Capital Adequacy, Risk, Remuneration Policy Report of Bank Millennium Capital Group

as at 31 December 2018

Warszawa, on the 11 July, 2019

CAPITAL ADEQUACY, RISK, REMUNERATION POLICY REPORT OF BANK MILLENNIUM CAPITAL GROUP AS AT 31 DECEMBER 2018

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INTRODUCTION

Pursuant to the requirements set forth in Part Eight of the Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms. amending Regulation (EU) No. 648/2012 (“CRR”). this material (“Disclosures”) presents qualitative and quantitative information pertaining to the comprehensive image of the risk profile of the Bank Millennium S.A. (the “Bank”) Capital Group (“the Group”) as at 31 December 2018.

Pursuant to Article 432.1 of CRR. the Group omitted in its Disclosures any information that is not regarded as material. The Group regards as immaterial any information the omission or misstatement of which could not change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions.

Pursuant to Article 432.2, the Group may omit in its disclosures any items of information which is regarded as proprietary or confidential. Information is regarded as proprietary if the Group believes that disclosing it publicly would undermine its competitive position. Information is regarded as confidential if the Group has made an obligation to a customer or other counterparty binding it to confidentiality.

It should be noted that this material does not cover the entire scope of information to be disclosed, as defined in Part Eight of CRR. Information not included in the Disclosures has been presented in the following documents:

- Report of the Bank Millennium SA Capital Group for 12 months ended 31 December 2018, hereinafter referred to as “Yearly Financial Report”
- Management Board Report on the Activity of Bank Millennium and Capital Group of Bank Millennium for 2018, hereinafter referred to as: “Management Board Report”
- 2018 Bank Millennium and Bank Millennium Capital Group Non-financial Information Report, hereinafter referred to as “Non-financial Report”.

Disclosures of information required by Part Eight of CRR in other documents is regulated by Article 434.2 of CRR.

The information presented has been prepared on the basis of the top domestic consolidation level (Bank Millennium SA Group). In some cases data was presented for Bank Millennium SA solo as well.

The update of the document, approved by the Bank’s Management Board on the 11 July 2019, relates to tables from number 49 to 51 in Chapter 11 „Remuneration Policy”, with data on variable remuneration granted to Management Board as for year 2018.

CAPITAL ADEQUACY

Capital management and planning

Capital management relates to two areas: capital adequacy management and capital allocation. For both areas, management goals were set.

The goal of capital adequacy management is: (a) ensuring the solvency in normal and stressed conditions (economic capital adequacy/internal capital) and (b) meeting the requirements specified in external regulations (regulatory capital adequacy). Completing that goal, Bank strives to achieve internal long-term capital limits (targets), defined in Risk Strategy.

Capital allocation purpose is to create value for shareholders by maximizing the return on risk in business activity, taking into account established risk tolerance.

In a scope of capital management process, there is also a capital planning process. The goal of capital planning is to designate the own funds (capital base that is risk-taking capacity) and capital usage (regulatory capital requirements and economic capital) in a way to ensure that capital targets/limits shall be met, given forecasted business strategy and risk profile – in normal and stressed macroeconomic conditions.

Regulatory capital adequacy

Group is obliged by law to meet minimum own funds requirements, set in CRR art. 92. At the same time, the following levels, reccomendations and buffers were included in capital limits/targets setting:

- Pillar II RRE FX buffer - KNF recommendation to maintain additional own funds for the coverage of additional capital requirements in order to secure the risk resulting from FX mortgage loans granted to households, in line with art. 138.1.2a of Banking Act. A value of that buffer is defined for particular banks by KNF every year as a result of Supervisory review and Evaluation process (SREP) and relates to risk that is in KNF's opinion - inadequately covered by minimum own funds requirements, set in CRR art. 92. At present, the buffer was set by KNF in reccomendations issued in October and November 2018 in the level of 6.41 p.p. (Bank) and 6.27 p.p. (Group) as for Total Capital Ratio (TCR), which corresponds to capital requirements over Tier 1 ratio of 4.81 p.p. in Bank and of 4.70 p.p. in Group, and which corresponds to capital requirements over CET 1 ratio of 3.59 p.p. in Bank and 3.51 p.p. in Group [1];
- Combined buffer – defined in Act on macroprudential supervision over the financial system and crisis management – that consists of:
    - Capital conservation buffer at the level of 1.875%, and from the beginning of 2019 increased to target value of 2.5%;
    - Other systemically important institution buffer (OSII) – at the level of 0%, and the value is set by KNF every year[2];
    - Systemic risk buffer at the level of 3% in force from the beginning of 2018;
    - Countercyclical buffer at the 0% level.

In accordance to binding legal requirements and recommendations of Polish Financial Supervisory Authority (KNF), Bank defined minimum levels of capital ratios. being at the same time capital targets/limits. These are OCR (overall capital requirements) as for particular capital ratios.

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[1] That reccomendation replaces the previous one from 2017, to maintain own funds for the coverage of additional capital requirements at the level of 5.53 p.p. (Bank) and 5.41 p.p. (Group) as for TCR, which should have consisted of at least 4.15 p.p. (Bank) and 4.06 p.p. (Group) as for Tier 1 capital and which should have consisted of at least 3.10 p.p. (Bank) and 3.06 p.p. (Group) as for CET1 capital

[2] In August 2018 Bank informed about the decision of KNF on the rescinding the decision on identification of the Bank as other systemically important institution (O-SII) and on imposing on the Bank an O-SII buffer

The below table presents these levels as at 31 December, 2018 and in 2019.

Table 1 Minimum capital ratios as at the 2018 end and in 2019 (in %)

Capital ratio	31.12.2018		2019	
CET1 ratio	Bank	Group	Bank	Group
Minimum	4,50%	4,50%	4,50%	4,50%
Pillar II RRE FX	3,59%	3,51%	3,59%	3,51%
TSCR CET1 (Total SREP Capital Requirements)	8,09%	8,01%	8,09%	8,01%
Capital Conservation Buffer	1,875%	1,875%	2,50%	2,50%
OSII Buffer	0,00%	0,00%	0,00%	0,00%
Systemic risk buffer	3,00%	3,00%	3,00%	3,00%
Countercyclical capital buffer	0,00%	0,00%	0,00%	0,00%
Combined buffer	*4,88%*	*4,88%*	*5,50%*	*5,50%*
OCR CET1 (Overall Capital Requirements CET1)	**12,97%**	**12,89%**	**13,59%**	**13,51%**
T1 ratio	Bank	Grupa	Bank	Grupa
Minimum	6,00%	6,00%	6,00%	6,00%
Pillar II RRE FX	4,81%	4,70%	4,81%	4,70%
TSCR T1 (Total SREP Capital Requirements)	10,81%	10,70%	10,81%	10,70%
Capital Conservation Buffer	1,875%	1,875%	2,50%	2,50%
OSII Buffer	0,00%	0,00%	0,00%	0,00%
Systemic risk buffer	3,00%	3,00%	3,00%	3,00%
Countercyclical capital buffer	0,00%	0,00%	0,00%	0,00%
Combined buffer	*4,88%*	*4,88%*	*5,50%*	*5,50%*
OCR T1 (Overall Capital Requirements T1)	**15,69%**	**15,58%**	**16,31%**	**16,20%**
TCR ratio	Bank	Grupa	Bank	Grupa
Minimum	8,00%	8,00%	8,00%	8,00%
Pillar II RRE FX	6,41%	6,27%	6,41%	6,27%
TSCR TCR (Total SREP Capital Requirements)	14,41%	14,27%	14,41%	14,27%
Capital Conservation Buffer	1,875%	1,875%	2,50%	2,50%
OSII Buffer	0,00%	0,00%	0,00%	0,00%
Systemic risk buffer	3,00%	3,00%	3,00%	3,00%
Countercyclical capital buffer	0,00%	0,00%	0,00%	0,00%
Combined buffer	*4,88%*	*4,88%*	*5,50%*	*5,50%*
OCR TCR (Overall Capital Requirements TCR)	**19,29%**	**19,15%**	**19,91%**	**19,77%**

Capital risk, expressed in the above capital targets/limits, is measured and monitored in a regular manner. As for all capital targets, there are determined some minimum ranges for those values. A capital ratios in a given range causes a need to take an appropriate management decision or action. Regular monitoring of capital risk relies on classification of capital ratios to the right ranges and then performing the evaluation of trends and drivers influencing capital adequacy.

Own funds capital requirements

The Group is completing a project of an implementation of internal ratings based method (IRB) for calculation of own funds requirements for credit risk and calculates its own funds minimum requirements using the IRB and standardise method for credit risk and standardise methods for other risk types.

In the end of 2012, Banco de Portugal (consolidating Regulator) with cooperation of Polish Financial Supervision Authority (PFSA) granted an approval to the use of IRB approach as to following loan portfolios: (i) Retail exposures to individual persons secured by residential real estate collateral (RRE), (ii) Qualifying revolving retail exposures (QRRE). According to the mentioned approval, minimum own funds requirements calculated using the IRB approach should be temporarily maintained at no less than 80% (“Regulatory floor”) of the respective capital requirements calculated using the Standardized approach.

During 2014 the Bank submitted to Regulatory Authorities an IRB approval pack regarding the remaining loan portfolios under the IRB roll-out plan – “other retail” and “corporate” portfolios.

In the end of 2014, the Bank received another decision by Regulatory Authorities regarding the IRB process. According to its content, for the RRE and QRRE loan portfolios, the minimum own funds requirements calculated using the IRB approach had to be temporarily maintained at no less than 70% (“Regulatory floor”) of the respective capital requirements calculated using the Standardized approach until the Bank fulfils further defined conditions.

The Bank received the decision of Competent Authorities (ECB cooperating with KNF) in July 2017 on approval the material changes to IRB LGD models and revoking the “Regulatory floor”.

Internal capital

Group defines internal capital according to Polish Banking Act, as the estimated amount needed to cover all identified, material risks found in Group’s activity and changes in economic environment, taking into account the anticipated level of risk in the future.

Internal capital is used in capital management in following processes: economic capital adequacy management and capital allocation. The Group defined an internal (economic) capital estimation process. To this end, as for measurable risk types, mathematic and statistic models and methods are used.

Maintaining economic capital adequacy means a coverage (provision) of internal capital (that is an aggregated risk measure) by available financial resources (own funds). An obligation to banks to have in place that sort of risk coverage stems from Banking Act. It was mirrored in the Group’s capital targets/limits: economic capital buffer and economic capital buffer in stressed conditions.

In 2018, both above capital targets were met with a surplus. A surplus of own funds over internal capital supports a further increase of banking activity, in particular in areas with a higher risk-adjusted return.

At the same time internal capital is utilised in capital allocation process, to assign an internal capital to products/business lines, calculating risk-adjusted performance measures, setting risk limits and internal capital reallocation.

Capital adequacy results

Capital adequacy evolution of Bank Millennium Group and Bank Millennium SA over the last three years was as follows:

Table 2 Capital adequacy of Bank Millennium Group (PLN mln)[1)]

Capital adequacy	31.12.2018	31.12.2017	31.12.2016[2)]
Risk-weighted assets	36635.5	32693.6	36730.6
Own Funds requirements, including:	2930.8	2615.5	2938.4
- Credit risk and counterparty credit risk	2593.9	2297.7	2621.8
- Market risk	20.3	18.3	23.4
- Operational risk	313.1	293.4	279,0
- Credit Valuation Adjustment CVA	3.5	6.1	14.3
Own Funds, including:	7943.0	7190.6	6390.7
Common Equity Tier 1 Capital	7243.0	6548.8	6356.8
Tier 2 Capital	700,0	641.8	33.9
Total Capital Ratio (TCR)	**21.68%**	**21.99%**	**17.4%**
Minimum required level	19.15%	18.91%	16.55%
Surplus(+) / Deficit(-) of TCR capital adequacy (p.p.)	2.53	3.08	0.85
Tier 1 Capital ratio (T1)	**19.77%**	**20.03%**	**17.31%**
Minimum required level	15.58%	14.56%	12.79%
Surplus(+) / Deficit(-) of T1 capital adequacy (p.p.)	4.19	5.47	4.52
Common Equity Tier 1 Capital ratio (CET1)	**19.77%**	**20.03%**	**17.31%**
Minimum required level	12.89%	13.53%	12.21%
Surplus(+) / Deficit(-) of CET1 capital adequacy (p.p.)	6.88	6.50	5.10
Leverage ratio [2)]	**8.78%**	**8.88%**	**8.85%**

1) *The Group uses transitional arrangements for IFRS 9. As at 31.12.2018, if IFRS 9 transitional arrangements had not been applied, capital ratios were as follows:*
   - *TCR: 21.39%*
   - *T1: 19.47%*
   - *CET1: 19.47%*
   - *Leverage ratio: 8,62%*

2) *Risk-weighted assets and own funds requirements are calculated with 70% „Regulatory floor"*

Table 3 Capital adequacy of Bank Millennium (PLN mln)[1)]

Capital adequacy	31.12.2018	31.12.2017	31.12.2016[2)]
Risk-weighted assets	36 012.8	31 927.7	36 198.7
Own Funds requirements, including:	2 880.9	2 554.2	2 895.9
- Credit risk and counterparty credit risk	2 570.6	2 260.4	2 601.2
- Market risk	20.3	18.3	23.4
- Operational risk	286.4	269.4	257.0
- Credit Valuation Adjustment CVA	3.6	6.2	14.3
Own Funds, including:	7 738.5	7 002.3	6 252.4
Common Equity Tier 1 Capital	7 038.5	6 360.5	6 218.5
Tier 2 Capital	700.0	641.8	33.9
Total Capital Ratio (TCR)	**21.49%**	**21.93%**	**17.27%**
Minimum required level	19.29%	19.03%	16.59%
Surplus(+) / Deficit(-) of TCR capital adequacy (p.p.)	2.20	2.90	0.68
Tier 1 Capital ratio (T1)	**19.54%**	**19.92%**	**17.18%**
Minimum required level	15.69%	14.65%	12.82%
Surplus(+) / Deficit(-) of T1 capital adequacy (p.p.)	3.85	5.27	4.36
Common Equity Tier 1 Capital ratio (CET1)	**19.54%**	**19.92%**	**17.18%**
Minimum required level	12.97%	13.60%	12.23%
Surplus(+) / Deficit(-) of CET1 capital adequacy (p.p.)	6.57	6.32	4.95
Leverage ratio [2)]	**8.57%**	**8.68%**	**8.74%**

1) The Group uses transitional arrangements for IFRS 9. As at 31.12.2018, if IFRS 9 transitional arrangements had not been applied, capital ratios were as follows:

- *TCR: 21.20%*
- *T1: 19.25%*
- *CET1: 19.25%*
- *Leverage ratio: 8,41%*

2) Risk-weighted assets and own funds requirements are calculated with 70% „Regulatory floor"

As at 2018 end, capital adequacy in Bank Millennium Group remained on very high and safe level. Total Capital Ratio stayed at year end at 21.68% level for the Group (21.49% for the Bank) and Common Equity Tier 1 Capital ratio (equals T1 ratio) was at 19.77% for the Group (19.54% for the Bank). Therefore, minimum capital levels required by KNF for Bank and Group were achieved with a surplus.

As at 2018 end, capital adequacy in Group, measured by Common Equity Tier 1 Capital ratio and Total Capital Ratio, decreased in one year period by ca 0.3 p.p.

In 2018, risk-weighted assets grew by ca PLN 3.9 billion (by 12%), as result of the growth of loan portfolio. Own Funds raised by ca PLN 753 million in 2018, mainly as a result of 100% retention of 2017 net earnings.

Minimum capital levels required by KNF for Bank and Group were achieved with a surplus.

In January 2019 KNF sent to Bank the individual dividend policy recommendation, in which it set the following additional buffers for dividend distribution above minimum required as at 2018 end for TCR: +1.5% and full conservation buffer 2.5% to pay 75%; + additional Stress test add-on (3.14% for the Bank/Group) to pay 100%. KNF kept additional criteria for banks with FX mortgage portfolio (K1 based on FX mortgage share in total portfolio and K2 based on share of 2007-2008 vintages in total FX mortgage portfolio).

Bank Millennium has a dividend policy of distributing between 35% to 50% of net profit, subject to regulatory recommendations. The high capital ratios (as at 2018 year-end) would allow to pay 75% if not additional K1/K2 criteria. Taking above into account and considering the planned acquisition of Eurobank SA, the Management Board of the Bank will submit to AGM a proposal of full retention of 2018 net profit in Bank's own funds. Assuming acceptance of this proposal by AGM, positive impact on T1 and TCR ratio will be approximately 2.1 p.p. (to levels 21.85% and 23.76% for Group, respectively).

After the reporting period, i.e. on 17 January 2019 the Bank had taken decision on the issue of PLN 830 million of subordinated bonds which were fully paid and subscribed as on 30 January 2019. The Bonds, after approval of KNF will constitute Bank's Tier II instruments and will result in further increase of

Group's TCR ratio by ca 2.3 p.p. to the level of 26.02% (based on 31.12.2018 data, including retention of full 2018 net profits).

Leverage ratio stood at the safe level of 8%-9%, with a small quarterly changes and exceeds almost three times a value deemed as safe (3%).

In a long perspective, capital adequacy level of Bank and Group is evaluated as satisfactory. Capital ratios are in long-term increasing trend, and their levels significantly exceed values defined in regulations.

RISK MANAGEMENT GOALS AND STRATEGY

Rules management goals

The mission of risk management in the Bank Millennium Group is to ensure that all types of risks are managed, monitored and controlled as required for the risk profile (risk tolerance), nature and scale of the Group's operations. Important principle of risk management is the optimization of the risk and profitability trade-off – the Group pays special attention to ensure that its business decisions balance risk and profit adequately.

The goals of the risk management mission are achieved through implementation of the following actions:

- Development of risk management strategies, credit policy, processes and procedures defining the principles for acceptance of the allowable level of particular types of risk,
- Increasingly wider implementation of the IT tools for risks identification, control and measurement,
- Increasing awareness of employees as regards their responsibility for proper risk management at every level of the Group's organisational structure.

Risk management is centralized for the Group and takes into account the need to obtain the assumed profitability and to maintain proper risk-capital relationship, in the context of having proper level of capital to cover the risk. Within risk management system, a broad range of methods is used, both qualitative and quantitative, including advanced mathematical and statistical tools supported by adequate IT systems.

When defining the business and profitability targets, the Group takes into account the specified risk framework (Risk Tolerance) in order to ensure that business structure and growth will respect the risk profile that is targeted and that will be reflected in several indicators such as:

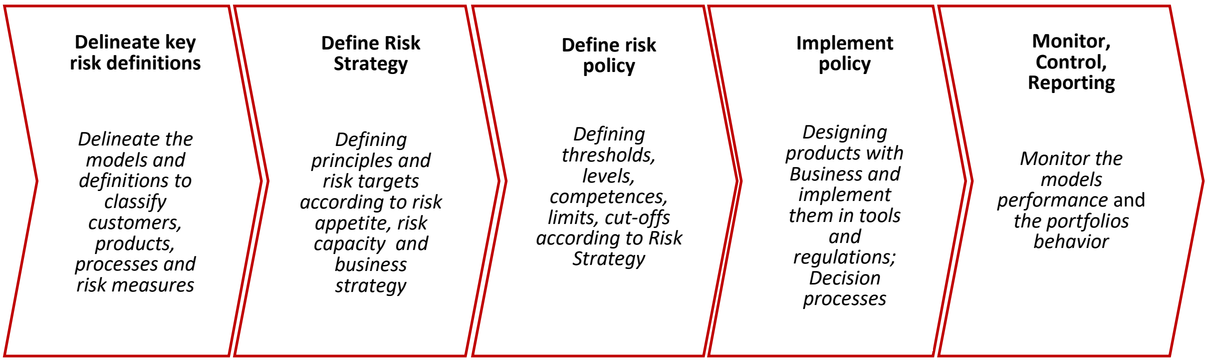
- Loan growth in specific products / segments
- Structure of the loan portfolio
- Asset quality indicators
- Cost of risk
- Capital requirements / Economic capital
- Amount and structure of liquidity needed.

Risk management model

The risk management and control model at the Group's level is based on the following main principles:

- ensuring the full-scope quantification and parameterization of various types of risks in the perspective of optimizing balance sheet and off-balance sheet items to the assumed level of profitability of business activity. The main areas of analysis encompass credit risk, market risk, liquidity risk and operational risk;
- all types of risks are monitored and controlled in reference to the profitability of operations and the level of capital necessary to ensure the safety of operations from the point of view of capital adequacy. The results of risk measuring are regularly reported as part of the management information system;
- the segregation of duties between risk origination, risk management and risk control.

The Risk management process of the Group is presented in the below diagram:



Segregation of duties in risk management

The split of competence in the field of risk management is as follows:

- The Supervisory Board is responsible for overseeing the compliance of the Group's risk-taking policy with the Group's strategy and its financial plan. Within the Supervisory Board acts the Committee for Risk Matters, which supports it in realization of those tasks, among others. issuing opinion on the Group's Risk Strategy, including the Group's Risk Appetite and verifying the assets and liabilities prices offered to customers.
- The Management Board is responsible for the effectiveness of the risk management system, internal capital estimation process, for reviewing the internal capital calculation and maintenance process and the internal control systems;
- The Credit Committee, the Capital, Assets and Liabilities Committee, and the Liabilities at Risk Committee are responsible for current management of different areas of banking risk, within the framework determined by the Management Board;
- The Risk Committee and the Processes and Operational Risk Committee are responsible for defining the policy and for monitoring and control of different areas of banking risk, within the framework determined by the Management Board;
- The Validation Committee is responsible for confirmation of risk models validation results and follow-up in the implementation of the measures defined by the Models Validation Office;
- The Risk Department is responsible for risk management, including identifying, measuring, analysing, monitoring and reporting on risk within the Bank. The Risk Department also prepares risk management policies and procedures as well as provides information and proposes courses of action necessary for the Capital, Assets and Liabilities Committee, Risk Committee and the Management Board to make decisions with respect to risk management;
- The Rating Department is mainly responsible for risk rating assignment for Corporate clients (based on the evaluation of clients' creditworthiness) as well as for rating monitoring and potential revision during the period of its validity. Rating assignment process is independent from credit decision process;
- The Corporate Credit Underwriting Department and the Retail Credit Underwriting Department have responsibility, within the Corporate Customer segment and Retail Customer segment, respectively, for the credit decision process, including analyzing customers' financial situation, preparing credit proposals for the decision-making levels and making credit decisions within specified limits;
- The Retail Liabilities Collection Department has responsibility for monitoring repayment of overdue debts by retail customers and their collection;
- The Corporate Recovery Department develops specific strategies with respect to each debtor from recovery portfolio, which aims to maximize timely collection of the outstanding debt and minimize the risk incurred by the Group. This approach is constantly revised to reflect updated information, and the best practices and experiences regarding collection of overdue debts;
- The Treasury Control and Analyses Office has responsibility for monitoring the use of part of the Group's limits, including counterparty and stop-loss limits, the Group's FX position, results of active trading and control of operations of the treasury segment;
- The Models Validation Office has responsibility for qualitative and quantitative models analysis and validation, independent from the function of models development; development of the models validation and monitoring tools; activities connected with issuing opinions on the adequacy of the models for the segment, for which they were developed; preparing reports for the Validation Committee needs;
- Fraud Risk Management Team has responsibility for implementation and monitoring the Bank policy execution in the scope of fraud risk management in cooperation with others Bank units. Team constitutes a competence center for anti-fraud process;
- The Compliance Department has the responsibility to ensure compliance with legal regulations, related regulatory standards, market principles and standards as well as internal organization regulations and codes of conduct.

Risk management strategy

The Group has prepared a comprehensive guideline document for the risk management policy/strategy: "Risk Strategy for 2019-2021". The document takes a 3-year perspective and is reviewed and updated annually. It is approved by the Bank's Management Board and Supervisory Board. The risk strategy is inextricably linked to other strategic documents. such as: Budget, Liquidity Plan, Capital Plan.

The Risk Strategy bases on the two concepts defined by the Group:

1. Risk profile – current risk profile in amount or type of risk the Group is currently exposed. The Group should also has a forward looking view how their risk profile may change under both expected and stress economic scenarios in accordance with risk appetite and risk tolerance.
2. Risk tolerance – the maximum amount or type of risk the Group is prepared to accept tolerate to achieve its financial and strategic objective. Three zones are defined in accordance with warning / action required level.

Goal of Risk Strategy is to define a risk profile and to maintain a risk profile for all risk types within the limits set in the risk tolerance.

Risk tolerance measures consider both the current and forecasted target risk profile. They have been defined in the key areas, listed below:

- Solvency
- Asset quality
- Liquidity and funding
- Earnings volatility
- Business mix
- Franchise and reputation.

The Group has a clear risk strategy, covering retail credit, corporate credit, markets activity and liquidity, operational and capital management. For each risk type and overall the Group clearly defines the risk tolerance.

The Risk Tolerance of the Group is mainly defined through the principles and targets defined in Risk Strategy and complemented in more detail by the principles and qualitative guidelines defined in the following documents:

a. Capital Management and Planning Framework
b. Credit Principles and Guidelines
c. Rules on Concentration Risk Management
d. Principles and Rules of Liquidity Risk Management
e. Principles and Guidelines on Market Risk Management on Financial Markets
f. Principles and Guidelines for Market Risk Management in Banking Book
g. Investment Policy
h. Principles and Guidelines for Management of Operational Risk
i. Stress tests policy.

Within risk tolerance, the Group have defined tolerance zones (build up based on the “traffic lights” principle). As for all tolerance zones have been set:

- Escalation process of taken decisions/actions (bodies/organizational entities responsible for decisions and actions)
- Catalogue of decisions/actions on risk controls and mitigation
- Risk tolerance monitoring procedures.

Risk management information system

Bank and Group have in place an integrated management information system that enables them to generate reports on identification, measurement and control measures relating to the management of individual risk types.

Bank and Group have defined the risk exposure reporting policy for management purposes, which sets forth the general rules for preparing and distributing information used to manage different risks. The unit responsible for preparing reports on exposure to different risks is mainly the Risk Department. The frequency and information content of the reports is adjusted to the level of powers and responsibilities of their recipients and also to the changes in the Bank’s and the Group’s risk profile.

Information contained in internal reports enable reliable evaluation of the risk exposure and support the decision-making process in the bank’s risk management area.

The reports also include information on exposure to risks in the business activity of the subsidiaries.

Risk exposure reports for management purposes are addressed to:

- Supervisory Board (reports approved by the Bank's Management Board)

- Bank’s Management Board
- Committees dedicated to risk management – Risk Committee, Capital, Assets and Liabilities Committee, Credit Committee, Liabilities at Risk Committee, Validation Coommittee, Processes and Operational Risk Committee
- Members of the Bank’s Management Board
- Risk Department (internal reports)

The risk exposure reporting policy defines the following for each addressee:

- Information content (e.g. synthetic information about the credit portfolio, including key risk parameters, change in revaluation charges in the profit and loss account. etc.).
- Information format
- Information frequency (CRR 435.2.e).

Other information

In respect to individual disclosures made pursuant to Article 435.1 of CRR. the following:

- the structure and organization of the relevant risk management function including information on its authority and statute. or other appropriate arrangements;
- the scope and nature of risk reporting and measurement systems;
- the strategy for hedging and mitigating risk. and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants,

have been discussed in risk management chapters in the Yearly Financial Report and the Management Board Report.

The declarations on the adequacy of risk management arrangements providing assurance that the risk management systems put in place are adequate with regard to the profile and strategy are presented at the end of this document. (CRR 435.1.e)

Discussion of the overall risk profile. with key indicators and figures. have been included in the Yearly Financial Reports and the Management Board Reports, in the chapters on risk management. (CRR 435.1.f)

Every Board Member holds 1 directorship. (CRR 435.2.a)

The Bank has established a separate risk committee: Bank Millennium SA Risk Committee. In 2018 the Committee held 14 meetings. (CRR 435.2.d).

Table EU OVA – Institution risk management approach

Informations in that chapter and in another indicated above documents are disclosed compliant with the requirements of the Table EU OVA – Institution risk management approach (EBA/GL/2016/11).

CRR SCOPE OF APPLICATION AND OWN FUNDS

The scope of consolidation of the Capital Group of Bank Millennium SA as determined in accordance with the prudential regulations (Regulation CRR) is the same as the scope of consolidation made for the preparation of consolidated financial statements prepared by the Group in accordance with IAS/IFRS. The Group did not make any exclusions of consolidated entities in comparison to IFRS financial statements, based on possibility provided by article 19.1 of the CRR.

Table 4 EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

			Carrying values of items				
ASSETS (PLN thous.)	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitization framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
Cash, cash balances at central banks	2 450 176	2 450 176	2 447 954				
Financial assets held for trading	794 718	794 718	693 418	112 167			
Derivatives	101 372	101 372		112 167			
Equity instruments	104	104	104				
Debt securities	693 242	693 242	693 314				
Non-trading financial assets mandatorily at fair value through profit or loss, other than Loans and advances to customers	64 796	64 796	64 796				
Equity instruments	21 609	21 609	21 609				
Debt securities	43 187	43 187	43 187				
Financial assets at fair value through other comprehensive income	22 133 938	22 133 938	22 122 381				
Equity instruments	29 299	29 299	29 299				
Debt securities	22 104 639	22 104 639	22 093 082				
Financial assets available for sale	n/d	n/d					
Equity instruments	n/d	n/d					

Debt securities	n/d	n/d						
Loans and advances to customers	52 711 680	52 711 680	53 735 945					
Mandatorily at fair value through profit or loss	1 250 525	1 250 525						
Valued at amortised cost	51 461 155	51 461 155						
Financial assets at amortised cost other than Loans and advances to customers	1 026 420	1 026 420	779 142	250 247				
Debt securities	44 884	44 884	44 868					
Deposits, loans and advances to banks and other monetary institutions	731 252	731 252	734 274					
Repurchase agreements	250 284	250 284		250 247				
Derivatives – Hedge accounting	125 501	125 501		115 998				
Investments in subsidiaries, joint ventures and associates	0	0						
Tangible assets	210 641	210 641	210 641					
Intangible assets	96 464	96 464	96 464					
Tax assets	335 297	335 297	335 286					
Current tax assets	11	11						
Deferred tax assets	335 286	335 286						
Other assets	483 609	483 609	477 615					
Non-current assets and disposal groups classified as held for sale	25 674	25 674	25 674					
Total assets	**80 458 914**	**80 458 914**	**80 989 317**	**478 412**				

Table 5 EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements (PLN thous.)

		Total	Items subject to			
			Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitization framework	Subject to the market risk framework
1	Assets carryiyng value amount under the scope of regulatory consolidation (as per template EU LI1)	80 458 914	80 989 317	478 412		
2	Liabilities carryiyng value amount under the scope of regulatory consolidation (as per template EU LI1)	80 458 914				
3	Total net amount under the regulatory scope of consolidation	80 458 914				
4	Off-balance-sheet amounts	9 855 664	9 686 300			
5	*Differences*					
6	Exposure amounts considered for regulatory purposes	90 314 578	90 675 617	478 412		

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

Considering that used in the Group method of the accounting consolidation is the same as the method of regulatory consolidation, the Table EU LI3 (EBA/GL/2016/11) is not presented.

Table EU LIA –Explanations of differences between accounting and regulatory exposure amounts

The exposure value used to calculate minimum capital requirements consists of capital, interest due and penalty interest. The Bank adopted a more conservative formula for determining the exposure, comparing to the balance sheet items, where the adjustment of the effective interest rate was not taken under consideration and from the other hand penalty interests were included. At the same time, the full compliance between the basis of calculation and the basis for estimating risk parameters using in capital requirements calculation is assured.

Exposure amount being the base for capital requirements calculation is being higher than balance-sheet exposure amount, what is in line a conservative way of risk estimation.

Companies included in consolidation as at 31.12.2018 are presented in the following table:

Table 6 Companies of Bank Millennium Group included in consolidation as at 31.12.2018

Company	Activity domain	Head office	% of the Group's capital share	% of the Group's voting share	Recognition in financial statements
BANK MILLENNIUM SA	banking services	Warsaw	Parent company		full consolidation
MILLENNIUM LEASING Sp. z o.o.	leasing services	Warsaw	100	100	full consolidation
MILLENNIUM DOM MAKLERSKI S.A.	brokerage services	Warsaw	100	100	full consolidation
MILLENNIUM TFI S.A.	investment funds management	Warsaw	100	100	full consolidation
MB FINANCE AB	funding companies from the Group	Stockholm	100	100	full consolidation
MILLENNIUM SERVICE Sp. z o.o.	rental and management of real estate, insurance and brokers activity	Warsaw	100	100	full consolidation
MILLENNIUM GOODIE Sp. z o.o.	web portals activity	Warsaw	100	100	full consolidation
MILLENNIUM TELECOMMUNICATION SERVICES Sp. z o.o.	financial operations - equity markets, advisory services	Warsaw	100	100	full consolidation
Piast Expert Sp. z o.o.	marketing services	Tychy	100	100	full consolidation
LUBUSKIE FABRYKI MEBLI S.A. in liquidation	furniture manufacturer	Świebodzin	50 (+1 share)	50 (+1 share)	equity method valuation (*)
BG LEASING S.A. in bankruptcy	leasing services	Gdańsk	74	74	historical cost (*)

(*) Despite having a control over the companies Lubuskie Fabryki Mebli S.A. and BG Leasing S.A., due to insignificant nature of these companies from the realization of the primary goal of the consolidated financial statements point of view, which is the correct presentation of Group's financial situation, the Group does not consolidate capital involvement in aforementioned enterprises.

As at 31 December 2018 none of the Group's companies disclosed the capital shortage in relation to existing capital requirements.

Group considers that there are no current or foreseen material or legal impediment to the prompt transfer of own funds or repayment of liabilities among parent undertaking and its subsidiaries. (Art. 436.c)

Group did not receive from competent authorities waiver from application of prudential requirements on an individual basis, based on CRR art. 7. Group did not receive a permission of competent authorities, based on CRR art. 9. (art. 436.e)

The below table presents own funds components of Group as at 31.12.2018.

Table 7 Bank Millennium Group Own Funds as at 31.12.2018 (in PLN thous.)

ID	Item	Amount
1	OWN FUNDS	**7 942 989**
1.1	TIER 1 CAPITAL	7 242 989
1.1.1	COMMON EQUITY TIER 1 CAPITAL	7 242 989
1.1.1.1	Capital instruments eligible as CET1 Capital	2 360 619
1.1.1.1.1	Paid up capital instruments	1 213 117
1.1.1.1.2	Memorandum item: Capital instruments not eligible	0
1.1.1.1.3	Share premium	1 147 502
1.1.1.1.4	(-) Own CET1 instruments	0
1.1.1.1.4.1	(-) Direct holdings of CET1 instruments	0
1.1.1.1.4.2	(-) Indirect holdings of CET1 instruments	0
1.1.1.1.4.3	(-) Synthetic holdings of CET1 instruments	0
1.1.1.1.5	(-) Actual or contingent obligations to purchase own CET1 instruments	0
1.1.1.2	Retained earnings	-257 351
1.1.1.2.1	Previous years retained earnings	-257 351
1.1.1.2.2	Profit or loss eligible	0
1.1.1.2.2.1	Profit or loss attributable to owners of the parent	760 651
1.1.1.2.2.2	(-) Part of interim or year-end profit not eligible	-760 651
1.1.1.3	Accumulated other comprehensive income	73 692
1.1.1.4	Other reserves	5 217 876
1.1.1.5	Funds for general banking risk	228 902
1.1.1.6	Transitional adjustments due to grandfathered CET1 Capital instruments	0
1.1.1.7	Minority interest given recognition in CET1 capital	0
1.1.1.8	Transitional adjustments due to additional minority interests	0
1.1.1.9	Adjustments to CET1 due to prudential filters	30 576
1.1.1.9.1	(-) Increases in equity resulting from securitised assets	0
1.1.1.9.2	Cash flow hedge reserve	55 541
1.1.1.9.3	Cumulative gains and losses due to changes in own credit risk on fair valued liabilities	0
1.1.1.9.4	Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities	0
1.1.1.9.5	(-) Value adjustments due to the requirements for prudent valuation	-24 965
1.1.1.10	(-) Goodwill	0
1.1.1.10.1	(-) Goodwill accounted for as intangible asset	0
1.1.1.10.2	(-) Goodwill included in the valuation of significant investments	0
1.1.1.10.3	Deferred tax liabilities associated to goodwill	0
1.1.1.11	(-) Other intangible assets	-96 464
1.1.1.11.1	(-) Other intangible assets gross amount	-96 464

1.1.1.11.2	Deferred tax liabilities associated to other intangible assets	0
1.1.1.12	(-) Deferred tax assets that rely on future profitability and do not arise from temporary differences net of associated tax liabilities	0
1.1.1.13	(-) IRB shortfall of credit risk adjustments to expected losses	-456 878
1.1.1.14	(-)Defined benefit pension fund assets	0
1.1.1.14.1	(-)Defined benefit pension fund assets gross amount	0
1.1.1.14.2	Deferred tax liabilities associated to defined benefit pension fund assets	0
1.1.1.14.3	Defined benefit pension fund assets which the institution has an unrestricted ability to use	0
1.1.1.15	(-) Reciprocal cross holdings in CET1 Capital	0
1.1.1.16	(-) Excess of deduction from AT1 items over AT1 Capital	0
1.1.1.17	(-) Qualifying holdings outside the financial sector which can alternatively be subject to a 1250% risk weight	0
1.1.1.18	(-) Securitisation positions which can alternatively be subject to a 1250% risk weight	0
1.1.1.19	(-) Free deliveries which can alternatively be subject to a 1250% risk weight	0
1.1.1.20	(-) Positions in a basket for which an institution cannot determine the risk weight under the IRB approach. and can alternatively be subject to a 1250% risk weight	0
1.1.1.21	(-) Equity exposures under an internal models approach which can alternatively be subject to a 1250% risk weight	0
1.1.1.22	(-) CET1 instruments of financial sector entities where the institution does not have a significant investment	0
1.1.1.23	(-) Deductible deferred tax assets that rely on future profitability and arise from temporary differences	0
1.1.1.24	(-) CET1 instruments of financial sector entities where the institution has a significant investment	0
1.1.1.25	(-) Amount exceeding the 17.65% threshold	0
1.1.1.26	Other transitional adjustments to CET1 Capital	142 018
1.1.1.27	(-) Additional deductions of CET1 Capital due to Article 3 CRR	0
1.1.1.28	CET1 capital elements or deductions - other	0
1.1.2	ADDITIONAL TIER 1 CAPITAL	0
1.1.2.1	Capital instruments eligible as AT1 Capital	0
1.1.2.1.1	Paid up capital instruments	0
1.1.2.1.2*	Memorandum item: Capital instruments not eligible	0
1.1.2.1.3	Share premium	0
1.1.2.1.4	(-) Own AT1 instruments	0
1.1.2.1.4.1	(-) Direct holdings of AT1 instruments	0
1.1.2.1.4.2	(-) Indirect holdings of AT1 instruments	0
1.1.2.1.4.3	(-) Synthetic holdings of AT1 instruments	0
1.1.2.1.5	(-) Actual or contingent obligations to purchase own AT1 instruments	0
1.1.2.2	Transitional adjustments due to grandfathered AT1 Capital instruments	0
1.1.2.3	Instruments issued by subsidiaries that are given recognition in AT1 Capital	0
1.1.2.4	Transitional adjustments due to additional recognition in AT1 Capital of instruments issued by subsidiaries	0

1.1.2.5	(-) Reciprocal cross holdings in AT1 Capital	0
1.1.2.6	(-) AT1 instruments of financial sector entities where the institution does not have a significant investment	0
1.1.2.7	(-) AT1 instruments of financial sector entities where the institution has a significant investment	0
1.1.2.8	(-) Excess of deduction from T2 items over T2 Capital	0
1.1.2.9	Other transitional adjustments to AT1 Capital	0
1.1.2.10	Excess of deduction from AT1 items over AT1 Capital (deducted in CET1)	0
1.1.2.11	(-) Additional deductions of AT1 Capital due to Article 3 CRR	0
1.1.2.12	AT1 capital elements or deductions - other	0
1.2	TIER 2 CAPITAL	700 000
1.2.1	Capital instruments and subordinated loans eligible as T2 Capital	700 000
1.2.1.1	Paid up capital instruments and subordinated loans	700 000
1.2.1.1	Memorandum item: Capital instruments and subordinated loans not eligible	0
1.2.1.3	Share premium	0
1.2.1.4	(-) Own T2 instruments	0
1.2.1.4.1	(-) Direct holdings of T2 instruments	0
1.2.1.4.2	(-) Indirect holdings of T2 instruments	0
1.2.1.4.3	(-) Synthetic holdings of T2 instruments	0
1.2.1.5	(-) Actual or contingent obligations to purchase own T2 instruments	0
1.2.2	Transitional adjustments due to grandfathered T2 Capital instruments and subordinated loans	0
1.2.3	Instruments issued by subsidiaries that are given recognition in T2 Capital	0
1.2.4	Transitional adjustments due to additional recognition in T2 Capital of instruments issued by subsidiaries	0
1.2.5	IRB Excess of provisions over expected losses eligible	0
1.2.6	SA General credit risk adjustments	0
1.2.7	(-) Reciprocal cross holdings in T2 Capital	0
1.2.8	(-) T2 instruments of financial sector entities where the institution does not have a significant investment	0
1.2.9	(-) T2 instruments of financial sector entities where the institution has a significant investment	0
1.2.10	Other transitional adjustments to T2 Capital	0
1.2.11	Excess of deduction from T2 items over T2 Capital (deducted in AT1)	0
1.2.12	(-) Additional deductions of T2 Capital due to Article 3 CRR	0
1.2.13	T2 capital elements or deductions - other	0
	Common Equity Tier1 Ratio (CET1)	**19.77%**
	Total Capital Ratio (TCR)	**21.68%**

Reconciliation of items of own funds and equity reported in the audited financial report

Table 8 Reconciliation of items of own funds and equity reported in the Yearly Financial Report (in PLN thous.)

Item	Note of financial report	Value in financial report	Item in Table No. 7
Subordinated liabilities	35	701 883	1.2.1.1
Share capital	39	1 213 117	1.1.1.1.1
Capital from sale of shares over nominal value	List of equity items page 10	1 147 502	1.1.1.1.3
Revaluation capital	39	73 692	1.1.1.3
Retained earnings	39	5 950 075	1.1.1.2 1.1.1.4 1.1.1.5 1.1.1.2.2.1
Total equity and subordinated liabilities reported in the audited financial report		9 086 270	
Part of net result, which cannot be included in own funds as of reporting date for purposes of calculation of prudential standards		-760 651	1.1.1.2.2.2
Gross amount of other intangible assets		-96 464	1.1.1.11.1
Shortage of credit risk corrections in view of expected losses according to IRB approach		-456 878	1.1.1.13
Transitional adjustments due to IFRS 9		142 018	1.1.1.26
Value correction due to requirements on prudential valuation		-24 965	1.1.1.9.5
Correction by part of principal of subordinated liability. which cannot be included in own funds		0	1.2.1.1
Correction by interest accrued on subordinated liability		-1 883	1.2.1.1
Provision for instruments hedging cash flows		55 541	1.1.1.9.2
Total own funds		7 942 989	1

Items non deducted from own funds

As at 31 December 2018 the Group did not make significant investments in financial sector entities, as mentioned in article 43 CRR.

In case of deferred tax assets, mentioned in article 38 CRR, their value constitutes 4.6% of adjusted Tier I and in consequence it is exempted from deductions in keeping with article 48 CRR. At the same time this amount was assigned a risk weight of 250% for purposes of calculation of capital requirements.

CAPITAL REQUIREMENTS AND INTERNAL CAPITAL

5.1 Capital requirements by exposure classes and risk types

Group and Bank calculate total risk exposure amount and maintain own funds requirements in accordance with CRR article 92.

As at the 31st December, 2018 total risk exposure amount was calculated as the sum of the following items:

- Risk weighted exposure amounts for credit risk and dilution risk according to internal rating based method for retail exposures for individual customers secured on residential real estates (RRE) and revolving retail exposures (QRRE) and these calculated according the standard method as for other portfolios
- Own funds requirements to settlement/delivery risk and free deliveries
- Own funds requirements to trading book business for position risk and large exposures exceeding the limits specified in articles 395-401 CRR
- Own funds requirements to market risk as for foreign-exchange risk. settlement risk and commodities risk
- Own funds requirements to credit valuation adjustment risk
- Own funds requirements to operational risk
- Own funds requirements to counterparty credit risk.

Amounts of risk exposures and capital requirements, disclosed according to CRR art. 438.c-f, are showed in the below table.

Table 9 EU OV1 Overview of risk-weighted assets (PLN thous.)

			RWAs			Minimum capital requirements
			31.12.2018	31.12.2017	30.09.2018	31.12.2018
CRR	1	Credit risk (excluding CCR)	31 504 636	27 855 522	29 642 272	2 520 371
Art. 438cd	2	*of which the standardized approach*	21 944 694	19 301 513	20 935 142	1 755 576
Art. 438cd	3	*of which the foundation IRB (FIRB) approach*	0			0
Art. 438cd	4	*of which the advanced IRB (AIRB) approach*	9 559 942	8 554 008	8 707 130	764 795
Art. 438d	5	*of which equity IRB under the simple risk-weighted approach or the IMA*	0			0
Art. 107 Art. 438cd	6	CCR	125 118	223 875	100 726	10 009
Art. 438cd	7	*of which mark-to-market*	81 432	147 884	60 565	6 515
Art. 438cd	8	*of which original exposure*	0			0
	9	*of which standardized approach*	0			0
	10	*of which internal model method (IMM)*	0			0
Art. 438cd	11	*of which risk exposure amount for contributions to the default fund of a CCP*	0			0
Art. 438cd	12	*of which CVA*	43 686	75 991	40 161	3 495
Art. 438e	13	Settlement risk	0			0
Art. 449oi	14	Securitization exposures in the banking book (after the cap)	0			0

	15	*of which IRB approach*	0			0
	16	*of which IRB supervisory formula approach (SFA)*	0			0
	17	*of which internal assessment approach (IAA)*	0			0
	18	*of which standardized approach*	0			0
Art. 438e	19	Market risk	253 788	228 878	339 106	20 303
	20	*of which standardized approach*	253 788	228 878	339 106	20 303
	21	*of which IMA*	0			0
Art. 438e	22	Large exposures	0			0
Art. 438f	23	Operational risk	3 913 781	3 667 260	3 884 896	313 102
	24	*of which basic indicator approach*	2 311			0
	25	*of which standardized approach*	3 911 470	3 667 260	3 884 896	312 918
	26	*of which advanced measurement approach*	0			0
Art. 437.2, Art. 48, Art. 60	27	Amounts below the thereshold for deduction (subject to 250% risk weight)	838 216	718 105	855 150	67 057
Art. 500	28	Floor adjustment	0			0
	29	Total	36 635 539	32 693 640	34 822 150	2 930 843

In y-o-y, total risk-weighted assets grew by 12% (by ca PLN 3.9 bn). The increase in RWA on credit risk had a dominant influence on this change (almost 94% of total RWA change), mainly on exposures to retail customers (51% of change in RWA credit risk) and exposures to corporates (44% of this change). RWA for other risks are less important. The analysis of RWA changes is presented in the following Table 10.

Table 10 Analysis of RWA's main changes in 2018 (PLN million)

Item	Yearly change in 2018 (in PLN milllion)	Yearly change in 2018 (in %)
Total RWA, including:	3 942	12%
- RWA credit risk (including CCR) [1)]	3 703	13%
> RWA retail exposures	1 911	14%
> RWA corporate exposures	1 621	13%
> RWA other exposures	171	12%
- RWA market risk	25	11%
- RWA CVA [2)]	-32	-43%
- RWA operational risk	247	7%

1) *CCR - counterparty credit risk*
2) *CVA - credit valuation adjustment*

The below table presents risk-weighted assets flow statements of credit risk exposures under IRB approach, what relates to retail exposures to individual persons secured by residential real estates (RRE) and qualifying revolving retail exposures (QRRE). That information is disclosed in accordance to CRR art. 438.d.

Table 10A EU CR8 - RWA flow statements of credit risk exposures under IRB approach

Date: 31 December 2018 (reporting period), 30 September 2018 (previous reporting period), PLN thous

		RWA amounts	Capital requirements
1	**RWAs as at the end of the previous reporting period**	**8 707 130**	**696 570**
2	Asset size	554 489	44 359
3	Asset quality	234 701	18 776
4	Model updates	0	0
5	Methodology and policy	0	0
6	Acquisitions and disposals	0	0
7	Foreign exchange movements	61 420	4 914
8	Other	2 202	176
9	**RWAs as at the end of the reporting period**	**9 559 942**	**764 795**

relates to retail exposures to individual persons secured by residential real estate collateral (RRE) and qualifying revolving retail exposures (QRRE)

Table EU INS1 – Non-deducted participations in insurance undertakings

Considering that Bank does not have holdings of own funds instruments of an insurance undertaking, a re-insurance undertaking or an insurance holding company and does not have permit according to the paragraph 49.1 CRR, Table EU INS1 (EBA/GL/2016/11) is not presented.

5.2 Internal capital

The Group and the Bank calculate and maintain on an ongoing basis internal capital amount, that is considered to cover adequately the nature and level of the risk to which they are or might be exposed, according to art. 73 od Directive 2013/36/UE.

Group and Bank carry out the internal capital adequacy assessment process (ICAAP) in reliance on the models of internal (economic) capital.

Group and Bank define 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 models quantify 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 1-year time horizon.

Internal capital is calculated and maintained as to every risk type evaluated as a material one and as to risk types, to which own funds requirements are maintained, according to CRR.

Those are the following risk types, presented together with methods of internal capital estimation. The last risk materiality assessment was completed in December 2018.

Table 11 Methodologies to estimate internal capital to risk types

Risk type	Internal capital estimation method
Credit risk and counterparty credit risk	VaR for credit risk – modified Credit Risk + model
Market risk – trading portfolio	Modified VaR model
Market risk – interest rate in banking portfolio	Modified VaR model
Risk of equities in banking portfolio	Own funds requirements to equities
Credit valuation adjustment risk	Own funds requirements to credit valuation adjustment risk
Additional internal capital stemming from decision of the competent authority on maintaining own funds to cover risk of retail exposures denominated in FX secured on residential real estates	Modified methodology of calculation of additional own funds requirements to cover risk of retail exposures denominated in FX secured on residential real estates

Hard-to-measure risks	Methodology of defining of internal capital to hard-to-measure risk types
Operational risk	Modified standard method

Risk types materiality assessment in 2018 covered in total 36 defined by the Bank/Group risk types, including many types of nonfinancial and hard-to-measure risks. Regarding the latter, there were following risk types defined and evaluated, including: outsourcing risk, reputational risk, business risk, litigation risk, excessive leverage risk, separated risk of exposures secured on residential real estate in FX - RRE FX and other. As a result of the assessment, additional internal capital to cover RRE FX risk and hard-to-measure risk types was decided to be maintained (look at the above table).

In internal capital calculation, 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) and calculates the effect of diversification on the entire loss distribution.

In line with the recommendations issued by the banking supervision authority, individual risk types and the diversification effect are subjected 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). The Group conservatively assumes that the available financial resources are equivalent to regulatory own funds which form the basis for calculating the total capital 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 operations, while taking into account the effect of 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 carried out at the end of 2018 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 at the end of 2018 is about one third higher than the capital requirements in the 1st Pillar.

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 and in the CRR.

CREDIT RISK

Table EU CRA – General qualitative information about credit risk

Qualitative information on credit risk are disclosed in Financial Report (chapter on credit risk) and in Management Report, according to requirements of Table EU CRA – General qualitative information about credit risk (EBA/GL/2016/11).

Table 12 EU CRB-B Total and average net amount of exposures (PLN thous.)

		Net value of exposures at the end of the period *)	Average net exposures over the period *)
1	Central governments or central banks		
2	Institutions		
3	Corporates		
4	*of which: Specialized lending*		
5	*of which: SMEs*		
6	Retail	32 063 702	31 142 160
7	*Secured by real estate property*	28 291 969	27 475 335
8	** SME's*	35 880	38 187
9	** Non-SME's*	28 256 088	27 437 149
10	*Qualifying revolving*	3 771 734	3 666 824
11	*Other retail*		
12	** SMEs*		
13	** Non-SMEs*		
14	Equity		
15	**Total IRB approach**	**32 063 702**	**31 142 160**
16	Central governments or central banks	24 877 776	21 536 760
17	Regional governments or local authorities	344 676	366 445
18	Public sector entities	97 920	89 134
19	Multilateral development banks	82 233	81 522
20	International organizations		
21	Institutions	1 174 430	1 253 920
22	Corporates	19 689 556	18 562 524
23	*of which: SMEs*	12 290 207	10 635 189
24	Retail	8 421 409	7 870 919
25	*of which: SMEs*	2 464 432	2 340 150
26	Secured by mortgages on immovable property		
27	*of which: SMEs*		
28	Exposures in default	741 958	715 814
29	Items associated with particularly high risk	44	44
30	Covered bonds		
31	Claims on institutions and corporates with a short-term credit assessment		
32	Collective investments undertakings		
33	Equity exposures	94 154	85 436
34	Other exposures	1 408 394	1 539 280
35	**Total standarized approach**	**56 190 593**	**51 385 984**
36	**Total**	**88 254 295**	**82 528 143**

*Table 13 EU CRB-C - Geographical breakdown of exposures (PLN thous.) **

		European Union (EU)	Poland	Other EU countries	Other geographical areas	Total
1	Central governments or central banks					
2	Institutions					
3	Corporates					
4	Retail	139 756	31 626 081	197 911	99 955	32 063 702
5	Equity					
6	**Total IRB approach**	139 756	31 626 081	197 911	99 955	32 063 702
7	Central governments or central banks		24 877 776			24 877 776
8	Regional governments or local authorities		344 676			344 676
9	Public sector entities		97 920			97 920
10	Multilateral development banks	82 233				82 233
11	International organizations					
12	Institutions	602 609	149 283	25 719	396 819	1 174 430
13	Corporates	121 563	19 547 573	0	20 420	19 689 556
14	Retail	13 467	8 211 462	128 012	68 469	8 421 409
15	Secured by mortgages on immovable property					
16	Exposures in default	1 283	727 381	4 297	8 996	741 958
17	Items associated with particularly high risk	32	12			44
18	Covered bonds					
19	Claims on institutions and corporates with a short-term credit assessment					
20	Collective investments undertakings					
21	Equity exposures		50 967		43 187	94 154
22	Other exposures		1 408 394		0	1 408 394

23	**Total standarized approach**	819 904	54 688 063	153 731	528 894	56 190 593
24	**Total**	959 660	86 314 144	351 641	628 849	88 254 295

**) without counterparty credit risk, net values of balance sheet and off-balance sheet exposures*

*Table 14 EU CRB-D - Concentration of exposures by industry or counterparty types (in PLN thous.) **

		Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accomodation and food service activities	Information and communication
1	Central governments or central banks										
2	Institutions										
3	Corporates										
4	Retail	300		10 256			1 999	13 922	1 057	2 393	
5	Equity										
6	**Total IRB approach**	300		10 256			1 999	13 922	1 057	2 393	
7	Central governments or central banks								461		
8	Regional governments or local authorities										
9	Public sector entities	60					10			2	34
10	Multilateral development banks										
11	International organizations										

12	Institutions										
13	Corporates	72 878	50 682	6 563 096	482 531	126 862	1 110 432	6 170 642	1 980 885	78 207	568 063
14	Retail	27 399	14 738	292 121	4 755	21 852	294 037	492 039	634 043	62 219	58 240
15	Secured by mortgages on immovable property										
16	Exposures in default	1 813	770	86 507	1 272	783	34 031	95 853	34 043	14 970	3 621
17	Items associated with particularly high risk										
18	Covered bonds										
19	Claims on institutions and corporates with a short-term credit assessment										
20	Collective investments undertakings										
21	Equity exposures										
22	Other exposures										
23	Total standarized approach	100 336	65 420	6 855 217	487 285	148 714	1 404 479	6 662 681	2 615 389	140 427	626 338
24	Total	100 636	66 082	6 865 473	487 285	148 714	1 406 478	6 676 603	2 616 446	142 820	626 338

		Financial and insurance activity	Real estate activities	Professional, scientific and technical activities	Administrative and support services activities	Public administration and defence, compulsory social security	Education	Human healyh services and social work acivities	Arts, entertainment and recreation	Other services	Total
1	Central governments or central banks										
2	Institutions										
3	Corporates										
4	Retail	694	1 075	1 696	450		391	638	75	273	35 880
5	Equity										
6	**Total IRB approach**	694	1 075	1 696	450		391	638	75	273	35 880
7	Central governments or central banks			486				262			1 209
8	Regional governments or local authorities					344 676					344 676
9	Public sector entities			6 346			63 641	10 041	803	16 950	97 887
10	Multilateral development banks										
11	International organizations										
12	Institutions	68								0	68

13	Corporates	274 487	907 146	303 988	643 514	93	13 377	157 154	8 163	6 331	19 518 532
14	Retail	39 700	48 667	183 726	106 885	114	26 709	55 629	20 135	27 427	2 410 435
15	Secured by mortgages on immovable property										
16	Exposures in default	5 018	38 284	15 887	17 952	0	1 421	632	923	742	354 523
17	Items associated with particularly high risk										
18	Covered bonds										
19	Claims on institutions and corporates with a short-term credit assessment										
20	Collective investments undertakings										
21	Equity exposures										
22	Other exposures										
23	Total standarized approach	314 254	955 813	494 546	750 399	344 884	103 728	223 087	29 101	50 708	22 372 806
24	Total	314 948	956 888	496 242	750 849	344 884	104 119	223 725	29 176	50 980	22 408 686

Table 15 *EU CRB-E - Maturity of exposures (in PLN thous.) **

		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1	Central governments or central banks						
2	Institutions						
3	Corporates						
4	Retail	905 262	1 597 699	1 750 396	27 810 345		32 063 702
5	Equity						
6	Total IRB approach	905 262	1 597 699	1 750 396	27 810 345		32 063 702
7	Central governments or central banks	100	3 628 974	19 627 954	1 271 902	348 846	24 877 776
8	Regional governments or local authorities	98 380	59 997	128 774	57 525		344 676
9	Public sector entities	39 622	3 506	37 624	17 168		97 920
10	Multilateral development banks			82 233			82 233
11	International organizations						
12	Institutions	428 526	734 332	10		11 562	1 174 430
13	Corporates	1 702 794	8 681 404	7 317 661	1 955 948	31 749	19 689 556
14	Retail	376 502	536 098	4 797 327	2 689 878	21 604	8 421 409
15	Secured by mortgages on immovable property						
16	Exposures in default	337 866	91 924	200 962	92 618	18 589	741 958
17	Items associated with particularly high risk					44	44
18	Covered bonds						
19	Claims on institutions and corporates with a short-term credit assessment						
20	Collective investments undertakings						
21	Equity exposures					94 154	94 154
22	Other exposures					1 408 394	1 408 394
23	**Total standarized approach**	2 645 924	13 644 310	31 991 584	5 992 421	1 916 354	56 190 593
24	**Total**	3 551 186	15 242 009	33 741 980	33 802 765	1 916 354	88 254 295

*) without counterparty credit risk, net values of balance sheet and off-balance sheet exposures

6.1 Capital requirements to credit risk

Calculating risk-weighted exposures in scope of credit risk, Group and Bank use standard method and internal rating based method as for portfolios described in the point 6.1 according to the approval of the competent authorities described in the point 10.1.

Exposure to securitization positions are not present (Explanations in the additional information to the Yearly Financial Report). (Art. 449)

Table 16 EU CR4 - Standardised approach - Credit risk exposure and CRM effects (in PLN thous.)

		Exposures CCF and CRM		Exposures after CRM		RWA's and RWA density	
	Exposure classes	On-balance sheet amount	Off-balance-sheet amount	On-balance sheet amount	Off-balance-sheet amount	RWAs	RWA density
1	Central governments or central banks	24 877 678	100	24 877 678	0	847 550	3,4%
2	Regional governments or local authorities	229 455	116 757	229 455	20 334	49 822	19,9%
3	Public sector entities	52 161	53 960	52 161	10 773	26 941	42,8%
4	Multilateral development banks	82 233	0	82 233	0	0	0,0%
5	International organizations	0	0	0	0	0	0,0%
6	Institutions	959 420	248 050	959 420	123 759	290 619	26,8%
7	Corporates	14 621 001	6 253 173	14 621 001	307 621	13 575 019	90,9%
8	Retail	8 136 898	234 966	8 139 681	9 107	5 688 715	69,8%
9	Secured by mortgages on immovable property	0	0	0	0	0	0,0%
10	Exposures in default	1 311 906	41 635	1 311 262	39 688	1 629 973	120,7%
11	Items associated with particularly high risk	44	0	44	0	67	150,0%
12	Covered bonds	0	0	0	0	0	0,0%
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0,0%
14	Collective investments undertakings	0	0	0	0	0	0,0%
15	Equity exposures	94 154	0	94 154	0	94 154	100,0%
16	Other exposures	1 408 394	0	1 408 394	0	580 050	41,2%
17	**Total**	**51 773 345**	**6 948 640**	**51 775 484**	**511 282**	**22 782 910**	**43,6%**

The below table presents exposures' amounts in scope of standardised approach of credit risk own funds requirements and the breakdown by asset class and risk weight (without counterparty credit risk).

Table 18 EU CCR3 - Standardized approach - CCR exposures by regulatory portfolio and risk (in PLN thous.)

	Exposure classes	Risk weight										Total	Of which unrated
		0%	2%	4%	10%	20%	50%	75%	100%	150%	Others		
1	Central governments or central banks												
2	Regional governments or local authorities												
3	Public sector entities					10						**10**	
4	Multilateral development banks												
5	International organizations												
6	Institutions					77 476	41 237					**118 713**	
7	Corporates								245 750			**245 750**	
8	Retail											**1**	
9	Claims on institutions and corporates with a short-term credit assessment												
10	Other exposures												
11	**Total**					**77 486**	**41 237**		**245 750**			**364 473**	

6.2 Counterparty credit risk

Counterparty credit risk means the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows.

The exposure to counterparty credit risk pertains to exposures arising from derivatives. repurchase transactions. securities or commodities lending or borrowing transactions. long settlement transactions and margin lending transactions.

At the end of 2018, the Group hold derivatives and repurchase transactions and there were no transactions regarding securities or commodities lending or borrowing transactions, long settlement transactions or margin lending transactions.

The Group presents its exposure to counterparty credit risk primarily under hedging derivatives and derivatives under contracts concluded with customers and repurchase transactions.

Amounts of exposures to counterparty credit risk are presented in the below table.

Table 18 EU CCR3 - Standardized approach - CCR exposures by regulatory portfolio and risk (in PLN thous.)

	Exposure classes	Risk weight										Total	Of which unrated
		0%	2%	4%	10%	20%	50%	75%	100%	150%	Others		
1	Central governments or central banks												
2	Regional governments or local authorities												
3	Public sector entities					2						**2**	
4	Multilateral development banks												
5	International organizations												
6	Institutions					9 668	93 715					**103 383**	
7	Corporates								56 081			**56 081**	
8	Retail												
9	Claims on institutions and corporates with a short-term credit assessment												
10	Other exposures												
11	**Total**					**9 670**	**93 715**		**56 081**			**159 466**	

Table EU CCRA – Qualitative disclosure requirements related to CCR

Qualitative information related to CCR is disclosed in the current chapter, in line with requirements of the Table EU CCRA – Qualitative disclosure requirements related to CCR (EBA/GL/2016/11).

The below table presents risk-weighted assets and own funds requirements amounts regarding counterparty credit risk.

Table 19 Counterparty credit risk - risk-weighted assets and capital requirements (in PLN thous.)

Exposure type	Portfel	RWA 31.12.2018	Own funds requirements 31.12.2018
Derivatives	Institution	102 548	8 204
Derivatives	Corporates	43 805	3 504
Derivatives	Public sector entities	2	0
Repos	Institution	835	67
Repos	Corporates	12 276	982
Total		**159 466**	**12 757**

Internal capital (Article 439.a)

In respect to the approaches used to assign internal capital to counterparty credit risk exposures, a modified Credit Risk+[3] approach is used, taking into account counterparty risk parameters: PD, LGD & EAD.

Credit limits

Credit limits applicable to counterparty credit risk exposures are set within the exposure limits for banks and non-bank customers, which are parties to transactions.

For banks, overall exposure limits are set in accordance with the Instructions for setting and controlling exposure limits to foreign and domestic banks. With respect to foreign exchange transactions, currency swaps, currency options, deposit transactions, FRAs, interest rate swaps and principal-interest rate swaps (“fx and money market transactions”) – sub-limits limits are set, which mark the Bank’s maximum exposure to outstanding currency purchase/sale transactions (spot and forward), active (outstanding) term deposits in a foreign or Polish bank (without due interest) and other outstanding transactions mentioned above. Irrespective of the sub-limits, settlement limits have been set, which are linked to the concentration of the counterparty’s obligations towards the Bank for the settlement date agreed on when they were concluded (“value date”).

The Group also concludes derivatives contracts upon orders from its customers. With respect to treasury transaction limits (including derivatives) concluded with non-bank customers, granting such limits to a customer is a pre-requisite[4] for the Bank to perform a derivative transaction for the customer. The Bank requires a customer applying for a treasury limit to have credit capacity for its current exposure and additionally for the amount equal to a specific portion of the requested treasury limit, to have a risk rating and natural exposure, that is cash flows under sales and purchases in a convertible currency other than PLN.

Collateral (Article 439.b)

As part of the policies for securing collateral, Credit Support Annexes to ISDA (International Swaps and Derivatives Association) agreements (CSAs) are broadly used.

The Bank concludes derivative transactions with those counterparties on the inter-bank market, with which it has signed ISDA agreements (International Swaps and Derivatives Agreements). According to the current market practices and regulations, CSAs are signed along with ISDA agreements to cover matters related to the collateralization of exposures under concluded derivative transactions. CSAs are bilateral

[3] Statistical credit risk model, developed by Credit Suisse First Boston Bank
[4] It is possible to conclude transaction under cash deposit, in case of lack of treasury transaction limit

agreements and establish mutual rights for a party whose valuation of derivatives is negative on a given day to request a security deposit. All active CSAs in place between the Bank and its counterparties reflect requirements (including the ones related to Variation Margin) established by relevant EMIR regulations.

The position concluded under derivative transactions with customers other than banks is immediately referred for management by inter-bank market dealers and is hedged by an inter-bank market transaction.

The rules for establishing credit impairment for credit risk are presented in the section entitled "Financial risk management - Credit risk" of the Yearly Financial Report.

Wrong way risk exposures (Article 439.c)

The Group does not identify its wrong-way risk exposures as material.

The impact of the amount of collateral the Bank would have to provide given a downgrade in its credit rating (Article 439.d)

The Bank is the Guarantor of the loan agreement signed between Millennium Leasing and European Investment Bank („Finance Contract") on December 15, 2017. The loan amounts to EUR 100 m and was drawn in four tranches in 2018.

The loan is secured in two ways. By Millennium Leasing in the form of assignment of rights from lease agreements (the value of assigned rights makes not less than 120 % of the granted loan) and by Bank Millennium in the form of the First Demand Guarantee up to amount of the already drawn loan plus accompanied interests, taxes, fiscal charges, duties etc.

According to the provisions of the Finance Contract in case the credit rating:

- by Fitch is B+ or below;
- by Moody is B1 or below;

it will be necessary to establish additional security for the Guarantee in the form of guarantee on terms acceptable for EIB (cash collateral, financial collateral, or other security).

The provisions of First Demand Guarantee warranty to EIB that in the time of execution of FDG by EIB, Bank Millennium long term rating granted by Fitch is BBB-, by Moody's is Baa2. Bank Millennium is obliged to inform EIB about any change in its rating.

Articles 439.e. 439.f. 439.g. 439.h. 439.i CRR

To determine the amount of its credit exposure under derivative instruments, the Group applies the Mark-to-market method laid down in Article 274 of CRR.

Amounts of counterparty credit risk by approach is presented in the below table.

Table 20 EU CCR1 - Analysis of CCR exposure by approach (in PLN thous.)

	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE (Effective Expected Exposure Profile)	Multiplier	EAD post CRM (EAD post Credit Risk Mitigation)	RWAs
Mark to market		587 506			0	578 000	159 467

Amounts of risk of credit valuation adjustment are showed in the below table.

Tabela 21 EU CCR2 - CVA capital charge (in PLN thous.)

		Exposure value	RWAs
1	Total portfolios subject to the advanced method		
2	(i) VaR component (including the 3x multiplier)		
3	(ii) SVaR component (including the 3x multiplier)		
4	All portfolios subject to the standardized method	289 518	43 686
EU4	based on the original exposure method		
5	Total subject to the CVA capital charge	289 518	43 686

Exposures to derivatives with Central Counterparties are presented in the below table.

Table 22 EU CCR8 - Exposures to CCPs (in PLN thous.)

		EAD post CRM	RWAs
1	**Exposures to QCCPs (total)**		7 087
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of ehich	35 436	7 087
3	(i) OTC derivatives	35 436	7 087
4	(ii) Exchange-traded derivatives		
5	(iii) SFTs		
6	(iv) Netting sets where cross-product nettinh has been approved		
7	Segregated initial margin	2 112	
8	Non-segregated initial margin		
9	Prefunded default fund contributions	2 540	31 756
10	Alternative calculation of own funds requirements for exposures		7 087
11	**Exposures to non-QCCP (total)**		
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of ehich		
13	(i) OTC derivatives		
14	(ii) Exchange-traded derivatives		
15	(iii) SFTs		
16	(iv) Netting sets where cross-product nettinh has been approved		
17	Segregated initial margin		
18	Non-segregated initial margin		
19	Prefunded default fund contributions		
20	Unfunded default fund contributions		

Table [EU CCR4] - IRB approach - CCR exposures by portfolio and PD scale

Considering that Bank does not calculate CCR own requirements using IRB approach, Table EU CCR4 (EBA/GL/2016/11) is not presented.

Table [EU CCR7] – RWA flow statements of CCR exposures under the IMM

Considering that the Bank does not use IMM, Table EU CCR7 (EBA/GL/2016/11) is not presented.

Table [EU CCR5-A] – Impact of netting and collateral held on exposure values

Considering that the Bank does not use netting for CCR exposures, Table EU CCR5-A (EBA/GL/2016/11) is not presented.

Table 23 EU CCR5-B - Composition of collateral for exposures to CCR (in PLN thous.)

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
		86 630	2 112	262 872	233 796	
Total		86 630	2 112	262 872	233 796	

Table [EU CCR6] – Credit derivatives exposures

Considering that the Bank does not hold credit derivatives exposures, Table EU CCR6 (EBA/GL/2016/11) is not presented.

Fair values of respective derivatives contracts. notional amounts of instruments by maturities and valuation of derivative instruments are presented in notes to the Yearly Financial Report (Note 23).

Data on security margins and netting of receivables and liabilities under master agreements are presented in Additional Information to the Yearly Financial Report.

6.3 Credit risk adjustments (impairment and impairment charges)

The Group's strategy and policy applicable to impairment and recognizing impairment charges has been presented in the Yearly Financial Report section 3 "Credit risk" in the part 8 devoted to financial risk management. It contains a detailed description of:

- Organization of the process to identify and measure impairment of credit exposures in order to determine adjustments for specific and general credit risk
- Analysis of individual impairment of credit receivables
- Collective analysis of a credit portfolio (Art. 442 a-b)

Table *EU CRB-A – Additional disclosure related to the credit quality of assets* (442.a,b)

Information in that chapter and the indicated above documents are disclosed according to the requirements of Table EU CRB-A – Additional disclosure related to the credit quality of assets (EBA/GL/2016/11).

Table 24 EU CR1-A - Credit quality of exposures by exposure class and instrument (in PLN thous.)

		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Central governments or central banks	0	0	0	0	0	0	0
2	Institutions	0	0	0	0	0	0	0
3	Corporates	0	0	0	0	0	0	0
4	*of which: Specialized lending*	0	0	0	0	0	0	0
5	*of which: SMEs*	0	0	0	0	0	0	0
6	Retail	902 971	31 789 641	589 227	39 682	0	628 910	32 063 702
7	*Secured by real estate property*	806 992	27 997 446	484 683	27 787	0	512 470	28 291 969
8	** SME's*	127	36 424	377	294	0	671	35 880
9	** Non-SME's*	806 865	27 961 022	484 306	27 493	0	511 799	28 256 088
10	*Qualifying revolving*	95 979	3 792 195	104 545	11 895	0	116 440	3 771 734
11	*Other retail*	0	0	0	0	0	0	0
12	** SMEs*	0	0	0	0	0	0	0
13	** Non-SMEs*	0	0	0	0	0	0	0
14	Equity	0	0	0	0	0	0	0
15	**Total IRB approach**	902 971	31 789 641	589 227	39 682	0	628 910	32 063 702
16	Central governments or central banks	0	24 877 778	0	2	0	2	24 877 776
17	Regional governments or local authorities	0	345 018	3	339	0	342	344 676
18	Public sector entities	188	98 192	164	296	0	460	97 920
19	Multilateral development banks	0	82 233	0	0	0	0	82 233
20	International organizations	0	0	0	0	0	0	0
21	Institutions	0	1 174 430	0	0	0	0	1 174 430
22	Corporates	586 586	19 634 952	360 614	171 369	0	531 982	19 689 556
23	*of which: SMEs*	282 122	12 286 947	164 297	114 564	0	278 861	12 290 207

24	**Retail**	1 029 350	8 085 230	636 390	56 781	950	693 171	8 421 409
25	*of which: SMEs*	227 907	2 397 523	146 970	14 028	0	160 998	2 464 432
26	Secured by mortgages on immovable property	0	0	0	0	0	0	0
27	*of which: SMEs*	0	0	0	0	0	0	0
28	Exposures in default	1 623 725	0	881 767	0	950	881 767	741 958
29	Items associated with particularly high risk	7 600	44	7 600	0	0	7 600	44
30	Covered bonds	0	0	0	0	0	0	0
31	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0
32	Collective investments undertakings	0	0	0	0	0	0	0
33	Equity exposures	0	94 154	0	0	0	0	94 154
34	Other exposures	0	2 400 068	991 674	0	0	991 674	1 408 394
35	**Total standarized approach**	1 623 725	56 792 100	1 996 445	228 787	950	2 225 232	56 190 593
36	**Total**	2 526 695	88 581 742	2 585 672	268 470	950	2 854 142	88 254 295
37	of which: loans	2 514 099	60 135 283	1 586 398	268 470	950	1 854 868	60 794 515
38	of which: debt securities	4 996	22 844 824	0	0	0	0	22 849 820
39	of which: off-balance sheet	42 324	8 142 578	21 046	30 703	950	51 749	8 133 153

Table 25 EU CR1-B - Credit quality of exposures by industry or conterparty types (in PLN tsd)

		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures (*)	Non-defaulted exposures (*)					(a+b-c-d)
1	Agriculture, forestry and fishing	13 449	99 781	11 884	709	0	12 593	100 636
2	Mining and quarrying	1 838	65 841	1 104	493	0	1 597	66 082
3	Manufacturing	171 992	6 860 308	108 867	57 960	0	166 827	6 865 473
4	Electricity, gas, steam and air conditioning supply	2 437	489 975	1 201	3 925	0	5 126	487 285

5	Water supply	2 739	149 142	2 456	712	0	3 168	148 714
6	Constructiom	128 720	1 391 828	98 224	15 846	0	114 070	1 406 478
7	Wholesale and retail trade	200 955	6 645 673	119 375	50 649	0	170 025	6 676 603
8	Transport and storage	60 088	2 613 285	40 064	16 863	0	56 927	2 616 446
9	Accomodation and food service activities	32 892	129 449	18 760	761	0	19 521	142 820
10	Information and communication	9 702	627 796	6 789	4 371	0	11 160	626 338
11	Real estate activities	47 927	938 884	13 703	16 220	0	29 923	956 888
12	Professional, scientific and technical activities	51 550	487 359	37 487	5 180	0	42 666	496 242
13	Administrative and support services activities	46 766	738 841	30 634	4 124	0	34 758	750 849
14	Public administration and defence, compulsory social security	0	345 226	3	340	0	343	344 884
15	Education	3 283	103 413	2 207	370	0	2 577	104 119
16	Human health services and social work acivities	2 022	227 047	1 676	3 668	0	5 344	223 725
17	Arts, entertainment and recreation	2 288	28 635	1 592	154	0	1 746	29 176
18	Other services	2 498	51 088	2 261	345	0	2 605	50 980
19	**Total**	781 146	21 993 569	498 287	182 691	0	680 977	22 093 738

Table 26 EU CR1-C - Credit quality of exposures by geography (in PLN thous.)

		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	European Union (EU)	15 206	955 283	8 804	2 024	39	10 829	959 660
2	Poland	2 458 844	86 656 648	2 537 329	264 019	904	2 801 348	86 314 144
3	Other EU countries	13 807	349 416	10 214	1 367	0	11 582	351 641
4	Other geographical areas	38 839	620 394	29 324	1 060	8	30 384	628 849
5	Total	2 526 695	88 581 742	2 585 672	268 470	950	2 854 142	88 254 295

Table 27 EU CR1-D - Ageing of past-due exposures (in PLN thous.) (*)

		Gross carying values					
		<= 30 days	> 30 days <= 60 days	> 60 days <= 90 days	> 90 days <= 180 days	> 180 days <= 1 year	> 1 year
1	Loans	960 055	265 570	83 420	138 229	183 798	937 660
2	Debt securities						5 004
3	***Total exposures***	960 055	265 570	83 420	138 229	183 798	942 664

(*) on-balance sheet exposures, past-due => 4 days

Table 28 EU CR1-E - Non-performing and forborne exposures (in PLN thous.)

<table>
<tr><th rowspan="3"></th><th rowspan="3"></th><th colspan="7">Gross carrying amount of performing and non-performing exposures</th><th colspan="4">Accumulated impairment and provisions and negative fair value adjustments due to credit risk</th><th colspan="2">Collaterals and financial guarantees received</th></tr>
<tr><th rowspan="2"></th><th rowspan="2">Of which performing but past due > 30 days and <= 90 days</th><th rowspan="2">Of which performing forborne</th><th colspan="4">Of which non-performing</th><th colspan="2">On performing exposures</th><th colspan="2">On non-performing exposures</th><th rowspan="2">On non-performing exposures</th><th rowspan="2">Of which forborne exposures</th></tr>
<tr><th></th><th>Of which defaulted</th><th>Of which impaired</th><th>Of which forborne</th><th></th><th>Of which forborne</th><th></th><th>Of which forborne</th></tr>
<tr><td>10</td><td>Debt securities</td><td>22 197 734</td><td>0</td><td>0</td><td>5 004</td><td>5 004</td><td>5 004</td><td>0</td><td>-20</td><td>0</td><td>-5 004</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>20</td><td>Loans and advances</td><td>57 276 378</td><td>269 748</td><td>85 799</td><td>2 473 723</td><td>2 420 852</td><td>2 403 894</td><td>1 044 219</td><td>-413 657</td><td>-1 933</td><td>-1 345 227</td><td>-491 697</td><td>755 459</td><td>352 156</td></tr>
<tr><td>30</td><td>Off-balance-sheet exposures</td><td>9 907 405</td><td>X</td><td>3 940</td><td>50 256</td><td>49 039</td><td>X</td><td>5 649</td><td>-42 521</td><td>-17</td><td>-9 220</td><td>-1 002</td><td>28</td><td>0</td></tr>
</table>

Table 29 EU CR2-A - Changes in the stock of general and specific credit risk adjustments (in PLN thous.)

		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	**Opening balance**	1 810 554	
2	**IFRS 9 implementation impact**	0	
2	Increases due to amounts set aside for estimated loan losses during the period	343 399	
3	Decreases due to amounts reversed for estimated loan losses during the period	-203 590	
4	Decreases due to amounts taken against accumulated credit risk adjustments	-168 257	
5	Transfers between credit risk adjustments	0	
6	Impact of exchange rate differences	1 412	
7	Business combinations, including acquisitions and disposals of subsidiaries	0	
8	Other adjustments	-19 627	
9	**Closing balance**	1 763 891	
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	1 529	
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	3 707	

Table 30 EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities (in PLN thous.)

		Gross carrying values defaulted exposures
1	**Opening balance**	1 924 249
2	Loans and debt securities that have defaulted or impaired since the last reporting period	448 423
3	Returned to non-defaulted status	60 183
4	Amounts written off	0
5	Other changes	0
6	**Closing balance**	2 312 489

The Group has presented the distribution of the key receivables portfolio by the residual maturity for main exposure types: deposits and loans granted to banks and other monetary institutions (Note 22d to the Yearly Financial Report), loans and borrowings granted to customers (Note 21i to the Yearly Financial Report). (Art. 442.f).

At the same time, in the chapter "Credit risk" in the Yearly Financial Report and the Management Board Report, the Bank/Group presents a general assessment of the credit risk level and assessment of changes in this respect, along with key asset quality indicators. It also presents an assessment of concentration levels in the credit portfolio. broken down into product types and industries.

The agreed changes in the impairment and impairment charges are presented in the Notes (21.g) to the Yearly Financial Report. (Art. 442.i)

6.4 Use of external ratings

When calculating requirements for own funds for entities other than financial institutions or government entities, the Group does not use ratings awarded by eligible credit assessment institutions (ECAIs). This is justified by the immaterial number of borrowers and counterparties who have a rating awarded by an ECAI. (Art. 444)

The following table presents the mapping of external ratings of each of the named ECAIs to credit quality grades featured in the unified rating Master Scale. The Group recognizes the following external rating agencies: Fitch, Moody's, Standard & Poors.

Table 31 Bank's Master Scale vs. ratings used by external rating agencies

MS risk grades	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

Table EU CRD – Qualitative disclosure requirements on institution's use of external credit ratings under the astandardised approach for credit risk

Information in that chapter is disclosed according to the requirements of Table EU EU CRD – Qualitative disclosure requirements on institution's use of external credit ratings under the astandardised approach for credit risk (EBA/GL/2016/11).

6.5 Encumbered assets

The following information on encumered assets is presented based on Commission Delegated Regulation (EU) No 2017/2295 supplementing CRR with regard to regulatory technical standards for disclosure of encumbered and unencumbered assets.

Table 32 Encumbered assets - Template A - carrying and fair value amounts (in PLN thous.)

	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of the reporting institution	546 934	546 934	72 661 865	72 661 865
Debt securities	294 201	294 201	18 709 958	18 709 958
Of which issued by general and local governments	240 261	240 261	17 025 926	17 025 926
Other assets*	252 733	252 733	53 951 907	53 951 907
Of which: deposits in other banks and loans and advances to other banks**	252 733	252 733	271 434	271 434

* „Other assets" covers all on-balance sheet exposures excluding debt securities

** collateral placed in other banks regarding derivatives transactions are presented in that item as encumbered assets

Table 33 - Encumbered assets - Template B - assets, collateral received and own debt securities (in PLN thous.)

	Fair value of encumbered collateral received or own debt securities issued	Unencumbered, fair value of collateral received or own debt securities issued available for encumbrance
Assets, collateral received and own debt securities issued	546 934	72 661 865

Table 34 - Encumbered assets - Template C – carrying amount of selected financial liabilities (in PLN thous.)

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	500 568	283 510
Of which: derivative transactions	469 770	252 733

Additional information (Template D)

Information presented in the templates A, B and C were presented based on the following rules:

- qualtitative data was calculated as a median of amounts as of ends of the 2018 quarters,

- main sources of encumbrance were presented in the below table with data on encumbered assets as at 31 December, 2018; information in that format is disclosed in yearly financial reports with quarterly frequency,

- assets in the below table in lines 2, 5, 6 and 7 were not presented in templates A, B i C because they may not be linked with a specific transaction, nevertheless they may not be freely withdrawn. That approach is used by the Bank in case of fulfilling reporting requirements about unencumbered assets, according to the appendix XVII to Regulatory Technical Standards (EU) No 680/2014.

Table 35 Encumbered assets - details (in PLN thous.)

No.	Type of assets	Portfolio	Secured liability	Par value of assets	Balance sheet value of assets
1.	Treasury bonds WZ0121	Held to Collect and for Sale	Lombard credit granted to the Bank by the NBP	130 000	131 630
2.	Treasury bonds WZ0120	Held to Collect and for Sale	Initial security deposit for bond futures	500	507
3.	Treasury bonds WZ0120	Held to Collect and for Sale	Securing the Fund for Protection of Funds Guaranteed as part of the Bank Guarantee Fund	311 000	315 273
4.	NBP bills NBP_040119	Held to Collect and for Sale	Security of payment obligation to BFG contribution - guarantee fund	35 600	35 600
5.	NBP bills NBP_040119	Held to Collect and for Sale	Security of payment obligation to BFG contribution - compulsory resolution fund	27 100	27 100
6.	Cash	receivables	Payment to the Futures Settlement Guarantee Fund	100	100
7.	Cash	receivables	Payment to the Security Fund OTC-KDPW_CCP	2 583	2 583
8.	Deposits placed	Deposits in banks	Settlement on transactions concluded	264 108	264 108
Total				770 991	776 901

Encumbered assets of the Group presented in the above table are at the same time encumbered assets of the Bank. Encumbrance between entities of the Group is not recognised.

Encumbered assets of the Group are denominated in PLN, with exception of deposits placed as a settlement of derivative transactions (point 10 of the above table), which are concluded mostly in EUR.

Additionally, as at December 31, 2018, the Group had concluded short-term transactions (usually settled within 7 days) of Treasury securities sale with a repurchase agreement, subject of securities worth PLN 50,295 thousand.

Considering values, the level of assets encumbrance of the Bank and the Group is immaterial and is not important for a model of financing of activity.

OPERATIONAL RISK

The capital requirements for operational risk are calculated using the standardized approach (CRR Article 317-320). They represented about 11% of the total amount of capital requirements as at 31 December 2018. (Art. 446)

Losses stemming from operational risk events

The below table presents operational risk events registered in the operational risk database in 2018. Losses on treasury transactions concluded in 2008 and operational risk events related to credit risk, which are treated as credit risk events for the purpose of calculating credit risk capital requirements, are not included in the table.

Table 36 Operational risk events (the amount of losses), divided by events categories and kind of loss (in PLN million)

Event category	Net loss	Gross loss
External fraud	0.6	0.8
Damage to physical assets	0.1	0.4
Clients, products and business practises	0	0.2
TOTAL	0.7	1.4

Operational risk management system requires identification of a causes of an events and implementation of decisions or actions to reduce frequency and financial impact of events. It is completed using change of processes, strengthening of internal controls, adjustments of documentation and procedures and dedicated trainings.

In 2018 Bank Millennium Group reported no material operational risk events. i.e. those for which gross loss exceeds 10% of capital requirements for operational risk.

MARKET RISK AND OTHER RISK TYPES

Table EU MRA – Qualitative disclosure requirements related to market risk

Qualitative information related to market risk are disclosed in Financial Report (chapter 8) and in Management Report, according to requirements of the Table EU MRA – Qualitative disclosure requirements related to market risk (EBA/GL/2016/11) [445 CRR].

The Group uses standardized approaches to calculate its capital requirements for various types of market risk. The Group had requirements for own funds for specific risk of debt instruments and the general interest rate risk. The exposure to market risk was not material. Capital requirements for this risk represented about 1% of the total amount of capital requirements as at 31 December, 2018.

Risk weighted exposure and own funds requirements to market risk are showed in the below table.

Table 37 EU MR1 - Market risk under the standardised approach (in PLN thous.)

		RWA	Capital requirements
1	Interest rate risk (general and specific)	253 788	20 303
2	Equity risk (general and specific)		
3	Foreign exchange risk		
4	Commodity risk		
	Options		
5	Simplified approach		
6	Delta-plus method		
7	Scenario approach		
8	Securitization (specific risk)		
9	**Total**	**253 788**	**20 303**

Own funds requirements to settlement risk, delivery risk, large exposures limits excess were not reported as at 31.12.2017.

Table EU MRB –Qualitative disclosure requirements for institutions using the IMA

Table EU MR2-A – Market risk under the IMA

Table EU MR2-B – RWA flow statements of market risk exposures under the IMA

Tabela EU MR3 – IMA values for trading portfolios

Tabela EU MR4 – Comparison of VaR estimates with gain/loss

Information listed in the above tables is not presented, as the Bank does not use internal models to calculate capital requirements to credit risk.

Exposures in equities not included in the trading book

As at 31 December 2018 the Group had exposures in equities not included in the trading book with total balance-sheet value of PLN 50,908 thousand. The adopted methods of valuation. balance-sheet classification and effect of measurement at fair value are presented in the table below. (Art. 447)

Table 38 Exposures in equities not included in the trading book (in PLN thous.)

Balance-sheet classification	Measurement method	Balance-sheet value	Effect of pricing carried in revaluation capital
Equity instruments mandatorily at fair value through profit or loss (FVTPL)	Valuation models in case of stock and shares not quoted on the active market	21 609	0
Equity instruments at fair value through other comprehensive income (FVTOCI)	Fair value measured on the basis of active market quotations or valuation models in case of stock and shares not quoted on the active market	29 299	28 246

Below are presented the most important from the point of view of the balance sheet equity exposures of the Group as at 31 December 2018, including the assignment of strategic goals of connected with these equities:

1. Polski Standard Płatności sp. z o.o.; balance-sheet value PLN 21,609 thous. – the purpose of the equity exposure is to introduce into the Bank's offering new products and services for the Bank's customers (FVTPL)

2. Biuro Informacji Kredytowej S.A.; balance-sheet value PLN 15,848 thous. – the equity exposure is connected with the banking activity (FVTOCI);

3. Krajowa Izba Rozliczeniowa S.A.; balance-sheet value PLN 12,863 thous.- the equity exposure is connected with the banking activity (FVTOCI);

4. Giełda Papierów Wartościowych SA; balance-sheet value PLN 257 thous. – the equity exposure is connected with activity on the capital market (FVTOCI).

In the analysed period (2018) the Group:

- changed accounting principles relating to recognition, valuation and presentation in financial statements equity instruments, due to implementation of IFRS9 commencing from 1st January 2018. Equity instruments (with the exception of related entities not covered by the provisions of IFRS9) are classified as valued at fair value through profit & loss (FVTPL), provided that the Group do not intend to hold them as a strategic investment, or at fair value through other comprehensive income (FVTOCI) for instruments which are not held for trading purposes. The decision to use the option to value capital instruments at fair value through other comprehensive income shall be taken by the Group on the day of the initial recognition of the instrument and constitute an irrevocable designation (even at the moment of selling, the profit/loss on the transaction shall not be recognised in the Profit and Loss Account). At the moment of implementation of IFRS9, the Group designated some equity investments from the strategic investment portfolio for which it is not planned to realize profits from sales in the medium-term horizon to the category of fair value measurement with the effect of valuation through other comprehensive income;

- did not realise profit on sale of shares from the FVTOCI and mandatorily at FVTPL book,

- in calculating own funds as at 31.12.2018 the positive effect of pricing of shares (net amount with account of deferred tax) from the FVTOCI book, presented in the balance-sheet in revaluation capital was recognised in the amount of PLN 22,879 thous.

Exposure to interest rate risk on positions not included in the trading book

Information on exposures to interest rate risk on positions not included in the trading book are presented in the Yearly Financial Report, in the market risk management section of the financial risk management chapter (Art.448).

Exposure to liquidity risk

In accordance with the Regulation of the European Parliament and of the Council (EU) No. 575/2013 on prudential requirements for credit institutions and investment firms (CRR), the Group sets a liquidity coverage requirement (LCR). The net outflow coverage ratio is determined individually by each entity of the Group subject to the requirement to determine this ratio and consolidated for the Group. The minimum, supervisory level of the 100% LCR ratio, which was in force in 2018, was met by the Group on each reporting date (at the end of December 2018, the LCR ratio was 212%). The amount and main components of the net outflow coverage ratio for the Group in 2018 are presented in Appendix 3, in accordance with the guidelines on disclosure of the net coverage ratio in addition to disclosing information on liquidity risk management pursuant to art. 435 of Regulation (EU) No 575/2013 (EBA/GL/2017/01). The data presented were designated as simple averages from observations at the end of each month in the twelve-month period preceding December 31, 2018.

The Group recognizes derivative transactions as material (the total nominal value of such transactions exceeded 10% of the net liquidity outflow of the LCR). The liquidity risk in the unfavorable market scenario results from the change in the market value of derivative instruments, which creates liquidity needs due to coverage of margins. Both in stress scenarios and in the LCR approach, this additional liquidity requirement is included as the largest absolute flow of net hedges realized over a 30-day period over 24 months.

Detailed information on the strategy, organizational model and liquidity risk management process in the Bank Millennium SA Group. presented in the Annual Financial Report, in the part concerning liquidity risk management, in the chapter on financial risk management (Art. 435).

FINANCIAL LEVERAGE

Bank completed calculation of leverage ratio on consolidated base, as at 31 December 2018, based on CRR, Regulatory Technical Standards (EU) 2015/62 from 10 October 2014 on leverage ratio and Regulation (EU) 2017/2395 from 12 December 2017 on transitional arrangments for mitigating the impact of the introduction of IFRS 9 on own funds and the large exposures treatment of certain public sector exposures denominated in the domestic currency of any Member State.

As at 31 December 2018, the leverage ratio at the Group level was 8.78% using temporary definition of Tier 1 Capital and 8.62% using fully implemented definition of Tier 1 Capital.

When calculating leverage, the Group does not apply the derogations set forth in Articles 499.2 and 499.3 of CRR. Leverage ratio is calculated both with respect to Tier 1 capital and using the temporary definition of Tier 1 capital.

The distribution of the total exposure measure used in the leverage ratio and leverage levels as at 31 December 2018 are presented in the table below:

Table 39 Distribution of total exposure measure and leverage ratios as at 31 December 2018 (in PLN thous., in %)

The amount and distribution of total exposure used in the leverage ratio	Value
Exposure to equity financing transactions. exposure in accordance to Article 429.5 and 429.8 of CRR	250 247
Derivatives: current replacement cost	204 893
Derivatives: amount calculated with market value method	122 859
Off-balance sheet items with CCF 10% according to Article 429.10 of CRR	834 873
Off-balance sheet items with CCF 20% according to Article 429.10 of CRR	195 763
Off-balance sheet items with CCF 50% according to Article 429.10 of CRR	32 692
Off-balance sheet items with CCF 100% according to Article 429.10 of CRR	293 374
Other assets	80 980 066
Deducted amount of assets – Tier I Capital – fully implemented definition	-522 766
Deducted amount of assets – Tier I Capital – temporary definition	-380 748
Total exposure of leverage ratio – using fully implemented definition of Tier I Capital	82 392 002
Total exposure of leverage ratio – using temporary definition of Tier I Capital	82 534 020
Tier I Capital – fully implemented definition	7 100 971
Tier I Capital – temporary definition	7 242 989
Leverage ratio - using the fully implemented Tier 1 Capital definition	8,62%
Leverage ratio - using the temporary Tier 1 Capital definition	8,78%

The Group does not apply amounts that have been excluded from the total exposure measure in accordance with CRR 429.11.

With the Risk Strategy assumptions currently in place, the Group assesses the risk of excessive financial leverage as immaterial and therefore no specific procedures have been developed in this area.

The table below presents the leverage ratio levels in 2018; its level is satisfactory, with slight changes, and therefore a description of factors that had an impact on its levels is not justified.

Table 40 Leverage ratios of the Groups in quarters of 2018 year (in %)

Leverage ratio	31.03.2018	30.06.2018	30.09.2018	31.12.2018
Leverage ratio - using the fully implemented Tier 1 Capital definition	9.64%	9.59%	9.44%	8.62%
Leverage ratio - using the temporary Tier 1 Capital definition	9.81%	9.78%	9.62%	8.78%

IRB METHOD

Bank and Group calculate own funds requirements to credit risk with internal rating based approach (IRB) for retail exposures to individual customers secured on residential mortgages (RRE portfolio) and for retail revolving exposures (QRRE). As for other loan portfolios, IRB roll-out plan proceeds according to arrangements made with competent authorities. The exceptions are portfolios of exposures to central banks and governments, institutions, leasing and capital exposures, which are included in the permanent exclusions from the IRB approach implementation.

As at 31 December, 2018, average risk weights under IRB method are as follows:

- Total RRE portfolio 30.3%
- RRE FX 32.1%
- RRE PLN 28.3%
- QRRE 28.9%.

Information in that chapter is disclosed according to the requirements of Table EU CRE – Qualitative disclosure requirements related to IRB models (EBA/GL/2016/11).

10.1 Approval to use the IRB Approach

As at 31 December 2018, the Banco Comercial Portugues Group (the parent owner of Bank Millennium SA) has obtained the described below approvals of the competent authority pertaining to the use of the IRB Approach by the Group and Bank Millennium SA ("IRB Decisions"). First two IRB decisions were issued by Banco de Portugal (the consolidating regulator of the Banco Comercial Portugues Group) in cooperation with the Polish Financial Supervision Commission (KNF – local regulator), and the last one decisions (issued in July 2017) was issued by European Central Bank (EBC) with cooperation of KNF.

The approval issued at the end of 2012 to use the Advanced IRB Approach for two credit portfolios of: retail exposures to individual clients secured by residential property (RRE) and qualifying revolving retail exposures (QRRE). The first IRB decision contained a "regulatory floor" according to which the minimum own funds requirements for the portfolios covered by the decisions had to be temporarily maintained at no less than 80% of the relevant capital requirements calculated using the Standardized Approach. The regulatory floor applied until the relevant authority determined that the conditions set forth by this decision have been fulfilled.

The approval issued at the end of 2014 entails:

1) reduction of the "regulatory floor" for RRE and QRRE portfolios from 80% to 70% of the relevant capital requirements calculated using the Standardized Approach. The regulatory floor shall be applied portfolio by portfolio. and should be adjusted up or downwards in case of any difference between expected losses and provisions so that the impact in the solvency ratios is exactly the same of considering only 70% of the capital requirements calculated under the standard method.

2) commencement of use of the IRB Approach for the other retail exposures class is conditional upon meeting certain conditions by 30 June 2015.

3) commencement of use of the IRB Approach for corporates (including specialized lending) is conditional upon meeting certain conditions. while the new application to use the IRB Approach should not be submitted before 31 December 2016.

4) the permission to make changes to models applicable to RRE and QRRE portfolios is conditional upon meeting certain conditions. while the new application to use the IRB Approach to these portfolios should be submitted until 30 June 2015.

In July 2017 Bank received the joint supervisory decision in the area of IRB method, issued by ECB in collaboration with KNF. The decision regards:

1) revoking the duty of the Bank to maintain the regulatory floor in view of generally positive assessment of the Bank's compliance with conditions of the Decision of 2014,

2) Application of multiplier of 1.3 to estimation of LGD models for RRE and QRRE portfolios until ECB and KNF recognise the internal estimations of LGD models to be representative for currently prevailing conditions;

3) Issue additional recommendations in scope of improvement of IRB models for RRE and QRRE.

10.2 Internal rating systems and processes

The Group defines a rating system as all of the methods, processes, controls, data collection and IT systems that are used for the assessment of credit risk and for classification of exposures to a pool with a specified risk level, including the rules on the priority of rating models, if applicable, and the rules for overriding rating grades. Elements of the rating system include PD, LGD, CCF-EAD models (hereinafter: models) and methodologies for evaluating specialized lending.

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

The Master Scale (MS) consists of 15 rating grades, where the given ratings are as follows:

1) Maximum security – only for sovereigns
2) Superior quality
3) Very high quality
4) High quality
5) Very good quality
6) Good quality
7) Average high quality
8) Average quality
9) Average low quality
10) Low quality
11) Very low quality
12) Restricted crediting
13) Soft signs of impairment
14) Strong signs of impairment
15) Default.

Ratings 13 – 15 are procedural ones, reserved to exposures with deteriorated quality.

All the clients with available lending, whether or not they actually use the approved credit limits and all other participants of credit transactions should have a previously awarded rating and should be assigned to an appropriate pool.

An adequate credit or rating policy should specify the model to be used for rating purposes or a homogenous pool for a given client segment.

Each PD model used must be calibrated to MS based on the observed or estimated probability of default.

The rating for governments, central banks, international organizations, multilateral development banks and Institutions may be assigned based on a rating awarded by recognized rating agencies, mapped to the Master Scale.

Should the above-mentioned entities have more than one classification awarded by recognized rating agencies (split rating) the rating corresponding to the second best risk shall be taken into account at all times.

The table showing relationships between internal and external risk grades is presented in chapter 6.4 of the Disclosures. The Bank recognizes the following external rating agencies for comparison purposes: Fitch, Moody’s, Standard & Poor’s.

In case of retail customers, rating awarded through a behavioral model (behavioral rating) by default takes precedence over a rating awarded through an application model (application rating) if behavioral rating only is awarded. In case of corporate customers, awarded rating comes from 3 components: quantitative module based on an analysis of data from financial statements, module of qualitative evaluation of customers based on non-financial information and behavioral module assessing existing nature of co-operation between customer and Millennium Bank Group (including Bank Millennium).

Procedural ratings (13, 14 and 15 according to the Master Scale) are awarded to clients showing signs of deteriorating borrowing capacity and creditworthiness or with overdue debt.

Procedural ratings by default take precedence over application ratings.

After the pre-conditions necessary to award any of the procedural ratings are no longer satisfied, ratings 13 and 14 expire immediately, while rating 15 either expires or is maintained for a “quarantine period”.

Description of the internal ratings process

1. Central governments and central banks

This exposure class is excluded permanently from the IRB approach.

2. Institutions

This exposure class is excluded permanently from the IRB approach.

3. Corporates, including SMEs, specialized lending and purchased corporate receivables

Exposure classes subject to the plan of gradual implementation of the IRB approach.

4. Retail exposures

- PD models

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

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

The presented rating principles apply to all categories of retail exposures: retail exposures to individuals secured by residential real estate, qualifying revolving retail exposures and other retail exposures.
The class of retail exposures to individuals secured by residential real estate include 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 total exposure not exceeding EUR 100.000 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:

a) Data input;
b) Verification of data;
c) Awarding of the final risk grade (automated decision).

Model-based risk grades and procedural ratings are awarded automatically and are not subject to expert adjustments.

In the rating process, the Bank uses data from various available sources:

- internal sources (Bank’s IT systems);

- external sources (Biuro Informacji Kredytowej S.A.);

- data received from customers.

With respect to probability of default (PD) models for retail exposures, there is a rating system in place for microbusinesses 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. Procedural ratings are awarded to clients showing signs of deteriorating borrowing capacity and creditworthiness or with past due debt.

A procedural rating has the priority in use. If the client has no procedural rating then the behavioral rating should be used, provided that it has been awarded.

Behavioral rating is awarded 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.

If the client has no behavioral or procedural rating then the application rating should be used.

- LGD models

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

a) unsecured portfolio for retail clients.
b) portfolio secured by residential real estate for retail clients.

Pursuant to CRR, and its subsequent amendments, 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.

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:

a) Establish homogenous risk pools of transactions;
b) Estimate the probability of different paths from the default status (cure, incomplete, liquidated);
c) Estimate loss parameters for each path of cure from default.

Loss given default is estimated on transaction level.

- Exposure at Default (EAD) models / CCF 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 case of guarantees, where the number of observations was too low to carry out statistical analyses, a conservative CCF value was used. No EAD model was developed for the RRE portfolio due to immaterial number of observations.

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.

6. Exposure values and adjustments

The below table presents the basic aggregates and parameters used in calculation of own funds requirements in IRB method. As for exposure classes under IRB method, exposure amounts, CCF's, average PD's, debtors amount, average LGD's, risk-weighted assets, risk density, expected loss and specific credit risk adjustments, break downed by probability of default (PD) brackets are showed.

Table 41 EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range (in %, in PLN thous.)

Segmento	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	RWAs	RWA density	EL	Value adjustments and provisions
QRRE	0,00 do <0,15	214 611 825	1 235 376 299	77,01%	1 165 942 712	0,08%	168 351	63,84%	39 414 440	3,38%	595 514	1 040 874
QRRE	0,15 do <0,25	126 209 852	319 510 944	81,46%	386 484 229	0,19%	70 855	62,10%	26 205 270	6,78%	461 960	1 041 818
QRRE	0,25 to <0,50	156 342 002	239 173 027	82,82%	354 432 162	0,39%	59 909	62,55%	43 030 398	12,14%	864 589	1 782 873
QRRE	0,50 to <0,75	230 383 272	187 005 754	84,33%	388 090 417	0,71%	58 991	63,33%	76 555 598	19,73%	1 745 065	3 008 771
QRRE	0,75 to <2,50	420 291 060	205 267 669	84,53%	593 812 863	1,63%	79 468	64,47%	222 829 004	37,53%	6 262 502	7 856 703
QRRE	2,50 to <10,00	253 082 585	67 304 849	84,32%	309 833 175	5,67%	39 269	65,36%	276 711 392	89,31%	11 483 648	9 333 450
QRRE	10,00 to <100,00	127 077 244	15 670 235	82,32%	139 976 207	27,87%	17 673	66,47%	257 327 098	183,84%	25 902 310	10 327 465
QRRE	100,00 (default)	97 178 168	4 690 718	0,00%	97 178 168	100,00%	14 794	93,90%	50 190 192	51,65%	91 247 429	39 519 398
QRRE	Total	1 625 176 009	2 273 999 496	79,62%	3 435 749 933	4,93%	509 310	64,66%	992 263 393	28,88%	138 563 017	73 911 352
Residential Retail	0,00 do <0,15	16 244 614 435	274 996 555	0,00%	16 244 614 435	0,08%	80 704	32,66%	1 124 446 140	6,92%	4 243 909	7 752 632
Residential Retail	0,15 do <0,25	3 623 718 881	28 474 626	0,00%	3 623 718 881	0,18%	16 268	34,25%	484 664 824	13,37%	2 228 454	5 456 990
Residential Retail	0,25 to <0,50	1 876 278 166	16 210 599	0,00%	1 876 278 166	0,39%	8 468	34,15%	443 839 325	23,66%	2 498 949	4 857 773
Residential Retail	0,50 to <0,75	1 705 095 558	12 015 947	0,00%	1 705 095 558	0,71%	7 410	34,47%	619 424 304	36,33%	4 172 989	10 374 819
Residential Retail	0,75 to <2,50	1 944 689 504	18 771 447	0,00%	1 944 689 504	1,66%	8 367	34,58%	1 222 618 469	62,87%	11 149 038	21 121 430
Residential Retail	2,50 to <10,00	1 334 851 896	90 417 988	0,00%	1 334 851 896	6,32%	5 691	35,31%	1 802 939 044	135,07%	30 290 477	31 093 494
Residential Retail	10,00 to <100,00	670 193 773	2 115 764	0,00%	670 193 773	19,01%	2 623	34,93%	1 319 415 091	196,87%	44 420 178	31 281 731
Residential Retail	100,00 (default)	901 466 534	12 970	0,00%	901 466 534	100,00%	2 857	81,26%	1 550 331 531	171,98%	732 499 482	327 338 227
Residential Retail	Total	28 300 908 746	443 015 895	0,00%	28 300 908 746	4,18%	132 388	34,93%	8 567 678 727	30,27%	831 503 475	439 277 095
Total	Total	29 926 084 755	2 717 015 391	66,64%	31 736 658 679	4,27%	588 404	38,15%	9 559 942 120	30,12%	970 066 492	513 188 446

7. Drivers that impacted on the loss experience, in conjunction with the actual results in a longer term

The following table presents a historical backtesting of PD as for exposures' classes.

Table 42 EU CR9 - IRB approach - Backtesting of PD per exposure class

Exposure class	PD range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
				End of previous year	End of the year			
QRRE	<0,06% - 0,12%)	0,08%	0,08%	152 383	168 026	66	11	0,04%
QRRE	<0,12% - 0,18%)	0,15%	0,15%	29 809	31 797	37	2	0,09%
QRRE	<0,18% - 0,28%)	0,23%	0,23%	35 727	38 924	62	5	0,14%
QRRE	<0,28% - 0,53%)	0,39%	0,39%	54 442	59 770	194	7	0,29%
QRRE	<0,53% - 0,95%)	0,71%	0,71%	54 102	58 781	360	8	0,55%
QRRE	<0,95% - 1,73%)	1,28%	1,28%	48 623	51 900	504	8	0,90%
QRRE	<1,73% - 2,94%)	2,25%	2,25%	25 897	27 437	452	15	1,54%
QRRE	<2,94% - 4,90%)	3,80%	3,80%	17 491	18 437	418	24	2,28%
QRRE	<4,90% - 7,60%)	6,10%	6,10%	11 993	12 707	445	38	3,41%
QRRE	<7,60% - 12%)	9,55%	9,55%	7 288	6 669	356	29	4,70%
QRRE	<12% - 20%)	15,63%	15,68%	7 492	7 581	724	8	8,83%
QRRE	<20% - 100%)	76,74%	40,88%	9 437	10 069	2 880	126	33,73%
Residential Retail	<0,06% - 0,12%)	0,08%	0,08%	77 389	80 704	2 210	0	0,05%
Residential Retail	<0,12% - 0,18%)	0,15%	0,15%	10 437	10 152	54	0	0,12%
Residential Retail	<0,18% - 0,28%)	0,23%	0,23%	5 979	6 116	616	0	0,19%

Residential Retail	<0,28% - 0,53%)	0,39%	0,39%	8 202	8 468	26	0	0,29%
Residential Retail	<0,53% - 0,95%)	0,71%	0,71%	7 278	7 410	26	0	0,49%
Residential Retail	<0,95% - 1,73%)	1,28%	1,28%	4 747	5 088	10	0	0,78%
Residential Retail	<1,73% - 2,94%)	2,25%	2,25%	2 944	3 279	7	0	1,27%
Residential Retail	<2,94% - 4,90%)	3,80%	3,80%	2 097	2 331	15	0	1,73%
Residential Retail	<4,90% - 7,60%)	6,10%	6,10%	1 348	1 386	23	0	2,70%
Residential Retail	<7,60% - 12%)	9,55%	9,55%	664	737	31	0	4,07%
Residential Retail	<12% - 20%)	16,49%	16,50%	2 401	2 471	35	0	9,87%
Residential Retail	<20% - 100%)	59,01%	59,01%	163	163	25	0	50,82%

Comparison of actual and modeled PD

The tables below present the calculation of actual default rates and estimated default rates for portfolios covered by the permission to use the IRB approach.

Table 43 Actual and estimated default rates for the QRRE portfolio (in %)

Term	Estimated default rate	Actual default rate
2014	2.68%	1.99%
2015	2.69%	1.82%
2016	2.47%	1.59%
2017	2.27%	1.45%
2018	2.01%	1.43%

Table 44 Actual and estimated default rates for the portfolio of loans secured by residential property (in %)

Term	Estimated default rate	Actual default rate
2014	0.78%	0.48%
2015	0.82%	0.55%
2016	0.88%	0.60%
2017	0.91%	0.53%
2018	0.82%	0.43%

In case of QRRE portfolio, one may observe a further decrease (although lower than previous years) of actual default rates in last years. They are lower than estimated. The observed decrease in actual default rates in recent years is consistent with the observed market trends and may be explained by the following stable macroeconomic situation.

In case of RRE portfolio, actual default rates are lower than in the last year. They are lower than estimated as well. That decrease stems from good macroeconomic situation, as well as a falling share loans denominated in foreign currencies (mostly CHF). As for the latter, the observed risk is higher than as for PLN loans.

In case of both portfolios, the actual default rates were also lower than the average probability of default (PD) mainly because of consideration in estimation of long-term PD an additional conservative buffer, connected with estimation errors, that increases PD values.

Comparison of actual and modeled CCF

The analysis of actual CCF has been conducted for QRRE portfolio cases defaulted during the calendar year 2018 (reporting period) as well as defaults from 2016 and 2017 (comparative periods) which at the end of the preceding year (31 December 2017 in case of the reporting period) were not defaulted and had a positive off-balance sheet exposure. The analysis involved a comparison of the average actual conversion factors with average modeled levels (weighted by the amount of off-balance sheet exposure). The modeled factors include a number of conservative haircuts and should be higher than the actual figures. The results are presented in the table below.

Table 45 Comparison of actual and modeled CCF (in %)

CCF	2018	2017	2016
Model CCF	89.0%	91.3%	86.1%
Actual CCF	55.8%	57.2%	61.0%

In both the reporting period and the comparative periods, actual CCF levels did not exceed the modeled levels. Since the Bank has not recorded higher than expected credit conversion factors, this credit risk element does not lead to the occurrence of higher than expected losses.

Comparison of actual and modeled LGD

The analysis of actual LGD was carried out for cases from RRE and QRRE portfolios. Calculation of actual LGD figures requires a longer time horizon, because recoveries may occur only after the exposure achieves the default status. Accordingly, the calculation of actual LGDs was based on the cases, which defaulted at the latest in December 2016. The average LGD calculated on the basis of these cases (EAD-weighted average) was compared with the average LGD level used for the purpose of IRB capital requirements calculation (EAD weighted). The model values include a number of conservative haircuts (including an additional multiplier imposed by regulators in the IRB decision from July 2017 on approval of changed LGD models for RRE and QRRE portfolios) and should be higher than the actual losses. The results are presented in the table below.

Table 46 Comparison of actual and modeled LGD (in %)

LGD	Portfolio	
	RRE	QRRE
Model LGD	38.5%	69.3%
Actual LGD	26.6%	50.8%

For both analyzed portfolios, modeled loss amounts were much higher than actual figures. We can therefore state that there were no unexpected losses associated with LGD levels and the parameters used have proven to be sufficiently conservative.

The Group does not have companies conducting credit activity abroad (CRR 452.j),

Table EU CR10 – IRB (specialised lending and equities)

Considering that the Group does not use IRB method for specialised lending and equities, Table EU CR10 (EBA/GL/2016/11) is not presented.

Table EU CR7 – IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques

Considering that the Group does not use credit derivatives as CRM techniques, Table EU CR7 (EBA/GL/2016/11) is not presented.

10.3 Use of internal estimates

The Group 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 Group 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.

- 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 Tolerance

Internal estimates have been used to determine the "risk tolerance" of the Bank and the Bank Millennium Group. The risk tolerance incorporates measures, buffers and quantitative limits which, along with qualitative guidelines on managing individual risk types, determine the Bank's propensity for risk. 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 limits for decision-making powers rely on the client's MS risk grade and the total exposure to its economic group.

- 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 maximum 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.

10.4 Credit risk mitigation

Table EU CRC – Qualitative disclosure requirements related to CRM techniques (art. 453.a,e)

Information in that chapter is disclosed according to the requirements of Table EU CRC – Qualitative disclosure requirements related to CRM techniques (EBA/GL/2016/11).

The main criterion considered in Bank when making a decision to provide financing on specific terms is the evaluation whether the client has capacity to service and repay the financing on a timely basis without a need to realize the collateral. Collateral is accepted to reduce credit risk incurred by the Group if the client fails to make the payments in contractual amounts and on contractual dates. Accordingly, the requirements for accepted collateral should correspond to the credit risk incurred by the Group in connection with the specific client, while taking into account the specific features of each individual financing transaction. Additionally, in the case of loans to finance real property (in particular retail mortgage loans), establishing collateral on the property is a mandatory element of the credit product.

The Group's collateral policy defines the principles governing the types, kinds and legal forms of collateral, the rules for valuating collateral and the requirements to be satisfied when collateral is accepted, the rules of measuring and monitoring collateral.

The list of collateral types accepted by the Group is long and includes financial security, mortgage, material collateral, guarantees, sureties and receivables. The accepted collateral types have been described in detail and the Group has also defined the terms relating to features of individual asset types on which they can be accepted as collateral. The Group has also defined a list of acceptable legal forms of collateral, taking into account the risk associated with the probability that the collateral might be lost, in particular upon bankruptcy of or enforced debt collection against the client.

The Group has defined the rules for measuring the value of assets accepted as collateral.

For financial collateral, its value is determined on the basis of current market valuation of the asset, less relevant haircuts, including price volatility haircuts.

Mortgage collateral is measured on the basis of valuations prepared by expert appraisers verified by the Group's specialized units. As the value of collateral of retail loans is monitored during their service, the collateral amount is revaluated using the statistical method based on real property price indices.

For physical collateral, valuation depends on the type, unit value of the asset and age of the asset; the valuation is performed most frequently on the basis of the estimated market price determined by the Group's specialized units.

In each case, the units performing the valuations/verifying the valuations are separate from sales units.

Depending on the type and kind of collateral items, the Bank monitors them in order to:

- ensure that the contractual terms of collateral are satisfied, which includes confirmation of legal certainty,
- update the value of collateral,
- verify that the collateral exists (local visits).

The Group uses as well a range of supplementary collateral to facilitate enforcement or increase probability of achieving repayment from a given collateral type.

Use of credit risk mitigation techniques

The Group does not make use of on- and off-balance sheet netting (CRR 453.a).

Policies and processes for collateral valuation and management

In the collateral management area, the Group applies the approach, in which collateral is used to ensure that the Group 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 including the funded project. 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 Group 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.

Real estate collateral (revaluation)

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 Group monitors collateral in order to:

- update the base value of the collateral,
- ensure that the chosen 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 Group's estimation of the current value of the real estate collateralizing the credit transaction, based on the methodologies used by the Bank 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 material collateral

The base value of material collateral should be updated, when based on a local vision, a material amortization of collateral, collateral deficiency or lack of collateral will be reported. The value of material collateral is assessed once a 12 months.

The table below presents the types, kinds 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. (CRR 453.c)

Table 47 Types and kinds of collateral used by the Group for loans granted

Type	Kind	Legal form
Financial	Term deposit in the Bank in PLN/foreign currency with a 100% principal guarantee	Ownership transfer
	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 (ultimately) and Ordinary pledge (as temporary collateral)
	Prestige Investment Program in PLN/foreign currency	Transfer of receivables.
	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 (ultimately) and Ordinary pledge (as temporary collateral)
	Participation units in mutual funds, being in sale by entities belonging to the Group, managed by Millennium TFI, ING TFI, Investors, Esaliens TFI	Registered pledge (ultimately) and Ordinary pledge (as temporary collateral)
		Ordinary pledge
	WSE-listed shares included in WIG 20 stock index, deposited in Millennium Brokerage House	Ownership transfer
		Registered pledge (ultimately) and Ordinary pledge (as temporary collateral)

Type	Kind	Legal form
		Ordinary pledge
	Treasury bills deposited in the Bank	Ownership transfer
		Registered pledge (ultimately) and Ordinary pledge (as temporary collateral)
		Ordinary pledge
	Dematerialized State Treasury bonds admitted to organized trading, deposited in the Bank or in Millennium Brokerage House	Ownership transfer
		Registered pledge (ultimately) and Ordinary pledge (as temporary collateral)
		Ordinary pledge
	Dematerialized State Treasury bonds not admitted to organized trading, deposited in the Bank or in Millennium Brokerage House	Registered pledge (ultimately) and Ordinary pledge (as temporary collateral)
		Ordinary pledge
Mortgage	Residential properties (used by an owner to inhabitancy or to rent excluding business activity: residential flats, housing buildings, grounds with a purpose of building of the above immovable)	Mortgage and 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)]
	Commercial real estate (offices, storage space, stores, service facilities, hotels, with a purpose of sale or rent in the course of business activity, residential flats, housing buildings one- or multi families, grounds with a purpose of building of the above immovable, other grounds)	
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 (conditional)
		Registered pledge for future collateral and ownership transfer (conditional)
	Fleet consisting of cars	Registered pledge and ownership transfer (conditional)
	Independent specialized hardware and machinery	Registered pledge and ownership transfer (conditional)
		Ownership transfer
	Production lines	Registered pledge and ownership transfer (conditional)

Type	Kind	Legal form
		Ownership transfer
	Collection of fixed assets including specialized equipment and machinery	Registered pledge and ownership transfer (conditional)
	Airplanes, helicopters, boat/ship	Registered pledge and ownership transfer (conditional)
	Inventory	Registered pledge and ownership transfer (conditional)
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

The Group does not use any guarantees and credit derivatives as risk protection instruments in the capital requirement calculation process. (CRR 453.d)

The Group notices concentration related to credit risk mitigation with respect to collaterals for loans in the form of a mortgage. The main risk factor associated with this protection are:

1) an increase in the exchange rate of CHF / PLN.

2) a decrease in the value of mortgage.

Both of these factors contribute to increase of average LTV ratio (the ratio of loan to value of collateral) and the resulting increase in the value of loans. where the value of the LTV is greater than 100% and a deterioration of capital adequacy. The first risk factor increases the DTI ratio (the ratio of debt-to-income for a customer) and it leads also to deterioration of liquidity.

The Group identifies, measures, monitors and controls continuously above risk factors. Conservative liquidity strategy is used, which provides for the maintenance of liquid assets buffer for unexpected changes in exchange rates. Capital plan provides for the maintenance of capital adequacy at a satisfactory level in the coming years. Both plans - Liquidity and Capital – account for stress tests assuming a significant appreciation of the exchange rate of CHF / PLN. The level of non-performing loans is regularly monitored and in case of potential problems with debt repayment customer is contacted in order to apply the right solution, suitable to his financial capability. The quality of loans secured by real estate remains at a high level. (CRR 453.e)

Group does use own estimates of LGD or conversion factors for exposures under the current IRB approval, and not as for portfolios under IRB roll-out plan, own estimates of the above parameters will be used. Therefore information defined in CRR art. 453.f are not presented.

Group does not use guarantees or credit derivatives as credit risk mitigation instruments by calculation of risk-weighted exposure amounts (CRR art. 453.g).

Table 48 EU CR3 - CRM techniques - Overview (in PLN thous.)

		Exposures unsecured - Carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans	36 742 890	24 051 625	23 707 760	343 865	0
2	Total debt securities	22 849 820	0	0	0	0
3	**Total exposures**	59 592 710	24 051 625	23 707 760	343 865	0
4	Of which defaulted	771 595	379 973	340 968	39 005	0

Group does not use Advanced Measurement Approaches to operational risk. (CRR art. 454).

Group does not use Internal Market Risk Models (CRR art. 455).

10.5 Rating systems control and review

The Group 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). In the area of retail exposures, the final risk grade (rating) is awarded automatically. In respect to corporate exposures, risk grades are awarded to clients and changed when necessary during their term by the specialized Ratings Department.
Management of rating models, including the performance of control functions, is regulated in internal procedures pertaining to model development, model calibration and model monitoring. Responsibility for these actions has been assigned to designated model owners.
In order to ensure the appropriate control and review of the rating systems (adequate estimation of risk parameters and correct course of the rating and credit decision process), a validation and monitoring process has been introduced.
The monitoring process is performed by the unit responsible for model development.
The validation process is performed by a unit independent from the organizational units responsible for model development.

The following units handle the monitoring and validation process:

- The Risk Committee, which has general responsibility for risk control;
- The Bank's Validation Committee which is responsible for confirming the results risk models validation and for continuing the implementation of the measures prescribed by the Model Validation Bureau. Validation results are then ratified by the Risk Committee;
- The Model Validation Bureau, which is responsible for qualitative and quantitative analyses, model validation independent from model development, development of model validation and monitoring methodologies, preparation of reports for the Validation Committee;
- 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.

Reports and recommendations from model monitoring are approved by the Head of the Risk Department.

Reports and recommendations of the Model Validation Bureau are approved by the Validation Committee.

The Chairman of the Validation Committee is obligated 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 any.

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

In addition, the Internal Audit Department shall review rating systems according to the annual Audit Plans approved by the Supervisory Board. These include the credit area, in particular issues of risk parameters estimation: PD, LGD, CCF and expected loss EL. The reviews are carried out based on the Audit Charter and the Audit Manual approved by the Audit Committee of the Supervisory Board. Research is carried out on the basis of specialist audit programs.

REMUNERATION AND RECRUITMENT POLICY

11.1 Recruitment policy

The recruitment policy of Members of the Managing Body is an assurance that persons holding positions in the managing bodies have the appropriate professional qualifications as well as proper reputation. Persons holding functions in managing bodies must have a good reputation and be qualified in accordance with the profile of the function performed and the size of the area they manage.

The body responsible for assessing the suitability of the Members of the Bank's Management Board is the Personnel Committee of the Supervisory Board.

The assessment of the suitability of the members of the Managing Body is based on the criteria set out in the Act of 29 August 1997 Banking Law and the criteria listed in detail in the Guidelines on the assessment of the suitability of members of the management body and key function holders EBA / GL / 2012/06 22 November 2012 .

In the process of assessment of the suitability process are used the following criteria, including experience and reputation:

- the level and profile of the education and training completed and their connection to banking or financial services,
- practical experience related to financial markets, regulatory requirements, planning, understanding and implementation of business strategy, risk management, ability to establish an effective management system, supervision and control in a financial institution, the ability to interpret financial information of a credit institution,
- the period of employment in the managerial position, the scope of competences at these positions, the type and complexity of subordinate structures and the number of subordinates,
- any data that may indicate a good repute in personal and professional life, among others, data from criminal records or other administrative registers,
- data regarding financial condition, for example financial and business results of entities owned by the Member or managed by him or entities in which he had significant shares.

Additionally, information is included to assess the independence of the Managing Body Members, in particular, past and present positions, personal, professional or business relationships with Members of the Management Board or shareholders with a controlling interest and the ability to allocate sufficient time for tasks related to the management of the credit institution.

The composition of the Managing Body must collectively have practical experience related to credit institutions.

Information about persons who are members of the Managing Body can be found in the Report of the Management Board of Bank Millennium's operations in Chapter X.4.

11.2 Decision-making processes regarding remuneration policy

"Employee Remuneration Policy in Bank Millennium Group" was developed on the basis of assumptions regarding remuneration of employees in the Bank Millennium Group - taking into account the applied management and internal control system. “Rules of granting and payment of variable remuneration for Board Members of Bank Millennium SA” and “Rules of granting and payment of variable remuneration for Risk Takers - excluding Board Members of Bank Millennium SA” function as part of the "Employee Remuneration Policy in Bank Millennium Group". “Policy” and “Rules” mentioned above were developed by a project team set up for this purpose composed of HR experts, banking law and labor law, management risk and compliance. When drawing up “Policy” no external consultants were used.

Dedicated internal Steering Committee supervised the method of analysis of scopes of responsibility for risk-based decisions, adopted remuneration assumptions as well as evaluation rules. Subject to the Committee’s verification was the list of positions and persons responsible for taking decisions significantly affecting the bank’s risk profile.

Policy updates were prepared internally by a project team composed of experts in risk management, compliance and law - under the direction of the HR Department director.

In 2017, the policy was verified from the perspective of compliance with the Regulation of the Minister of Development and Finance of March 6, 2017 on the risk management system and internal control system, remuneration policy and detailed method of estimating internal capital in banks.

In 2018, as part of the annual identification process of employees having a significant impact on the risk profile of the Bank Millennium Group, the Head of the Tax Department was added to the existing list of risk takers. The list of risk takers has been accepted by the Management Board of Bank Millennium SA based on recommendation of an expert team responsible for the identification process. The identification of persons having a significant impact on the risk profile of the Bank Millennium Group was confirmed by the Personnel Committee of the Supervisory Board of Bank Millennium S.A.

Composition, scope of tasks and procedure of work of the Supervisory Board Personnel Committee in 2018

In 2018, supervision of remuneration of persons holding managerial posts in Bank Millennium Group was held by Personnel Committee of the Supervisory Board, composed of:

1. Andrzej Koźmiński – President
2. Nuno Manuel da Silva Amado
3. Miguel de Campos Pereira de Bragança
4. Bogusław Kott

The Committee is responsible i.a. for defining terms and conditions of employment, defining evaluation criteria and evaluating work of members of the Bank's Management Board. Moreover the Supervisory Board Personnel Committee in line with its powers pronounces opinions on the remuneration policy, including amount and type of components awarded to persons occupying management positions, including persons involved with risk management and compliance of the Bank's activity with legal provisions and internal regulations.

In 2018, two meetings of the Personnel Committee were held: on 26.03.2018 and on 9.04.2018.

In 2018, in order to ensure the correct implementation of the tasks set for the Committee, the Committee members took actions both during and outside the meetings - by conducting mutual consultations and meetings and conversations with other persons, including members of the Bank's Management Board. The subject of the Committee's work was the reassessment of the members of the Bank's Management Board and determination of the rules for paying part of the deferred bonus for 2014, 2015 and 2016 to the members of the Bank's Management Board who performed their functions in those years; assessment of the results of work of individual members of the Bank's Management Board in 2017 and granting individual members of the Management Board for this period bonuses based on the policy of remuneration; consideration of information about decisions regarding bonuses for 2017 for the so-called Risk Takers, who are not members of the Bank's Management Board; analysis of the process of determining the amounts of payment of fixed and variable remuneration in the Bank.

The Supervisory Board presented to the General Meeting of Shareholders a report on the assessment of the remuneration policy in the Bank Millennium Group. The General Meeting of Shareholders acknowledged the policy pursued as conducive to the development and security of the Bank.

Information about the remuneration system, including criteria used when measuring results and adjusting for risk; about payments deferral policy and about eligibility criteria

Remuneration of persons taking decisions affecting the risk profile is determined in particular with consideration of:

- Scope of tasks performed in the organisational unit,
- Scope of responsibility of the employees,
- Based on analysis of salary information presented in labour market surveys of salaries in financial institutions.

Bonus pool vs. results

Variable remuneration components – annual bonus pool for persons occupying management positions is approved after prior analysis of the Bank's situation regarding:

- Actual business performance: net profit, Result on Banking Activity, Cost to Income ratio, ROE;
- Liquidity: Loans/Deposits ratio, value of liquid assets;
- Capital adequacy ratios with respect to the KNF reference level.

The Bank's results before approval of bonus pool for variable remuneration for persons occupying management positions are analysed in a three-year perspective.

The level of the bonus pool is correlated with the actual Result on Banking Activity, net profit, Cost to Income ratio, ROE. Capital adequacy ratios in the evaluated period cannot fall below levels accepted by

KNF. Risk ratios regarding the Bank's liquidity in the evaluated period cannot fall below levels accepted by KNF.

The bonus pool may be raised as the ratios improve. The bonus pool assigned for payment of bonus to Management Board Members cannot exceed 100% of total annual base remuneration and 2% of Consolidated Net Profit of Millennium Group. Variable remuneration of a person covered by the Policy cannot exceed 100% of the person's total annual fixed remuneration.

Payments deferral policy

Management Board Members of Bank Millennium

Awarding and payment of 50% of the value of variable components of remuneration occurs after the end of the settlement period and after announcement of financial results, while payment of 50% of variable remuneration is deferred for 3 years, payable in equal annual instalments. Members of the Management Board receive each part of the awarded bonus – paid in the year coming after the settlement period and deferred – half of it in cash and half in a financial instrument, the value of which is related to the value of shares of Bank Millennium.

Other persons

Other persons covered by the Policy for Variable Components of Remuneration have the bonus paid in 50% in cash form in the year coming after the given financial year. The remaining 50% is paid in a financial instrument, the value of which is related to the value of shares of Bank Millennium – in equal annual instalments during 3 years.

Criteria of eligibility

The bonus, in the deferred part, is subject to reassessment in subsequent years and may be reduced or withheld on the basis of a decision of the Personnel Committee depending on the Bank's financial situation resulting from actions undertaken in the evaluated period.

The condition for payment is the non-occurrence of following events:

- Significant correction of results with respect to the evaluated period,
- Low level of results of the Bank threatening the capital base,
- Materialisation of risk of decisions taken in the evaluated period, adversely affecting the bank's risk profile.

Criteria of evaluation of results on the level of the Bank. organisational units and personal. providing a basis for ascertaining and paying individual variable remuneration

Members of the Bank's Management Board:

Decisions concerning awarding of bonus to Members of the Management Board are taken by the Supervisory Board Personnel Committee after analysis of results, with consideration of financial criteria:

- Fulfilment of planned budgets and ratios defined for the managed area of activity,
- Comparison with competitive banks of similar size,
- Market business criteria defined for the specific period;

And non-financial criteria, in particular:

- Overall quality of management in the area of responsibility,
- Effective leadership and contribution to the Bank's development,
- Management and supervision over units in the area of responsibility.

Other persons

The Personnel Committee of the Management Board of Bank Millennium evaluates work in the given settlement period looking at quantitative criteria for the particular area of responsibility (results of banking activity of business lines) as well as discretionary evaluation of personal work quality with particular consideration of the quality of decision affecting the bank's risk profile in an at least three-year perspective. The each employee identified as Risk Taker had a measure in performance evaluation system assigned, tied to her/his scope of responsibility and related to influence on risk profile.

On this basis it determines the value of annual discretionary bonus.

Quantitative information regarding remuneration

Aggregated quantitative information concerning remuneration of persons in management positions in Bank Millennium Group. who have material impact on its risk profile, in the meaning of article 450 of CRR.

Table 49 Aggregate quantitative information on remuneration per 2018, broken down by areas of the company's activity and by senior management and members of staff whose actions have a material impact on the risk profile of the institution (PLN thous.)

Business lines	Total remuneration		
	Management Board	Risk Takers (without Management Board Members)	Total
Retail Banking	0	1 897	1 897
Corporate Banking	0	4 611	4 611
Overall Bank Management	20 195	9 089	29 284
Total	20 195	15 597	**35 792**

Table 50 The amounts of remuneration for 2018 the financial year, split into fixed and variable remuneration. and the number of beneficiaries; the amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types; the amounts of outstanding deferred remuneration, split into vested and unvested portions; broken down by Management Board Members, persons reporting directly to Management Board Members and other persons in management positions in Bank Millennium Group, whose actions have a material impact on the risk profile of the institution (PLN thous.)

	Management Board Members	Persons in management positions - reporting directly to Management Board Members	Other persons in management positions
Number of persons	*8*	*29*	*6*
Fixed remuneration plus additional benefits	11 654	11 262	1 805
Variable remuneration (*)	8 540	2 143	387
Total cash	4 270	1 093	194
Cash paid	2 135	1 093	194
Cash deferred	2 135	0	0
Total financial instrument	4 270	1 051	194
Vested financial instrument	2 135	0	0
Deferred financial instrument	2 135	1 051	194
Paid financial instrument	0	0	0

(*) Variable remuneration of Management Board Members for 2018 was granted in the decision of Personal Committee of Supervisory Board on the 31st May, 2019.

Table 51 The amounts of outstanding deferred remuneration for the 2018 financial year, split into vested and unvested portions; broken down by Management Board Members, persons reporting directly to Management Board Members holding function in 2018 and other persons in management positions in Bank Millennium Group in 2018, whose actions have a material impact on the risk profile of the institution (PLN thous.)

	Management Board Members	Persons in management positions - reporting directly to Management Board Members	Other persons in management positions
Variable remuneration with deferred payment - part already awarded	0	0	0
Variable remuneration with deferred payment - part not yet awarded	4 270	1 051	194
Total deferred variable remuneration	4 270	1 051	194

Table 52 The amounts of deferred remuneration awarded during 2018 year, paid out and reduced through performance adjustments for persons in management positions (including former employees), broken down by Management Board Members, persons reporting directly to Management Board Members and other persons in management positions in Bank Millennium Group, whose actions have a material impact on the risk profile of the institution (PLN thous.)

	Management Board Members	Persons in management positions - reporting directly to Management Board Members	Other persons in management positions
Number of persons	*9*	*37*	*6*
Employed as of end of year	5	28	6
Former employees (*)	4	9	0
Deferred remuneration paid out during the financial year, subject to adjustment for performance in previous financial years (**)	3 761	950	152
Employed as of end of year	2 826	725	152
Former employees	935	225	0

(*) included former member of Management Board, on duty till 20.04.2018

(**) Deferred remuneration for 2014, 2015 and 2016 programmes

Table 53 New sign-on and severance payments made during the 2018 financial year, and the number of beneficiaries of such payments among persons in management positions, broken down by Management Board Members, persons reporting directly to Management Board Members and other persons in management positions in Bank Millennium Group, whose actions have a material impact on the risk profile of the institution (PLN thous.)

	Management Board Members	Persons in management positions - reporting directly to Management Board Members	Other persons in management positions
New sign-on and severance payments	0	0	**0**
Highest such payment	0	0	0
Number of persons receiving such payments	*0*	*0*	*0*

The number of individuals being remunerated EUR 1 million or more per financial year

1 person – remuneration in band 1-1,5 mln EUR.

Detail information concerning remuneration of Management Board Members are presented in chapter IX.3 of Management Board Report on Activity of Bank Millennium S.A. for 2018.

STATEMENT OF THE MANAGEMENT BOARD

The Management Board of Bank Millennium SA hereby declares that:

- to the best of their knowledge, the information disclosed in accordance with section eight of the CRR was prepared in accordance with internal control processes;
- to the best of its knowledge, the adequacy of risk management arrangements in Bank Millennium SA, ensures that the risk management systems in place are adequate to the risk profile and strategy of the Bank and the Group
- approves this "Capital Adequacy, Risk, Remuneration Policy Report of Bank Millennium Capital Group as at 31 December 2018 ", which contains information about risk, discusses the general risk profile of the Bank and the Group associated with the business strategy and in which key indicators and figures were included, providing external stakeholders with a comprehensive view of risk management in the Bank Millennium SA Group, including the interaction between the Bank's risk profile and risk tolerance, determined by the Management Board and approved by the Supervisory Board.

SIGNATURES

Date	Name and Surname	Position/Function	Signature
11.07.2019	Joao Bras Jorge	Chairman of the Management Board	....
11.07.2019	Fernando Bicho	Deputy Chairman of the Management Board	....
11.07.2019	Wojciech Haase	Member of the Management Board	....
11.07.2019	Andrzej Gliński	Member of the Management Board	....
11.07.2019	Wojciech Rybak	Member of the Management Board	....
1.07.2019	Antonio Pinto Junior	Member of the Management Board	....
11.07.2019	Jarosław Hermann	Member of the Management Board	....

APPENDIX 1 OWN FUNDS IN ACCORDANCE WITH THE EU COMMISSION IMPLEMENTING REGULATION NO 1423/2013 OF 20.12.2013

Main features of capital instruments

1	Issuer
2	Unique identifier (eg CUSIP. ISIN or Bloomberg identifier for private placement)
3	Governing law(s) of the instrument
Regulatory treatment	
4	Transitional CRR rules
5	Post-transitional CRR rules
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated
7	Instrument type (types to be specified by each jurisdiction)
8	Amount recognised in regulatory capital (Currency in million. as of most recent reporting date)
9	Nominal amount of instrument
9a	Issue price
9b	Redemption price
10	Accounting classification
11	Original date of issuance
12	Perpetual or dated
13	Original maturity date
14	Issuer call subject to prior supervisory approval
15	Optional call date. contingent call dates and redemption amount
16	Subsequent call dates. if applicable
Coupons / dividends	
17	Fixed or floating dividend/coupon
18	Coupon rate and any related index
19	Existence of a dividend stopper
20a	Fully discretionary. partially discretionary or mandatory (in terms of timing)
20b	Fully discretionary. partially discretionary or mandatory (in terms of amount)
21	Existence of step up or other incentive to redeem

22 Noncumulative or cumulative
23 Convertible or non-convertible
24 If convertible. conversion trigger(s)
25 If convertible. fully or partially
26 If convertible. conversion rate
27 If convertible. mandatory or optional conversion
28 If convertible. specify instrument type convertible into
29 If convertible. specify issuer of instrument it converts into
30 Write-down features
31 If write-down. write-down trigger(s)
32 If write-down. full or partial
33 If write-down. permanent or temporary
34 If temporary write-down. description of write-up mechanism
35 Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)
36 Non-compliant transitioned features
37 If yes. specify non-compliant features

	A	B1	B2	C	D1	D2	D3
1	Bank Millennium S.A.	Bank Millennium S.A.	Bank Millennium S.A.	Bank Millennium S.A.	Bank Millennium S.A.	Bank Millennium S.A.	Bank Millennium S.A.
2	N/A	N/A	N/A	PLBIG0000016	PLBIG0000016	PLBIG0000016	PLBIG0000016
3	Polish	Polish	Polish	Polish	Polish	Polish	Polish
4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	Common Tier I Capital	Common Tier I Capital	Common Tier I Capital	Common Tier I Capital	Common Tier I Capital	Common Tier I Capital	Common Tier I Capital
6	Stand-alone level/consolidated level	Stand-alone level/consolidated level	Stand-alone level/consolidated level	Stand-alone level/consolidated level	Stand-alone level/consolidated level	Stand-alone level/consolidated level	Stand-alone level/consolidated level
7	registered founder	registered ordinary	registered ordinary	bearer ordinary	bearer ordinary	bearer ordinary	bearer ordinary
8	427 400	600 000	600 000	18 772 600	6 800 008	10 445 464	4 006 000

9	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9a	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9b	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	equity	equity	equity	equity	equity	equity	equity
11	30.06.1989	13.06.1990	13.12.1990	17.05.1991	31.12.1991	31.01.1992	10.03.1992
12	perpetual	perpetual	perpetual	perpetual	perpetual	perpetual	perpetual
13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	Floating rate	Floating rate	Floating rate	Floating rate	Floating rate	Floating rate	Floating rate
18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20a	fully discretionary	fully discretionary	fully discretionary	fully discretionary	fully discretionary	fully discretionary	fully discretionary
20b	fully discretionary	fully discretionary	fully discretionary	fully discretionary	fully discretionary	fully discretionary	fully discretionary
21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
31	GSM. statutory approach	GSM. statutory approach	GSM. statutory approach	GSM. statutory approach	GSM. statutory approach	GSM. statutory approach	GSM. statutory approach

32	full or partial	full or partial	full or partial	full or partial	full or partial	full or partial	full or partial
33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
34	GSM's resolution	GSM's resolution	GSM's resolution	GSM's resolution	GSM's resolution	GSM's resolution	GSM's resolution
35	N/A	N/A	N/A	N/A	N/A	N/A	N/A
36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
37	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Transitional Own Funds (PLN thousand)

	(A) AMOUNT AT DISCLOSURE DATE	(B) REGULATION (EU) NO 575/2013 ARTICLE REFERENCE	(C) AMOUNTS SUBJECT TO PRE-REGULATION (EU) NO 575/2013 TREATMENT OR PRESCRIBED RESIDUAL AMOUNT OF REGULATION (EU) NO 575/2013
Common Equity Tier 1 capital: instruments and reserves			
Capital instruments and the related share premium accounts	2 360 619	26 (1). 27. 28. 29. EBA list 26 (3)	0
Retained earnings	4 960 524	26 (1) (c)	0
Accumulated other comprehensive income (and other reserves. to include unrealised gains and losses under the applicable accounting standards)	73 692	26 (1)	0
Funds for general banking risk	228 902	26 (1) (f)	0
Independently reviewed interim profits net of any foreseeable charge or dividend	0	26 (2)	0
Common Equity Tier 1 (CET1) capital before regulatory adjustments	**7 623 737**		0
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
Additional value adjustments (negative amount)	-24 965	34. 105	0
Intangible assets (net of related tax liability) (negative amount)	-96 464	36 (1) (b). 37. 472 (4)	0
Fair value reserves related to gains or losses on cash flow hedges	55 541	33 (a)	0
Negative amounts resulting from the calculation of expected loss amounts	-456 878	36 (1) (d). 40. 159. 472 (6)	0
Transitional adjustments due to MSSF 9	142 018	473a	0
Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	-		0
Of which: …filter for unrealised loss 1	-	467	0
Of which: …filter for unrealised loss 2	-	467	0
Of which: …filter for unrealised gain 1	-	468	0

Of which: …filter for unrealised gain 2	-	468	0
Total regulatory adjustments to Common equity Tier 1 (CET1)	-380 624		0
Common Equity Tier 1 (CET1) capital	**7 242 989**		0
Additional Tier 1 (AT1) capital: instruments			
Additional Tier 1 (AT1) capital before regulatory adjustments	-		0
Additional Tier 1 (AT1) capital: regulatory adjustments			
Additional Tier 1 (AT1) capital	-		0
Tier 1 capital (T1 = CET1 + AT1)	7 242 989		0
Tier 2 (T2) capital: instruments and provisions			
Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	700 000	486 (4)	0
Tier 2 (T2) capital before regulatory adjustments	700 000		0
Tier 2 (T2) capital: regulatory adjustments			
Residual amounts deducted from Tier 2capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013	0	472. 472(3)(a). 472 (4). 472 (6). 472 (8) (a). 472 (9). 472 (10) (a). 472 (11) (a)	0
Total regulatory adjustments to Tier 2 (T2) capital	0		0
Tier 2 (T2) capital	700 000		0
Total capital (TC = T1 + T2)	7 942 989		0
Risk weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013(i.e. CRR residual amounts)	-		0
Of which: …items not deducted from CET1 (Regulation (EU) No 575/2013residual amounts) (items to be detailed line by line. e.g. Deferred tax assets that rely on future profitability net of related tax liablity. indirect holdings of own CET1. etc)	-	472. 472 (5). 472 (8) (b). 472 (10) (b). 472 (11) (b)	0

Of which: …items not deducted from AT1 items (Regulation (EU) No 575/2013residual amounts) (items to be detailed line by line. e.g. Reciprocal cross holdings in T2 instruments. direct holdings of non-significant investments in the capital of other financial sector entities. etc)	-	475. 475 (2) (b). 475 (2) (c). 475 (4) (b)	0
Items not deducted from T2 items (Regulation (EU) No 575/2013residual amounts) (items to be detailed line by line. e.g. Indirect holdings of own t2 instruments. indirect holdings of non significant investments in the capital of other financial sector entities. indirect holdings of significant investments in the capital of other financial sector entities etc)	-	477. 477 (2) (b). 477 (2) (c). 477 (4) (b)	0
Total risk weighted assets			0
Capital ratios and buffers			0
Common Equity Tier 1 (as a percentage of risk exposure amount)	19.77%	92 (2) (a). 465	0
Tier 1 (as a percentage of risk exposure amount)	19.77%	92 (2) (b). 465	0
Total capital (as a percentage of risk exposure amount)	21.68%	92 (2) (c)	0
Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements. plus systemic risk buffer. plus the systemically important institution buffer (G-SII or O-SII buffer). expressed as a percentage of risk exposure amount)	-	CRD 128. 129. 130	0
of which: capital conservation buffer requirement	-		0
of which: countercyclical buffer requirement	-		0
of which: systemic risk buffer requirement	-		0
of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-	CRD 131	0
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	-	CRD 128	0

Description of key components of own funds

Details of items from Table no 7 (in PLN thous.)

1.1.1.1.1	**Paid-for capital instruments**	**1 213 117**
This item is equal to the company’s share capital. which comprises the following components (nominal value of one share = PLN 1):		

Series / issue	Share type	Privilege type	Number of shares	Series / issue value	Payment of capital	Registration date	Right to dividend
A	registered founding	x2 voting rights	106 850	106 850	cash	30.06.1989	30.06.1989
B1	registered ordinary		150 000	150 000	cash	13.06.1990	01.01.1990
B2	registered ordinary		150 000	150 000	cash	13.12.1990	01.01.1990
C	bearer ordinary		4 693 150	4 693 150	cash	17.05.1991	01.01.1991
D1	bearer ordinary		1 700 002	1 700 002	cash	31.12.1991	01.01.1992
D2	bearer ordinary		2 611 366	2 611 366	cash	31.01.1992	01.01.1992
D3	bearer ordinary		1 001 500	1 001 500	cash	10.03.1992	01.01.1992
E	bearer ordinary		6 000 000	6 000 000	cash	28.05.1993	01.01.1992
F	bearer ordinary		9 372 721	9 372 721	cash	10.12.1993	01.01.1993
G	bearer ordinary		8 000 000	8 000 000	cash	30.05.1994	01.10.1993
H	bearer ordinary		7 082 129	7 082 129	cash	24.10.1994	01.10.1994
Increase of nominal share value from PLN 1 to 4				122 603 154	Reserve capital	24.11.1994	
1:4 share split			122 603 154			05.12.1994	
I	bearer ordinary		65 000 000	65 000 000	cash	12.08.1997	01.10.1996
J	bearer ordinary		196 120 000	196 120 000	Capitals of Bank Gdański S.A.	12.09.1997	01.10.1996
K	bearer ordinary		424 590 872	424 590 872	cash	31.12.2001	01.01.2001
L	bearer		363 935 033	363 935 033	cash	26.02.2010	01.01.2009

	ordinary						
Total number of shares			1 213 116 777				
Total stock capital				1 213 116 777			

1.1.1.1.3	**Agio**	**1 147 502**
Agio is the capital from sale of shares above their nominal value. It is created with the issue premium generated from an issue of shares less direct related costs incurred.		
1.1.1.2.1	**Previous years retained earnings**	**-257 352**
This is the amount consists of adjustments resulting from IFRS 9 implementation.		
1.1.1.2.2.1	**Profit or loss attributable to owners of the parent entity**	**760 651**
This item is equal to 2018 consolidated net result.		
1.1.1.2.2.2	**(-) Part of not recognised current profit or not recognised annual profit**	**-760 651**
This is the amount of net result, which cannot be included in own funds for purposes of calculation of prudential standards as of reporting date.		
1.1.1.3	**Accumulated other total income**	**73 692**
This item comprises revaluation capital, which arose in result of recognition of: - Effect of measurement (at fair value) of financial assets available for sale in the net amount i.e. after deduction of deferred tax. These amounts are removed from revaluation capital is done when all or part of the valuated assets are taken out of the books or when impairment is recognised (the valuation effect is then taken to the P&L Account). Amount of PLN 131 317 thous. - Effect of measurement (at fair value) of derivative instruments hedging cash flows in the net amount i.e. after deduction of deferred tax. Revaluation capital carries part of profit or loss involved with the instrument hedging cash flows, which constitutes an effective hedge, while the ineffective part of profit or loss involved with this hedging instrument is carried in P&L. Amount of PLN (-) 55 541 thous.		

- Actuarial profit / (loss) in the net amount i.e. after deferred tax. Revaluation capital carries profit or loss resulting from discounting of future liabilities arisen on account of a provision created for retirement severance pay. These values are not eligible for moving to P&L. The amount is PLN (-) 2 084 thous.		
1.1.1.4	**Additional reserve capital**	**5 217 876**
This capital arose in result of annual resolutions of the Shareholders' Meeting on distribution of profit. These resolutions decided to retain part of profit generated in the Bank and in Companies of the Group. According to the Articles of Association the GSM decides about use of additional reserve capital and it may be used in particular to cover any future losses or for payment of dividend.		
1.1.1.5	**General banking risk fund**	**228 902**
The General Banking Risk Fund in the Bank was created with profit after tax in keeping with provisions of Banking Law of 29 August 1997 as amended.		
1.1.1.9.2	**Provision for instruments hedging cash flows**	**55 541**
This amount with a negative mark is a component of item 1.1.1.3 and in accordance with article 33 of Regulation No. 575/2013 the Bank does not include it in own funds.		
1.1.1.9.5	**Value adjustments coming from requirements on prudent valuation**	**-24 965**
That adjustment concerns: - debt securities (valued at fair value through profit and loss): PLN (-) 693 thous. - debt securities (valued at fair value through other comprehensive income): PLN (-) 22 091 thous. - shares (valued at fair value): PLN (-) 94 thous. - balance sheet value of derivatives (trading portfolio): PLN (-) 335 thous. - balance sheet value of derivatives (hedging): PLN (-) 502 thous. - loans (valued at fair value): : PLN (-) 1 250 thous.		
1.1.1.11.1	**(-) Gross amount of other intangible assets**	**-96 464**

This amount comprises mainly the value of software purchased by the Bank and companies of the Group.		
1.1.1.13	**(-) Shortage of credit risk corrections in view of expected losses according to IRB approach**	**-456 878**
Deductions under art. 36 CRR concern portfolios of retail residential real estate (RRE) mortgages and renewable retail exposures (QRRE). with respect to which the Group has permission to apply the IRB approach. The method of carrying the amounts of expected losses is consistent with CRR art. 128 and 159.		
1.1.1.26	**Other interim corrections in Tier I**	**142 018**
These corrections comprise following amounts: - Transitional adjustments due to MSSF 9 (473a): 142 018		
1.2.1.1	**Paid-for equity instruments and subordinated loans**	**700 000**
The Bank (and Group) includes in supplementary funds the liabilities from issue of securities with maturities on 7 December, 2027. The nominal amount of the liability is PLN 700 000 000.		
1.2.10	**Other interim corrections in Tier II**	**0**

APPENDIX 2 IFRS 9-FL COMPARISON OF INSTITUTIONS' OWN FUNDS AND CAPITAL AND LEVERAGE RATIOS WITH AND WITHOUT THE APPLICATION OF TRANSITIONAL ARRANGEMENTS FOR IFRS 9 OR ANALOGOUS ECLS (IN PLN THOUS. AND IN %)

	31.12.2018	30.09.2018	30.06.2018	31.03.2018
Available capital (amounts)				
1. Common Equity Tier 1 (CET1) capital	7 242 988	7 278 213	7 309 606	7 379 886
2.Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7 100 970	7 131 498	7 157 772	7 239 821
3. Tier 1 capital	7 242 988	7 278 213	7 309 606	7 379 886
4. Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7 100 970	7 131 498	7 157 772	7 239 821
5. Total capital	7 942 988	7 978 213	8 009 606	8 079 886
6. Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7 800 970	7 831 498	7 857 772	7 939 821
Risk-weighted assets (amounts)				
7. Total risk-weighted assets	36 635 539	34 822 150	34 268 671	33 070 344
8. Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	36 477 459	34 656 529	34 098 895	32 897 092
Capital ratios				
9. Common Equity Tier 1 (as percentage of risk exposure amount)	19,77%	20,90%	21,33%	22,32%
10. Common Equity Tier 1 (as percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	19,47%	20,58%	20,99%	22,01%
11. Tier 1 (as percentage of risk exposure amount)	19,77%	20,90%	21,33%	22,32%
12. Tier 1 (as percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	19,47%	20,58%	20,99%	22,01%
13. Total capital (as percentage of risk exposure amount)	21,68%	22,91%	23,37%	24,43%
14. Total capital (as percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	21,39%	22,60%	23,04%	24,14%
Leverage ratio				
15. Leverage ratio total exposure measure	82 534 020	75 693 126	74 754 655	75 214 764
16. Leverage ratio	8,78%	9,62%	9,78%	9,81%
17. Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	8,62%	9,44%	9,59%	9,64%

APPENDIX 3 LIQUIDITY COVERAGE REQUIREMENT FOR GROUP (MONTLY AVERAGE FOR 2018)

Scope of consolidation (solo/consolidated)		Total unweighted value (simple average)	Total weighted value (simple average)
Currency and units (PLN million)			
Quarter ending on (DD Month YYY)		31 December 2018	31 December 2018
Number of data points used in the calculation of averages		12	12
HIGH-QUALITY LIQUID ASSETS			
1	Total high-quality liquid assets (HQLA)		19 629
CASH-OUTFLOWS			
2	Retail deposits and deposits from small business customers, of which:	38 180	2 570
3	*Stable deposits*	30 238	1 512
4	*Less stable deposits*	7 942	1 058
5	Unsecured wholesale funding	13 988	7 019
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	0	0
7	*Non-operational deposits (all counterparties)*	13 960	7 019
8	*Unsecured debt*	28	0
9	Secured wholesale funding		0
10	Additional requirements	8 496	1 661
11	*Outflows related to derivative exposures and other collateral requirements*	800	800
12	*Outflows related to loss of funding on debt products*	0	0
13	*Credit and liquidity facilities*	7 695	861
14	Other contractual funding obligations	489	484
15	Other contingent funding obligations	913	913
16	**TOTAL CASH OUTFLOWS**		12 647
CASH-INFLOWS			
17	Secured lending (eg reverse repos)	148	5
18	Inflows from fully performing exposures	1 965	1 582
19	Other cash inflows	16	16

EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)		0
EU-19b	(Excess inflows from a related specialised credit institution)		0
20	**TOTAL CASH INFLOWS**	2 129	1 604
EU-20a	***Fully exempt inflows***	0	0
EU-20b	***Inflows Subject to 90% Cap***	0	0
EU-20c	***Inflows Subject to 75% Cap***	2 129	1 604
			TOTAL ADJUSTED VALUE
21	**LIQUIDITY BUFFER**		**19 629**
22	**TOTAL NET CASH OUTFLOWS**		**11 043**
23	**LIQUIDITY COVERAGE RATIO (%)**		178%

Note: Information calculated as the consolidated LCR simple month-end observations over the twelve months in 2018 (EBA/GL/2017/01).

The LCR value as at 2018-12-31 was equal to 212 %.

DISCLOSURES INDEX

The below table presents the disclosure index with references to chapters in the Disclosures or another documents of the Group, wherein information defined in Part Eight of CRR. The table presents the references to the tables and templates set in the Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013 (EBA/GL/2016/11).

Disclosures index

CRR article (Part VIII)	CRR provision	Table / template in EBA/GL/2016/11	Point in the Report / in another document
435.1.a	1. Institutions shall disclose their risk management objectives and policies for each separate category of risk. including the risks referred to under this Title. These disclosures shall include: (a) the strategies and processes to manage those risks;	EU OVA EU CRA EU CCRA EU MRA	3,6,7,8 8 Yearly Report VIII Management Board Report
435.1.b	(b) the structure and organisation of the relevant risk management function including information on its authority and statute. or other appropriate arrangements;	EU OVA EU CRA EU CCRA EU MRA	3 8 Yearly Report, VIII Management Board Report
435.1.c	(c) the scope and nature of risk reporting and measurement systems;	EU OVA	3 8 Yearly Report, VIII Management Board Report
435.1.d	(d) the policies for hedging and mitigating risk. and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants;	EU OVA EU CRA EU CCRA EU MRA	10.4 8 Yearly Report VIII Management Board Report
435.1.e	(e) a declaration approved by the management body on the adequacy of risk management arrangements of the institution providing assurance that the risk management systems put in place are adequate with regard to the institution's profile and strategy;	EU OVA	12
435.1.f	(f) a concise risk statement approved by the management body succinctly describing the institution's overall risk profile associated with the business strategy. This statement shall include key ratios and figures providing external stakeholders with a comprehensive view of the institution's management of risk. including how the risk profile of the institution interacts with the risk tolerance set by the management body.	EU OVA EU CRA, LCR quantitative disclosure template in EBA/GL/2017/01	3, Appendix 3 8 Yearly Report VIII Management Board Report
435.2.a	2. Institutions shall disclose the following information. including regular. at least annual updates. regarding governance arrangements:		3

	(a) the number of directorships held by members of the management body;		
435.2.b	(b) the recruitment policy for the selection of members of the management body and their actual knowledge. skills and expertise;		11 III.2.1 Non-financial Report
435.2.c	(c) the policy on diversity with regard to selection of members of the management body. its objectives and any relevant targets set out in that policy. and the extent to which these objectives and targets have been achieved;		11 III.2.1, III.2.4Non-financial Report IX.1 Management Board Report
435.2.d	(d) whether or not the institution has set up a separate risk committee and the number of times the risk committee has met;		3
435.2.e	(e) the description of the information flow on risk to the management body.		3
436.a-b	Institutions shall disclose the following information regarding the scope of application of the requirements of this Regulation in accordance with Directive 2013/36/EU: (a) the name of the institution to which the requirements of this Regulation apply; (b) an outline of the differences in the basis of consolidation for accounting and prudential purposes. with a brief description of the entities therein. explaining whether they are: (i) fully consolidated; (ii) proportionally consolidated; (iii) deducted from own funds; (iv) neither consolidated nor deducted;	EU LI1 EU LI2 EU LI3 EU LIA	4
436.c	(c) any current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities among the parent undertaking and its subsidiaries;		4
436.d	(d) the aggregate amount by which the actual own funds are less than required in all subsidiaries not included in the consolidation. and the name or names of such subsidiaries;		4
436.e	(e) if applicable. the circumstance of making use of the provisions laid down in Articles 7 and 9.		4
437.1.a	1. Institutions shall disclose the following information regarding their own funds: (a) a full reconciliation of Common Equity Tier 1 items. Additional Tier 1 items. Tier 2 items and filters and deductions applied pursuant to Articles 32 to 35. 36. 56. 66 and 79 to own funds of the institution and the balance sheet in the audited financial statements of the institution;		4 Attachment 1
437.1.b	(b) a description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution;		4 Attachment 1
437.1.c	(c) the full terms and conditions of all		4

	Common Equity Tier 1. Additional Tier 1 and Tier 2 instruments;		Attachment 1
437.1.d	(d) separate disclosure of the nature and amounts of the following: (i) each prudential filter applied pursuant to Articles 32 to 35; (ii) each deduction made pursuant to Articles 36. 56 and 66; (iii) items not deducted in accordance with Articles 47. 48. 56. 66 and 79;		4 Attachment 1
437.1.e	(e) a description of all restrictions applied to the calculation of own funds in accordance with this Regulation and the instruments. prudential filters and deductions to which those restrictions apply;		4
437.1.f	(f) where institutions disclose capital ratios calculated using elements of own funds determined on a basis other than that laid down in this Regulation. a comprehensive explanation of the basis on which those capital ratios are calculated.		n.d.
438.a	Institutions shall disclose the following information regarding the compliance by the institution with the requirements laid down in Article 92 of this Regulation and in Article 73 of Directive 2013/36/EU: (a) a summary of the institution's approach to assessing the adequacy of its internal capital to support current and future activities;		5.2
438.b	(b) upon demand from the relevant competent authority. the result of the institution's internal capital adequacy assessment process including the composition of the additional own funds requirements based on the supervisory review process as referred to in point (a) of Article 104(1) of Directive 2013/36/EU;		2
438.c	(c) for institutions calculating the risk-weighted exposure amounts in accordance with Chapter 2 of Part Three. Title II. 8 % of the risk-weighted exposure amounts for each of the exposure classes specified in Article 112;	EU OV1 EU INS1	5.1
438.d	(d) for institutions calculating risk-weighted exposure amounts in accordance with Chapter 3 of Part Three. Title II. 8 % of the risk-weighted exposure amounts for each of the exposure classes specified in Article 147. For the retail exposure class. this requirement applies to each of the categories of exposures to which the different correlations in Article 154(1) to (4) correspond. For the equity exposure class. this requirement applies to: (i) each of the approaches provided in Article 155; (ii) exchange traded exposures. private equity exposures in sufficiently diversified portfolios. and other exposures;	EU OV1 EU INS 1 EU CR8 EU CCR7	5.1

	(iii) exposures subject to supervisory transition regarding own funds requirements; (iv) exposures subject to grandfathering provisions regarding own funds requirements;		
438.e	(e) own funds requirements calculated in accordance with points (b) and (c) of Article 92(3);	EU OV1	5.1
438.f	(f) own funds requirements calculated in accordance with Part Three. Title III. Chapters 2. 3 and 4 and disclosed separately.	EU OV1 EU CR10	5.1 10.2
439.a	Institutions shall disclose the following information regarding the institution's exposure to counterparty credit risk as referred to in Part Three. Title II. Chapter 6: (a) a discussion of the methodology used to assign internal capital and credit limits for counterparty credit exposures;	EU CCRA	7.2
439.b	(b) a discussion of policies for securing collateral and establishing credit reserves;	EU CCRA	7.2
439.c	(c) a discussion of policies with respect to wrong-way risk exposures;	EU CCRA	7.2
439.d	(d) a discussion of the impact of the amount of collateral the institution would have to provide given a downgrade in its credit rating;	EU CCRA	7.2
439.e	(e) gross positive fair value of contracts. netting benefits. netted current credit exposure. collateral held and net derivatives credit exposure. Net derivatives credit exposure is the credit exposure on derivatives transactions after considering both the benefits from legally enforceable netting agreements and collateral arrangements;	EU CCR1 EU CCR2 EU CCR8 EU CCR5-A EU CCR5-B	7.2 13 Yearly Report, Note 23
439.f	(f) measures for exposure value under the methods set out in Part Three. Title II. Chapter 6. Sections 3 to 6 whichever method is applicable;	EU CCR1 EU CCR2 EU CCR8	6.2
439.g	(g) the notional value of credit derivative hedges. and the distribution of current credit exposure by types of credit exposure;	EU CCR6	6.2
439.h	(h) the notional amounts of credit derivative transactions. segregated between use for the institution's own credit portfolio. as well as in its intermediation activities. including the distribution of the credit derivatives products used. broken down further by protection bought and sold within each product group;	EU CCR6	6.2
439.i	(i) the estimate of α if the institution has received the permission of the competent authorities to estimate α.	EU CCR1	6.2
440	An institution shall disclose the following information in relation to its compliance with the requirement for a countercyclical capital buffer referred to in Title VII. Chapter 4 of Directive 2013/36/EU:		2

441	1. Institutions identified as G-SIIs in accordance with Article 131 of Directive 2013/36/EU shall disclose. on an annual basis. the values of the indicators used for determining the score of the institutions in accordance with the identification methodology referred to in that Article.		n.a.
442.a	Institutions shall disclose the following information regarding the institution's exposure to credit risk and dilution risk: (a) the definitions for accounting purposes of 'past due' and 'impaired';	EU CRB-A	6.3 8 Yearly Report
442.b	(b) a description of the approaches and methods adopted for determining specific and general credit risk adjustments;		6.3 8 Yearly Report
442.c	(c) the total amount of exposures after accounting offsets and without taking into account the effects of credit risk mitigation. and the average amount of the exposures over the period broken down by different types of exposure classes;	EU CRB-B	6
442.d	(d) the geographic distribution of the exposures. broken down in significant areas by material exposure classes. and further detailed if appropriate;	EU CRB-C	6
442.e	(e) the distribution of the exposures by industry or counterparty type. broken down by exposure classes. including specifying exposure to SMEs. and further detailed if appropriate;	EU CRB-D EU CR1-B EU CR1-C	7 6.3
442.f	(f) the residual maturity breakdown of all the exposures. broken down by exposure classes. and further detailed if appropriate;	EU CRB-E	6 13 Yearly Report Note 21
442.g	(g) by significant industry or counterparty type. the amount of: (i) impaired exposures and past due exposures. provided separately; (ii) specific and general credit risk adjustments; (iii) charges for specific and general credit risk adjustments during the reporting period;	EU CR1-A EU CR1-D EU CR1-E	6.3 VIII.3 Yearly Report
442.h	(h) the amount of the impaired exposures and past due exposures. provided separately. broken down by significant geographical areas including. if practical. the amounts of specific and general credit risk adjustments related to each geographical area;	EU CR1-C	6.3
442.i	(i) the reconciliation of changes in the specific and general credit risk adjustments for impaired exposures. shown separately. The information shall comprise: (i) a description of the type of specific and general credit risk adjustments; (ii) the opening balances; (iii) the amounts taken against the credit risk adjustments during the reporting period;	EU CR1-E EU CR2-A EU CR2-B	6.3

	(iv) the amounts set aside or reversed for estimated probable losses on exposures during the reporting period. any other adjustments including those determined by exchange rate differences. business combinations. acquisitions and disposals of subsidiaries. and transfers between credit risk adjustments; (v) the closing balances.		
443	Unencumbered assets		6.5
444.a	For institutions calculating the risk-weighted exposure amounts in accordance with Part Three. Title II. Chapter 2. the following information shall be disclosed for each of the exposure classes specified in Article 112: (a) the names of the nominated ECAIs and ECAs and the reasons for any changes;	EU CRD	6.4
444.b	(b) the exposure classes for which each ECAI or ECA is used;	EU CRD	6.4
444.c	(c) a description of the process used to transfer the issuer and issue credit assessments onto items not included in the trading book;	EU CRD	6.4
444.d	(d) the association of the external rating of each nominated ECAI or ECA with the credit quality steps prescribed in Part Three. Title II. Chapter 2. taking into account that this information needs not be disclosed if the institution complies with the standard association published by EBA;	EU CRD	6.4
444.e	(e) the exposure values and the exposure values after credit risk mitigation associated with each credit quality step prescribed in Part Three. Title II. Chapter 2 as well as those deducted from own funds.	EU CR5 EU CCR3	6.1 6.4
445	Exposure to market risk	EU MR1	8 8.4 Yearly Report
446	Operational risk		7
447.a	Institutions shall disclose the following information regarding the exposures in equities not included in the trading book: (a) the differentiation between exposures based on their objectives. including for capital gains relationship and strategic reasons. and an overview of the accounting techniques and valuation methodologies used. including key assumptions and practices affecting valuation and any significant changes in these practices;		8
447.b	(b) the balance sheet value. the fair value and. for those exchange-traded. a comparison to the market price where it is materially different from the fair value;		8
447.c	(c) the types. nature and amounts of exchange-traded exposures. private equity exposures in sufficiently diversified portfolios. and other exposures;		8

447.d	(d) the cumulative realised gains or losses arising from sales and liquidations in the period; and		8
447.e	(e) the total unrealised gains or losses. the total latent revaluation gains or losses. and any of these amounts included in the original or additional own funds.		8
448.a	Institutions shall disclose the following information on their exposure to interest rate risk on positions not included in the trading book: (a) the nature of the interest rate risk and the key assumptions (including assumptions regarding loan prepayments and behaviour of non-maturity deposits). and frequency of measurement of the interest rate risk;		8 8.4 Yearly Report
448.b	(b) the variation in earnings. economic value or other relevant measure used by the management for upward and downward rate shocks according to management's method for measuring the interest rate risk. broken down by currency.		8 8.4 Yearly Report
449	Exposure to securitisation positions	EU OV1	5.1
450.a	1. Institutions shall disclose at least the following information. regarding the remuneration policy and practices of the institution for those categories of staff whose professional activities have a material impact on its risk profile: (a) information concerning the decision-making process used for determining the remuneration policy. as well as the number of meetings held by the main body overseeing remuneration during the financial year. including. if applicable. information about the composition and the mandate of a remuneration committee. the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;		11 III.2.2 Non-financial Report IX.1 Management Board Report
450.b	(b) information on link between pay and performance;		11
450.c	(c) the most important design characteristics of the remuneration system. including information on the criteria used for performance measurement and risk adjustment. deferral policy and vesting criteria;		11
450.d	(d) the ratios between fixed and variable remuneration set in accordance with Article 94(1)(g) of Directive 2013/36/EU;		11
450.e	(e) information on the performance criteria on which the entitlement to shares. options or variable components of remuneration is based;		11
450.f	(f) the main parameters and rationale for any variable component scheme and any other non-cash benefits;		11
450.g	(g) aggregate quantitative information on remuneration. broken down by business area;		11

450.h	(h) aggregate quantitative information on remuneration. broken down by senior management and members of staff whose actions have a material impact on the risk profile of the institution. indicating the following: (i) the amounts of remuneration for the financial year. split into fixed and variable remuneration. and the number of beneficiaries; (ii) the amounts and forms of variable remuneration. split into cash. shares. share-linked instruments and other types; (iii) the amounts of outstanding deferred remuneration. split into vested and unvested portions; (iv) the amounts of deferred remuneration awarded during the financial year. paid out and reduced through performance adjustments; (v) new sign-on and severance payments made during the financial year. and the number of beneficiaries of such payments; (vi) the amounts of severance payments awarded during the financial year. number of beneficiaries and highest such award to a single person;		11
450.i	(i) the number of individuals being remunerated EUR 1 million or more per financial year. for remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and for remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million;		11
451.a	1. Institutions shall disclose the following information regarding their leverage ratio calculated in accordance with Article 429 and their management of the risk of excessive leverage: (a) the leverage ratio and how the institution applies Article 499(2) and (3);		9
451.b	(b) a breakdown of the total exposure measure as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements;		9
451.c	(c) where applicable. the amount of derecognised fiduciary items in accordance with Article 429(11);		9
451.d	(d) a description of the processes used to manage the risk of excessive leverage;		9
451.e	(e) a description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers.		9
452.a	under the IRB Approach shall disclose the following information: (a) the competent authority's permission of the approach or approved transition;	EU CRE	10.1
452.b	(b) an explanation and review of:	EU CRE	10.2

	(i) the structure of internal rating systems and relation between internal and external ratings; (ii) the use of internal estimates other than for calculating risk-weighted exposure amounts in accordance with Part Three. Title II. Chapter 3; (iii) the process for managing and recognising credit risk mitigation; (iv) the control mechanisms for rating systems including a description of independence. accountability. and rating systems review;		10.3 10.4
452.c	a description of the internal ratings process. provided separately for the following exposure classes: (i) central governments and central banks; (ii) institutions; (iii) corporate. including SMEs. specialised lending and purchased corporate receivables; (iv) retail. for each of the categories of exposures to which the different correlations in Article 154(1) to (4) correspond; (v) equities;	EU CRE	10.2
452.d	(d) the exposure values for each of the exposure classes specified in Article 147. Exposures to central governments and central banks. institutions and corporates where institutions use own estimates of LGDs or conversion factors for the calculation of risk-weighted exposure amounts shall be disclosed separately from exposures for which the institutions do not use such estimates;		10.2
452.e	(e) for each of the exposure classes central governments and central banks. institutions. corporate and equity. and across a sufficient number of obligor grades (including default) to allow for a meaningful differentiation of credit risk. institutions shall disclose: (i) the total exposures. including for the exposure classes central governments and central banks. institutions and corporate. the sum of outstanding loans and exposure values for undrawn commitments; and for equities the outstanding amount; (ii) the exposure-weighted average risk weight; (iii) for the institutions using own estimates of conversion factors for the calculation of risk-weighted exposure amounts. the amount of undrawn commitments and exposure-weighted average exposure values for each exposure class;	EU CR6 EU CCR4	10.2

452.f	(f) For the retail exposure class and for each of the categories set out in point (c)(iv). either the disclosures outlined in point (e) (if applicable. on a pooled basis). or an analysis of exposures (outstanding loans and exposure values for undrawn commitments) against a sufficient number of EL grades to allow for a meaningful differentiation of credit risk (if applicable. on a pooled basis);		10.2
452.g	(g) the actual specific credit risk adjustments in the preceding period for each exposure class (for retail. for each of the categories as set out in point (c)(iv)) and how they differ from past experience;		10.2
452.h	(h) a description of the factors that impacted on the loss experience in the preceding period (for example. has the institution experienced higher than average default rates. or higher than average LGDs and conversion factors);		10.2
452.i	(i) the institution's estimates against actual outcomes over a longer period. At a minimum. this shall include information on estimates of losses against actual losses in each exposure class (for retail. for each of the categories as set out in point (c)(iv) over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each exposure class (for retail for each of the categories as set out in point (c)(iv). Where appropriate. the institutions shall further decompose this to provide analysis of PD and. for the institutions using own estimates of LGDs and/or conversion factors. LGD and conversion factor outcomes against estimates provided in the quantitative risk assessment disclosures set out in this Article;	EU CR9	10.2
452.j	(j) for all exposure classes specified in Article 147 and for each category of exposure to which the different correlations in Article 154 (1) to (4) correspond: (i) for the institutions using own LGD estimates for the calculation of risk-weighted exposure amounts. the exposure-weighted average LGD and PD in percentage for each relevant geographical location of credit exposures; (ii) for the institutions that do not use own LGD estimates. the exposure-weighted average PD in percentage for each relevant geographical location of credit exposures.		n.a.
453.a	The institutions applying credit risk mitigation techniques shall disclose the following information: (a) the policies and processes for. and an indication of the extent to which the entity makes use of. on- and off- balance sheet netting;	EU CRC	10.4
453.b	(b) the policies and processes for collateral valuation and management;	EU CRC	10.4

453.c	(c) a description of the main types of collateral taken by the institution;	EU CRC	10.4
453.d	(d) the main types of guarantor and credit derivative counterparty and their creditworthiness;	EU CRC	10.4
453.e	(e) information about market or credit risk concentrations within the credit mitigation taken;	EU CRC	10.4
453.f	(f) for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach. but not providing own estimates of LGDs or conversion factors in respect of the exposure class. separately for each exposure class. the total exposure value (after. where applicable. on- or off-balance sheet netting) that is covered — after the application of volatility adjustments — by eligible financial collateral. and other eligible collateral;	EU CR3 EU CR4	10.4 6.1
453.g	(g) for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach. separately for each exposure class. the total exposure (after. where applicable. on- or off-balance sheet netting) that is covered by guarantees or credit derivatives. For the equity exposure class. this requirement applies to each of the approaches provided in Article 155.	EU CR3 EU CR4 EU CR7	10.2 10.4 6.1
454	Use of the Advanced Measurement Approaches to operational risk		n.d.
455	Use of Internal Market Risk Models	EU MRA EU LIA EU MRB EU MR2-A EU MR2-B EU MR3 EU MR4	8