradual implementation of the IRB approach.

### **IV.6.4 *Retail exposures***

- **PD models**

The rating process in Bank Millennium is based on the following principles:

- awarding risk grades to all credit exposures;
- All credit decisions should be preceded by awarding a risk grade to the client;
- In the retail segment, the rating process is based on scoring/rating PD models;
- The rating process is separated and independent from the credit decision process.

With respect to probability of default (PD) models for retail exposures, there is a rating system for Small Businesses and a rating system for private individuals. Both systems use behavioral scoring models and application scoring models designed for specific client and/or product groups. The presented rating principles apply to all categories of retail exposures: residential retail exposures to individuals, qualifying revolving retail exposures and other retail exposures.

The class of residential retail exposures to individuals includes exposures which are mortgage loans or home equity loans granted to retail clients (small businesses and private individuals) and secured by mortgage.

The class of qualifying revolving retail exposures includes exposures to natural persons which are unsecured, renewable, with exposures not exceeding EUR 50,000 and which meet the requirement of low volatility of loss rates.

All the retail exposures that do not qualify to the above categories are treated as other retail exposures.

In the rating process, the powers are allocated as follows:

- Data entry (initiation function - Relationship Managers)

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<sup>11</sup> § 1 item 3 of Appendix 2 to the KNF Resolution no. 385/2008, as amended; exposure classes according to the KNF Resolution No 76/2010 as amended

- b) Verification of data
- c) Decision, awarding of the final risk grade (automated decision);

Most of the data needed to award a rating originates from internal sources (the Bank's IT systems).

In the case of new clients, application models are used to award risk grades. Behavioral scoring is calculated for the first time after three months of the client's cooperation with the Bank and then monthly, provided that the client's accounts meet the requirements of the behavioral model.

A rating awarded by a behavioral model takes precedence over a rating awarded by an application rating model.

If a behavioral model cannot be applied, the risk grade is awarded on the basis of the most recent score from the application model (applicable to the given credit product or client segment). Procedural ratings (13, 14 and 15 according to Master Scale) are awarded to clients showing signs of deteriorating borrowing capacity and creditworthiness or with overdue debt.

According to internal rules, procedural ratings take precedence over application and behavioral ratings (i.e. a procedural rating overrides an application or behavioral rating), if applicable.

Risk grades awarded by the models (or procedural ratings) may be adjusted only by Rating Department employees, upon request from relevant units in the Bank, if an error in the rating is found. Such an error must be duly documented.

- **LGD models**

Loss Given Default (LGD) models have been built for the following two portfolios:

- a) unsecured portfolio for private individuals,
- b) portfolio secured by residential real estate for private individuals.

Pursuant to Directive 48/2006 of the European Union and the KNF Resolution 76/2010 as amended, banks must estimate LGD parameters using data on defaulted exposures from all the available sources, taking into account all information that is significant for the estimation of economic loss levels.

Accordingly, the Bank has estimated LGD parameters using a database that contains all the defaults resulting from quantitative and qualitative premises included in default definitions and therefore it has ensured full compliance with the requirements of the IRB approach.

According to the LGD calculation methodology, the main factors in the calculation include: probability of cure or completion of the client recovery process, value of recoveries, costs and discount rate.

The Bank has taken the following approach to building LGD models:

- Estimate the probability of the path of cure from the default status, i.e. a probability tree;
- Estimate indirect costs;
- Estimate loss parameters for each path of cure from default.

Loss given default is estimated at a transaction level.



- **Exposure At Default (EAD) models**

An EAD model has been built for retail portfolio exposures. When estimating EAD, exposure at default was compared to the value of the limit and the book value of the exposure observed one year before the default event. Credit Conversion Factor (CCF) parameters have been calculated for product groups for which an off-balance sheet exposure could occur and where the Bank had a significant number of observations that enabled statistical conclusions to be drawn, i.e. for overdraft limits and for credit cards. In the case of guarantees, where the number of observations was insignificant, a conservative CCF value was used.

#### IV.6.5 Equity exposures

In equity exposures, the Millennium Group classifies shares and equity instruments held by any of the Bank's units. On the consolidated basis, however, the shares representing investments in subsidiaries are excluded, since those are classified as intragroup transactions. However due to the fact that the total value of the Group's equity portfolio is insignificant, it has been decided that these exposures should be excluded from the IRB approach permanently and the capital requirement for these exposures should be calculated based on the standardized approach.

### IV.7 Exposures by exposure classes<sup>12</sup>

The table below presents the value of exposures and losses expected in each of the classes defined in § 6 par. 1 of Appendix 5 to Resolution 76/2010 adopted by the Financial Supervision Commission on 10 March 2010, as later amended.

Table 6 Exposures and expected loss as at 31 December 2012

000s PLN

No.	Exposure class	Exposure value	Expected losses in PLN tsd (*)	Expected losses as % of exposure value (*)
1	Sovereigns and central banks	8,499,750		
2	Institutions	3,147,490		
3	Corporates	8,383,004		
4	Retail exposures, including:	33,487,351	451,036	1,35%
	- Residential Retail exposures	27,329,677	272,021	1,00%
	• High credit quality (1-3 MS)	17,354,759	4,076	0,02%
	• Good credit quality (4-6 MS)	5,928,320	6,453	0,11%
	• Average and low credit quality (7-12 MS)	3,226,365	32,849	1,02%
	• Procedural ratings (13-15 MS)	820,233	228,643	27,88%

<sup>12</sup> § 1 items 4, 5, 6 of Appendix 2 to the KNF Resolution no. 385/2008, as amended

	- Qualified revolving retail exposures	2,562,536	179,015	6,99%
	• High credit quality (1-3 MS)	541,480	346	0,06%
	• Good credit quality (4-6 MS)	892,786	2,507	0,28%
	• Average and low credit quality (7-12 MS)	900,661	23,829	2,65%
	• Procedural ratings (13-15 MS)	227,607	152,333	66,93%
	- Other retail exposures	3,595,138		
	Equity exposures	0		
	Securitization positions	0		
	Other non credit-exposure assets	2,472,284		
	TOTAL	55,989,879	451,036	

(\*) only for exposures covered by the IRB approach

## IV.8 Value adjustments and provisions for original exposures<sup>13</sup>

The table below shows value adjustments and provisions on account of initial exposures in each exposure class.

Table 7 Value adjustments and provisions for original exposures as at 31 December 2012

000s PLN

No.	Exposure class	Value adjustments and provisions for initial exposures
1	Sovereigns and central banks	50
2	Institutions	1,132
3	Corporates	547,698
4	Retail exposures, including:	804,146
	- Residential retail exposures	159,379
	- Qualified revolving retail exposures	106,258
	- Other retail exposures	538,509
	Equity exposures	0
	Securitization positions	0
	Other non credit-exposure assets	0
	TOTAL	1,353,026

## V. Credit risk mitigation techniques<sup>14</sup>

### V.1 Netting of exposures

The Bank does not apply netting of balance and off-balance exposures.

<sup>13</sup> § 1 item 7 of Appendix 2 to the KNF Resolution no. 385/2008, as amended

<sup>14</sup> § 2 of Appendix 2 to the KNF Resolution no. 385/2008, as amended

## V.2 Collateral valuation and collateral management policy and procedures

In the collateral management area, the Bank applies the approach, in which collateral is used to ensure that the Bank receives the repayment of principal, interest, commissions and fees if the client fails to make the payments in contractual amounts and on contractual dates. However, the main source for the repayment of receivables is always the borrower's income and/or the funded project. Accordingly, collateral should correspond to the credit risk incurred by the Bank, while taking into account the specific features of each individual credit transaction.

Legal collateral is applicable until all the amounts due to the Bank under the collateralized credit transaction are repaid. The validity date or maturity date of collateral should not be earlier than the date of total repayment of the secured credit transaction.

In respect to the valuation of loan collateral in the largest credit portfolio, i.e. residential retail loans, the loan application review process must include in each case a valuation of the real estate securing the loan performed by an expert appraiser.

The Bank monitors the collateral in order to:

- update the base value of the collateral,
- ensure that the contractual terms of collateral are satisfied,
- verify that the collateral exists (local visits).

The base value of mortgage collateral may be updated using one of the following forms:

- assessment of the value of the real estate, understood as the Bank's estimation of the current value of the real estate collateralizing the credit transaction, based on used by the Bank methods or on an analysis of the real estate market analysis on the date of the assessment.
- valuation by an expert appraiser.

Update of the base value of financial collateral

In the case of financial collateral classified as "participation units in mutual funds sold by Bank Group entities and managed by Millennium TFI" and "WSE-listed shares", their base value is updated daily.

Update of the base value of collateral (tangible)

The value of collateral is assessed once a year.

Assessment of collateral value involves the application of depreciation ratios determined by the age and type of the collateral, to its initial value. The application of depreciation begins in the year following the year of production. An assumed

period of use is assumed for every collateral item, after which a zero value of collateral is assumed.

### V.3 Description of the main types of collateral accepted by the bank

The table below presents the types and legal forms of collateral accepted by the Bank. The collateral acceptance process is regulated by special procedures. Other collateral types may be accepted if they meet certain specified requirements.

Table 8 Types of collateral used by the Bank

Type	Type	Legal form
Financial	Term deposit in the Bank in PLN/foreign currency with a 100% principal guarantee	Ownership transfer
		Registered pledge (eventually) and Ordinary pledge (temporarily)
		Ordinary pledge
		Registered pledge
	Superduet Deposit in PLN/foreign currency with a 100% principal guarantee in the deposit part	<u>For a deposit:</u> - Ownership transfer <u>For participation units in mutual funds:</u> Registered pledge (eventually) and Ordinary pledge (temporarily)
		<u>For a deposit:</u> - Registered pledge <u>For participation units in mutual funds:</u> Registered pledge (eventually) and Ordinary pledge (temporarily)
	Prestige Investment Program - SPUL in PLN/foreign currency	Transfer of receivables.
	SPE guarantee policy	Transfer of receivables
	Megazysk insurance agreement	Transfer of receivables
	Term deposit in another bank in PLN/foreign currency with a 100% principal guarantee	Transfer of receivables
		Registered pledge (eventually) and Ordinary pledge (temporarily)
	Participation units in investment funds sold by entities in the Bank's group and managed by Millennium TFI, ING TFI, Investors, Legg Mason TFI	Registered pledge (eventually) and Ordinary pledge (temporarily)
		Ordinary pledge
WSE-listed shares included in WIG 20 stock index, deposited in Millennium Brokerage House	Ownership transfer	
	Registered pledge (eventually) and Ordinary pledge (temporarily)	

Type	Type	Legal form
		Ordinary pledge
	Treasury bills deposited in Custody Department (DPO)	Ownership transfer
		Registered pledge (eventually) and Ordinary pledge (temporarily)
		Ordinary pledge
	Dematerialized State Treasury bonds admitted to organized trading, deposited in DPO or in Millennium Brokerage House	Ownership transfer
		Registered pledge (eventually) and Ordinary pledge (temporarily)
		Ordinary pledge
	Dematerialized State Treasury bonds not admitted to organized trading, deposited in DPO or in Millennium Brokerage House	Registered pledge (eventually) and Ordinary pledge (temporarily)
		Ordinary pledge
Mortgage	Residential properties (apartment complexes, houses, apartments, farm house in the case of farming land)	Mortgage
	Commercial real estate (offices, storage space, stores, service facilities, hotels)	and
	Non-residential and non-commercial property (e.g. industrial property, workshops, land)	Registered pledge and Ownership transfer (conditionally) - if collateral is established on parts of real property [e.g. devices, specialized equipment, machinery, production lines permanently connected to land or to a building which, if dismantled, will compromise the building's structure or materially reduce the value of collateral being dismantled (e.g. utilities, elevators)]
Material	Vehicles, including cars, construction equipment built on car chassis, other vehicles (e.g. semi-trailers and trailers and truck tractors)	Registered pledge and ownership transfer (temporary)
		Registered pledge for future collateral and ownership transfer (temporary)
	Fleet consisting of cars	Registered pledge and ownership transfer (temporary)
	Independent specialized hardware and machinery	Registered pledge and ownership transfer (temporary)
		Ownership transfer
	Production lines	Registered pledge and ownership transfer (temporary)
		Ownership transfer
	Collection of fixed assets consisting of specialized equipment and machinery	Registered pledge and ownership transfer (temporary)
	Inventories	Registered pledge and ownership transfer (temporary)
Ownership transfer		

Type	Type	Legal form
Receivables	Receivables under contracts pertaining to the client's business activity and lease.	Assignment of contractual receivables
	Receivables from permanent cooperation with specified business partners	Assignment of receivables from permanent cooperation with specified business partners
Guarantees and sureties	Bank guarantee	Bank guarantee
	Surety	Surety under Civil Law
		Promissory note surety

#### V.4 Main types of guarantors and business partners for credit derivatives

The Bank does not use any guarantees and credit derivatives as risk protection instruments in the capital requirement calculation process.