This document is a translation of a document originally issued in Polish. The only binding version is the original Polish version.

Bank Polski

Capital Adequacy and Other Information Subject to Disclosure of The Group of PKO Bank Polski SA as at 31 December 2017

Introduction

The Report "Capital Adequacy and Other Information Subject to Disclosure of the Group of Powszechna Kasa Oszczędności Bank Polski SA as at 31 December 2017", hereinafter referred to as "the Report", was prepared in accordance with the provisions of Article 111a clause 1 of the Act of 29 August 1997 – Banking Law[1], hereinafter referred to as the "Banking Law", 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 and amending Regulation (EU) No 648/2012 (hereinafter referred to as "CRR"), taking into account implementing acts under the CRR, the Act of 5 August 2015 on macroprudential supervision over the financial system and crisis management[2], hereinafter referred to as the "Act on macroprudential supervision", as well as Recommendation M of the Polish Financial Supervision Authority (*Komisja Nadzoru Finansowego*, hereinafter referred to as "PFSA") on the operational risk management in banks, Recommendation P on liquidity risk management in banks and Recommendation H on internal control system at banks.

Pursuant to Article 13 par. 1 of the CRR, Powszechna Kasa Oszczędności Bank Polski SA ("PKO Bank Polski SA", "the Bank") being a European parent institution, discloses information regarding capital adequacy in a separate document annually, as referred to in Part Eight of the CRR, with part of the information disclosed semi-annually.

This Report was prepared in accordance with the principles of information policy of PKO Bank Polski SA regarding capital adequacy ("The principles of information policy of PKO Bank Polski SA regarding capital adequacy", as described in the art. 431 of the CRR, available on the Bank's website (www.pkobp.pl)., as well as internal regulations adopted by the Bank, which contain detailed information related to disclosures concerning capital adequacy, rules of their verification, approval and publication.

The Report covers the year 2017 and present data as of 31 December 2017 and was prepared in accordance with the principles described in the first paragraph as of 31 December 2017. The Report includes consolidated data[3] of the PKO Bank Polski SA Group (hereinafter referred to as the "Bank Group"). Some of the information contained in the Report refers specifically to individual data of PKO Bank Polski SA, due to Bank's significant influence on the Bank Group's risk profile.

Unless otherwise stated, the figures presented in the Report have been expressed in PLN million. Any differences in the totals and proportions result from the rounding to PLN million and to one decimal place respectively.

The Report has been prepared taking into account all of the data available as of 31 December 2017.

The Report has been prepared taking into account all obligations arising from the aforementioned regulations, relating to the Bank and the Group. Lack of a reference to a particular article means that it has been deemed inapplicable.

This Report has been subject to internal verification by the Bank's internal audit.

[1] Uniform text, Journal of Laws 2017, No. 1876/2361 with further amendments.
[2] Uniform text, Journal of Laws 2015, No. 1513 with further amendments.
[3] Data provided only for entities subject to prudential consolidation.

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CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

1. Information on the bank and the group

Pursuant to the CRR, the prudential consolidation is used for the purposes of capital adequacy, which unlike IAS-compliant consolidation, encompasses only subordinated entities that can be defined as institutions, financial institutions or ancillary services undertakings only.

Non-financial and insurance entities are not subject to prudential consolidation. Tables 1.1-1.2 present the differences in the scope of accounting and prudential consolidation of Group's entities as of 31st December 2017.

Table 1.1 Differences in accounting and regulatory consolidation and mapping of categories of financial statements to regulatory risk categories

The Bank Group	2017	
	a)	b)
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation
Assets		
Cash and balances at central banks	17 810	17 809
Items in the course of collection from other banks	5 233	5 129
Financial assets held for trading excluding derivative financial instruments	431	430
Derivative financial instruments	2 598	2 599
Financial instruments measured at fair value through profit and loss at initial recognition.	8 157	6 410
Loans to clients	205 628	205 832
Investment securities available for sale	43 675	43 164
Investment securities held to maturity	1 812	1 768
Investments in associates and joint ventures	393	1 093
Fixed assets for sale	138	339
Total stocks	186	144
Intangible assets	3 242	3 055
Tangible fixed assets	2 915	2 657
Receivables due to current income tax	2	2
Assets due to deferred income tax	1 767	1 756
Other assets	2 925	2 390
Total assets	296 912	294 577
Liabilities		
Liabilities to the Central Bank	6	6
Liabilities to banks	4 558	4 559
Derivative financial instruments	2 740	2 740
Liabilities to customers	218 800	219 503
Liabilities due to insurance activities	2 999	-
Liabilities due to issue of securities	23 932	23 932
Subordinated liabilities	1 720	1 720
Other liabilities	5 062	4 881
Liabilities due to current income tax	588	587
Reserves due to deferred income tax	36	24
Reserves	215	214
Total equity		
Total equity	36 256	36 411
Total liabilities	296 912	294 577

Carrying value of exposures subject to regulatory consolidation	294 577
Off-balance sheet value of exposures subject to regulatory consolidation	45 771
Total net value of on- and off-balance sheet exposures	340 348

Balance sheet values shown according to the regulatory model differ from the values included in the published financial statements for the end of 2017 only due to the application of different scope of consolidation.

Table 1.2. Outline of differences in the scope of consolidation (of each entity)

		2017					
		a)	b)	c)	d)	e)	f)
			Method of regulatory consolidation				
No.[1]	Name of entity	Method of accounting consolidation	Full consolidation	Proportional consolidation	Neither consolidated nor deducted	Deducted[2]	Description of the entity
1	PKO Bank Polski SA	parent company					Banking activities
2	PKO Bank Hipoteczny SA	**Full consolidation**	X				Banking activities
3	PKO Towarzystwo Funduszy Inwestycyjnych SA	**Full consolidation**	X				Creation and management of Open-end and Closed-end Investment Funds and management of the trading book
4	PKO BP BANKOWY PTE SA	**Full consolidation**	X				Management of an open and voluntary pension fund
5	PKO Leasing SA	**Full consolidation**	X				Leasing and providing bank loans
	PKO Leasing Nieruchomości Sp. z o.o.	**Full consolidation**	X				Leasing
	PKO Agencja Ubezpieczeniowa Sp. z o.o.	**Full consolidation**	X				Insurance brokerage and providing bank loans within PKO Leasing Group
	PKO Leasing Finanse Sp. z o.o.	**Full consolidation**	X				Ancillary services in the field of storing and selling post-Leasing items
	PKO Leasing Sverige AB	**Full consolidation**	X				Leasing
	ROOF Poland Leasing 2014 DAC3	**Full consolidation**	X				A special-purpose vehicles set up for the purpose of leasing receivables securitization
	PKO Faktoring SA	**Full consolidation**	X				Factoring
6	PKO BP Finat Sp. z o.o.	**Full consolidation**	X				Service activities, including transfer agent services and outsourcing of IT specialists. On the basis of the KNF authorization - services as a national payment institution
	KBC Towarzystwo Funduszy Inwestycyjnych SA	**Full consolidation**	X				Creation and management of Open-end and Closed-end Investment Funds and management of the trading book
	Net Fund Administration Sp. z o.o.	**Full consolidation**			X		Transfer agent services and IT services
7	PKO Życie Towarzystwo Ubezpieczeń SA	**Full consolidation**				X	Life insurance
	Ubezpieczeniowe Financial services Sp. z o.o.	**Full consolidation**			X		Service activities
8	PKO Towarzystwo Ubezpieczeń SA	**Full consolidation**				X	Other personal insurance and property insurance
9	PKO Finance AB	**Full consolidation**	X				Financial services, including obtaining funds by issuing bonds and granting loans to companies from the PKO Bank Polski SA Group, including the Bank
10	KREDOBANK SA	**Full consolidation**	X				Banking activities
	Finansowa Kompania „Idea Kapitał" Sp. z o.o.	Full consolidation	X				Financial services
11	Finansowa Kompania „Prywatne Inwestycje" Sp. z o.o.	Full consolidation	X				Financial services

		2017					
		a)	b)	c)	d)	e)	f)
No.[1]	Name of entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
			Full consolidation	Proportional consolidation	Neither consolidated nor	Deducted[2]	
12	Qualia Development Sp. z o.o.[4]	Full consolidation			X		Real estate development
	Qualia Sp. z o.o.	Full consolidation			X		General partner in a company from the Qualia Development Group
	Qualia 2 Sp. z o.o.	Full consolidation			X		General partner in a company from the Qualia Development Group
	Qualia 3 Sp. z o.o.	Full consolidation			X		General partner in a company from the Qualia Development Group
	Qualia spółka z ograniczoną odpowiedzialnością – Zakopane Sp. k.	Full consolidation			X		Real estate development
	Qualia 2 spółka z ograniczoną odpowiedzialnością – Nowy Wilanów Sp. k.	Full consolidation			X		Real estate development
	Qualia 3 spółka z ograniczoną odpowiedzialnością – Neptun Park Sp. k.	Full consolidation			X		Real estate development
	Qualia Hotel Management Sp. z o.o.	Full consolidation			X		Operating services.
	Qualia - Residence Sp. z o.o.	Full consolidation			X		Real estate development
	Sarnia Dolina Sp. z o.o.	Full consolidation			X		Real estate development
	FORT MOKOTÓW Sp. z o.o. w likwidacji	Full consolidation			X		The company in liquidation
13	ZenCard Sp. z o.o.	Full consolidation				X	An insignificant technology company dealing in services and products in the field of IT and business support
14	Merkury - fiz an	Full consolidation			X		Placing funds collected from fund participants
	„Zarząd Majątkiem Górczewska" Sp. z o.o.	Full consolidation			X		Real estate management
	Molina Sp. z o.o.	Full consolidation			X		A general partner in limited joint-stock partnerships of the fund
	Molina spółka z ograniczoną odpowiedzialnością 1 S.K.A.	Full consolidation			X		Buying and selling real estate for own account. Real estate management
	Molina spółka z ograniczoną odpowiedzialnością 2 S.K.A.	Full consolidation			X		
	Molina spółka z ograniczoną odpowiedzialnością 3 S.K.A.	Full consolidation			X		
	Molina spółka z ograniczoną odpowiedzialnością 4 S.K.A.	Full consolidation			X		
	Molina spółka z ograniczoną odpowiedzialnością 5 S.K.A.	Full consolidation			X		
	Molina spółka z ograniczoną odpowiedzialnością 6 S.K.A.	Full consolidation			X		

		2017					
		a)	b)	c)	d)	e)	f)
No.[1]	Name of entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
			Full consolidation	Proportional consolidation	Neither consolidated nor	Deducted[2]	
15	NEPTUN - fizan	Full consolidation			X		Placing funds collected from fund participants
	Bankowe Towarzystwo Kapitałowe SA	Full consolidation	X				Service activities and portfolio management
	„Inter-Risk Ukraina" Spółka z dodatkową odpowiedzialnością	Full consolidation	X				Real estate development
	„CENTRUM HAFFNERA" Sp. z o.o.	Full consolidation			X		Real estate management of subsidiaries
	„Sopot Zdrój" Sp. z o.o.	Full consolidation			X		Real estate management
	„Promenada Sopocka" Sp. z o.o.	Full consolidation			X		Rental services and real estate management

[1] This item points "numbered" entities - entities directly dependent on PKO Bank Polski SA, other entities - indirect subsidiaries.
[2] "The “deducted” item points at capital exposures of the Bank (other than in entities subject to prudential consolidation) taken into account during calculation of own and supplementary funds of the Group. Since the Group's exposure in Tier 1 instruments of financial sector companies did not exceed the thresholds defined in the CRR, own funds of the Group for prudential consolidation as of 31 December 2017 were not reduced by the aforementioned exposures. The Group did not have any exposures deducted from Tier 2 capital.
[3] The company PKO Leasing SA in accordance with IFRS 10 exercises control over the above-mentioned company, although the company PKO Leasing SA has no capital commitment.
[4] Qualia Development Sp. z o.o. Capital Group is recognized as fixed asset available for sale.

In 2017, the following companies entered into the PKO Bank Polski SA Group (under the accounting consolidation):

1) ZenCard Sp. z o.o, and IT company, specializing in creation of solutions related to the use of payment cards in rebate and loyalty programs,
2) KBC Towarzystwo Funduszy Inwestycyjnych SA (KBC TFI SA)[4], specializing in creation and management of investment funds,
3) Net Fund Administration Sp. z o.o. (NetFA Sp. z o.o.), a transfer agent and IT solutions company.

KBC TFI SA (holding 100% of shares of NetFA Sp. z o.o.) was purchased by PKO BP Finat Sp. z o.o. – a subsidiary of PKO Bank Polski S.A. in December 2017. In 2018, KBC TFI SA is to be merged with PKO Towarzystwo Funduszy Inwestycyjnych SA and NetFA Sp. z o.o. is to be merged with PKO BP Finat Sp. z o.o.

The aforementioned companies operate on the territory of the Republic of Poland.

As of 31 December 2018, out of the new companies, KBC TFI SA was recognized for the purposes of prudential consolidation. ZenCard Sp. z o.o. was excluded pursuant to the art. 19 item 1 of the CRR, according to which entities, for which the total assets and off-balance sheet exposure is lower than EUR 10 million, can be excluded from the prudential consolidation.

The controlling entity of the Group is PKO Bank Polski SA, whose share in the consolidated balance sheet total amounts to 86.93%[5], and 90.01%[6] in the consolidated profit/loss on banking activities.

The PKO Leasing SA Group (i.e. PKO Leasing SA together with its subsidiaries) operates mainly in the leasing and factoring areas.

In 2017 the merger of PKO Leasing SA and Raiffeisen-Leasing Polska SA has been registered in the National Court Register. All assets of Raiffeisen-Leasing Polska SA were transferred to PKO Leasing SA (merger through acquisition). PKO Leasing SA assumed all rights and liabilities of Raiffeisen-Leasing Polska SA.

The following companiesc changed their names in 2017:

1) Raiffeisen-Leasing Real Estate Sp. z o.o. to PKO Leasing Nieruchomości Sp. z o.o.
2) Raiffeisen Insurance Agency Sp. z o.o. to PKO Agencja Ubezpieczeniowa Sp. z o.o.
3) Raiffeisen-Leasing Service Sp. z o.o. to PKO Leasing Finanse Sp. z o.o.

Companies of PKO Leasing SA Group operate almost exclusively on the territory of the Republic of Poland, Sweden (PKO Leasing Sverige) and Ireland (ROOF Poland Leasing 2014 DAC).

The share of PKO Leasing SA Group in the consolidated balance sheet total is 5.21%[4], and 4.11%[5] in the consolidated profit/loss on banking activities.

PKO Bank Hipoteczny SA begun its operations in April 2015. The purpose of PKO Bank Hipoteczny SA is the issuance of mortgage bonds, which are to be the main source of long-term financing of mortgage-backed loans. The company specializes in granting mortgages to individual clients and purchases liabilities related to such loans from PKO Bank Polski S.A. PKO Bank Hipoteczny operates on the territory of the Republic of Poland, with mortgage bonds issued through both Domestic and International Programs.

The share of PKO Bank Hipoteczny SA in the consolidated balance sheet total is 5.29%[4], and 1.18%[5] in the consolidated profit/loss on banking activities.

KREDOBANK SA pursues banking operations in the territory of Ukraine and is subject to Ukrainian banking supervision. KREDOBANK SA is a universal bank, oriented on servicing retail clients and small and medium-sized enterprises operating mainly in the western part of Ukraine and in Kiev. At the same time, it strives to acquire corporate clients with high creditworthiness.

The company offers services in the areas of, i.a.: keeping accounts of natural persons and business entities, collecting deposits, granting loans, sureties and guarantees, leasing, check and bill of exchange transactions, FX market and securities market operations.

In March 2012 KREDOBANK SA become the sole shareholder of Finansowa Kompania "Idea Kapitał" Sp. z o.o. (which subject of business includes rendering of financial services) and established the capital group.

The share of KREDOBANK SA Group in the consolidated balance sheet total is 0.55%[4], and 1.74%[5] in the consolidated profit/loss on banking activities.

Remaining companies listed in Table 1.2, forming the Bank's Group (subject to prudential consolidation) operate almost exclusively on the territory of the Republic of Poland, Ukraine (Finansowa Kompania „Prywatne Inwestycje" Sp. z o.o. and Inter-Risk Ukraina Sp z d.o.) and Sweden (PKO Finance AB).

PKO Bank Polski SA operates also in Germany through its branch (PKO Bank Polski SA Niederlassung Deutschland) and in Czech Republic (PKO BP S.A., Czech Branch).

Detailed information on all entities of the Group, subject to the Bank's share in the equity capital of individual entities is contained in the consolidated financial statements of the Group for the year ended 31 December 2017, published on 12 March 2018 (page 96).

[4] Currently: GAMMA Towarzystwo Funduszy Inwestycyjnych SA
[5] The share was calculated in relation to the consolidated balance sheet total of companies included in prudential consolidation before adjustments and transactions excluded from consolidation eliminations as at December 31, 2017.
[6] The share was calculated in relation to the consolidated result on banking operations of companies included in prudential consolidation before adjustments and transactions excluded from consolidation eliminations as at December 31, 2017.

Within the Bank Group, some limitations exist (described below) in regard to premature settlement of liabilities by subordinated companies as well as to the transfer of funds in the form of dividend payments:

1) In view of a difficult political and economic situation in Ukraine, together with related volatilities on the foreign exchange market in 2017, a series of administrative limitations introduced in the previous years have been prolonged, potentially influencing rapid transfer of funds and settlement of liabilities between Ukrainian entities of PKO Bank Polski SA Group and their parent company. Restrictions include a ban on premature repayment of FX liabilities.
2) In accordance with the resolution of the Extraordinary General Shareholders' Meeting of KREDOBANK SA commenced 29 January 2009 and continued 23 February 2009, a moratorium was introduced with respect to dividend payments. The moratorium is valid until revoked under an appropriate resolution. In 2017 the moratorium on dividend payment remained in force.
3) The strategy of PKO Bank Hipoteczny SA for 2017-2020 (approved by the Supervisory Board) does not assume any dividend payments during those years.
4) Selected credit agreements signed by the Group companies involve additional covenants concerning restrictions on dividend payment prior to the credit's maturity.

Moreover, in terms of dividend payments, PKO Bank Polski SA and its subordinated companies are bound by law and recommendations of the PFSA.

Supervisory expectations in terms of capital adequacy measures were described in detail in chapters: "6. Capital buffers" and "9. Capital adequacy" of this Report.

2. Management system

The management system is a set of principles and mechanisms related to the decision-making process taking place in the Bank, as well as to the assessment of conducted banking activities.

The Bank's management system comprises the risk management and internal control systems.

2.1. Risk management

Risk management is one the most substantial internal processes both in PKO Bank Polski SA, including the Bank's foreign branches, and in other entities of the Bank Group. Risk management aims at ensuring profitability of business activity, while ensuring control of the risk level and maintaining it within the risk tolerance and limits applied by the Bank and the Bank Group, within the changing macroeconomic and legal environment. The level of the risk is an important factor in the planning process.

The goals of risk management by striving to maintain the level of risk within the accepted tolerance level are:
1) protection of shareholder capital,
2) protection of customer deposits,
3) support for Group in conducting effective operations.

The objectives of risk management are achieved in particular by providing appropriate risk information so that decisions can be made with full awareness of the individual risks they carry.

Risk management in the Bank Group is based in particular on the following principles:
1) the Bank Group manages all defined types of risk,
2) the risk management process corresponds to the volume of activities and to significance, level and complexity of the risk concerned and it is adjusted to new risk factors and sources on an ongoing basic,
3) risk management methods (in particular models and their assumptions) and risk measurement systems are adjusted to the volume and complexity of risk and they are verified and validated periodically,
4) organisational separation of the risk management process from business functions is maintained,
5) risk management is integrated with the planning and controlling systems,
6) the risk level is monitored and controlled on an ongoing basis,
7) the risk management process supports the pursuit of the Bank's Strategy while being compliant with the risk management strategy, in particular with regard to the risk tolerance level.

The risk management process in the Group includes:

1) risk identification which consists of recognition of both current and potential risk sources and assessment of significance of potential impact of such type of risk on the activities of the Bank and the Group; risk identification includes defining of such types of risk that are considered to be significant for the operations of the Bank or the Group,

2) risk measurement and assessment – risk measurement includes determining risk measures adequate to the type, significance of risk and data availability, as well as quantitative measurement of risk by means of defined measures and risk assessment in a form of a determination of volume or scope of risks from the perspective of risk management objectives; the risk measurements include risk assessment for price policy purposes and stress tests performed on the basis of assumptions ensuring reliable risk assessment. The stress test scenarios take into account i.a. PFRA's requirements. Moreover, comprehensive stress tests (CST) are also performed at the Bank, forming an integral part of risk management and complementing stress testing of specific risk types Comprehensive stress tests analyse the impact of changes in the environment as well as in the functioning of the Bank on the financial situation of the Bank and the Bank Group,

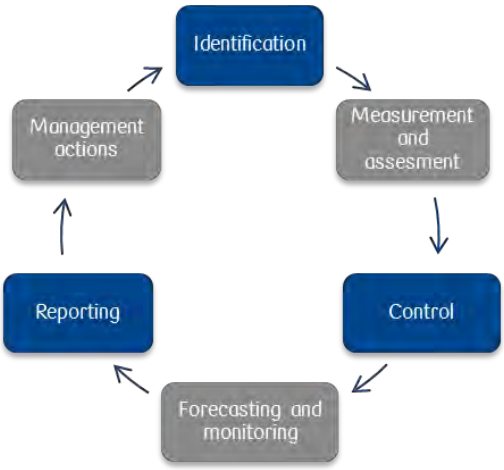
3) risk control – defining the tools used in diagnosis and mitigation of risk levels in individual business areas of the Bank and the Bank Group. Risk control includes establishment of control mechanisms, tailored to the scale and complexity of the Bank's activities, in particular in the form of actively monitored tolerance limits for particular risk types and, in case they are exceeded, undertaking management actions,

4) risk forecasting and monitoring – consists in preparation of risk level forecasts and monitoring differences between execution and forecasts or assumed references (e.g. limits, thresholds, plans, previous measurements, issued recommendations and suggestions issued by the supervisory body), as well as of conducting of specific and comprehensive stress tests. Risk forecasting is subject to verification. Risk monitoring is performed at a frequency appropriate for significance and volatility of a given type of risk,

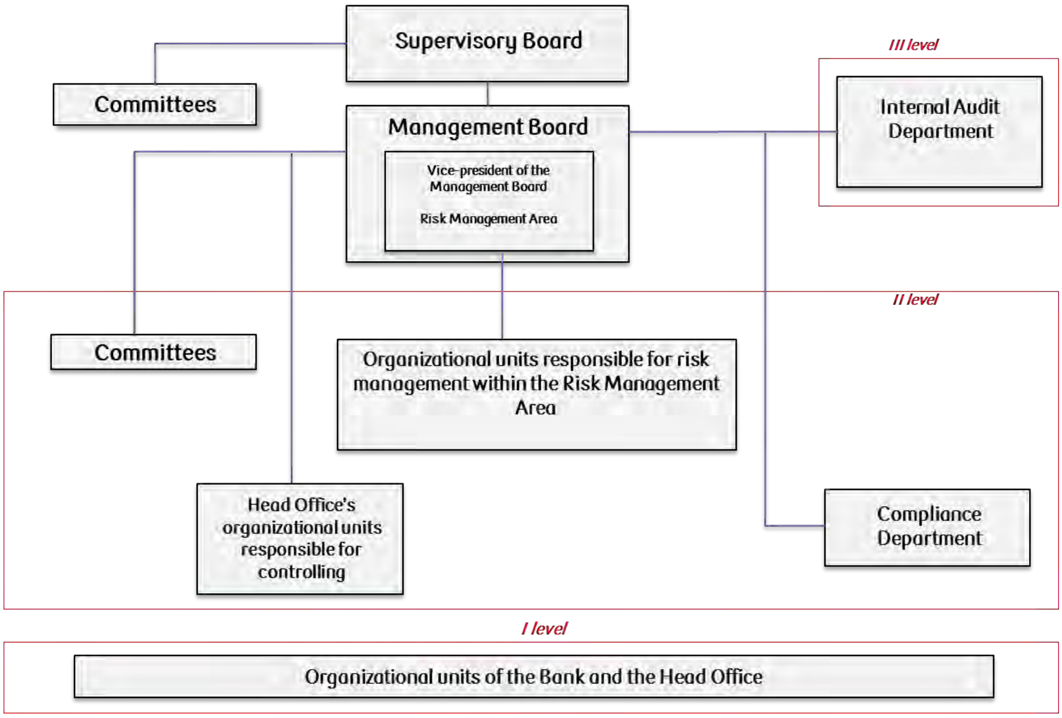
5) risk reporting informing the Bank's Management on a cyclical basis on results of risk measurement or assessment, activities undertaken and recommendations of activities. The reporting scope, frequency and form are adjusted to the management level of addressees. In case of potential liquidity problems of the Bank, the Supervisory Board is notified immediately on the Bank's liquidity level, threats and undertaken remedial actions, as well as in the case of significant operating events or security incidents,

6) risk management actions including in particular, issuance of internal regulations developing the management process of individual risk types, defining risk tolerance levels, limits and thresholds, issuing recommendations, including use of risk management tools. Management activities are aimed at designing risk management process and influencing the risk level.

Scheme 2.1 Risk management process



Scheme 2.2 Bank's risk management organisation



The risk management process takes place in all of the operational units of the Bank and operational units of the Head Office.

The risk management process is supervised by the Supervisory Board, which regularly receives information on the risk profile of the Bank and of the Bank Group and on the most important activities undertaken within the risk management.

The Supervisory Board is supported among other by the following committees:
1) Remuneration Committee (RC),
2) Supervisory Board's Risk Committee (SBRC),
3) Supervisory Board's Audit Committee (SBAC).

The RC supports the Supervisory Board in its statutory duties and responsibilities arising from the law, regarding remuneration. The RC is described in detail in Chapter "10. Remuneration policy" of this Report.

The Supervisory Board's Risk Committee supports the Supervisory Board i.a. by formulating opinions on the Bank's overall current and future readiness to take risks, expressed in particular in the strategic limits of tolerance for particular types of risk, formulating opinions on solutions related to risk mitigation, operations and support of the Supervisory Board in supervision over the Management Board in regard to risk management system and assessment of its adequacy and efficacy, as well as in supervision of implementation of the strategy of risk management.

The Supervisory Board's Audit Committee supports the Supervisory Board in particular through monitoring of: financial reporting process, efficacy of internal control systems, including internal audit and risk management; financial revision and control of independence of the statutory auditor and the entity authorized to audit the financial statements. .

In 2017, 6 sessions of SBAC and 7 session of SBRC took place.

The Management Board is responsible for the strategic risk management, which includes the supervision and monitoring of the risk management activities taken by the Bank. The Management Board takes major decisions affecting the Bank's risk profile and approves internal regulations which define the risk management system.

The risk management process is executed in three independent, complementary levels:

1) the first level comprises organizational units responsible for the management of the product, sales and customer support as well as other operational units generating risk, which operate on separate internal regulations. The function is performed by all of the Bank's units, the Head Office units and entities of the Bank Group. The HQ's units and organizational units implement appropriate risk control mechanisms, in particular, limits designed by the HG's units and organizational units located on the second level, and ensure their compliance through appropriate control mechanisms. At the same time the Bank Group's companies are obliged to comply with the principles of coherence and comparability of risk assessment and control in the Bank and Bank Group entities, taking into account the specific nature of the company's business and market at which it operates,
2) the second level comprises compliance unit and identification, measurement, evaluation, control, monitoring and reporting of significant risks as well as identified hazards and irregularities – those tasks are carried out by specialized organizational units operating on the basis of internal regulations of the Bank. The purpose of those units is to ensure that operations carried out on the first level are properly regulated in the Bank's regulations, reduce risk and support measurement, assessment and analysis of risk and efficacy of the operations. The second level is complemented by activities aimed at elimination of unfavourable deviations from the financial plan that may affect the strategic tolerance limits. This function is carried out in particular in the Risk Management Area, Compliance Department and appropriate committees.
3) the third level – internal audit, executing independent audits of the risk management system of the Bank, including risk management and internal control systems. Internal audit operates separately from the first and second level and can provide them with a support and consolatory roles, without the ability to affect any of the decisions. This function is carried out in accordance with internal regulations of the Bank, related to the functioning of the internal control system.

The independence of the levels means that they remain organisationally independent in the following areas:

1) the function of the second level is independent from the first line of defence in regard to creation of system solutions,
2) the function of the third level is independent from the first and second levels,
3) the compliance function is reporting to the Vice-President of the Management Board Responsible for the Legal and Compliance Areas.

The Bank's Head Office units that are responsible for management of significant, leverage and concentration risks within the scope of their respective competencies in 2017 were grouped in the Bank Risk Division, Restructuring and Debt Collection Department of the Corporate Client Division, Restructuring and Debt Collection Centre, Credit Risk Assessment and Analysis Centre of the Retail Division and Credit Risk Assessment and Analysis Centre of the Corporate Client Division, which are supervised by the Vice-President of the Risk Division.

The purpose of the Banking Risk Division is to create and implement systemic solutions for managing risks that have been defined as significant, such as credit, interest rate, foreign exchange, liquidity and financing, operational, business, macroeconomic, model risk as well as capital adequacy, as well as initiation and coordination of activities related to risk management in the Bank Group

The Bank Risk Division, in the context of risk management, is responsible in particular for:

1) identification of risk factors and its sources,
2) risk measurement, assessment, control and cyclical monitoring and reporting of the risk level,
3) coordination of risk management strategy-related activities,
4) measurement and assessment of capital adequacy,
5) preparing recommendations for the Management Board or committees as to the acceptable risk level,
6) developing and reviewing of internal regulations relating to risk and capital adequacy management,
7) developing IT systems to support risk and capital adequacy management,
8) coordination of implementation of coherent risk management standards in the Bank Group
9) validation of models used in risk management[7].

The Restructuring and Debt Collection Department of the Corporate Client is responsible in particular for:

1) managing of acquired difficult receivables as defined by separate internal regulations of the Bank, including development and implementation of the optimal means for their recovery,
2) cooperation with Group's entities in client and transaction risk assessment and development of strategy regarding difficult receivables of common clients,

[7] model validation is subject directly the Vice-President responsible for supervision of the Risk Area

3) preparation of proposals regarding sale of difficult receivables,
4) repossession of property as a result of debt collection,
5) review and classification of liabilities and off-balance sheet items that remain under the management of the Department and calculation of impairments related to risk of Bank's operation.

The Restructuring and Debt Collection Center is responsible in particular for:

1) preparation of systemic solutions, including internal regulations, applications and models utilized in the processes of non-performing debt monitoring
2) debt collection through restructuring, recovery, as well as improving effectiveness of those activities,
3) outsourcing of monitoring and debt collection and management of collateral foreclosed as a result of recovering Bank's receivables, as well as efficient sale of non-performing debts,
4) interventions in the context of early monitoring of delays in repayment of debts of individual and institutional clients in the Retail Banking Area.

The Retail Client Credit Risk Centre is responsible in particular for:

1) design and development of an effective credit risk assessment system related to the financing of retail clients, including the Bank's internal regulations regarding the principles and methodologies of credit risk assessment as well as process support tools,
2) assessment, risk-taking within granted decision limits and monitoring of the credit risk of clients and transactions

The Corporate Client Credit Risk Centre is responsible in particular for:

1) assessment, risk-taking within granted decision limits and monitoring of the credit risk of clients and transactions,
2) improvement and optimization of credit process utilized and IT solutions used in the credit process,
3) development of effective risk assessment system regarding corporate clients, ensuring an adequate cost of risk,
4) development and formation of credit policy regarding corporate client portfolios as well as evaluation of corporate credit portfolio's risk parameters,
5) management of concentration risk for the Bank.

The Management Board, in the context of risk management, is supported by the following committees:

1) Risk Committee ('the RC'),
2) Assets & Liabilities Committee ('the ALCO'),
3) Bank's Credit Committee ('the BCC'),
4) Operating Risk Committee ('the ORC').

RC monitors the integrity, adequacy and efficiency of the risk management system, capital adequacy and implementation of the risk management principles, in compliance with the Bank's strategy, analyses and evaluates compliance with strategic risk tolerance limits defined in the risk management strategy of PKO Bank Polski SA. RC supports the Management Board in the process of banking risk management through preparation of recommendations and making decision on capital adequacy and efficiency of the risk control system. Four sessions of the Risk Committee took place in 2017.

ALCO manages the Bank's assets and liabilities by influencing the structure of Bank's balance and off-balance positions in a way optimal in relation to profitability. The Committee supports the Bank's Management Board in the scope of both Bank and Group's activities related to the balance sheet structure, capital adequacy, profitability, as well as financial, market, liquidity, business, credit (both settlement and pre-settlement) risk and wholesale market transactions. In 2016, the decisions made by the ALCO took place during one of the 7 sessions of the BCC or by circulation.

BCC issues opinions and takes credit decisions in respect of individual significant credit exposures or issues recommendations in this respect to the Management Board of the Bank, issues recommendations and makes decisions regarding non-performing debt management, as well as makes decisions related to approval of credit risk models, credit risk parameters and results of their validation, with representatives from the Area of Finance and Accounting included in the decision making process. In 2017, the decisions made by the BCC took place during one of the 71 sessions of the BCC or by circulation.

ORC supports the Management Board in operational risk management through decision taking, issuing recommendations and opinions, for instance strategic tolerance limits and operational risk limits, key risk indicators (KRI), assumptions of stress tests, results of validation of operation risk measurement models, expansions and changes in AMA approach and by supporting all activities aimed at lowering of operational risk in all of the areas of the Group's activities. ORC formulates opinions and recommendations regarding operational risk management in Group's entities, which are forwarded to Group's subsidiaries as part of the Bank's ownership supervision over those subsidiaries. The Operational Risk Committee made decisions by circulation and during eight sessions taking place in 2017.

The ALCO, BCC, OCR, RC SBRC, SBAC as well as Management and Supervisory Boards receive cyclical reports concerning individual risk types and capital adequacy.

The Bank supervises the functioning of the Bank Group entities. Within this supervisory function, the Bank defines and oversees their risk management systems and supports the development of such systems; and also takes the risk level of the activity of individual entities into account as part of the risk monitoring and reporting system at the Group level.

Assessment of individual types of risk in the entities of the Group are defined by internal regulations implemented by those entities. Entities of the Group develop and update internal regulations regarding particular types of risk after consultation with the Bank and taking into account the recommendations prepared by the Bank as well as risk management Strategy of PKO Bank Polski SA and its Group. Subsidiaries' internal regulations on risk management take into account:

1) rule of coherence and comparability of assessment of individual types of risk in the Bank and the Bank Group entities,
2) scope and type of relationships between entities of the Group,
3) specific nature and scale of the company's business and market at which it operates,
4) types of risk subject to management at the Group's entities, related to their activities.

Supervision over risk management in the entities of the Bank Group is realised in particular through involvement of the units of Risk Management Area, Compliance Department, Planning and Controlling Department or relevant Committees of the Bank in a review process of significant transactions of the Group entities, according to separate internal regulations of the Bank. A list of key Capital Group entities, which have a significant impact on the risk profile of the Capital Group, is prepared at least annually. For those entities, organization units of the Head Office and specialized units of the Risk Area, Compliance Department and Planning and Controlling Department, review the current approach regarding strategic tolerance limits for each entity, in compliance with internal regulations of the Bank.

The priority of the Bank Group is to keep its strong capital position, together with effective capital adequacy management, support of the Polish entrepreneurship, clients' satisfaction, participation in the new market standard creation and cybersecurity activities, having maintained at the same time the priorities related to business efficiency and efficient cost control and appropriate risk assessment. As a consequence, the following activities took place in 2017:

1) the Bank exchanged its maturing short-term bonds for new short-term bonds in the amount of PLN 670 million (May) and PLN 650 million (November) and has repaid own short-term bonds in the amount of EUR 200 million (April).
2) Under the EMTN program, the Bank issued: on 25th of July 2017 own bonds in the amount of EUR 750 million with 4-year maturity period and on 2nd of November 2017 own bonds in the nominal amount of CHF 400 million with a 4-year maturity period.
3) The Bank included the profit for year 2016 in the amount of PLN 2,888 million in its own funds (following the decision of the Ordinary General Meeting of the Bank), with part of the amount (PLN 1,589 million) already recognized in the own funds of the Bank for 31 December 2016, in compliance with the PFSA's approval for including the net profit for 3q2016 into own funds (after expected charges).
4) Following the PFSA's approval, the Bank recognized its net profit for 3q2017 (in the amount of PLN 1,822 million) in its Tier 1 capital.
5) Following the PFSA's approval, the Bank executed a call option for subordinated bonds in the amount of PLN 1,600 million and executed an early repayment of subordinated loan in the amount of CHF 224 million (an equivalent of PLN 884 million at the repayment date).
6) On 23rd of August, the Bank placed subordinated bonds in the amount of PLN 1,700 million, with single bond issue price equal to nominal value in the amount of PLN 0.1 million. The bonds have a semi-annual interest period, with variable interest rate equal to WIBOR 6M rate plus 155 bp margin, calculated for bond's nominal value, throughout the entire issue period. Settlement took place on August 28, 2017. The maturity is equal to 10 years, with an option for early redemption by the Bank within 5 years from the date of issue, following an obligatory PFSA approval. On 30th of August, the PFSA approved the inclusion of funds received from the subordinated bonds placement into supplementary capital of the Bank and the Bank Group. The bonds are listed on Catalyst market since 27 September, 2017. The acquired funds have been recognized by the Bank as a Tier 2 capital, following PFSA's approval.
7) On 21 December, 2017, following necessary corporate approvals and in compliance with the CRR Regulation, the Bank entered with its counterparty into an unfunded credit protection agreement, encompassing a selected corporate credit portfolio of the Bank. The total value of the secured portfolio amounted to ca. PLN 5.495 million (PLN 1.097 million in the form of bonds).
8) in 2017, in the context of operational risk management, the Bank took preparatory actions necessary for the establishment of a foreign branch in the Czech Republic, which started its operations in April 2017. As a consequence of the aforementioned actions, the Bank received the PFSA's approval in February 2017, for a combined use of both AMA and BIA approaches for calculation of own funds requirements for operational risk, with the BIA approach utilized for the purpose of own funds requirements calculation for operational risk related to the activities of the foreign branches in Germany and Czech Republic and AMA approach for the remaining operations of the Bank.
9) Following PFSA's Recommendation C, changes in concentration risk management at the Bank took place on 1 January, 2017. The changes affect i.a. concentration management goals and process, new tolerance measures, including internal limits mitigation concentration risk as well as internal stress tests for concentration risk.
10) Within the Bank Group, the mortgage loan portfolio is gradually transferred to PKO Bank Hipoteczny SA. Value of the portfolio transferred in 2017 amounted to PLN 5.554 million.
11) In 2017 PKO Bank Hipoteczny SA carried out three issues of mortgage letters aimed at institutional investors of a total nominal value of PLN 1,265 million and maturity date of 4 up to 6 years starting from the issue date. The mortgage letters issued by PKO Bank Hipoteczny SA are one of the most secure financial instruments available at the polish financial market. As a result, they have been awarded the highest possible rating available for polish financial instruments – Moody's Aa3. Moreover, in 2017, PKO Bank Hipoteczny SA carrier out four issues of EUR denominated mortgage letters, aimed at institutional investors, of a total nominal value of EUR 1,079 million and maturity date of 5 up to 7 years starting from the issue date. The bonds were purchased by both the domestic and foreign investors.
12) As a result of a merger of PKO Leasing S.A and Raiffeisen-Leasing Polska S.A. (28 April, 2017), both conceptual and implementation activities related to integration of risk management within PKO Leasing S.A Group were undertaken. In 2017, works on standardization of internal regulations related to key risks (in particular: credit, market and operational), as well as implementation of new risk measurement and assessment tools (in the form of IT systems made available to PKO Leasing S.A. subsidiaries) took place.
13) Intra-group transactions for 2017 had no significant effect on the risk profile of the Bank.

No less than once a year, the organizational units of the Head Office from the Risk Area, Compliance Department and Planning and Controlling Department conduct a review of the risk management Strategy for PKO Bank Polski S.A. and the Capital Group, in particular regarding the strategic tolerance limits for risk, for the purpose of their alignment to the current and forecasted market conditions as well as the needs of the Bank and the Capital Group.

In justified cases related to significant shifts in market conditions or on the basis of conducted stress test, the review may be conducted more often than on an annual basis. Moreover, methods as well as risk measurement or assessment systems are adjusted to risk complexity, currently conducted and planned operations of the Bank and its environment and are periodically verified and validated.

2.2. Comprehensive stress tests and reverse stress tests

Comprehensive stress tests (CST) are an integral part of the PKO Bank Polski SA Group's risk management and are complementary to other stress tests specific to particular types of risks. CST for the Group provide a complementary role to the CST for the Bank and comprise all significant risk types for the Group and the Bank. Tests include analysis of the impact of changes in the macroeconomic environment or Group's functioning on the financial situation of the Group, in particular: profit and loss account, statement of financial position, own funds, capital adequacy (including own funds requirements), internal capital, capital adequacy measures, credit portfolio quality and selected liquidity measures. Calculations are performed using Bank's internal models, taking into account the adopted macroeconomic assumptions. The data is analysed on a high level of detail, including portfolio and product type segmentation.

Comprehensive stress tests comprise cyclical and supervisory tests. Cyclical tests are performed on an annual basis in a 3-year time horizon. Cyclical tests' stress scenarios assume a shock weakening of the economy in comparison to the baseline scenario, reflecting historical cases of world financial crises. Supervisory tests are conducted on supervisor's demand, for a given time horizon and macroeconomic and financial parameters set out in a provided scenario.

Complex stress-tests collectively include the following risks considered to be relevant by the Bank, including:

1) credit and concentration risk,
2) market risk,
3) liquidity risk,
4) operational risk,
5) business risk,
6) leverage risk.

Reverse comprehensive stress tests (RCST) provide a supplementary role to the comprehensive stress tests and are conducted in order to evaluate the Bank's resilience to macroeconomic changes. RCST are performed in the form of sensitivity analysis and require formulation of potential, negative scenarios related to the Bank's liquidity and capital adequacy, and then finding events contributing to their materialization.

2.3. Internal control

The Bank's internal control system constitutes a part of Bank's management system. The Bank's Management Board is responsible for its design, implementation and functioning.

The goal of the internal control system is to ensure:
1) efficacy and efficiency of the Bank's operations,
2) credibility of financial reporting,
3) adherence to the Bank's risk management principles,
4) compliance with generally applicable laws, internal regulations and supervisory recommendations as well as market standards adopted by the Bank.

The Bank's internal control system is based on three separate, independent levels:
1) the first level comprises the Bank's organizational structures responsible for operational activities, in particular: product sales and customer support as well as other organizational structures that perform risk generating operational activities, operating under separate internal regulations,
2) the second level comprises the compliance unit as well as identification, measurement or evaluation, control, monitoring and reporting of significant risk types, as well as identified threats and irregularities - tasks are carried out by specialized organizational structures, operating on the basis of applicable rules, methodologies and procedures; the purpose of these structures is to ensure that the activities implemented at the first level are properly designed and effectively reduce risk, support the measurement and analysis of risk and the efficiency of operations,
3) the third level is the activity of the internal audit unit, performing independent audits of the elements of the Bank's management system, including risk management and internal control systems; internal audit functions separately from the first and second level.

Within the internal control framework, the Bank distinguishes:
1) control function,
2) compliance unit,
3) independent internal audit unit.

The control function ensures adherence to control mechanisms relating in particular to risk management in the Bank covering all units of the Bank and their organizational positions.

The control function comprises:
1) control mechanisms,
2) independent monitoring of control mechanisms,
3) reporting within the control function.

The compliance unit plays a key role in ensuring compliance and managing compliance risk understood as the risk of legal sanctions, financial losses or reputational loss due to Bank's, Bank employees or entities acting on its behalf failure to comply with generally applicable laws, internal regulations and market standards adopted by the Bank.

The purpose of the compliance unit is to formulate solutions regarding compliance and management of compliance risk and identification, measurement, control, monitoring and reporting of said risk in the Bank.

Internal audit constitutes an independent and objective assurance and advisory activity performed through systemic and ordered assessment of individual areas of Bank's operation as well as indication of directions of activities affecting the improvement of quality and effectiveness of the Bank's operations.

The purpose of the audit unit is to assess the adequacy and efficacy of the risk management and internal control systems as well as to add value and streamline processes at the Bank.

The Bank has mechanisms that ensure independence of the compliance and internal audit units, in particular responsible for:
1) Management Board and the Supervisory Board's approval of the Audit Card and the principles of compliance and compliance risk management,
2) functional subordination of the compliance unit directly to the Vice-President of the Management Board responsible for the Legal and Compliance Areas,
3) functional subordination of the internal audit unit to the Audit Committee of the Supervisory Board and administrative subordination to the President of the Management Board,
4) ensuring that the internal audit unit (as a third level) is not subject to independent monitoring by the Bank's organizational units situated at the second level,
5) providing directors of the aforementioned cells with direct contact with members of the Management Board and Supervisory Board,
6) participation of the directors of the aforementioned cells in meetings of the Board,
7) participation of the directors of the aforementioned units in the meetings of the Supervisory Board and relevant Committees, where issues related to the internal control system or risk management are the subject of their meeting,,
8) appointing and dismissing as well as approving remuneration of directors of the aforementioned units with the consent of the Audit Committee of the Supervisory Board or the Supervisory Board,
9) informing the PFSA about changes in the position of directors of the aforementioned units together with an indication of the reason for the change,
10) providing employees of the aforementioned units with access to all necessary information (including confidential and sensitive), premises and IT systems (without the possibility of interference in the system's resources), as well as communication with Bank employees, to the extent that they consider it necessary to perform tasks,
11) non-participation of employees of the above-mentioned cells in the implementation of current business tasks,
12) providing remuneration guaranteeing independence and objectivity in performing their tasks and enabling the employment of people with appropriate qualifications, experience and skills,
13) protection of employees of the aforementioned units against unjustified termination of employment,
14) providing financial resources necessary for effective performance of tasks and systematic improvement of skills and qualifications by employees of the aforementioned units.

Information on irregularities identified within individual elements of the Bank's internal control system, results of assessments and other relevant information regarding the functioning of the elements of this system are included in reports for the Management Board, Audit Committee of the Supervisory Board or Supervisory Board.

On the basis of this information and other relevant information provided, among others by the Management Board of the Bank and the certified auditor, the Supervisory Board supervises the functioning of the internal control system and annually evaluates the adequacy and effectiveness of this system. The Supervisory Board in supported in this regard by the Audit Committee of the Supervisory Board, which is responsible in particular for monitoring the effectiveness of the internal control system.

The Bank's subsidiaries have an internal control system adapted to the specificity of the business conducted by a given entity. The internal control system in the Bank's subsidiaries is defined by internal regulations created and introduced by these entities. The Bank's subsidiaries create and update the above-mentioned internal regulations, after consulting the Bank and taking into account the recommendations formulated by the Bank. The Bank periodically requests the Bank's subsidiaries to provide information or documents regarding the functioning of the internal control system in these entities.

2.4. Assessment of members of the management body

Assessment of the Management Board is carried out by the Supervisory Board, starting from the time of recruitment, throughout the term of office.

Selection and assessment of members of the Management Board is conducted by the Supervisory Board and is conducted in compliance with binding legal provisions (in particular Commercial Companies Code[8] and the Banking Law), supervisory authority regulations and market standards as well as the Bank's Articles of Association. In 2017, additional requirements stemming from i.a. Act on the Management of State Property[9] and Principles of Ownership Supervision over Companies with Treasury shareholding[10] were implemented.

Members of the Management Board should possess the knowledge, skills and experience relevant to the function performed and must commit to the proper performance of their duties. Potential conflict of interest is taken into account during assessment. Additional limiting conditions, that may prove disqualifying for the Member of the Management Board are also taken into account, such as performing particular public functions or holding a management board position in other commercial companies.

Diversity is taken into account during the selection of Management Board members. Competencies of individual members are complimentary, allowing for the proper Bank management. The Management Board comprises a proper share of members speaking Polish and having diverse experience, competencies and knowledge of the Polish financial market, necessary for the management of the Bank. More information on diversity has been included in the Directors' Report on the non-financial information, published on 12 March, 2018 (p. 17, Diversity management, page 62).

In the course of carrying out the function of a member of the Management Board, pursuant to art. 395 par. 2 item 3 of the Commercial Companies Code, the general assembly gives a discharge to each of the members of the Management Board, on a yearly basis. Said discharge constitutes a positive assessment of each member, irrespective of the approval of the Management Board's report on the operations of the Company, and a lack

[8] Act of 15 September 2010, Code of Commercial Partnerships and Companies, Journal of Laws 2016, item 1577.
[9] Act of 16 December 2016 on management of state property, Journal of Laws 2016, item 2259 with further amendments.
[10] Principles of Ownership Supervision over Companies with Treasury shareholding, Prime Minister's office, Warsaw, September 2017.

of the aforementioned discharge constitutes a negative assessment of a member of the Management Board and in consequence can form a basis for his/her removal from the Management Board.

As of 31 December 2017 there were 11 members of the Supervisory Board and 8 members of the Management Board, all of which complied to the requirements laid out in the art. 22aa of the Baking Law.

2.5. Identification of significant types of risks

PKO Bank Polski SA Capital Group has identified risks subject to management, some of which were identified as significant. The process of assessment of risks, for which the Bank or the Capital Group are exposed to, has been improved in 2017. A modified approach for assessment of significant risk types in Bank and the Capital Group has been implemented and a new catalogue of significant risk types has been established. The risk significance assessment, for which the Bank's or the Bank's Capital Group is likely to be exposed in an annual horizon, is carried out at least once a year. Significance assessment may be carried out more frequently, in the event of emergence of new types of risk, significant changes in the strategy and plans of the Bank or the Capital Group or the external environment. The risk significance assessment at the Bank and entities of the Group is based on a risk assessment sheet.

Significance assessment takes place in three stages:
1) determining the degree of occurrence of individual factors affecting a given type of risk,
2) determining whether the analyzed type of risk is a significant risk or subject to monitoring,
3) for those types of risk that have been considered material, the method of estimating internal capital is determined.

For the types of risk recognized as being subject to monitoring at the Bank and entities of the Bank Group, annual comparisons are made between current values of significance indicators and their threshold values.

All risk types identified as significant in the Bank, are considered significant in the Capital Group. The Bank identified the following risks as significant: credit risk, foreign exchange risk, interest rate risk, liquidity risk, including financing risk, operational risk, business risk, macroeconomic risk, model risk. The entities of the Capital Group may consider other types of risk to be significant in these entities, taking into account the specificity and scale of their operations and the market on which the entity operates. For these types of risk, the Bank verifies the significance of risk at the level of the Capital Group. The entities of the Capital Group participate in the assessment of the significance of the types of risk initiated by the dominant entity and assessed at the level of the Capital Group.

2.6. Credit risk

2.6.1. Introduction

Credit risk is understood as the risk of incurring losses as a result of client's default or the risk of decrease in the economic value of the Capital Group receivables as a result of deterioration of the client's credibility.

The purpose of credit risk management is to limit losses arising from the credit portfolio and minimise risk of occurrence of credit exposures which may be subject to impairment, while maintaining the expected level of profitability and value of the credit portfolio.

The Bank and the subordinated entities of the Capital Group apply, primarily the following credit risk management principles:
1) a credit transaction requires a comprehensive credit risk assessment, expressed as an internal rating or scoring,
2) credit risk transactions is measured at the application stage and on a cyclical basis as part of monitoring, and takes into account both the changing external conditions and changes in the financial standing of the borrowers,
3) the credit risk assessment of exposures significant for their risk level or value is executed by credit risk assessment units, irrespective of business units,
4) the terms and conditions of credit transactions offered to clients depend on the assessment of credit risk level generated by the transaction concerned,
5) credit decisions may be taken only by authorised persons,
6) credit risk, in particular is diversified by geographical areas, industries, products and clients,
7) the expected level of credit risk is mitigated by legal collateral accepted by the Bank, credit spreads charged to clients as well as by impairment allowance and reserves for credit exposures.

2.6.2. Credit risk measurement and assessment

2.6.2.1. Credit risk measurement methods

In order to assess the level of credit risk and credit portfolio profitability, the Bank Group uses various credit risk measurement and assessment methods, including the following:
1) probability of default (PD),
2) expected loss (EL),
3) unexpected loss (UL),
4) loss given default (LGD),
5) credit value at risk (CVaR),
6) share and structure of loans with recognized impairment (according to IAS),
7) coverage ratio for impaired loans (according to IAS) with write-downs,
8) cost of credit risk.

PKO Bank Polski SA systematically improves the scope of its credit risk parameters, taking into account the IRB approach, as well as the scope of application of risk measures so as to fully cover the Bank's credit portfolio with those methods.

The portfolio credit risk measurement methods allow, among other things, to include credit risk in the price of products; to determine the optimum conditions of financing availability; and to determine impairment write-downs.

The Bank performs analysis and stress-tests taking into account, in particular Recommendations S, T and C of the PFSA. Stress tests and analysis concern the influence of potential changes in macroeconomic environment on the quality of Bank's loan portfolio and the results are reported to the Bank's authorities. The above mentioned information enables the Bank to identify and take measures to limit the negative influence of unfavourable market changes on the Bank's performance.

2.6.2.2. Rating and scoring methods

Risk assessment of individual credit transactions is made by the Bank using scoring and rating methods developed, enhanced and supervised by the Risk Area. The functioning of those methods is supported by specialised IT applications. The manner of credit risk assessment is defined in the Bank's internal regulations whose main purpose is to ensure uniform and objective credit risk assessment in the process of granting credit facilities.

The process of credit risk assessment in the Bank takes into account the requirements of the PFSA set out in Recommendation S regarding good management practices related to mortgage secured credit exposures as well as the Recommendation T on good practices in the area of risk management of retail credit exposures.

The Bank assesses credit risk for individual clients in two dimensions: from quantitative and qualitative perspective. Client's borrowing capacity measured using quantitative methods consists of verifying the financial standing of a prospective borrower, while creditworthiness assessment measured using qualitative methods, covers the client score and credit history obtained from the Bank's internal databases and from external databases.

In case of corporate customers from the small and medium enterprise segment, that meet certain criteria, the Bank assesses credit risk using the scoring method. Such assessment is dedicated to the low-value, plain vanilla loans and is performed in two dimensions: customers' borrowing capacity and creditworthiness. The borrowing capacity assessment involves examination of the customer's economic and financial situation, whereas the creditworthiness assessment involves scoring and assessment of historical and current behaviour of the customer company and its owners (natural persons) in their dealings with banks. In other cases, the credit rating method is used.

The scoring method used assess the credit risk associated with corporate clients is performed in two dimensions: client's and the transaction's. The measures of said scoring being: client's creditworthiness, i.e. rating and scoring of the transaction, i.e. the ability to repay the debt in a given amount and time. Since credit rating models used for individual clients are developed on the basis of the Bank's internal data, they are tailored to the client's risk profiles. The models are based on the statistical dependency analysis between defaulted debt and client's scoring. The risk assessment is dependent on the size of analysed enterprises. Additionally, the Bank applies credit enterprises assessment model in the form of specialised financing enabling adequate assessment of large undertaking's credit risk which rely on property financing (for instance office premises, shop surfaces, warehouses) and infrastructure projects (for instance communications system, industrial infrastructure, public utility infrastructure).

Risk assessment models are subject to monitoring at least once a quarter in accordance with the Bank's internal regulations regarding periodic verification of credit risk models.

The rating and scoring information is used widely by the Bank in the process of credit risk management, within the system of competencies in the area of credit decisions and within the system for credit risk measurement and reporting.

2.6.3. Credit risk control

The credit risk control consists in determination of instruments that diagnose the credit risk level and application of risk control mechanisms that reduce credit risk level, both in credits process and at the portfolio level. The main credit risk control instruments are determined strategic limits of tolerance for credit risk and risk appetite limits for each the Bank's portfolios, for both the Bank's and the Group's level.

The Bank controls the level of credit exposures to its clients or groups of related clients according to the Banking Law by determining competence limits that define the maximum level of powers required to take credit decisions concerning credit transactions, including condition changes, referred to the Bank's internal regulations concerning division of the credit decision-making competence.

2.6.4. Credit risk monitoring

Credit risk monitoring is performed on the individual credit exposure and portfolio levels.

Monitoring of the individual exposure credit risk is defined by the Bank's internal regulations in particular related to:
1) creation of impairments related to credit exposures and impairments related to outstanding forward transactions,
2) operation of the Early Warning System (EWS),
3) early monitoring of delays in debt repayment,
4) classification of credit exposures and establishment of specific provisions.

In order to reduce the response time to the observed warning signs indicating an increase of the credit risk level, the Bank uses and develops IT application of the EWS as well as develops scoring models used for behavioural assessment.

Monitoring of the portfolio's credit risk is defined by the Bank's internal regulations in particular related to:
1) control over the portfolio's credit risk on the basis of:
   a) adopted credit risk measurement tools, including identified sources of the credit risk,
   b) analysis of results and actions taken under the systemic risk management framework,
2) recommendations regarding remedial actions to be taken in case of an increased credit risk level.

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

2.6.4.1. Risk concentration

The Capital Group monitors the exposures of concentration risk in respect of:
1) exposures to individual clients or groups of related clients,
2) exposures to groups of clients or credit portfolios exposed to a single risk factor.

The Capital Group analyses the concentration in relation to:
1) geographical region,
2) currencies,
3) industries,
4) mortgage-backed credit exposures,
5) the largest entities,
6) the largest capital groups.

The exposures of concentration risk to individual clients and groups of related clients is monitored in relation to the exposure concentration limit, where individual exposure may not exceed 25% of consolidated own funds.

Table 2.1 Exposures towards the 10 biggest clients*

	2017		2016	
	Value	Own funds percentage	Value	Own funds percentage
1	2 936	8.6%	3 200	10.4%
2	2 856	8.4%	2 887	9.4%
3	2 450	7.2%	2 450	7.9%
4	2 332	6.9%	2 371	7.7%
5	1 895	5.6%	2 064	6.7%
6	1 747	5.1%	1 583	5.1%
7	1 602	4.7%	1 571	5.1%
8	1 566	4.6%	1 482	4.8%
9	1 322	3.9%	1 435	4.6%
10	1 101	3.2%	1 081	3.5%
Total	19 807	58.2%	20 124	65.2%

* Total exposure to non-banking clients (balance sheet and off-balance sheet) that are the basis for comparison with the exposure concentration limit

Concentration limits as of 31 December 2017 and 31 December 2016 were not exceeded. The biggest exposure to a single entity as of 31 December 2017 constituted 8.6% of consolidated own funds. The group of the 10 biggest borrowers of the Group consist of clients of PKO Bank Polski SA only.

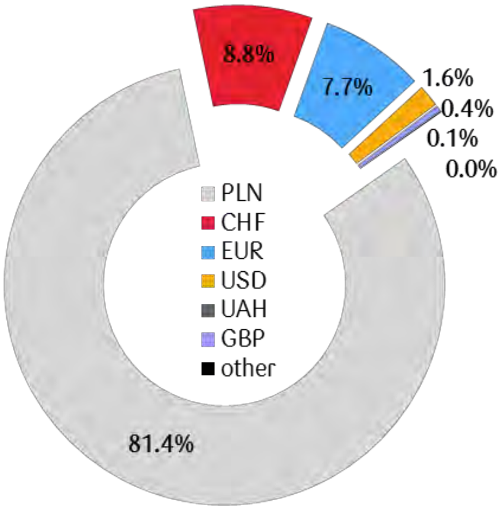
As of 31 December 2017, the largest concentration of the Capital Group's exposure to a group of related entities within the meaning of the Banking Act amounted to 9.2% of consolidated own funds.

Table 2.2 Exposure towards 5 biggest capital groups*

	2017		2016	
	Value	Own funds percentage	Value	Own funds percentage
1	3 122	9.2%	3 160	10.2%
2	3 064	9.0%	2 468	8.0%
3	2 336	6.9%	2 396	7.8%
4	2 169	6.4%	2 118	6.9%
5	1 989	5.8%	2 091	6.8%
Total	12 680	37.3%	12 233	39.6%

* Total exposure to non-banking clients (balance sheet and off-balance sheet) that are the basis for comparison with the exposure concentration limit

Chart 2.1. Capital Group credit portfolio currency structure



The largest part of the Capital Group's currency exposure are CHF denominated and are related to the Bank's loan portfolio. At the end of 2017, the share of loans in CHF accounted for 47% of the Capital Group's currency portfolio, which means a decrease in relation to the end of 2016 by 12%. Another group of foreign-denominated loans are loans in EUR, the share of which amounted to 41% of the currency portfolio at the end of 2017, which means an increase in relation to the end of 2016 by 7%.

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Table 2.3 Geographical breakdown of exposures*

		2017													
		a)	b)	c)	d)	e)	f)	h)	i)	j)	k)	l)	m)	n)	o)
		Net value													
		Poland	Ukraine	Belgium	United Kingdom	Luksemburg	Germany	France	Austria	Sweden	United States	Netherlands	Norway	Other countries	Total
1	Central governments or central banks	56 553	428	0	0	0	0	0	0	0	0	0	0	0	56 981
2	Regional governments or local authorities	10 232	0	0	0	0	0	0	0	0	0	0	0	0	10 232
3	Public sector entities	3 095	0	0	0	0	0	0	0	0	0	0	0	0	3 095
4	Multilateral development banks	0	0	0	2	352	0	0	0	0	0	0	0	0	355
5	International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Institutions	4 109	89	1 187	911	333	838	667	616	270	438	276	37	766	10 538
7	Corporates	70 377	502	0	91	367	176	37	0	262	0	75	295	576	72 757
8	Retail	106 411	597	2	45	0	9	2	1	2	2	1	4	19	107 094
9	Secured by mortgages on immovable property	55 155	129	2	39	1	15	5	0	3	1	2	4	21	55 377
10	Exposures in default	6 525	31	0	1	0	0	1	0	0	0	0	0	1	6 559
11	Items associated with particularly high risk	526	0	0	0	0	0	0	0	0	0	0	0	0	526
12	Covered bonds	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0
14	Collective investments undertakings	5	0	0	0	0	0	0	0	0	0	0	0	0	5
15	Equity exposures	1 349	0	0	0	0	0	0	0	0	0	0	0	0	1 349
16	Other exposures	15 369	111	1	0	0	0	0	0	0	0	0	0	0	15 480
17	**Total standardised approach**	329 705	1 886	1 192	1 089	1 052	1 039	711	618	536	442	354	340	1 384	340 348
18	Total	329 705	1 886	1 192	1 089	1 052	1 039	711	618	536	442	354	340	1 384	340 348

The exposures secured by mortgage on immovable property shown in the table under item 9 include retail exposures and exposures to corporates, up to the amount fully secured by mortgages on immovable property.

(IN PLN MILLION)

Table 2.4 Concentration of exposures by industry or counterparty types

Bank Group		2017											
		Institutional clients							Natural person	Government	Banks	Others	Total
		Electricity, gas, steam and air conditioning supply	Manufacturing	Construction	Wholesale and retail trade	Public administration and defence, compulsory social security	Real estate activities	Other services					
1	Central governments or central banks	0	0	0	0	3	0	428	0	55 624	0	926	56 981
2	Regional governments or local authorities	0	0	0	0	83	0	7 452	0	0	0	2 697	10 232
3	Public sector entities	0	0	0	0	10	0	596	0	0	0	2 489	3 095
4	Multilateral development banks	0	0	0	0	0	0	0	0	0	355	0	355
5	International organisations	0	0	0	0	0	0	0	0	0	0	0	0
6	Institutions	0	0	0	0	0	0	363	0	0	3 639	6 536	10 538
7	Corporates	19 290	3 872	884	1 623	463	150	34 200	2 919	0	0	9 354	72 757
8	Retail	1 526	2 265	1 357	1 953	52	185	13 648	85 294	0	0	814	107 094
9	Secured by mortgages on immovable property	221	106	79	55	27	199	1 184	53 492	0	0	15	55 377
10	Exposures in default	1 234	177	78	74	25	65	3 093	1 743	0	0	70	6 559
11	Items associated with particularly high risk	0	0	0	0	0	0	0	0	0	0	526	526
12	Covered bonds	0	0	0	0	0	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	0	0	0	0	0
14	Collective investments undertakings	0	0	0	0	0	0	5	0	0	0	0	5
15	Equity exposures	0	0	0	0	0	0	0	0	0	0	1 349	1 349
16	Other exposures	0	0	0	0	0	0	130	0	0	0	15 350	15 480
17	**Total standardised approach**	22 272	6 420	2 398	3 704	663	600	61 100	143 448	55 624	3 994	40 126	340 348
18	Total	22 272	6 420	2 398	3 704	663	600	61 100	143 448	55 624	3 994	40 126	340 348

2.6.5. Credit risk reporting

The Bank prepares monthly and quarterly credit risk reports. Credit risk reporting comprises periodical information on the exposure level to the credit portfolio risk. Besides information on the Bank, the reports also includes the credit risk data for the Group entities in which significant credit risk level is identified (for instance the KREDOBANK SA Group, PKO Leasing SA Group).

Moreover, the Bank prepares daily, weekly, monthly and quarterly reports on credit exposures related to derivatives risk, and the quarterly reports refer to the whole Bank Group. The reports comprise information on the risk exposure of derivatives and information on the use of risk limits. The recipients of the reports are mainly: BCC, ALCO, RC the Management Board and the Supervisory Board.

2.6.6. Credit risk related management actions

The main credit risk management tools used by the Bank, in particular:

1) minimum transaction conditions (risk parameters) defined for a given type of transaction (e.g. the minimum value of the LTV rate, the maximum loan amount, the required collateral),
2) the principles to determine crediting availability, including cut-off points – the minimum number of points awarded during the creditworthiness assessment made using the scoring system (for individual and SME) or the rating class (for institutional), from which the loan transaction can be made with a given client,
3) concentration limits – as defined in art. 395 item 1 of CRR and also in Banking Law or internal limits specifying concentration risk appetite,
4) industry limits – defining the credit risk appetite that constrains the risk level related to financing of institutional clients that conduct their businesses in industries characterized by a high level of credit risk,
5) limits related to the credit exposures of the Bank's clients –resulting for instance from Recommendations S and T,
6) credit limits – defining the maximum Bank's concentration in case of a specific counterparty or country in relation to wholesale market transactions, settlement limits and tenor limits,
7) competence limits – defining the maximum level of powers required to take credit decisions with respect to the Bank's clients; the limits depend mainly on the Bank's credit exposure amount to a given client (or a group of related clients) and the period of credit transaction; the competence limits depend on the credit decision-making level (within the Bank's organisational structure),
8) minimum credit spreads – credit risk spreads related to a specific credit transaction executed by the Bank with a given corporate client, and the interest rates offered to a client may not be lower than the reference rate plus credit risk spread.

The collateral policy plays particular role in determination of minimum conditions of credit transactions. The purpose of the collateral policy of the Bank and the Group is to properly hedge the credit risk, in particular by establishing securities characterized by highest possible liquidity. The collateral may be considered liquid if it is possible to sell it without a significant price reduction and at a time that does not expose the Bank to a change in the collateral value due to the price fluctuation typical for this collateral. The Capital Group strives to diversity its collaterals (both in respect to their types and form). The Capital Group assesses collaterals in terms of actual possibility of their use to satisfy its claims. The specific types of collateral that are actually established depend on the product and client type.

2.6.7. Use of external credit assessment institutions (ECAI)

Within the calculation of its own funds requirements, the Bank uses the credit assessments assigned by the following external credit assessment institutions (rating agencies):

1) Moody's Investors Service,
2) Standard and Poor's Ratings Services,
3) Fitch Ratings

The Bank implemented the process of carrying the issuer's and issue's rating to off-trading book items for the purposes of calculation of the own funds requirements functions in accordance with the CRR, Part III, Title II, Chapter 2.

PKO Bank Polski SA cooperates on the wholesale market with financial institutions headquartered in 67 countries. The Bank, within previously set limits, can enter into transactions with 317 counterparties, including local and foreign banks, insurance companies, pension and investment funds. The scope of executed transactions includes deposits, securities transactions, currency exchange and derivatives.
The Bank has access to two clearing houses (the first one: as a direct participant, second: as an indirect participant) through which EMIR[11] regulated interest rate derivative transactions, with selected local and foreign counterparties, are settled.

In order to limit credit risk relating to derivative and securities transactions, the Bank enters into framework agreements with its counterparties (according to ISDA, ICMA and The Polish Bank Association). Those agreements enable off-setting of due liabilities (mitigation of settlement risk) and non-due liabilities (mitigation of pre-settlement risk), arising from derivative transactions as well as utilisation of close-out netting at the moment of termination of the agreement due to infringement or event warranting termination in relation to one or both parties.

Additionally, the Bank enters into collateral agreements (CSA – Credit Support Annex – standard developed by ISDA or PBA collateral agreement) with its counterparties, on the basis of which, each of the parties, after meeting certain criteria specified in the agreement, undertakes to establish appropriate collateral along with the right to set it off.

The Bank utilizes international Loan Market Association standards when entering into credit transactions with financial institutions headquartered outside of the Republic of Poland.

[11] EMIR (ang. *European Market Infrastructure Regulation*) – Regulation of the European Parliament and the Council (EU) No 648/2012 of 4 July 2012 with regard to derivatives which are trading outside the regulated market, the main counterparties and transactions repository, became effective on 16 August 2012.

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Entering into a framework agreement with counterparty is the basis for verification of internal limit per counterparty and of the length of period of the Bank's exposures to forward or repurchase agreement transactions.

The Bank regularly monitors the financial situation of its counterparties and sets risk-adequate limits for pre- and post-settlement exposures for single counterparties.

In order to mitigate counterparty credit risk, the Bank establishes credit and settlement limits. The credit limit defines the Bank's maximum exposure to a given counterparty or country arising from wholesale market transactions. The settlement limit defines a maximum daily cash flow value from a single counterparty or country.

Pursuant to the Bank's methodology, the value of limits for credit institutions is depended on counterparty's rating as well as own funds level of the Bank and the counterparty, and in case of non-financial institutions: additionally on a treasury survey, determining the client's demand for hedging transactions.

Assessment of counterparty credit risk forms a basis for CVA and DVA adjustments.

The amount of internal capital for the risk of default of financial institution, country or central bank counterparties is calculated on the basis of on-balance sheet equivalent of the on- and off-balance sheet transactions. Depending on the rating, the exposure is assigned a relevant credit quality step and risk weight, calculated using the internal methods. Monitoring and reporting of internal capital levels for counterparty risk is considered one of the elements of risk management.

As of 31 December 2017, the CSA collateral agreements existed between the Bank and its counterparties, for which the collateral value depended on the Bank's credit rating. In case of a downgrade of the Bank's rating below the level defined in the agreement, the value of the collateral (deposited on a daily basis) may be modified according to the methodology described in the agreement and/or additional margin may be required. As of the day of the Report, the outflow amount resulting from required additional collateral in case of Bank's rating downgrade by 3 notches would be equal to PLN 800 million.

As of 31 December 2017, a positive gross value of derivative transactions with financial institutions amounted to PLN 1,377 million. The above amount was calculated as the total of positive market values of all open transactions. The net credit exposure, after taking into account the netting of transactions, for counterparties with framework agreements was ca. PLN 1,021 million (excluding centrally-cleared transactions). The profits from netting amounted to PLN 356 million. The value of collaterals received on the basis of CSA and PBA collateral agreements amounted to ca. PLN 799 million.

As of 31 December 2017 the Bank had no credits derivatives.

As of 31 December 2017 the Bank recognized credit value adjustments in the valuation of financial derivatives concluded with non-financial business entities based on a performed analysis of recoverability of the exposures. The Bank's adjustment included the market value of credit risk as assessed by the Bank. The analysis covered all significant exposures with the positive valuation of financial derivatives contracted with non-financial business entities. In particular, the adjustment included the risk of non-performance of agreements executed with a counterparty, on the basis of i.a. analysis of entity's financial situation, probability of default of selected contracts as well as the value of the amounts received from collaterals.

The Bank enters into transactions with financial institutions characterized by a diverse external credit rating, ranging from AAA to BBB (Table 2.5).

Table 2.5 The quality of exposures* to financial institutions**

PKO Bank Polski SA		
Rating	**2017**	**2016**
AAA	6.3%	4.0%
AA	24.7%	32.0%
A	51.7%	54.0%
BBB	10.9%	8.0%
BB	0.0%	1.0%
B	0.0%	0.0%
CCC	0.0%	0.0%
Brak ratingu	6.4%	1.0%
Total	100.0%	100.0%

* Exposure is the total of the nominal exposure on account of bank deposits and securities and the total of derivatives valuations after netting them for counterparties with whom there have been concluded

** Exposures to institutions from outside the Group

The above listing is based on external rating granted by Moody's, Standard and Poor's and Fitch's rating agencies, mapped to a uniform rating scale.

The value of counterparty risk exposures is computed by market value method according to the part 3, title 2, chapter 6, section 3 of CRR. In order to specify current cost of contracts recreation that have positive value, the Bank assigns current market values to that contracts.

2.6.8. Credit risk adjustments

2.6.8.1. Impairment of credit exposures

Past due exposures mean credit exposures for which there is a delay in repayment of principal or interest in amounts exceeding previously set thresholds. Similar quota thresholds are taken into account when recognizing delay in repayment (over 90 days) as a reason for default.

Impairment losses on credit exposures are recognized in relation to credit exposures for which a premise of default was identified and impairment of their value was recognized and a revaluation write-down was created on the basis of estimated future cash flows.

A change in the repayment terms of a credit exposure is recognized as the premise of default if it is dictated by the debtor's difficult situation and introduces pro-debtor changes in repayment terms that would otherwise not be granted. As a rule, any change to the repayment terms, in which any of the following conditions are met, shall be recognized as a premise for default:

1) as at the date of signing the new agreement (annex to the original agreement), the indebtedness is fully due or the delay in repayment of the exposure is equal to or greater than 90 days,
2) the new agreement reduces the interest rate (margin), except when it is related to the contract being additionaly secured or in case of adjusting the margin to the market benchmark or the current margin levels in the Bank,
3) a conditional debt reduction is planned, a change in the payment settlement pattern,
4) the contract postpones the payment deadline or the final repayment date of the loan by more than one quarter
5) the restructuring agreement is yet another one in the series

The Bank Group reviews each month the credit exposures to identify impaired credit exposures; measures the impairment of its credit exposures; and establishes write-downs and provisions. The process of establishing write-downs and provisions comprises the following stages:

1) identification of the conditions of impairment and events significant for such identification,
2) recording in the IT systems the events significant for identification of the conditions of impairment of credit exposures,
3) defining the method for impairment measurement,
4) measuring the impairment and deciding on a write-down or provision,
5) verification and aggregation of the impairment measurement results,
6) recording of the impairment measurement results.

The method for defining the amount of the write-downs related to the impairment of credits and loans depends on the type of impairment sources identified and the individual significance of the credit exposure concerned. The following events are specifically treated as the conditions of individual impairment:

1) breaking the contract provision by debtor i.e. for example delay in repayment of principal or interest longer than 90 days (to specify past due period of credit, the amounts of unpaid on time interest or principal instalments above defined thresholds are taken into consideration),
2) deterioration of the debtor rating assessment to the level that indicates significant danger for repayment resulting from appearance of debtor substantial financial difficulties (‘H1’ rating concerning non-financial clients and ‘G’, ‘H’ ratings concerning financial institutions),
3) entering into restructuring agreement or granting a discount concerning debt repayment (the indication of impairment is recognized, if the convenience granted to the consumer is a result of its difficult legal or economic position)
4) occurrence of high probability of default or debtor restructuring,
5) setting liabilities in foreclosure,
6) debt enforcement proceeding against debtor,
7) declaration of debtor bankruptcy or filing an bankruptcy application,
8) receivables contestation by debtor,
9) launching of remedial actions against debtor,
10) establishing of board of commissioners to supervise debtor activities or debtor activity suspension,
11) additional conditions identified with regard to exposures of housing association in relation to mortgages of ‘old portfolio’ guarantee under the Treasury.

In determining the past due period of the credit, the outstanding amounts of interest or principal instalments above defined thresholds are taken into account.

The Capital Group divides credits and loans on the grounds of exposures volume. The Bank Group uses three methods for impairment assessment:

1) the individual method for individually significant loans which meet the condition of individual impairment or require individual assessment due to the specific nature of a transaction and events that condition exposure repayment. In the individually significant exposure portfolio, each individual credit exposure is analysed individuated whether exist impairment conditions and the identified loss level.
2) the portfolio method, applied in the case of individually insignificant loans for which the condition of individual impairment has been identified. With respect to individually insignificant exposures the loss identification and measurement is undertaken by using portfolio risk parameters, estimated by statistic methods. If loss is identified with regard to individual credit exposure, the adequate write-down is made for it.
3) the collective method (IBNR), used in the case of loans where no conditions of individual impairment have been identified, but there is the possibility of occurrence of incurred but not identified losses. If loss is not recognised at the individual exposure level, exposure is categorised under portfolio of assets that has similar characteristic, assessed collectively and is embraced write-down defined for particular group in respect to ensuing unreported loss (IBNR write-down).

The write-down for impairment of the balance sheet value of exposure is the difference between the balance sheet value of that exposure and the current value of the expected future cash flows from that exposure:

1) when defining the write-down under the individual method, the expected future cash flows are assessed for each exposure individually, the possible scenarios of performance of the agreement taken into account and weighed with the probability of their fulfilment,
2) the write-down for credit exposure impairment defined under the portfolio or collective method equals the difference between the balance sheet value of those exposures and the current value of the expected future cash-flow (except for future credit losses not incurred), assessed with statistical methods on the basis of historical monitoring of exposures from homogeneous portfolios.

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The provision for off-balance sheet credit exposures is established in the amount equal to the expected (assessable) loss of economic benefits resulting from such exposures.

The provision is set as the difference between the expected value of the balance sheet exposure to arise from the off-balance sheet liability (from the date as at which the assessment is made to the date of occurrence of the overdue debt that is identified as the condition of individual impairment) and the current value of the expected future cash flows generated from the balance sheet exposure arising from the off-balance liability.

When determining the provision under the individualised method, the expected future cash flows are assessed for each exposure individually.

When determining the provision under the portfolio or collective method, portfolio parameters are used that are assessed by means of statistical methods on the basis of historical exposures of the same characteristics.

Impaired exposures are defined as exposures, in case of which a trigger of default has been identified and, in an assessment of future cash flow, impairment in value has been recognized and offsetting write-down is made.

Exposures are considered to be at risk and classified as such, in case exposures for which one or both of below events occur:

1) the Bank decides that there is a small probability of full repayment towards the Bank or any of the Group's entities of debt towards the Bank without such actions as collateral foreclosure by the Bank (for retail exposures, the above conditions are verified on the level of the exposure, not the debtor),
2) the delay in repayment of any significant debt towards the Bank or any Group's entity by the debtor exceeds 90 days.

The definition of exposures at risk among the companies of the Bank Group is similar to the one adopted by the Bank.

In terms of adjustment for specific credit risk, the Bank uses the impairment related to value loss of assets, which was recognized in the Bank's Tier 1 capital, pursuant to the CRR and its implementing acts.

Table 2.6 Total and average net amount of exposures

		2017		2016	
		a)	b)	a)	b)
		Net value of exposures at the end of the period	Average net exposures over the period	Net value of exposures at the end of the period	Average net exposures over the period
1	Central governments or central banks	56 981	52 774	50 890	48 964
2	Regional governments or local authorities	10 232	10 187	10 045	10 825
3	Public sector entities	3 095	3 115	3 124	3 104
4	Multilateral development banks	355	224	202	159
5	International organisations	0	0	0	0
6	Institutions	10 538	9 504	9 407	8 192
7	Corporates	72 757	74 353	76 456	72 936
8	*Of which: SMEs*	7 751	5 489	8 981	7 434
9	Retail	107 094	105 465	106 633	102 574
10	*Of which: SMEs*	26 228	24 377	21 971	18 572
11	Secured by mortgages on immovable property	55 377	54 480	49 321	45 529
12	*W tym: MŚP*	1 166	1 000	1 065	554
13	Exposures in default	6 559	6 681	6 675	7 204
14	Items associated with particularly high risk	526	670	850	767
15	Covered bonds	0	0	0	0
16	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0
17	Collective investments undertakings	5	15	18	143
18	Equity exposures	1 349	1 170	879	873
19	Other exposures	15 480	15 158	15 598	14 897
20	**Total standardised approach**	340 348	333 796	330 097	316 167
21	Total	340 348	333 796	330 097	316 167

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Table 2.7 Maturity of exposures

		2017					
		a)	b)	c)	d)	e)	f)
		Net exposure value					
		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1	Central governments or central banks	0	14 649	210	41 291	831	56 981
2	Regional governments or local authorities	1 435	82	191	8 522	1	10 232
3	Public sector entities	2 589	1	25	480	0	3 095
4	Multilateral development banks	0	173	50	132	0	355
5	International organisations	0	0	0	0	0	0
6	Institutions	2 890	4 658	2 148	567	275	10 538
7	Corporates	10 955	4 409	23 869	30 947	2 578	72 757
8	Retail	6 582	11 951	19 179	69 323	59	107 094
9	Secured by mortgages on immovable property	63	47	233	55 033	0	55 377
10	Exposures in default	847	488	1 280	3 885	60	6 559
11	Items associated with particularly high risk	0	0	0	23	504	526
12	Covered bonds	0	0	0	0	0	0
13	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
14	Collective investments undertakings	0	0	0	5	0	5
15	Equity exposures	0	0	0	26	1 323	1 349
16	Other exposures	19	6 714	23	67	8 657	15 480
17	**Total standardised approach**	25 381	43 172	47 208	210 300	14 287	340 348
18	Total	25 381	43 172	47 208	210 300	14 287	340 348

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Table 2.8 Credit quality of exposures by exposure classes and instruments

		2017					
		a)	b)	c)	d)	e)	f)
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Net values
		Defaulted exposures	Non-defaulted exposures				(a+b-c-d)
1	Central governments or central banks	0	56 984	3	0	0	56 981
2	Regional governments or local authorities	0	10 247	16	0	0	10 232
3	Public sector entities	0	3 096	1	0	0	3 095
4	Multilateral development banks	0	355	0	0	0	355
5	International organisations	0	0	0	0	0	0
6	Institutions	0	10 584	45	0	0	10 538
7	Corporates	0	73 069	312	0	0	72 757
8	*Of which: SMEs*	0	7 770	19	0	0	7 751
9	Retail	0	107 460	366	0	5	107 094
10	*Of which: SMEs*	0	26 399	171	0	2	26 228
11	Secured by mortgages on immovable property	0	55 518	141	0	0	55 377
12	*Of which: SMEs*	0	1 186	20	0	0	1 166
13	Exposures in default	12 753	0	6 194	0	1 226	6 559
14	Items associated with particularly high risk	0	526	0	0	0	526
15	Covered bonds	0	0	0	0	0	0
16	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
17	Collective investments undertakings	0	5	0	0	0	5
18	Equity exposures	0	1 349	0	0	0	1 349
19	Other exposures	0	15 489	9	0	0	15 480
20	**Total standardised approach**	12 753	334 682	7 087	0	1 231	340 348
21	Total	12 753	334 682	7 087	0	1 231	340 348
22	*Of which: Loans*	11 093	178 508	6 303	0	1 231	183 299
23	*Of which: Debt securities*	0	45 081	0	0	0	45 081
24	*Of which: Off-balance-sheet exposures*	694	51 205	92	0	0	51 807

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Table 2.9 Credit quality of exposures by industry or counterparty types

		2017					
		a)	b)	c)	d)	e)	f)
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Net values
		Defaulted exposures	Non-defaulted exposures				(a+b-c-d)
Institutional clients	Electricity, gas, steam and air conditioning supply	1 668	21 081	534	0	167	22 215
	Manufacturing	224	3 459	115	0	18	3 567
	Construction	129	1 396	82	0	7	1 443
	Wholesale and retail trade	70	1 010	76	0	0	1 004
	Public administration and defence, compulsory social security	40	571	17	0	1	595
	Real estate activities	0	24	0	0	0	24
	Other services	5 777	84 924	2 874	0	564	87 828
Natural person		4 768	125 315	3 329	0	475	126 755
Government		0	54 684	3	0	0	54 681
Banks		0	15 815	42	0	0	15 773
Others		76	26 401	15	0	0	26 462
Total		12 753	334 682	7 087	0	1 231	340 348

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Table 2.10 Credit quality of exposures by geography

		2017					
		a)	b)	c)	d)	e)	f)
		Gross carrying values of					Net values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	(a+b-c-d)
1	Poland	12 621	324 281	6 891	0	1 230	330 011
2	Ukraine	84	2 048	87	0	0	2 045
3	Belgium	0	1 192	0	0	0	1 192
4	United Kingdom	0	1 053	1	0	0	1 052
5	Luksemburg	5	1 029	5	0	0	1 029
6	Germany	1	998	1	0	0	998
7	France	2	706	1	0	0	707
8	Austria	0	617	0	0	0	617
9	Sweden	0	501	0	0	0	501
10	United States	0	442	0	0	0	442
11	Netherlands	0	338	1	0	0	337
12	Norway	0	258	0	0	0	258
13	Other countries	40	1 218	100	0	1	1 159
14	Total	12 753	334 682	7 087	0	1 231	340 348

Table 2.11 Ageing of past-due exposures

PKO Bank Polski		2017					
		a)	b)	c)	d)	e)	f)
		Gross carrying values					
		≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
1	Loans	4 223	221	135	567	728	5 938
2	Debt securities	0	0	0	0	0	0
3	Total exposures	4 223	221	135	567	728	5 938

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Table 2.12. Changes in the stock of general and specific credit risk adjustments

Bank Group		2017	
		a)	b)
		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	**Opening balance**		
2	Increases due to amounts set aside for estimated loan losses during the period	-10 080	-
3	Decreases due to amounts reversed for estimated loan losses during the period	8 926	-
4	Decreases due to amounts taken against accumulated credit risk adjustments	1 231	-
5	Transfers between credit risk adjustments	0	-
6	Impact of exchange rate differences	0	-
7	Business combinations, including acquisitions and disposals of subsidiaries	0	-
8	Other adjustments	-7 164	-
9	Closing balance	-7 087	-
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	33	-
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	0	-

Table 2.13. Changes in stock of defaulted and impaired loans and debt securities

		2017
		a)
		Gross carrying value defaulted exposures
1	**Opening balance**	12 110
2	Loans and debt securities that have defaulted or impaired since the last reporting period	2 503
3	Returned to non-defaulted status	397
4	Amounts written off	-1 231
5	Other changes	-1 026
6	Closing balance	12 753

2.6.9. Use of credit risk mitigation techniques

The market value forms the basis for assessment of value of immovable property, collateral and rights. Pursuant to regulations regarding the appraisal of collateral, including immovable property, the market value is set on the basis of the Bank's assessment or evaluation of an independent appraiser.

The collateral assessment takes into account in particular:
1) property, economic and financial or social and financial situation of entities providing personal collateral,
2) the state and the market value of the collateral objects and their susceptibility to the depreciation during of the life of collateral (the impact of technological wear of the collateral on its value),
3) the potential economic benefits of the Bank arising from a particular method of securing debts, in particular, the ability to deduct write-downs related to impairment losses,
4) method of collateral establishment, including: the typical duration and complexity of formal operations, as well as necessary costs (cost of upholding the collateral and debt enforcement from the collateral), using the Bank's internal regulations relating to collateral evaluation,
5) complexity, time-intensity as well as economic and legal conditions related to the effective enforcement from the collateral, in the context of limitations and existing rules of execution related to distribution of amounts received from individual execution and/or bankruptcy proceedings, debt seniority.

Particular types of collateral are established based on the product and segment of the client.

For credits for residential and commercial real estate, a collateral in a form of a mortgage on immovable property is obligatory.

Until an effective (based on the type and amount of the credit) collateral is established, the Bank may accept temporary collateral in another form.

When granting retail loans to individual clients, the Bank usually accepts personal collateral (a guarantee under civil law or a bill of exchange) or establishes registered pledge on the bank account, car or securities.

Collateral on loans financing small and medium enterprises as well as corporate clients is established, among other things, on business liabilities, bank accounts, movables, immovable property or securities or in the form of BGK guarantees (commonly applied in case of SME).

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Table 2.4 CRM techniques – Overview

		2017				
		a)	b)	c)	d)	e)
		Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans*	283 146	12 121	6 016	6 104	0
2	Total debt securities	45 081	0	0	0	0
3	Total exposures	328 227	12 121	6 016	6 104	0
4	Of which defaulted	6 127	432	248	184	0

*Total loans represent total exposures net total debt securities

Table 2.15 Standardised approach – Credit risk exposure and CRM effects

		2017					
		a)	b)	c)	d)	e)	f)
		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs 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	56 980	1	62 745	59	5 864	9%
2	Regional government or local authorities	8 688	1 544	8 821	329	1 853	20%
3	Public sector entities	469	2 626	387	48	217	50%
4	Multilateral development banks	302	0	302	0	0	0%
5	International organisations	0	0	0	0	0	0%
6	Institutions	4 790	3 092	4 815	1 525	1 804	28%
7	Corporates	42 685	29 084	33 872	4 981	37 820	97%
8	Retail	92 680	14 414	91 490	2 547	66 554	71%
9	Secured by mortgages on immovable property	55 019	359	55 019	56	49 039	89%
10	Exposures in default	5 879	680	5 672	172	7 217	124%
11	Exposures associated with particularly high risk	526	0	526	0	790	150%
12	Covered bonds	0	0	0	0	0	0%
13	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0%
14	Collective investment undertakings	5	0	5	0	5	100%
15	Equity	1 349	0	1 349	0	3 348	248%
16	Other items	15 473	7	15 473	3	5 156	33%
17	Total	284 843	51 807	280 474	9 719	179 664	62%

The total exposure value does not include derivative instruments, buy-back transactions, securities or commodities lending or borrowing transactions, long settlement transactions and transactions with an obligation to top up a loan collateral in the amount of PLN 3,698 million.

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Table 2.16 – Standardised approach

		2017																	
	Exposure classes	Risk weight																Total	Of which unrated
		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted		
1	Central governments or central banks	59 449	0	0	0	895	0	0	0	0	0	463	1 996	0	0	0	0	62 804	0
2	Regional government or local authorities	0	0	0	0	9 072	0	77	0	0	0	0	0	0	0	0	0	9 150	5 275
3	Public sector entities	0	0	0	0	1	0	433	0	0	0	0	0	0	0	0	0	434	395
4	Multilateral development banks	355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	355	355
5	International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Institutions	450	0	0	0	5 322	0	2 454	0	0	53	13	0	0	0	0	0	8 292	450
7	Corporates	0	0	0	0	0	0	291	0	0	39 549	0	0	0	0	0	0	39 840	3 412
8	Retail	0	0	0	0	0	0	0	0	94 038	0	0	0	0	0	0	0	94 038	94 038
9	Secured by mortgages on immovable property	0	0	0	0	0	28 328	142	0	14	1 318	25 271	0	0	0	0	0	55 074	55 074
10	Exposures in default	0	0	0	0	0	0	0	0	0	3 097	2 747	0	0	0	0	0	5 843	5 843
11	Exposures associated with particularly high risk	0	0	0	0	0	0	0	0	0	0	526	0	0	0	0	0	526	526
12	Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Collective investment undertakings	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	5
15	Equity	0	0	0	0	0	0	0	0	0	16	0	1 332	0	0	0	0	1 349	1 349
16	Other items	10 308	0	0	0	15	0	0	0	0	5 153	0	0	0	0	0	0	15 477	15 477
17	Total	70 562	0	0	0	15 306	28 328	3 398	0	94 052	49 191	29 021	3 329	0	0	0	0	293 187	182 199

Table 2.16 presents the total exposure amount of balance sheet and off-balance sheet items of the Capital Group in the amount of PLN 293 187 million, which is the total exposure after specific risk deductions and impairment losses and after applying appropriate conversion factors for off-balance sheet exposures, i.e. after multiplying the exposure amounts of off-balance items by the corresponding factors of 0%, 20%, 50% or 100%.

	Exposures net provisions and imparment losses	Credit risk mitigation techniques affecting exposure (funded protection)	Fully adjusted exposure value	of which: Balance sheet exposure	of which: Off-balance sheet exposures	Off-balance sheet exposures by CCF value: 0%	20%	50%	100%	Off-balance sheet exposures after CCF	Exposure value
	(a)	(b)	(c=a-b)	(d)	(e=f+g+h+i)	(f)	(g)	(h)	(i)	(j=f*0%+g*20%+h*50%+i*100%)	(k=d+j)
Total exposure	340 348	6 016	334 331	283 468	50 863	19 632	22 066	7 719	1 446	9 719	293 187

As of December 2017 no netting of on- or off- balance sheet items pursuant to art. 205 of the CRR was used, therefore the provisions of art. 453 letter a) of the CRR, regarding the policies and processes for, and an indication of the extent to which the entity makes use of, on- and off- balance sheet netting, are not applicable.

As of 31 December 2017, the Bank utilized provisions laid out in art. 298 of the CRR, regarding effects of recognition of netting agreements, for the purpose of calculation of on-balance sheet equivalent of derivatives. Said agreements are entered into primarily with institutional counterparties. They allow for a settlement of all the transactions covered by the agreement, even in an event of default of one of the parties, with a total sum of market value of individual transactions. The agreements being netted meet the requirements laid out in art. 295-297 of the CRR.

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2.6.10. Exposures in equity securities not included in the trading book

PKO Bank Polski SA and its subsidiaries subject to prudential consolidation have banking book equity exposures in other entities.

Exposures are qualified into following groups depending on their type and purpose of their acquisition:

1) equity exposures of the Bank and its subsidiaries in subsidiary companies not subject to prudential consolidation–– said entities comprise companies providing services supplementary to the Bank's basic financial offer related to insurance services and close-end investment funds established for optimization of sales and managerial activities related to supervised funds as well as new companies purchased in 2017, in order to expand the product line and increase the market position of the Bank Group,
2) Bank's exposures towards financial and financial market infrastructure companies – investments in joint-ventures, associated and minority-interest companies, providing financial services or services supporting the development of financial markets; said group includes Centrum Elektronicznych Usług Płatniczych eService Sp. z o.o., together with which PKO Bank Polski SA offers comprehensive services in the field of POS terminal placement and transactions settlement,
3) Bank's exposure to *The 2020 European Fund for Energy, Climate Change and Infrastructure*, established with the purpose of realization of investment projects in Poland and other European Union countries,
4) participation units in investment funds – covering investments of PKO Towarzystwo Funduszy Inwestycyjnych SA (PKO TFI SA) in participation units of the new investment funds under its management. Assets are acquired with the purpose of providing financing required for establishment of said investment funds.
5) other exposures – investments which are mostly intended for sale, made by the Bank and its subsidiaries subject to prudential consolidation. This group includes i.a. the Bank's entities for sale to NEPTUN – fizan or fund subsidiary, assets acquired during debt restructuring process and collaterals taken over by the Bank.

Table 2.17 Banking book equity exposures

	2017		2016	
	Carrying amount	Fair value*	Carrying amount	Fair value*
Total	1 864	1 964	1 732	1 727
Investments valued under the equity method (equity investments in subsidiaries not subject to prudential consolidation, joint-ventures and associated entities)	1 093	1 102	947	942
Including: shares in entities listed on regulated market	19	22	26	20
Shares in other entities, this includes also equity investments in entities revealed as fixed assets items for sale	339	343	326	326
Equity securities	175	262	142	143
Shares in entities listed on regulated market	48	48	34	34
Shares in entities not listed on regulated market**	127	214	108	109
Participation units in PKO TFI SA investment funds	5	5	18	18
Participation units in collective investment undertakings of PKO Banku Polski SA***	252	252	298	298

* Assessed fair value of shares listed on regular market - market value; 2017 values include fair value measurement of financial assets of non-public entities according to new valuation models developed for the purposes of implementing IFRS 9.
** This line includes also shares that are not listed on the regular market of public companies
*** This item presents participation units in entities other than the Bank's subsidiaries, recognized as „investments accounted for using the equity method"

Stocks and shares in other entities are subject to periodic valuation.

<u>Investments in subsidiaries not subject to prudential consolidation, joint and affiliated ventures</u>

Investments in subsidiaries not subject to prudential consolidation, joint and affiliated ventures are valued using equity method, unless categorized as fixed assets for sale. The share of the Capital Group in the financial result of the abovementioned entities from the date of acquisition is recognized in the profit and loss account and its share in changes in other comprehensive income from the date of acquisition - in other comprehensive income. The carrying amount of the investment is adjusted by the total change in the balance of particular capital items from the date of their acquisition.

At the end of each reporting period, an assessment of impairment for investments in subsidiaries not subject to prudential consolidation, joint-ventures and associates is made. If impairment is identified, an assessment is made of the higher of the investment's value in use and fair value less selling expenses (impairment test). If the carrying amount of an asset exceeds its recoverable value, an impairment loss is recognized in the profit and loss account. The value in use is assessed using the discounted cash flow method under the assumption that the stocks or shares will continue to be held, and on the basis of financial plans of entities using discount rate determined for the Bank's capital contributions.

Investments in subsidiaries not subject to prudential consolidation, joint-ventures and associated companies recognized as fixed assets for sale are presented as carrying amount or goodwill net cost of sales – depending on which one is smaller.

Stocks and shares in other companies are valued:

1) at fair value, based on the market value for those stocks, for which there is an active market - according to an external valuation or based on the purchase price offered – for companies for which no active market is present,
2) at acquisition cost reduced by an impairment allowance – for stocks and shares which fair value cannot be assessed.

Changes in the value of stocks and shares are recognized in the revaluation fund, except for impairments recognized in the profit and loss account.

Participation units and investment fund shares

Participation units in investment funds as well as creation units in joint financing institutions are priced according to fair value and recognized in the revaluation fund.

The fair value of significant capital exposures, determined based on internal valuation models, is described in the financial statements of the Bank and the Bank Capital Group for 2017 in notes on the fair value hierarchy.

In 2017, the Bank Group (under prudential consolidation) realized a cumulative gross profit on the sale of securities representing banking book equity exposures in the amount of PLN 3.8 million. The Bank Group's total unrealized cumulative gross profit resulting from revaluation of the banking book equity exposures (shown i.a in the revaluation reserve) amounted to PLN 315.6 million as of the end of 2017. The aforementioned value includes unrealized profit of the Group in the amount of PLN 178.5 million related to revaluation to fair value of the purchase price of the shares of one of the companies.

In 2017, PKO Polish Bank SA received a dividend related to shares held and shares representing equity exposures in the total gross amount of 23.4 million.

2.7. Interest rate risk

2.7.1. Introduction

Interest rate risk is the risk of loss on the Bank Group's balance sheet and off-balance sheet items sensitive to interest rate changes, resulting from unfavourable interest rate changes on the market. Interest rate risk is actively managed by the Bank that results from both positions which belong to trading book and positions which are not the part of trading book.

The purpose of interest rate risk management is to mitigate the possible losses due to changes in the market interest rates to an acceptable level through appropriate shaping of the structure of the balance sheet and off-balance sheet items.

2.7.2. Interest rate risk identification, measurement and assessment

Interest rate risk identification consists in identification of its current and potential sources and estimation of significance of its potential impact on the Bank's and the Bank Group's activities.

In order to determine the level of interest rate risk, the Bank uses interest income sensitivity measure, economic value sensitivity measure (BPV), the value at risk model (VaR), shocks analysis and repricing gaps.

The process and organization of interest rate risk management in the Bank Group are compliant with the principles described in section 2.1.

The interest rate risk management process is supervised by the Supervisory Board, which regularly receives information on the Bank's and the Capital Group's risk profile as well as the most important actions taken in the area of interest rate risk management. The Supervisory Board also approves reports confirming compliance between the interest rate risk profile and the tolerance to the interest rate risk set at the level of the Bank and the Capital Group. The Management Board is responsible for managing the Bank's interest rate risk, including supervision and monitoring of the actions taken by the Bank in the area of interest rate risk management. The Management Board adopts internal regulations on interest rate risk management.

The risk management Strategy of PKO Bank Polski SA and the PKO Bank Polski SA Group defines an acceptable level of interest rate risk in both the Bank and the Bank Group and defines the principles of interest rate risk management in the Bank Group. Additionally, the interest rate risk management Strategy specifies the approach to interest rate risk management in the banking portfolio.

The assignment of transactions to business models according to IFRS 9 and the breakdown between the trading and banking portfolio is determined by the Bank's Investment Policy.

The Bank supervises the functioning of interest rate risk management in individual subsidiaries of the Bank Group. As part of the supervision, the Bank influences the interest rate risk management methods in these entities and supports their development. The Bank also takes into account the level of interest rate risk in the operations of individual entities within the framework of the interest rate risk monitoring and reporting system at the level of the Capital Group.

The interest rate risk generated by the Bank's core activity is transferred using a transfer pricing system for the purpose of centralized management of this risk. The Bank's business model assumes active interest rate risk management by means of appropriate shaping of the product offer and use of available financial instruments within the limits adopted at the Bank and threshold values for interest rate risk.

The interest income sensitivity is a measure defining a change in the interest income resulting from stepwise interest rate changes. The measure takes into account the different repricing dates of individual interest items in each of selected time horizons.

Economic value sensitivity measure (Basis Point Value – BPV) is defined as fair value change of the financial instrument caused by parallel upward movement of the profitability curves by one basis point.

The value at risk (VaR) is the potential loss resulting from maintained structure of balance sheet and off-balance sheet items and changes in interest rates or as potential value of loss on the maintained currency positions due to changes in interest rates or foreign exchange rates, with an assumed probability level and taking account of a correlation between risk factors.

VaR for market risk management purposes is calculated with the 99% confidence level and 10-day holding. For interest rate risk management purposes, the following, among other things, are applied: the VaR value determined for individual financial instruments and for the Bank's portfolios, and by individual types of business activity of the Bank

Shocks analysis (stress tests, crash tests, reverse stress tests) are used to assess potential losses resulting from the maintained structure of the balance sheet and off-balance sheet items where market situation occurs that is not described in a standard manner using the statistical measures. Additionally, the Bank utilized shock analysis in the form of reverse stress tests related to interest rate risk.

The following scenarios are applied at the Bank:

1) hypothetical stress tests – within which fluctuations in interest rates are assumed arbitrarily: parallel shift of the interest rate curves for the individual currencies by ±50 bps, by ±100 bps, by ±200 bps, values over 200 bps and deflection scenarios (nonparallel peak- and twist- type deflections) of profitability curves.
2) historical stress tests – within which fluctuations in interest rates are assumed on the basis of fluctuations in interest rates observed in the past, including: the biggest historical change, deflection of the interest rate curve, the biggest historical nonparallel movement of interest rate curves for securities and for derivatives hedging those securities,
3) crash tests – within which fluctuations in interest rates are assumed on the basis of fluctuations in interest rates observed in the past so as to maximise the Bank's potential loss,
4) reverse stress tests – which the purpose is to determine such profitability curves movement scenario that results will be corresponding with given change of the Bank's balance sheet and off-balance sheet items.

The repricing gap is the difference between the current value of assets and liabilities positions exposed to interest rate risk, repriced in a given time interval, with the items shown as at the transaction date.

In the process of interest rate risk measurement, in relation to credit and deposit balances with indefinite repricing, the Bank assumed the approach based on replicated interest rate profiles, while taking account of instability of balances of this products (defined on the basis of their past structure). Moreover, the Bank cyclically monitors the impact of past due repayment of credits on interest rate risk measures – currently considered immaterial, based on the latest analysis.

2.7.3. Interest rate risk control

The control of interest rate risk encompasses establishing limits and thresholds concerning interest rate risk, in particular the strategic limits of tolerance for interest rate risk adjusted to the scale and complexity of the Bank Group's activities.

2.7.4. Monitoring the interest rate risk

The Bank's interest rate risk is monitored on a daily basis, while the Capital Group is monitored on a monthly basis. In 2017, interest rate risk of the Bank Group was determined mainly by the mismatch of repricing dates of assets and liabilities.

As at 31 December 2017 the mismatch of reassessment dates of the Bank Group in case of PLN interest rate and USD, EUR and CHF interest rate comprised mainly the Bank's mismatch. The mismatch of interest rate repricing dates for these currencies that was generated by the other Group entities had no significant impact on the interest rate risk for the entire Group and consequently, it did not change its risk profile significantly.

The Tables 2.18 – 2.21 present the repricing gaps of the Bank and the Group as at 31 December 2017 by currencies.

Table 2.18 PLN repricing gap (in PLN million)

2017	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years	Total
PKO Bank Polski SA								
Periodic gap	49 532	38 793	-11 526	-15 058	-14 735	-28 139	4 130	22 996
Cumulative gap	49 532	88 325	76 799	61 740	47 005	18 866	22 996	-
Group subsidiaries								
Periodic gap	3 683	-1 404	-751	344	176	569	119	2 735
Cumulative gap	3 683	2 279	1 528	1 871	2 047	2 616	2 735	-
Total - Periodic gap	**53 215**	**37 389**	**-12 278**	**-14 715**	**-14 560**	**-27 570**	**4 249**	**25 731**
Total - Cumulative gap	**53 215**	**90 604**	**78 326**	**63 612**	**49 052**	**21 482**	**25 731**	**-**

Table 2.19 USD repricing gap (in USD million)

2017	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years	Total
PKO Bank Polski SA								
Periodic gap	924	-376	-429	-85	-8	-119	0	-93
Cumulative gap	924	548	119	34	26	-93	-93	-
Group subsidiaries								
Periodic gap	-83	29	-16	1	20	10	2	-37
Cumulative gap	-83	-54	-70	-69	-49	-39	-37	-
Total - Periodic gap	841	-347	-445	-84	12	-109	1	-131
Total - Cumulative gap	841	494	49	-35	-23	-132	-131	-

Table 2.20 EUR repricing gap (in EUR million)

2017	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years	Total
PKO Bank Polski SA								
Periodic gap	3 658	-1 607	-736	-551	-900	135	18	17
Cumulative gap	3 658	2 051	1 315	763	-136	-1	17	-
Group subsidiaries								
Periodic gap	208	-187	-67	4	12	6	0	-25
Cumulative gap	208	21	-46	-42	-30	-25	-25	-
Total - Periodic gap	3 866	-1 794	-803	-548	-888	141	18	-8
Total - Cumulative gap	3 866	2 072	1 269	721	-166	-26	-8	-

Table 2.21 CHF repricing gap (in CHF million)

2017	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years	Total
PKO Bank Polski SA								
Periodic gap	284	874	75	-83	-217	-2	-590	341
Cumulative gap	284	1 158	1 233	1 150	933	931	341	-
Group subsidiaries								
Periodic gap	5	-7	0	0	0	0	0	-2
Cumulative gap	5	-2	-2	-2	-2	-2	-2	-
Total - Periodic gap	289	867	75	-83	-217	-2	-590	339
Total - Cumulative gap	289	1 155	1 231	1 148	931	929	339	-

The Bank's VaR and analysis of stress test scenarios of the Bank Group's exposure to the interest rate risk as at 31 December 2017 and 31 December 2016 respectively are presented below:

Table 2.22 Sensitivity of financial assets exposed to interest rate risk

	2017		2016	
	10-day VaR	Stress-test ±200 b.p.*	10-day VaR	Stress-test ±200 b.p.*
PKO Bank Polski SA	301	2 097	269	2 131
Group subsidiaries	-	2 151	-	2 105

*The table presents the absolute value of most adverse stress test among all scenarios: shift of FX rates in particular currencies by 200 BPS up and by 200 BPS down.

As at 31 December 2017, the 10-day VaR on the interest rate was PLN 301.5 million for the Bank. As of 31 December 2016, the Bank's VaR was PLN 268.8 million.

The results of stress tests showing changes in the market value resulting from shifts of the yield curves by individual currencies are presented in Table 2.23.

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Table 2.23 Tests results* - value of Bank's portfolio as a result of parallel shift of interest rate curves by ±200 base points (depending on which scenario generates greater loss)

	Bank		Group subsidiaries		Total	
Currency	2017	2016	2017	2016	2017	2016
PLN	-1 809	-1 802	-48	-5	-1 857	-1 807
EUR	-142	-138	-5	-8	-147	-146
USD	-30	-20	-1	-12	-31	-32
CHF	-111	-181	0	0	-111	-181
GBP	0	-115	0	0	0	-115

* Main foreign currency values have been shown in PLN equivalents

Given the nature of business activity of the other entities of the Group generating significant interest rate risk and the specific nature of the market on which they operate, the Group does not determine the consolidated VaR. The companies use their own risk measures to manage interest rate risk. The 10-day VaR measure for interest rate for main currencies is used by KREDOBANK SA, its value as at 31 December 2017 was PLN 9.6 million, while as at 31 December 2016 – ca. PLN 8.9 million.

2.7.5. Interest rate risk reporting

The Bank prepares daily, weekly, monthly and quarterly interest rate risk reports, but the quarterly reports refer also to the Bank Group. The reports contain information on interest rate risk exposure and on the risk limits utilisation. Assessment of interest rate risk for the Bank is prepared on a daily basis. The recipients of such reports are mainly ALCO, RC, the Management Board, Supervisory Board's Risk Committee and Supervisory Board.

2.7.6. Management actions related to interest rate risk

The basic interest rate management tools used in the Bank Group are as follows:

1) interest rate risk management procedures,
2) limits and threshold values by individual market risk types,
3) defining characteristics and level of exposure for the interest rate risk for particular types of products,
4) defining the allowed types of transactions exposed to interest rate risk.

The Group defined limits and thresholds for interest rate risk, that is among other, interest income sensitivity, economic value sensitivity as well as limits and thresholds of losses, and limits for instruments sensitive to interest rate fluctuations.

The methods of interest rate management in the Group entities are defined by internal regulations that are implemented by companies in which the interest rate risk is significant. Such provisions are developed with consultations with the Bank and taking account of the recommendations of the Bank.

The acceptable level of risk at both the Bank and the Bank's Group level is determined within the framework of the Risk Management Strategy in PKO Bank Polski SA and the PKO Bank Polski SA Group.

At least once a year, the Bank reviews the risk management process to verify the consistency of the interest rate risk management process with the process of managing other risks, regulatory requirements and the degree of adjustment to the scale and complexity of the interest rate risk to which the Bank is exposed, ensuring continued effectiveness of hedging instruments and risk mitigation measures. Additionally, the effectiveness of the risk management process is constantly monitored as part of the reports specified in chapter 2.7.5 of this Report.

2.8. Foreign exchange risk

2.8.1. Introduction

FX risk is the risk of loss due to changes in the foreign exchange rates, generated through maintaining open currency positions in individual currencies.

The purpose of FX risk management is to mitigate possible losses resulting from changes of FX rates to an acceptable level through appropriate structuring of balance sheet and off-balance sheet items. The acceptable level of risk for both the Bank and the Bank Group is determined within the framework of the Risk Management Strategy of PKO Bank Polski SA and the PKO Bank Polski SA Group, introduced by the Management Board and approved by the Supervisory Board.

The overall structure of risk management, including currency risk, is included in Chapter 2.1 of this Report. According to the currency risk management Principles, introduced by the Management Board, the currency position generated by banking operations (ex. repayment of foreign currency loan in PLN by the customer, currency conversion) is transferred to the Treasury Department on a daily basis. As a consequence, the Bank's currency position at the end of the day may consist only of the uncovered position in banking operations generated on that day and of a limited currency position derived from trading activities, ensuring that the Bank's exposure to currency risk remains low.

2.8.2. Foreign exchange risk identification, measurement and assessment

FX exchange risk identification consists in identification of both current and potential risk sources and estimation of the significance level of its potential impact on the Bank's and the Bank Group's activities.

The process and organization of currency risk management in the Bank Group are compliant with the principles described in section 2.1.

The currency risk management process is supervised by the Supervisory Board, which regularly receives information on the Bank's and the Capital Group's risk profile as well as the most important actions taken in the area of interest rate risk management. The Supervisory Board also approves reports confirming compliance between the currency risk profile and the tolerance to the currency risk set at the level of the Bank and the Capital Group. The Management Board is responsible for managing the Bank's currency risk, including supervision and monitoring of the actions taken by the Bank in the area of currency risk management. The Management Board adopts internal regulations on currency risk management.

The risk management strategy at PKO Bank Polski SA and the PKO Bank Polski SA Group defines an acceptable level of currency risk in both the Bank and the Bank Group and defines the principles of currency risk management in the Bank Capital Group.

The Bank supervises the functioning of currency risk management in individual subsidiaries of the Bank Group.

As part of the supervision, the Bank influences the methods of currency risk management in these entities and supports their development. The Bank also takes into account the level of currency risk in the operations of individual entities within the framework of the currency risk monitoring and reporting system at the level of the Capital Group.

In order to determine the level of FX rate risk, the Bank uses the value at risk model (VaR) and shock analysis.

Shock analysis (stress tests and crash tests, reverse stress tests) for FX risk are used to assess potential losses on taken currency positions where extraordinary market situation occurs that is not described in a standard manner using the statistical measures. The shock analysis in the form of reverse stress test for foreign exchange risk were launched in the Bank in 2016.

There are stress test analysis, crash test analysis and reverse stress test analysis applied at the Bank with the following foreign exchange rates changes scenarios:

1) hypothetical scenarios – within which the historical appreciation or depreciation of foreign exchange rates is assumed (by 20% and 50%),
2) historical scenarios – scenarios of fluctuations in exchange rates observed in the past,
3) reverse stress tests – exploring potential changes in the foreign exchange rates resulting in the Bank's losses at the specified level of the own funds.

2.8.3. The foreign exchange risk control

The main instruments to control FX risk for both the Bank and the Bank Group are strategic levels of the foreign exchange risk and the acceptable level of the foreign exchange risk exposure of the particular Bank's portfolios defined by limits introduced by ALCO.

The Bank Group defined limits and thresholds for FX risk, that is among others, FX positions, 10-day VaR and daily losses on the FX market.

2.8.4. Monitoring of the foreign exchange risk

In 2017, the FX risk of the Bank Group was low as it is the Bank's policy to close currency positions in the main currencies, that is EUR, USD, CHF and GBP. 10-day VaR for FX position of the Bank at the end of 2017 amounted to PLN 2.9 million. The VaR and stress-test analysis in respect of the Bank's and the Bank Group's financial assets (total for all currencies) exposed to FX risk as at 31 December 2017 and 31 December 2016 respectively was as follows:

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Table 2.24 Sensitivity of financial assets exposed to FX risk

	2017		2016	
	10-day VaR	Stress-test ±200 b.p.*	10-day VaR	Stress-test ±200 b.p.*
PKO Bank Polski SA	3	184	9	78
Group subsidiaries	-	2	-	25

* The table presents the absolute value of most adverse stress test among all scenarios: PLN appreciation by 20% and PLN depreciation by 20%

As in the case of interest rate risk, given the nature of business activity of the Bank Group entities generating significant FX risk and the specific nature of the market on which they operate, the Bank does not determine the consolidated VaR sensitivity measure. The companies use their own risk measures to manage FX risk. The 10-day VaR measure is used by KREDOBANK SA, as at 31 December 2017 its value was ca. PLN 0.11 million while as at 31 December 2016 – PLN 0.35 million.

2.8.5. Reporting of the foreign exchange risk

The Bank prepares daily, weekly, monthly and quarterly FX risk reports, but the quarterly reports refer also to the Bank Group. The reports contain information on FX risk exposure and on the use of these risk limits. The recipients of such reports are mainly ALCO, RC, the Management Board, Supervisory Board's Risk Committee and Supervisory Board.

2.8.6. Management actions related to foreign exchange risk

The basic FX risk management tools used in the Bank Group are as follows:

1) FX risk management procedures,
2) limits and thresholds for FX risk,
3) defining the allowed types of FX transactions and FX rates used in such transactions.

The methods of FX risk management in the Bank Group entities are defined by internal regulations implemented by companies in which FX risk is significant. Such regulations are prepared after consultation with the Bank and taking into account recommendations of the Bank.

The acceptable level of currency risk at both the Bank and the Bank Group level is determined within the framework of the Risk Management Strategy of PKO Bank Polski SA and the PKO Bank Polski SA Group.

At least once a year, the Bank conducts a review of the risk management process to verify the consistency of the currency risk management process with the process of managing other risks, regulatory requirements and the degree of adjustment to the scale and complexity of currency risk to which the Bank is exposed, which ensures that hedging instruments and risk mitigation measures continue to be effective. In addition, the effectiveness of the risk management process is constantly monitored in the reports specified in Section 2.8.5 of this Report.

2.9. Liquidity risk including financing risk

2.9.1. Introduction

Liquidity risk is the risk of inability of timely discharge of liabilities due to absence of liquid cash and equivalents. The lack of liquidity may result from an improper balance sheet structure, cash flows mismatch, non-payment by contractors, and sudden withdrawal of funds by the clients or other market events.

The purpose of liquidity risk management is to secure necessary means through appropriate structuring of balance sheet and off-balance sheet items to discharge the current and future (also potential) liabilities to the nature of business activity and any needs that may result from a changing market environment.

Liquidity risk management in the Bank includes:

1) financing risk management, which includes the risk of loss of financing, the risk of inability of renewal of financing and loss of access to new sources of financing,
2) product liquidity risk, for calculation of which, the cost of sale of liquid securities is assessed, later used in main risk measures, liquidity and stress testing as well as within internal transfer prices system.

The process and organization of liquidity risk management in the Bank Group are compliant with the principles described in section 2.1.

The liquidity risk management process is supervised by the Supervisory Board, which regularly receives information on the Bank's and the Capital Group's risk profile as well as the most important actions taken in the area of interest rate risk management. The Supervisory Board also approves reports confirming compliance between the liquidity risk profile and the tolerance to the liquidity risk set at the level of the Bank and the Capital Group. The Management Board is responsible for managing the Bank's liquidity risk, including supervision and monitoring of the actions taken by the Bank in the area of liquidity risk management. The Management Board adopts internal regulations on liquidity risk management.

The risk management strategy at PKO Bank Polski SA and the PKO Bank Polski SA Group defines an acceptable level of liquidity risk in both the Bank and the Bank Group and defines the principles of liquidity risk management in the Bank Capital Group.

The Bank supervises the functioning of liquidity risk management in individual subsidiaries of the Bank Group. As part of the supervision, the Bank influences the methods of liquidity risk management in these entities and supports their development. The Bank also takes into account the level of liquidity risk in the operations of individual entities within the framework of the liquidity risk monitoring and reporting system at the level of the Capital Group.

The Bank's treasury functions and liquidity risk management are distributed between its Corporate Banking and Investment Areas, whereas both of these functions are centralized in selected Group entities. Internal liquidity transfer within the Group is restricted to the level of reported need for financing and previously granted limits.

The Bank Group has different sorts of the long-term, external financing sources including credits acquired from international financial institutions, bond issuances on the domestic and international market related to The Own Bond Issuance Project of PKO Bank Polski SA, bond issuances on the foreign market through PKO Finance AB related to Euro Medium Term Notes (EMTN) Project and bonds issued by PKO Bank Hipoteczny SA.

2.9.2. Liquidity risk identification, measurement and assessment

The liquidity risk identification consists in identification of both current and potential risk sources and estimation of the significance level of its potential impact on the Bank's and the Bank Group's activities.

The Bank Group's liquidity policy is based on maintenance of adequate level of liquidity surplus by increase in the liquid securities portfolio and stable financing sources (in particular stable deposit base). Moreover, money market instruments, including operations of the open market of the National Bank of Poland are used for liquidity risk management.

The Bank Group uses, for instance the following liquidity risk measures:

1) contractual liquidity gap – listing of all balance sheet items by their adjusted maturity,
2) adjusted liquidity gap – listing of individual balance sheet categories by their adjusted maturity,
3) liquidity reserve – the difference between the most liquid assets and expected and potential liabilities that mature in a given period,
4) liquidity surplus – a measure defining the Bank's ability to maintain liquidity for each day of the "survival horizon" period, in adverse conditions, taking into account scenarios of various severity and probability,
5) stable financing to non-liquid assets ratio indicator – ratio of stable deposits, own funds and stable market financing sources to loans, fixed assets and non-liquid securities,
6) Liquidity Coverage Ratio (LCR) – defining the relation of high-quality liquid assets to net outflows in the 1 month horizon in stress conditions (supervisory measure specified in the CRR Regulation),
7) Net Stable Funding Ratio (NSFR) - a measure defining the relationship of items providing stable funding to items requiring stable financing,
8) national supervisory ratios M1-M4 - measures specified in resolution 386/2008 of the Polish Financial Supervision Authority regarding liquidity standards for the banks[12],
9) stability measures of deposit and loan portfolio,
10) early warning indicators – monitored with a purpose of early detection of adverse events of probable negative impact on liquidity of the Bank or the financial sector,
11) liquidity stress tests.

The main goal of the stress tests performed under the liquidity risk framework is to identify and determine main factors constituting the greatest risk to the Bank's liquidity and to assess their impact on the Bank's liquidity, should they materialise.

The following scenarios are applied at the Bank:

1) survival horizon stress tests,
2) scenarios of mass withdrawal of deposits by non-financial clients,
3) scenarios of sensitivity of in- and outflows to changing market conditions,
4) scenarios of impact of stress tests on expected losses on mortgage portfolio,
5) scenarios of forecasted liquidity risk in shock conditions,
6) scenarios of additional collateral for derivatives concluded in the event of a downgrade of the Bank's credit rating,
7) reverse stress tests,

Results of stress tests are used in particular in the:

1) monitoring of Bank's exposure to liquidity risk,
2) process of establishment of limits and threshold values set on the liquidity risk measures,
3) control over liquidity maintenance for each day of the "survival horizon" period,
4) planning financial process in the Bank,
5) determination of symptoms triggering liquidity contingency plan in the Bank.

2.9.3. The liquidity risk control

The control of the liquidity risk encompasses establishing the strategic limits of tolerance for risk, limits and thresholds that specified acceptable level of risk exposure for the Bank Group entities of the current, mid- and long-term liquidity., adjusted to the scale and complexity of both the Bank and the Bank Group.

[12] The supervisory standards regarding the minimum level of M1 and M2 measures were valid until December 31, 2017, pursuant to art. 94 par. 2 of the Act on macro-prudential supervision.

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2.9.4. Monitoring the liquidity risk

The adjusted liquidity gaps presented below include a list of matured assets, payable liabilities, and selected balance sheet items for a proper presentation of the liquidity status of the Bank and the companies of the Bank Group.

Subject to adjustment were the following:

1) the core deposits (interbank market excluded) and their payability - clients' deposits (current accounts, savings accounts and fixed term deposits) have been classified to appropriate tenors according to their stability (maintenance of an appropriate balance or revolving after payability),
2) the core deposits on the current accounts of non-financial entities and their maturity - overdrafts have been classified to appropriate tenors according to their possibility of revolving,
3) liquid securities and their maturity – liquid securities have been classified into the tenor of up to 7 days according to the possible date of their liquidation (pledging, sale).

The table below presents data concerning periodic gap and cumulative periodic gap of the Bank and of the companies of the Bank Group as at 31 December 2017 and 31 December 2016 respectively.

Table 2.25 Adjusted liquidity gap* - assets and liabilities

2017	a'vista	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years
PKO Bank Polski SA								
Periodic gap	15 256	22 934	-1 927	1 912	12 096	10 242	34 258	-94 771
Cumulative gap	15 256	38 190	36 263	38 175	50 271	60 513	94 771	-
Group subsidiaries								
Periodic gap	755	4 286	1 056	-2 089	-6 006	-92	-3 858	5 947
Cumulative gap	755	5 041	6 097	4 008	-1 997	-2 090	-5 947	-
Total - Periodic gap	16 011	27 220	-871	-177	6 091	10 150	30 400	-88 824
Total - Cumulative gap	16 011	43 231	42 360	42 183	48 274	58 424	88 824	0

2016	a'vista	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years
PKO Bank Polski SA								
Periodic gap	12 018	20 185	641	-223	8 593	9 101	23 850	-74 165
Cumulative gap	12 018	32 203	32 844	32 621	41 214	50 316	74 165	-
Group subsidiaries								
Periodic gap	-98	-162	-153	285	-2 596	1 800	1 089	-165
Cumulative gap	-98	-260	-413	-128	-2 724	-924	165	-
Total - Periodic gap	11 920	20 023	488	62	5 997	10 901	24 939	-74 330
Total - Cumulative gap	11 920	31 943	32 430	32 493	38 490	49 391	74 330	0

* Set as a sum of real-terms liquidity gap of PKO Bank Polski SA and contractual liquidity gaps of the other companies of the Bank Group

In all tenors, the cumulative adjusted liquidity gap of the Bank Group showed positive values. This means a surplus of matured assets over matured liabilities.

The table below presents data concerning contractual off-balance sheet liquidity gap of derivatives of the Bank Group.

Table 2.26 Contractual off-balance sheet liquidity gap for derivatives for the Bank Group.

2017	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years	Total
Total - Periodic gap	-120	7	-43	96	551	1 389	500	2 380
Total - Cumulative gap	-120	-113	-156	-60	491	1 880	2 380	-

2016	0-1 month	1-3 months	3-6 months	6-12 months	1-2 years	2-5 years	Over 5 years	Total
Total - Periodic gap	-141	83	-110	-102	325	-82	448	421
Total - Cumulative gap	-141	-58	-168	-270	55	-27	421	-

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The table below presents the Bank's liquidity reserve and liquidity surplus as at 31 December 2017 and 31 December 2016:

Table 2.27 Liquidity reserve up to 1 month and liquidity surplus

Sensitivity measure	2017	2016
Liquidity reserve up to 1 month	36 883	31 204
Liquidity surplus in 30-day horizon	14 318	13 022

The Bank maintains high and safe level of high quality unencumbered liquid assets which are the hedge in case of scenarios of extreme liquidity (liquidity surplus) accomplishment. Easy to dispose assets includes: cash (reduced by minimal balance kept at the ATM's and in the Bank's branches), funds on the Bank's nostro accounts (excepted the average reserves required level), interbank deposits located in the others banks and liquid securities.

Table 2.28 Liquidity surplus items

PKO Bank Polski SA		
Category	**2017**	**2016**
Cash	4 617	3 974
Nostro accounts and deposits	6 005	3 435
Treasury bills and bonds	33 134	25 172
Monetary bills	4 199	8 999
Other liquid securities	1 627	2 298

The table below represents supervisory liquidity measures as of 31 December 2017 and 31 December 2017.

Table 2.29 Additional liquidity measures

PKO Bank Polski SA		
Measure	**2017**	**2016**
M1	22 446	24 464
M2	1.66	1.89
M3	13.92	11.63
M4	1.19	1.19

The Bank Group		
Measure	**2017**	**2016**
LCR	156.0%	136.3%
NSFR	113.9%	115.2%

During the period ranging from 31 December 2016 to 31 December 2017 values of supervisory measures remained above the supervisory limits.

The structure of the Bank's funding has been described in the Financial Statement for 2017, published on the 12 March 2018 (note 61. Liquidity risk management, Financial sources structure, page 155). EUR, CHF, PLN and USD denominated bond issues as well as mortgage bonds denominated in EUR and PLN constitute a significant portion of financing of the Bank and the Bank Group (in particular in the case of foreign currencies). Surplus funds obtained from the market in a given currency (securities issues) are used to manage the Bank's currency liquidity needs using derivative transactions (mainly CIRS, FX swap).

Table 2.30. – Liquidity Coverage Ratio for the Capital Group (average for 2017)

		2017	
Scope of consolidation (~~solo~~/consolidated)		Total unweighted value (avg)	Total weighted value (avg)
Currency and units (PLN million)			
Quarter ending on (DD Month YYY)		31-12-2017	31-12-2017
Number of data points used in the calculation of averages		12	12
HIGH-QUALITY LIQUID ASSETS			
1	Total high-quality liquid assets (HQLA)		46 153
CASH-OUTFLOWS			
2	Retail deposits and deposits from small business customers, of which:	149 888	10 491
3	*Stable deposits*	108 855	5 443
4	*Less stable deposits*	41 032	5 047
5	**Unsecured wholesale funding**	56 344	16 474
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	49 429	11 499
7	*Non-operational deposits (all counterparties)*	6 174	4 233
8	*Unsecured debt*	741	741
9	**Secured wholesale funding**		0
10	**Additional requirements**	51 790	9 516
11	*Outflows related to derivative exposures and other collateral requirements*	3 199	3 199
12	*Outflows related to loss of funding on debt products*	0	0
13	*Credit and liquidity facilities*	48 591	6 317
14	**Other contractual funding obligations**	1 921	1 144
15	**Other contingent funding obligations**	16 624	3 767
16	**TOTAL CASH OUTFLOWS**		41 391
CASH-INFLOWS			
17	Secured lending (eg reverse repos)	1 303	91
18	Inflows from fully performing exposures	8 199	6 014
19	Other cash inflows	2 258	1 580
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**	11 760	7 685
EU-20a	***Fully exempt inflows***	0	0
EU-20b	***Inflows Subject to 90% Cap***	0	0
EU-20c	***Inflows Subject to 75% Cap***	11 760	7 685
			TOTAL ADJUSTED VALUE
21	**LIQUIDITY BUFFER**		**46 153**
22	**TOTAL NET CASH OUTFLOWS**		**33 706**
23	**LIQUIDITY COVERAGE RATIO (%)**		**137%**

The net liquidity coverage ratio is determined individually for each entity of the Bank Group subject to the requirement to determine this ratio and on a consolidated basis for the Capital Group. The list of companies included in the consolidation is determined in accordance with the scope of prudential consolidation.

As at the end of December 2017, the Bank Group had 3 currencies for which the value of liabilities in a given currency to the total value of liabilities in all currencies amounted to at least 5%: PLN, EUR and CHF. The Capital Group has a surplus of financing in PLN and CHF, which was used to cover the shortage in EUR.

As at the end of December 2017, outflows from derivative instruments calculated in accordance with the CRR Regulation amounted to PLN 0.9 billion, while the impact of the unfavorable market scenario on derivatives, financing transactions and other agreements accounted for 0.9% of the total unweighted outflows recognized in the liquidity coverage ratio.

At the end of December 2017, the Bank provided PKO Bank Hipoteczny SA with standby lines of credit in the total amount of PLN 2.4 billion, of which PLN 0.9 billion remained unutilized.

2.9.5. Liquidity risk reporting

The Bank prepares daily, weekly, monthly and quarterly liquidity risk reports, but the quarterly reports refer also to the Bank Group. The reports contain information on liquidity risk exposure and on the risk limits utilisation. The recipients of such reports are mainly ALCO, RC, the Management Board, Supervisory Board's Risk Committee and the Supervisory Board.

2.9.6. Management actions related to liquidity risk

The basic liquidity risk management tools used by the Bank Group are as follows:

1) liquidity risk management procedures including contingency plans,
2) limits and threshold values for liquidity risk,
3) deposit, investment, derivative transactions, including structured FX transactions and security sell and buy transactions,
4) transactions ensuring long-term financing of credit activities.

Liquidity risk management methods in the Group's entities are defined in the internal regulations introduced by the companies for which the liquidity risk is significant.

These regulations have been developed after consultations with the Bank and after considering the recommendations of the Bank.

The acceptable level of risk at both the Bank and the Bank's Group level is determined within the framework of the Risk Management Strategy in PKO Bank Polski SA and the PKO Bank Polski SA Group.

At least once a year, the Bank reviews the risk management process to verify the consistency of the liquidity risk management process with the process of managing other risks, regulatory requirements and the degree of adjustment to the scale and complexity of the interest rate risk to which the Bank is exposed, ensuring continued effectiveness of hedging instruments and risk mitigation measures. Additionally, the effectiveness of the risk management process is constantly monitored as part of the reports specified in chapter 2.7.5 of this Report.

2.10. Operational risk

2.10.1. Introduction

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events; includes legal risk and does not include reputation risk and business risk.

The purpose of operational risk management is to increase the security of Bank's operational activity through improvement of effective, adjusted to the profile and volume of activity, mechanisms of identification, assessment and measurement, control, as well as monitoring, mitigation and reporting on operational risk.

Ongoing operational risk management is carried out by each employee of the Bank Group in the scope of their duties and obligations and consist in preventing the materialization of operational events arising in servicing products, conducting processes, using IT applications and reacting on operational events occurrence. Reacting includes:

1) identifying operational events and explaining reasons for their occurrence,
2) defining consequences of operational events,
3) recording data on operational risk events and their consequences,
4) monitoring information on operational events and their consequences,
5) minimizing the negative consequences of operational risk events,
6) implementation of corrective and preventive actions.

Operational risk profile of the Bank and of the Bank Group is defined as the volume and structure of exposure to operational risk, determined by strategic limits for operational risk tolerance.

The Bank's internal regulations clearly define the distribution of duties between the Supervisory Board and Management Board in the area of operational risk management. The Supervisory Board supervises the risk management process, i.a. by:
1) approving strategic tolerance limits for operational risk within the Bank and the Capital Group,
2) approving operational risk management strategy,
3) evaluating the operational risk management process, in particular on the basis of cyclical operational risk reports and the results of the strategy and operational risk management process reviews

In accordance with these regulations, all issues related to operational risk management are supervised by the Management Board that:
1) sets the objectives of operational risk management,
2) shapes operational risk management strategy,
3) adopts resolutions on operational risk management principles, strategic limits for operational risk tolerance and the extensions and changes for the AMA,
4) accepts the value of the management adjustment of the own funds requirement for operational risk according to the AMA,
5) accepts reports and information related to operational risk.

Operational risk management process is cyclically validated through:
1) review of the strategy and operational risk management processes, verifying adequacy and efficacy of operational risk management system,
2) self-assessment of compliance with the AMA requirements,

3) validation of the AMA,
4) internal audit.

The Bank Group entities manage operational risk in accordance with the principles of managing operational risk of the Bank, taking into account the scope and type of connections between entities belonging to the Bank Group as well as the specific nature and scale of activity these entities.

2.10.2. Operational risk identification, measurement and assessment

2.10.2.1. Operational risk identification, method of measurement and assessment

For the purpose of operational risk management, the Bank gathers internal and external data on operational events together with causes and results of their occurrence, data on business environment factors, results of self-assessment connected, data on Key Risk Indicators (*KRI*) and data on the quality of internal control.

Operational risk self-assessment includes identification and assessment of operational risk arising in the products, processes and IT applications of the Bank, as well as resulting from organisational changes. Self-assessment is conducted periodically before the introduction of new or changed products, processes and applications of the Bank by using collected data on operational events and information obtained during the measurement, monitoring, reporting of this risk (including internal audit and audit security reports) or through cooperation with the Bank Group's entities.

In 2017 a dominant influence on the operational risk profile of the Bank Group have had PKO Bank Polski SA, the PKO Leasing SA Group and the KREDOBANK SA Group. Other companies of the Bank Group, due to a considerably lower scale and specific type of their businesses, generate only limited operational risk.

Operational risk measurement in the Bank is aimed to define the scale of threats related to the operational risk by using defined risk measures. Operational risk measurement includes:

1) calculation of *KRI*,
2) calculation of own funds requirement for operational risk under the AMA (for the Bank) and BIA (for the branches in the Federal Republic of Germany and Czech Republic as well as Capital Group entities subject to prudential consolidation),
3) stress tests,
4) calculation of internal capital for the Bank Group.

The BIA requirement regarding operations conducted by the Bank, falling under BIA approach, is calculated in accordance with the CRR (part III, title III) and applies only to the part of the Bank's activities, for which the PFSA's consent for a joint AMA and BIA calculation of own funds requirements related to operational risk has been granted.

The Bank assesses parameters of distributions used for measurement of the operational risk on the basis of internal and external information on operational events. The estimating algorithm of these parameters takes account of existing thresholds of losses for which information on operational events are gathered. The value of a threshold for internal events was established by taking into account the economic costs related to gathering information on operational events and their added-value for operational risk measurement. Used external data on operational events come for instance from the consortium database (called ZORO) maintained by the Polish Bank Association. Moreover, the operational risk measurements include macroeconomic data and data related to the volume of the Bank's operational and business activities.

Own funds requirement for operational risk according to the AMA corresponds to the VaR in respect to operational risk plus the result of scenario analysis and corrected by the value of adjustments related to changes in quality of internal audit and management adjustment according to the following formula:

$$AMA = (LDA+SbAMA) *(1+IC) +MA$$

where:
AMA - own funds requirement for operational risk according to the AMA,
LDA - value at risk,
SbAMA - scenario based AMA,
IC - adjustment related to changes in quality of internal control,
MA - management adjustment.

The AMA captures potentially severe tail events, achieving a standard comparable to a 99,9% confidence interval over a one year period.

Calculations of value at risk are made under a loss distribution approach (LDA) framework. On the basis of historical internal and external information on operational events and about business environment, this approach measures potential loss that is not to be exceeded within coming year.

The purpose of the scenario based AMA is to extend the AMA calculation to capture operational risk related to operational events that have not been covered with the LDA.

Adjustment related to the changes in quality of internal control allows to assess the potential deterioration of the quality of Bank's internal control that would result in an increase of the frequency or severity of operational risk events.

The purpose of management adjustment is to cover the requirement of extraordinary events in the AMA calculation, if due to their specific nature such events were not included into LDA or AMA calculation.

Risk measurement includes stress tests referring to potential consequences of extremely unfavourable, yet possible, scenarios. Its aim is to define the sensitivity of the Bank's results to the fulfilment of a test scenario and to determine if the AMA covers the total amount of losses resulting from the accomplishment of such scenarios.

The previous results of stress tests do not challenge the sufficient conservatism of the AMA.

Moreover, the Bank performs backtesting of the AMA calculation. Backtest results confirm the sufficient conservatism of the AMA.

Furthermore, the AMA is validated by an independent organisational unit of the Head Office (Model Validation Department). The validation is aimed to ensure that the operational risk measurement and management systems in the Bank with their essential components comply with the assumptions. Validation include the verification of accuracy, objectivity, correctness and conservatism of the AMA model applied by the Bank.

2.10.2.2. The Bank's insurance policy

To minimize negative financial impact of operational events, PKO Bank Polski SA has an insurance policy that requires that a continuing and effective insurance cover is granted in return for an acceptable cost.

PKO Bank Polski SA endeavours to apply uniform insurance principles to the whole Bank Group, in order to optimise the scope and costs of the insurance cover using of effects of scale.

The Bank's insurance programme is regularly monitored in order to identify needs of essential changes.

2.10.2.3. Impact of insurance

While calculating the own funds requirement for operational risk, the Bank includes the impact of insurance.

The insurance policies used by the Bank to reduce own funds requirement for operational risk, fulfil the criteria defined in Article 323 of CRR and also comply with internal regulations of the Bank regarding calculation of own funds requirement reduction due to insurance. The Bank's insurance policies refer mainly to all risk property insurance and the Bank's civil liability insurance. The Bank takes deductibles and franchises into account, while calculating deductions related to purchased insurance policies.

In compliance with Article 323 of CRR the reduction in own funds requirements from the recognition of insurances shall not exceed the maximum value equal to 20% of the own funds requirement for operational risk before the recognition of risk mitigation techniques are taken into account.

2.10.3. Operational risk control

The objective of operational risk management is striving for maintaining the level of operational risk of the Bank and the Bank Group at fixed level.

Control of operational risk involves formulation of risk control mechanisms in the form of operational risk limits, tailored to the scale and complexity of the Bank's and the Bank Group's activities, in particular strategic tolerance limits for operational risk, losses limits, KRI enclosing thresholds and critical values.

Strategic tolerance limits for operational risk are specified by the Management Board and approved by the Supervisory Board. Additionally, the Management Board defines the levels of utilization of the strategic tolerance limits for operational risk for both the Bank and the Bank Group, which, when exceeded, serve as a signal for taking managerial activities aimed at operational risk mitigation.

A system of local limits assigned to selected organizational or functional units of the Bank or its Head Office functions in the Bank, which defines the maximum operational risk allocated to said selected organizational or functional units of the Bank or its Head Office, ensuring that the strategic limits for operational risk are not exceeded.

2.10.4. Monitoring of operational risk

The purpose of operational risk monitoring is observation of deviation from benchmarks assumed (in particular limits, thresholds, measurements from the previous period, recommendations) in order to diagnose areas requiring management actions.

The Bank regularly monitors in particular:

1) utilisation of strategic limits for the Bank and the Bank Group and of risk tolerance and operational risk limits for the Bank,
2) operational events and their consequences,
3) results of operational risk self - assessment,
4) own funds requirement for operational risk according to the BIA in respect to the Bank's foreign branches in the Federal Republic of Germany and Czech Republic and according to AMA for the remaining activities of the Bank and own funds requirement for operational risk according to the BIA (basic indicator approach) for other Bank Group's entities,
5) results of stress tests including reverse stress tests,
6) KRI values against threshold and critical values,
7) the level of risk for the Bank and the Bank Group, areas and operational risk management tools in the Bank, such as self-assessment, KRIs, loss limits,
8) efficiency and timeliness of the management activities undertaken in relation to operational risk reduction or transfer,
9) management activities undertaken because of increased or high level of operational risk and their effectiveness in reducing the operational risk level.

2.10.5. Operational risk reporting

Reporting on operational risk is carried out for the purpose of senior management, ORC, RC, the Management Board and Supervisory Board monthly and quarterly.

The recipients of monthly information are ORC, senior management, the Head Office units and specialized organizational units responsible for systemic operational risk management. Monthly information includes in particular information about:

1) the number and the effects of the operational events,
2) the structure of operational events,
3) KRI values.

The recipients of quarterly information are ORC, RC, the Management Board and Supervisory Board. Quarterly information includes in particular information about:

1) the Bank's operational risk profile result from identification process and product danger assessment, the Bank's processes and application, and LDA measurement,
2) the operational risk level of the Bank, areas and instruments to manage the risk, such as self-assessment, KRIs, loss limits,
3) the results of operational risk measurement and monitoring,
4) the activities undertaken in order to constrain operational risk and assessment of effectiveness of undertaken activities in order to reduce operational risk level.

2.10.6. Management actions related to operational risk

Operational risk management process is conducted at the Bank's level as well as at the particular areas of systemic operational risk management.

Systemic operational risk management consists in developing solutions, which enable the Bank to exercise control in order to achieve its objectives. Main areas of systemic operational risk management are:

1) security,
2) IT,
3) settlements,
4) human resources,
5) business processes,
6) administration,
7) support (in particular: insurance management, outsourcing, creation and implementation of internal operational risk model and systems of identification, assessment, monitoring and limiting of operational risk, etc.).

Management activities are taken in the following cases:

1) as a response to the initiative of ORC or the Management Board,
2) as a response to the initiative of Bank's organizational units responsible for managing operational risk,
3) when the operational risk has exceeded the levels set out by the Management Board or the ORC.

In particular, if the operational risk level is considered as increased or high, the Bank uses the following approaches and operational risk management tools:

1) risk reduction – mitigating impact of risk factors or results of risk materialization by implementation or reinforcement of operational risk management tools, such as:
    a) control instruments (i.a. authorization, internal control, functions separation),
    b) human resources management instruments (personnel selection, increase in qualifications of employees, motivational systems)
    c) definition or verification of OCR's thresholds and critical values of KRIs,
    d) definition and verification of operational risk level
    e) contingency plans,
2) risk transfer – a transfer of responsibility for coverage of potential losses to an external party:
    f) insurances,
    g) outsourcing,
3) risk avoidance – resignation from a risk generating activity or elimination of a possibility that a risk factor occurs.

2.10.7. Incurred losses and operational risk management actions

In the 2017 events related to operational risk, excluding losses from credit process, that were disclosed in the Bank and amounted to ca. PLN 16,55 mio. net and PLN 63,86 mio. gross (Table 2.32).

The most significant operational event, unrelated to credit risk, was disclosed in the category Making transactions, providing and managing operational processes and consisted of a double transfer. All funds were recovered on the same day. The Bank has taken appropriate procedural actions limiting operational risk.

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Table 2.32 Gross losses* related to disclosed events

PKO Bank Polski SA		**2017**	
General cathegory	**Specific cathegory**	**Gross losses****	**Net losses*****
Internal frauds	Non-legitimated activities	0.20	0.04
	Thefts and frauds	5.09	4.54
Regulations of employment and work safety	Labour issues	1.48	0.52
Clients, products and operational practises	Customer service, disclosure of information about clients, responsibilities to clients	1.06	1.06
	Improper business or market practices	3.60	3.60
	Products malfunctions	1.30	0.56
	Customer classification and exposures	0.04	0.01
Disruption of bank operations and system failures	Systems	1.23	0.01
Making transactions, providing and managing operational processes	Recording in the system, making, calculating and servicing transactions	38.57	2.65
	Inflow and registering clients	0.29	0.28
	Managing clients' bank accounts	0.71	0.16
	Sellers and suppliers	0.28	0.14
Losses related to fixed assets	Natural disasters and other events	1.34	0.60
External frauds	Thefts and frauds	8.65	2.38
Total		**63.86**	**16.55**

* Gross losses do not include losses from operational risk related to credit risk, which are recognised as losses from credit risk and are used to calculate minimum capital requirements.
** According to the Recommendation M of the Polish Financial Supervision Authority as at 31.12.2017 gross losses include realised losses (e.g. provisions, write-downs, expenses) as well as unrealised (potential) losses. Gross losses do not include direct recoveries and recoveries from the risk transfer mechanisms.
*** Net losses as at 31.12.2017 include realised losses (e.g. provisions, write-downs, expenses).

The Bank takes systemic and current management actions in order to limit losses from operational risk. Current actions include direct reacting on identified risks, eliminating irregularities when it is possible as well as recovering financial losses. Systemic actions consist of, among others, securing IT systems, improving transaction authorization methods, non-execution of transfers to accounts identified as associated with criminal activity, development of anti-fraud system, processes improvement, internal control optimization, trainings, risk transfer (insurances, outsourcing).

The Bank continues to raise the security of IT systems, in particular in the area of applications used by the Bank's customers – related to i.a. active combating phishing websites impersonating the Bank's services, active following the development of malware attacking the Bank's clients, development of detection mechanisms identifying infected computers of clients and rule improvement, extension the range of electronic transactions monitoring. In 2017 an anti-phishing image has been implemented in the log in process to the Bank's internet services. Works on functional improvements were continued, consisting in defining limits on payments advised by online banking and an opportunity to self-manage of www services level by clients. Full implementation of the above functionality for all customer segments is planned for the second quarter of 2018. In order to constrain the risk connected with using cards in the internet, all cards issued by the Bank were covered by a 3D-Secure service, launched in 2016 as mandatory authorization of online transactions method handled by payment cards.

To increase cyberspace security the Bank cooperates with Microsoft in its Enterprise Customers Cyber Threat Intelligence Program (ECCTIP), utilizing it for the purpose of potential threats information exchange .

Additionally, the representatives of the Bank are involved in activities undertaken within Banking Cybersecurity Centre (BCC) project, which acting under The Polish Bank Association. The purpose of BCC is realization of complex and long-term oriented operations placed on several levels: inner-sector and inter-sector (i.a. cooperation with telecommunication, transport and energy companies), national (cooperation with state administration, law enforcement) and international aimed at increasing the level of security of mobile banking and preparation of tools (structures, procedures, mechanisms of information exchange) for managing emergency situations (eg. in the event of a massive cyberattack on the banking sector.

In July 2017, the Computer Emergency Response Team (CERT) of the Bank was the first in the Polish banking sector to receive accreditation as a member of the European CERT teams, as part of the registry and authorization system run by GÉANT TF-CSIRT *Trusted Introducer*. The team operating at the Bank is also the first member of the elite FIRST initiative (*Forum of Incident Response and Security Teams*) in the Polish financial industry, which is a worldwide organization of information and communication technology incidents response teams.

Joining international organizations allows the Bank's CERT team to respond more quickly and effectively to cyber security threats, through operational cooperation and sharing of knowledge and experience with similar entities around the world. Membership is also a confirmation of the high level of services provided and recognition of professionalism and skills in ensuring the Bank's IT security. This translates into the perception of the Bank as an organization that meets the highest national and international standards in the field of cyber security.

The Bank's CERT team implements the strategy of ensuring IT security of services provided by the Bank. The Bank's market position, its wide range of operations, the constantly growing number of threats and emerging innovative IT solutions developed by the Bank require continuous CERT development. Bank's CERT is a leading participant of the Banking Cybersecurity Center, as well an active participant of the National Cyber Security Center framework established in 2016, having a direct impact on the increase of security of companies and institutions operating in Poland.

In 2017, as part of cooperation in threats information exchange, the Bank implemented the MISP (*Malware Information Sharing Platform & Threat Sharing*) platform - a system for effective collection and exchange of information on incidents and network, host, fraud account and other threats (so-called IoC - Indicators of Compromise). Data collected on the MISP platform, containing technical and non-technical information on malware, incidents or phishing attacks, is automatically correlated on the basis of common features, which greatly simplifies the handling of security incidents. In particular, MISP enables the exchange of data between entities of the Capital Group. In addition, the platform enables obtaining data on trends and new threats from CIRCL - *The Computer Incident Response Center Luxembourg* and NICP - institutions participating in the *NATO Industry Cyber Partnership*, with PKO Bank Polski SA as the only bank member from Poland.

Moreover, together with the Gdańsk University of Technology and Microsystem, PKO Bank Polski SA carries out a research project related to the preparation of the first comprehensive biometric solution in Polish banking. The aim of the study is to develop an innovative technology that will safely and effectively verify a given person based on its unique physical or behavioral characteristics.

The use of biometric data in banking will introduce a new quality in the approach to security, speed of authorization and customer service costs. The technology used is safe and forgery resistant. Biometric data cannot be copied or used by third parties. The solution prepared by the Bank will constitute a complementary authorization method to the existing solutions and a starting point for work on new technologies used in banking.

Physical security of facilities, cash and processed information is provided in the Bank using technical (construction, mechanical and electronic) security, stationary physical protection and remote protection in the form of alarm signals monitoring with access to intervention groups. Current activities of the Bank in the field of physical protection and monitoring of alarm signals and implemented technical protections are aimed at minimizing the risks associated with storing large amounts of cash, especially attacks and burglaries and other threats to physical security such as fires, property damage, vandalism and terrorism. At the same time, technical and physical security increase the security of the Bank's IT infrastructure and information processed in the Bank, in particular that constituting bank secrecy and personal data. Technical security of the Bank's facilities and stationary physical protection as well as monitoring of alarm signals ensure the level of security required by law and adequate to the operational risk assessment. The security inside the facilities is ensured by physically restricting and controlling access to protected areas, in which monetary values and deposits are stores as well as data processing and key elements of the Bank's IT network, through the use of alarm systems, access control systems and CCTV systems.

2.11. Business risk

2.11.1. Introduction

Business risk (strategic) is the risk of failure to achieve previously set financial goals, including losses resulting from unfavourable changes in the business environment, unfavourable decisions, improper implementation of decisions or a failure to take appropriate action in response to changes in the business environment.

Managing the business risk is aimed at maintaining, on an acceptable level, the potential negative financial consequences resulting from: adverse changes in the business environment, making adverse decisions, improper implementation of adopted decisions or lack of appropriate actions, which would be a response to changes in the business environment.

2.11.2. Business risk measurement and assessment

Business risk identification is to recognize and determine factors both current and potential, resulting from current and planned activities of the Bank and which may significantly affect the financial position of the Bank, generating or change in the Bank's income and expense. Business risk identification involves identification and analysis of factors, which significantly affected the level of deviation of costs and revenues from their projected values.

The purpose of measurement of business risk is to determine, using existing risk measures, the scale of hazards related to the existence of business risk. Business risk measured involves:

1) calculation of internal capital,
2) conducting of stress test,
3) conducting of reverse stress test.

Assessment of the business risk level is performed quarterly on the basis of:
1) calculated levels of strategic limits of tolerance,
2) qualitative business risk assessment,
3) results of internal capital for business risk measurements.

2.11.3. Business risk controlling

The purpose of the business risk controlling is to strive for maintaining the level of business risk of the Bank Group at an acceptable level.

Control of business risk involves setting and periodic review of the risk controls in the form of tolerance limits on the business risk along with its thresholds and critical values, adequate to the scale and complexity of the Bank Group.

2.11.4. Business risk monitoring

The purpose of business risk monitoring is to identify areas requiring management actions. Monitoring of business risk includes in particular:

1) strategic levels of business risk,
2) stress-tests results,
3) reverse stress-tests results,
4) internal capital level,
5) deviation of business risk realisation from its projected values,
6) results of qualitative business risk assessment.

2.11.5. Business risk reporting

Business risk reporting for the Bank Group is conducted quarterly. Reports on business risk are prepared for the ALCO, the RC, the Management Board, Supervisory Board risk Committee and the Supervisory Board. Reports contain i.a. business risk assessment results, internal capital in particular, utilization level of strategic tolerance limit for business risk, qualitative business risk assessment results, business risk internal capital forecast and its backtesting, Bank's cash flow monitoring results, stress-tests and reverse stress-tests results, results of an annual capital management adequacy and efficacy review, including business risk management process review, information on business risk related to the Bank Group entities, internal capital and utilization level of strategic tolerance limit for business risk in particular.

2.11.6. Business risk related management actions

Management activities involve in particular:
1) verification and updating of quarterly financial forecasts, including efforts to reduce business risk level,
2) monitoring of the strategic limit of business risk tolerance.

2.12. Model risk

2.12.1. Introduction

Model risk is the risk of incurring losses as a result of making incorrect business decisions on the basis of the models operating within the Bank. The model risk in the Bank Group is managed both on the level of particular company of the Bank Group (owner of the model) and on the Bank's level, acting as a controlling entity of the Bank Group.

The objective of model risk management is to mitigate the model risk of incurring losses due to inaccurate business decisions made on the basis of functioning models, thanks to a properly defined and implemented model management process in the Bank Group.

All significant models in the Bank and model of the Bank Group entities are covered by regular process of independent validation carried out by the validation PKO Bank Polski SA.

2.12.2. Model risk identification, measurement and assessment

Identification of model risk in the Bank mainly consists of:

1) gathering information on used and planned to be implemented models,
2) cyclical determining the relevance of models.

The model risk evaluation is aimed at determining the scale of threats associated with the occurrence of the model risk. Assessment of the risk is made on the singular model level and also in the aggregated terms at the level of each entity of the Bank Group.

2.12.3. Model risk control

The purpose of model risk control is to maintain the model risk aggregated assessment at the acceptable level for the Bank Group. The model risk control consists in determination of mechanisms that diagnose model risk level and instruments that constrain this level. In particular, to diagnose model risk there are used such instruments as strategic limit of tolerance and thresholds for model risk.

2.12.4. Model risk monitoring and reporting

The purpose of model risk monitoring is to diagnose areas for management actions. Model risk monitoring contains, in particular:
1) updates on the level of model risk,
2) assessment of strategic limit of tolerance utilization and thresholds for model risk,

3) verification of the status of implementation of the proposed recommendations and the assessment of effectiveness of implementation of the actions on mitigation of model risk.

The results are cyclically reported to the RC, the Management Board, the Supervisory Board and contain a comprehensive assessment of model risk, in particular:
1) information on the utilization level of strategic limit of tolerance for model risk,
2) information on the level of model risk (solo and consolidated),
3) model risk map,
4) evaluation of effectiveness of the recommendations made to reduce the model risk level,
5) potential proposed management actions reducing the model risk.

2.12.5. Management actions concerning model risk

The purpose of management actions is to form a model risk management process and a level of this risk, in particular by determining acceptable risk levels and making decisions about the use of tools supporting model risk management.

2.13. Macroeconomic risk

2.13.1. Introduction

Macroeconomic risk is a risk of deterioration of the Bank Group's financial situation as a result of the adverse impact of changes in macroeconomic conditions.

The purpose of macroeconomic risk management is to identify macroeconomic factors having a significant impact on the Bank Group's activities and taking actions to reduce the adverse impact of potential changes in the macroeconomic situation on the financial situation of the Bank Group.

2.13.2. Macroeconomic risk identification and assessment

Identification of macroeconomic risk is to determine scenarios of the potential macroeconomic changes and to determine risk factors having the greatest impact on the financial situation of the Group. Macroeconomic risk results from interaction of factors dependent (in particular, balance sheet structure and response plans prepared for stress scenarios) and independent of the Group's activities (macroeconomic factors). The Bank Group identifies the factors affecting the level of macroeconomic risk during carrying out comprehensive stress-tests.

The purpose of macroeconomic risk assessment is to determine the scale of threats related to the occurrence of the risk of macroeconomic changes and includes:
1) calculation of financial result together with its components and calculation of risk measures, as part of comprehensive stress tests,
2) reverse stress test,
3) calculation of internal capital.

The assessment of macroeconomic risk is carried out on an annual basis, based on the results of cyclical comprehensive stress tests. The level of macroeconomic risk is defined as moderate, elevated or high.

2.13.3. Macroeconomic risk control

The purpose of macroeconomic risk is striving for constraining unfavourable influence of potential macroeconomic changes on the Bank Group's financial conditions.

Control of macroeconomic risk consists in determining the acceptable level of macroeconomic risk adjusted to the scale of operations of the Capital Group and its impact on functioning and financial standing of the Capital Group. Acceptable level of macroeconomic risk means a situation when the comprehensive stress-tests results do not indicate the necessity of undertaking the recovery activities, or necessary recovery activities prove sufficient for improving the financial situation of the Capital Group.

2.13.4. Macroeconomic risk monitoring

Monitoring the macroeconomic risk consists in analysing the macroeconomic situation, macroeconomic factors to which the Bank's Capital Group is sensitive, the level of macroeconomic risk and the results of comprehensive stress tests.

2.13.5. Macroeconomic risk reporting

Macroeconomic risk reporting is carried out on a quarterly basis in the form of a report submitted to the ALCO, RC, the Management Board, the Risk Committee of the Supervisory Board and the Supervisory Board. The report contains in particular:

1) macroeconomic risk assessment results, internal capital in particular,
2) the level of macroeconomic risk,
3) results of comprehensive stress tests,
4) results of reverse stress tests.

2.13.6. Management actions concerning macroeconomic risk

Management actions in particular consist of:

1) determining acceptable levels of risk,
2) taking measures to reduce the level of risk in the event of an elevated or high level of macroeconomic risk.

2.14. Risk management in PKO Bank Hipoteczny SA

Risk management system adopted in PKO Bank Hipoteczny SA is consistent to the one adopted in the Bank Group. A specialized nature of the activities of a mortgage bank means that:

1) credit risk management is focused mainly on the mortgage sector, retail clients' creditworthiness and mortgage lending value assessment.
2) long-term mortgage bonds are a to be a default main financing source, with liquidity management competencies focused on issuance of securities on the domestic and foreign securitized debt market.

PKO Bank Hipoteczny SA expands its mortgage loans portfolio through sales by intermediaries as well as purchase of liabilities from the parent company. The mortgage portfolio forms the basis of a collateral pool securing issuance of mortgage bonds.

The mortgage lending value is a value determined by PKO Bank Hipoteczny SA in order to reflect the level of risk associated with the property accepted as a collateral securing the loans granted and is used in order to determine the maximum potential amount of the loan secured by a given immovable property or in order to determine whether a loan secured by said property can be purchased by the bank.

PKO Bank Hipoteczny SA determines the mortgage lending value on the basis of an expertise made with due diligence and caution, taking into account only those features of the property, together with investments necessary for its completion, that are permanent and which, considering a rational exploitation, will be obtained by each of the owners of said property. All assumptions, parameters and the evaluation process adopted during the expertise are documented in the expertise, together with its date and proposed estimation value. The expertise takes into account all analyses and forecasts related to the property, which affect the creditworthiness assessment, as well as general factors such as: population, unemployment rate, local zoning plans.

The mortgage bond is a personal or a bearer bond, issued by a mortgage bank, on the basis of mortgage secured loans. Mortgage bonds are issued primarily for longer terms, therefore providing a source of long-term financing for the Bank Group.

The PKO Bank Hipoteczny SA's business model assumes a significant share of mortgage bonds in the bank's financing structure. The mortgage bond is a stable source of financing, although its balloon repayment character frequently necessitates its replacement with additional bonds or alternative financing sources. The liquidity management process in PKO Bank Hipoteczny SA pays particular attention to the matching of terms of cash flow items and the ability of the Bank to renew its financing sources during the maturity period of significant liabilities (repurchase of mortgage bonds).

3. Own funds

For the purpose of capital adequacy, own funds are calculated according to the regulations of the Banking Law and Part Two of the CRR together with supplementary acts related to the CRR.

Own funds of the Group include Common Equity Tier 1 capital and Tier 2 capital. No items classified as Additional Tier 1 capital are identified in the Group.

Included in the Common Equity Tier 1 capital are the following:

1) share capital – presented according to the Bank's Statutes and entry in the Trade Registry, at nominal value,
2) supplementary capital – established from the annual net profits, assigned to absorb balance sheet losses that may arise within the Group's activities,
3) other reserve capital – established independently from the supplementary capital, created from the annual net profits in the amount defined by the General Meeting (hereinafter referred to as "GM"), assigned to absorb balance sheet losses exclusively,
4) other accumulated total income (except for profits and losses related to cash flow), with the unrealised profits and losses on instruments classified as AFS (available for sale), previously recognized under the transition period (until the end of 2017) in the amount accepted by the Banking Law,
5) general risk reserve created from the annual net profits in the amount defined by the GM, assigned to absorb unidentified losses may arise within the Bank's activities,
6) retained earnings,
7) net financial result prior to approval and net result for the current reporting period – calculated based on applicable accounting standards, decreased by any expected charges and dividends, in amounts not exceeding amounts audited by a certified public accountant; net financial result can be included in own funds under the condition of GM's approval or, prior to the aforementioned approval, consent of the PSFA.

Common Equity Tier 1 capital is reduced by the following items:

1) losses for the current financial year,
2) intangible assets valued at their carrying amount, after deduction of the related provisions for deferred tax. The deducted amount includes goodwill included in the valuation of significant investments,
3) additional adjustments for assets valued at their fair value, subject to requirements for prudent valuation, which are deducted from Common Equity Tier 1 capital,
4) deferred tax assets related to future profitability, not resulting from temporary differences, previously recognized in the amount described in the Banking Law during the transitional period (i.e. until the end of 2017),
5) additional fair value adjustments of liabilities and derivative instruments constituting liabilities, resulting from the own credit risk of the Bank, recognized in the amount described in the Banking Law during the transitional period (i.e. until the end of 2017),
6) deferred tax assets related to future profitability arising from temporary differences, not exceeding 10% of Common Equity Tier 1 capital of the Group (after deductions described in items 1-5 and 7),
7) direct and indirect equity exposures of the Group in financial sector entities in which it doesn't have any significant investments, in the form of shares or other instruments of Common Equity Tier 1 or Tier 2 capital of said entities, not exceeding 10% of Common Equity Tier 1 capital of the Group (after deductions described in items 1-5),
8) direct and indirect capital exposure in financial sector entities in which the institution has significant investments, in the form of shares or other instruments of Common Equity Tier 1 of said entities, exceeding 10% of Common Equity Tier 1 capital of the Group (after deductions described in items 1-5 and 7),
9) amount by which the sum of:
    a) deferred tax assets related to future profitability arising from temporary differences, not exceeding 10% of Common Equity Tier 1 capital of the Group (after deductions described in items 1-5 and 7) and
    b) direct and indirect capital exposure in financial sector entities in which the Group has significant investments, in the form of shares or other instruments of Common Equity Tier 1 of said entities, not exceeding 10% of Common Equity Tier 1 capital of the Group (after deductions described in items 1-5 and 7),
10) exceeds 17.65% of Common Equity Tier 1 capital of the institution (after deductions described in items 1-7). The amount below the aforementioned threshold is included in risk weighted exposures,during the transitional period described in the CRR (end of 2017), Common Equity Tier 1 capital is reduced by the amount, by which the sum of:
    a) deferred tax assets related to future profitability arising from temporary differences, not exceeding 10% of Common Equity Tier 1 capital (after deductions described in items 1-4 and 6) and,
    b) direct and indirect capital exposure in financial sector entities in which the institution has significant investments, in the form of shares or other instruments of Common Equity Tier 1 of said entities, not exceeding 10% of Common Equity Tier 1 capital of the institution (after deductions described in items 1-5 and 7),

exceeds 15% of Common Equity Tier 1 Capital of the of the Group.

The amount below the threshold (15%) is included in risk weighted exposures.

The Tier 2 capital comprises subordinated liabilities i.e. funds acquired by the Bank - in the amount and based on the consent of the PFSA issued in response to the Bank's request – conforming to the principles laid out in art. 63 of the CRR.

The Tier 2 capital is reduced by the following items:

1) direct and indirect capital exposure in financial sector entities in which the institution has significant investments, in the form of instruments of Tier 2 capital of said entities,
2) direct and indirect capital exposure in financial sector entities in which the institution doesn't have any significant investments, in the form of shares or other instruments of Tier 2 capital of said entities,

3) if the deductions described in points 1 and 2 above would result in a negative value of Tier 2 capital, the remaining value of said deductions is used to reduce Common Equity Tier 1 capital.

By way of derogation, during the transitional period described in the CRR (end of 2017), the residual amounts specified by the Banking Law are deducted from the Common Equity Tier 1 and Tier 2 capital on the 50/50 basis.

Conforming to the Executive Order 1423/2014, the Table 3.1 presents information on reconciliation of items from the report on the financial situation used in own fund requirements calculation as at 31 December 2017.

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Table 3.1 Reconciliation of items of own funds and equity reported in the audited financial report

	2017				
	IFRS compliant financial report	De-consolidation of entities not subject to prudential consolidation	Prudential consolidation / CRR compliant financial report	Items not recognized in the regulatory own funds	Items recognized in the regulatory own funds
Assets					
Intangible assets	3 242	-187	3 055	-242	**2 813**
Liabilities					
Subordinated liabilities	1 720	0	1 720	-20	**1 700**
Capital					
Share capital	1 250	0	1 250	0	**1 250**
Supplementary capital	27 374	-74	27 300	0	**27 300**
Other reserves	3 645	-55	3 590	0	**3 590**
General banking risk reserve	1 070	0	1 070	0	**1 070**
Other income	-110	-4	-114	41	**-73**
Revaluation capital related to assets avalable for sale	272	-3	269	-75	**194**
Revaluation capital related to cash flow hedging instruments	-116	0	-116	116	**0**
Exchange differences	-257	-1	-258	0	**-258**
Actuarial gains / losses	-9	-1	-10	0	**-10**
Share in other comprehensive income of an associated entity	0	0	0	0	**0**
Net profit for the current period	3 104	-28	3 076	-3 076	**0**
Previous years' result	-66	303	237	1 822	**2 059**
Non-Controlling Interest	-11	11	0	0	**0**
Total own funds	**36 256**	**154**	**36 410**	**-1 213**	**35 198**
Additional deductions					**-58**
Additional adjustments of assets measured at fair value					**-58**
Deferred tax assets reliant on future profitability excluding those arising from temporary differences					**0**
Own funds total used for calculation of capital adequacy ratio					34 026

Conforming to the Executive Order 1423/2014, the Table 3.2 presents information on the type and value of key items of own funds utilised in the calculation of Total Capital Ratio as at 31 December 2016. Rows with values equal to 0 have been omitted.

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Table 3.2 Own funds used for calculation of capital adequacy ratio (consolidated basis)

Common Equity Tier I capital: Instruments and reserves		(A) Kwota w dniu ujawnienia	(B) Odniesienie do artykułu Rozporządzenia (UE) nr 575/2013
1	Capital instruments and the related share premium accounts	1 250	Art. 26 ust. 1 lit. a) i b)
of which: A-series registered shares		313	
of which: A-series common bearer shares		198	
of which: B-series common bearer shares		105	
of which: C-series common bearer shares		385	
of which: D-series common bearer shares		250	
2	Retained earnings	2 059	Art. 26 ust. 1 lit. c), Art. 28
3	Accumulated other comprehensive income	30 778	Art. 26 ust. 1 lit. d) i e)
3a	Funds for general banking risk	1 070	Art. 26 ust. 1 lit f)
6	Common Equity Tier I prior to regulatory adjustments	35 157	Art. 26
Common Equity Tier I capital: regulatory adjustments			
7	Additional value adjustment (negative value)	-49	Art. 34
8	Intangible assets (net of related deferred tax liabilities) (negative value)	-2 813	Art. 36 ust. 1 lit. b)
10	Deferred tax assets reliant on future profitability excluding those arising from temporary differences (net of related income tax liabilities providing the conditions in Article 38 (3) are met) (negative value)	0	Art. 36 ust. 1 lit. c), Art. 38
11	Fair value reserves related to gains or losses resulting from cash flow headging instruments	115	Art. 33 ust. 1 lit a)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-11	Art. 33 ust. 1 lit c)
26	Regulatory adjustments applied to Common Equity Tier I in respect of amounts subject to pre-CRR treatment	2	Art. 469 ust. 1 lit. a) i b), Art. 472 ust. 5, Art. 468 ust. 4, Art. 472 ust. 2, Art. 478
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Article 467 and 468	-75	Art. 467, Art. 468
of which: ... filter for unrealised loss 1		-54	Art. 467
of which: ... filter for unrealized losses 2		-20	Art. 467
of which: ... filter for unrealised loss 3		0	Art. 467
28	**Total regulatory adjustments to Common equity Tier I**	-2 831	

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

29	Common Equity Tier I capital	32 326	Art. 50
Additional Tier I: regulatory adjustments			
45	Tier I capital (Tier I = Common Equity Tier I + Additional Tier I capital)	32 326	Art. 25
Tier II capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	1 700	Art. 62 lit. a), Art. 63
51	Tier II capital before regulatory adjustments	1 700	Art. 62
Tier II Capital: regulatory adjustments			
58	Tier II capital	1 700	Art. 71
59	Total capital (Tier I + Tier II capital)	34 026	Art. 72
Capital coefficients and buffers			
61	Common Equity Tier 1 capital (expressed as a percentage of the total risk exposure amount)	16.50%	Art. 92 ust. 1 lit. a)
62	Tier 1 capital (expressed as a percentage of the total risk exposure amount)	16.50%	Art.. 92 ust. 1 lit b)
63	Total capital (expressed as a percentage of the total risk exposure amount)	17.37%	Art.. 92 ust. 1 lit c)
64	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 systemically important institution buffer expressed as a percentage of risk exposure amount)	2,00%	
65	of which: capital conservation buffer requirement	1.25%	
66	of which: countercyclical buffer requirement		
67	of which: systemic risk buffer requirement		
67a	of which: Global Systemically Important Institution (G-SII) or other Systemically Important Institution (O-SII) buffer	0.75%	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	8.50%	
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investement in those entities (amount below 10% threshold and net of eligible short positions)	216	Art. 36 ust. 1 lit. h), Art. 46 ust. 4
73	Direct and indirect holdings by the instititution of the CET1 instruments of financial sector entities where the institution has a significant investement in those entities (amount below 10% threshold and net of eligible short positions)	985	Art. 36 ust. 1 lit. i), Art. 48 ust. 1, Art. 470
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	1 997	Art. 36 ust. 1 lit. c), Art. 48 ust. 1, Art. 470

As at 31 December 2017, conforming to par. 48 of the CRR, capital exposure in financial sector entities didn't exceed 10% of Common Equity Tier 1 capital, and therefore do not constitute an impairment to own funds of the Bank and the Group and have been included in risk weighted assets.

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The main features of instruments issued by the Bank and included in the Common Equity Tier 1 and instruments of Tier 2 capital are presented in Table 3.3 (PLN). Rows not related to the Group companies have been omitted.

Table 3.3 Capital instruments' main features (PLN)

Instrumenty kapitałowe		Nazwa I	Nazwa II	Nazwa III	Nazwa IV	Nazwa V	Nazwa VI
1	Issuer	PKO BP	PKO BP	PKO BP	PKO BP	PKO BP	PKO BP
2	Unique identifier (eg. CUSIP or Bloomberg identifier for private placement)	PLPKO0000016	PLPKO0000016	PLPKO0000016	PLPKO0000016	PLPKO0000016	PLPKO0000099
3	Governing law(s) of the instrument	Polish law	Polish law	Polish law	Polish law	Polish law	Polish law
4	Transitional CRR rules	Common Equity Tier I	Common Equity Tier I	Common Equity Tier I	Common Equity Tier I	Common Equity Tier I	Tier 2
5	Post-transitional CRR rules	Common Equity Tier I	Common Equity Tier I	Common Equity Tier I	Common Equity Tier I	Common Equity Tier I	Tier 2
6	Eligible at solo/(sub-)consolidated / solo and (sub-) consolidated	Solo and consolidated	Solo and consolidated	Solo and consolidated	Solo and consolidated	Solo and consolidated	Solo and consolidated
7	Instrument type (types to be specified by each jurisdiction)	common stock	common stock	common stock	common stock	common stock	bonds
8	Amount recognised in regulatory capital (PLN, as of most recent reporting date)	312 500 000	197 500 000	105 000 000	385 000 000	250 000 000	1 700 000 000
9	Nominal amount of instrument	312 500 000	197 500 000	105 000 000	385 000 000	250 000 000	1 700 000 000
9a	Issue price	312 500 000	197 500 000	105 000 000	385 000 000	250 000 000	-
11	Original issue date	-	-	-	-	-	28.08.2017
12	Perpetual or dated	perpetual	perpetual	perpetual	perpetual	perpetual	dated
13	Original maturity date	no maturity	no maturity	no maturity	no maturity	no maturity	28.08.2027
17	Fixed or floating dividend / coupon	Floating dividend	Floating dividend	Floating dividend	Floating dividend	Floating dividend	Floating coupon
30	Write-down features	No	No	No	No	No	No
36	Non-compliant transitional features	No	No	No	No	No	No

At 31 December 2017 the net profit of the Bank for 2016 (PLN 2.888 million), which is not intended to be distributed as a dividend, have been included in the own funds of the Bank calculated for capital adequacy purposes, with part of this amount (PLN 1,589 million) already recognized in the own funds of the Bank for 31 December 2016, in compliance with the PFSA's approval for including the net profit for 3 quarters of 2016 into own funds (after expected charges). This profit was included in supplementary and reserve capital, pursuant to Resolution 7/2017 of the General Meeting of Powszechna Kasa Oszczędności Bank Polski SA of 22 June 2017, regarding distribution of profits of PKO Bank Polski SA for year 2016.

Additionally, with the PFSA's prior permission, the net profit for 3 quarters of 2017 reduced by foreseeable charges was included in own funds of the Bank (PLN 1.822 million). Moreover, with PFSA's approval, the Bank executed a call option for subordinated bonds in the amount of PLN 1,600 million as well as made an early repayment of subordinated loan in the amount of CHF 224 million (PLN 884 million). Both of said instruments constituted Tier 2 capital. At the same time, the Bank obtained PFSA's approval for inclusion of new subordinated bonds emission (PLN 1,700 million) into own funds.

4. Own funds requirements

Pursuant to the CRR, the Group calculates own funds requirement for the following types of risk:

1) the credit risk – using the standardized approach pursuant to part III, title II, chapter 2 of the CRR, using the following formula:
   a) statement of financial position items – a product of a carrying amount (considering value of adjustments for specific credit risk), a risk weight of the exposure calculated according to the standardised method of credit risk requirement as regards own funds and 8% (considering recognised collaterals),
   b) off-balance sheet liabilities granted – a product of value of liability (considering value of adjustments for specific credit risk), a risk weight of the product, a risk weight of off-balance sheet exposure calculated according to the standardized method of credit risk requirement for own funds and 8% (considering recognized collaterals),
   c) off-balance sheet transactions (derivative instruments) – a product of risk weight of the off-balance sheet transaction calculated according to the standardized method of credit risk requirement for own funds, equivalent in the statement of financial position of off-balance sheet transaction and 8% (the value of the equivalent in the statement of financial position is calculated in accordance with the mark-to-market method).
2) the operational risk[13]:
   a) using AMA for the Bank, excluding the Bank's foreign branches in Germany and in the Czech Republic,
   b) using BIA (pursuant to Part III, Title III of the CRR) for the Bank's foreign branch in Germany, The Czech Republic and Group entities subject to prudential consolidation,
3) the market risk (pursuant to Part III, Title IV, Chapter 2-4 of the CRR):
   a) foreign-exchange risk – using basic approach,
   b) commodities risk – using simplified approach,
   c) equity risk – using simplified approach,
   d) specific risk of debt instruments – using basic approach,
   e) general risk of debt instruments – using duration-based approach,
   f) other risks, apart from the delta risk (non-delta risk) – scenario approach for options for appropriate internal pricing models is implemented and delta-plus approach for other options.
4) other risks:
   a) settlement and delivery risk – pursuant to Part III, Title V of the CRR,
   b) counterparty credit risk – using mark-to-market method, pursuant to Part III, Title II, Chapter 6 of the CRR,
   c) credit valuation adjustment risk (CVA) – using standardised method, pursuant to Part III, Title VI of the CRR,
   d) large exposures limit risk – pursuant to articles 395-401 of the CRR,
   e) own funds requirement for trade exposures and own funds requirement for pre-funded contributions to the default fund of a CCP is calculated for exposures to a central counterparty, pursuant to Part III, Title II, Chapter 6, Section 9 of the CRR.

Total own funds requirement for the Group comprises all of the above requirements for selected types or risk.

Contractual netting agreements are recognised in own funds requirement for counterparty credit risk pursuant to articles 295-298 of the CRR.

[13] Since 31 December 2015, with prior permission of the PFSA from July 2015 and January 2017, the AMA approach was applied to own funds requirements for operational risk of the Bank, excluding the Bank's foreign branch in the Federal Republic of Germany and in the Czech Republic (BIA).

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Information on own funds requirements of the Bank and the Group is presented in Table 4.1.

Table 4.1 Risk weighted assets of the Bank Group

The Bank Group			RWAs	Minimum capital requirements
			2017	
	1	Credit risk (excluding CCR)	179 664	14 373
Article 438(c)(d)	2	Of which the standardised approach	179 664	14 373
Article 107 Article 438(c)(d)	6	CCR	2 091	167
Article 438(c)(d)	7	Of which mark to market	1 541	123
Article 438(c)(d)	8	Of which original exposure	0	0
	9	Of which the standardised approach	0	0
	10	Of which internal model method (IMM)	0	0
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP and other exposures to the central counterparty	36	3
Article 438(c)(d)	12	Of which CVA	515	41
Article 438(e)	13	Settlement risk	0	0
Article 438(e)	19	Market risk	5 924	474
	20	Of which the standardised approach	5 924	474
	21	Of which IMA	0	0
Article 438€	22	Large exposures	0	0
Article 438(f)	23	Operational risk	8 204	656
	24	Of which basic indicator approach	2 520	202
	25	Of which standardised approach	0	0
	26	Of which advanced measurement approach	5 684	454
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	0	0
Article 500	28	Floor adjustment	0	0
	29	Total	195 884	15 671

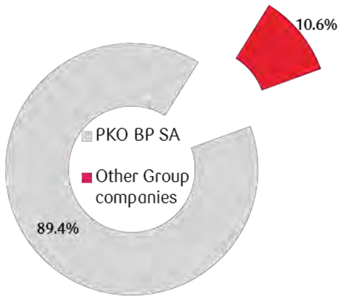
As at 31 December 2017, the biggest part of the Group's total own funds requirements was the own funds requirement for credit risk (92,8%) – Chart 4.1. Credit risk showed on the chart includes risk of credit valuation adjustment. Settlement risk is presented as part of market risk.

Chart 4.1 Structure of capital requirement of the PKO Bank Polski SA Group by risk types

Own funds requirement for the Bank constitutes a significant part (89,4%) of the total own funds requirement for the Group (Chart 4.2).

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Chart 4.2 Structure of capital requirement by equities in the Bank's Capital Group



The Bank Group comprises insurance companies, PKO Życie Towarzystwo Ubezpieczeń SA and PKO Towarzystwo Ubezpieczeń SA, which, as an entity covered with separate supervision of PFSA Office, including capital requirements compliance assessment for insurance undertakings, is excluded from the prudential consolidation.

As at 31 December 2017, the Bank did not have any instruments which should be disclosed as unpaid shares in insurance companies in accordance with Art. 49 of the CRR Regulation.

4.1. Credit risk

The own funds requirement for credit risk and the counterparty credit risk as at 31 December 2017 is shown (by exposure classes) in Table 4.2.

Table 4.2 Structure of own funds requirement for credit risk in Bank's Capital Group

	2017		2016	
TOTAL	14 499	100.0%	14 271	100.0%
Exposures to central governments or central banks	469	3.2%	486	3.4%
Exposures to regional governments or local authorities	148	1.0%	153	1.1%
Exposures to public sector entities	17	0.1%	17	0.1%
Exposures to multilateral development banks	0	0.0%	0	0.0%
Exposures to international organisations	0	0.0%	0	0.0%
Exposures to institutions	192	1.3%	197	1.4%
Exposures to corporates	3 104	21.4%	3 724	26.1%
Retail exposures	5 324	36.7%	5 390	37.8%
Exposures secured by mortgages on immovable property	3 923	27.1%	3 045	21.3%
Exposures in default	577	4.0%	582	4.1%
Exposures associated with particularly high risk	63	0.4%	102	0.7%
Exposures in the form of covered bonds	0	0.0%	0	0.0%
Items representing securitisation positions	0	0.0%	0	0.0%
Exposures to institutions and corporates with a short-term credit assessment	0	0.0%	0	0.0%
Exposures in the form of units or shares in collective investment undertakings ('CIUs')	0	0.0%	1	0.0%
Equity exposures	268	1.8%	175	1.2%
Other items	412	2.8%	401	2.8%

The Group is obliged to maintain the highest own funds requirement for the risk related to retail exposures (36.7%) and exposures secured on real property (21.7%), which results from the Bank's high exposure to such types of segments as well as corporates exposures (21.4%).

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

4.1.1. Exposure to counterparty credit risk

Table 4.3. Analysis of exposures subject to the CCR framework (excluding capital requirements or exposures cleared by the central counterparty)

		2017						
		a)	b)	c)	d)	e)	f)	g)
		Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		1 523	2 360			2 956	1 506
2	Original exposure	0					0	0
3	Standardised approach		0			0	0	0
4	IMM (for derivatives and SFTs)				0	0	0	0
5	*Of which securities financing transactions*				0	0	0	0
6	*Of which derivatives and long settlement transactions*				0	0	0	0
7	*Of which from contractual cross-product netting*				0	0	0	0
8	Financial collateral simple method (for SFTs)						0	0
9	Financial collateral comprehensive method (for SFTs)						38	35
10	VaR for SFTs						0	0
11	Total							1 541

Table 4.4. Exposures of central counterparties

		2017	
		a	b
		EAD post CRM	RWAs
1	Exposures to QCCPs (total)		36
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	466	8
3	(i) OTC derivatives	463	8
4	(ii) Exchange-traded derivatives	3	0
5	(iii) SFTs	0	0
6	(iv) Netting sets where cross-product netting has been approved	0	0
7	Segregated initial margin	50	
8	Non-segregated initial margin	0	0
9	Prefunded default fund contributions	23	0
10	Alternative calculation of own funds requirements for exposures		28
11	Exposures to non-QCCPs (total)		0
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	0	0
13	(i) OTC derivatives	0	0
14	(ii) Exchange-traded derivatives	0	0
15	(iii) SFTs	0	0
16	(iv) Netting sets where cross-product netting has been approved	0	0
17	Segregated initial margin	0	
18	Non-segregated initial margin	0	0
19	Prefunded default fund contributions	0	0
20	Unfunded default fund contributions	0	0

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Table 4.5. The CVA capital charge

		2017	
		a	b
		Exposure value	RWAs
1	Total portfolios subject to the advanced method	0	0
2	(i) VaR component (including the 3× multiplier)		0
3	(ii) SVaR component (including the 3× multiplier)		0
4	All portfolios subject to the standardised method	1 544	515
EU4	Based on the original exposure method	0	0
5	Total subject to the CVA capital charge	0	0

Table 4.6. Standard method - the effect of netting and established exposure value collateral

		2017				
		a	b	c	d	e
		Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1	Derivatives	828	123	0	746	1 369
2	SFTs	988	0	0	989	38
3	Cross-product netting	0	0	0	0	0
4	Total	1 816	123	0	1 735	1 407

Table 4.7. Collateral structure for counterparty credit risk exposure

	2017					
	a	b	c	d	e	f
	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		
Total	746	0	0	0	941	47

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Table 4.8. Standard method - counterparty credit risk exposures by exposure category and risk weights

		2017												
	Kategorie ekspozycji	Risk weight											Total	Of which unrated
		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Inne kwestie		
1	Central governments or central banks	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Regional government or local authorities	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Public sector entities	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Multilateral development banks	53	0	0	0	0	0	0	0	0	0	0	53	53
5	International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Institutions	450	0	0	0	641	859	0	0	3	0	0	1 952	3
7	Corporates	0	0	0	0	0	5	0	0	983	0	0	988	678
8	Retail	0	0	0	0	0	0	0	1	0	0	0	1	1
9	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Other items	0	0	0	0	0	0	0	0	0		0	0	0
11	Total	502	0	0	0	641	864	0	1	985	0	0	2 993	735

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

4.1.2. Exposure to securitization positions

Detailed information in this respect can be found in consolidated financial statement for the Group for 31 December 2017, published on 12 March 2018 (72 "Information on securitisation of lease portfolio and portfolio sale of receivables", page 195). As a result of securitization, there was no risk transfer outside the Bank Group.

4.2. Market risk

The largest share in the value of requirement for market risk in the Bank's Capital Group for 2017 was related to the specific risk of debt instruments (approx. 76.0%), Another type of capital requirement that is significant in terms of value is the own funds requirement for the general debt instruments risk (23%) (table 4.9).

Table 4.9 Own funds requirement for market risk

		2017	
		a	b
		RWAs	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	5 870	470
2	Equity risk (general and specific)	32	3
3	Foreign exchange risk	0	0
4	Commodity risk	0	0
	Options		
5	Simplified approach	0	0
6	Delta-plus method	16	1
7	Scenario approach	6	0
8	Securitisation (specific risk)	0	0
9	Total	5 924	474

The own funds requirement for FX risk was zero due to the fact that the total currency position did not exceed 2% of the Bank's own funds.

As at the end of 2017 the Bank's Capital Bank did not have an open position for commodity price risk, so the respective own funds requirement was zero.

Considering the fact that the Group does not use internal models for the purpose of calculation of own funds requirements for market risk, art. 455 of the CRR does not apply.

4.3. Operational risk

The division of the own funds requirement for operational risk, due to the calculation method used is presented in table. 4.10.

Table 4.10 Capital requirement for operational risk

	The Bank Group		Other Group companies		Bank	
	2017	2016	2017	2016	2017	2016
Total	656	656	201	174	455	482
Basic Index Approach - BIA	202	174	201	174	1*	0
Advanced approach - AMA	454	482	0	0	454	482

* the own funds requirement for operational risk for the branch in Germany and the branch in Czech Republic were equal to PLN 604 thousand and PLN 148 thousand respectively.

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

5. Encumbered and unencumbered assets

Information regarding encumbered and unencumbered assets of the Group can be found in the tables below. Respective assets are considered encumbered, if they have been pledged or are subject to any form of agreement aimed at securing or increasing a credit rating of any on- or off-balance sheet transaction, and cannot be freely withdrawn (for instance to be pledged for financing purposes).

The Group held encumbered assets as of 31 December 2017:

1) resulting from sell-buy-back transactions
2) Registered treasury bonds, pursuant to art. 18 items 3a of Mortgage Bonds and Mortgage Banks Act.

Moreover, the Group held securities in the form of mortgage bonds, secured with mortgage loans in the amount of PLN 11 143 million. and bonds in the amount of PLN 1 261 million secured by receivables under lease agreements in the amount of PLN 1 262 million. As of 31 December 2017, the Bank Group had a loan in the amount of PLN 169 million granted by the European Bank for Reconstruction and Development secured in full by the assignment of lease receivables.

Table 5.1 Encumbered and unencumbered assets

	2017			
	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	24 193	0	270 384	0
Equity instruments	0	0	479	479
Debt securities	351	351	55 310	50 989
Other assets	0	0	18 702	0

	2016			
	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	19 994	-	263 020	-
Equity instruments	0	0	492	492
Debt securities	284	284	52 971	48 105
Other assets	0	-	18 809	-

Table 5.2 Collateral received

	2017	
	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
Collateral received by the Group including:	0	0
Equity instruments	0	0
Debt securities	0	0
Other collateral received	0	0
Own debt securities issued other than own covered bonds or ABSs	0	0

Table 5.3 Encumbered assets/collateral received and associated liabilities

	2017	
	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	10 359	13 187

	2016	
	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	4 823	6 363

Repo and sell-buy-back transactions are conditional transactions resulting in encumbrance of assets transferred to counterparties as loan collateral. Transactions are normally used by the Bank in the business model used in the area of liquidity management in the financial markets and in the framework of servicing the transaction needs of financial institutions that are the Bank's counterparties. The collateral being transferred in respect of current valuation of derivative transactions constitutes a standard mechanism for securing the Bank's credit exposure resulting from concluded securing agreements and as such are part of the Bank's business model related to transactional activity on financial markets.

6. Capital buffers

Pursuant to the CRR and the act on macroprudential supervision, financial institutions are obligated to hold the combined buffer requirement over the minimum levels set out in the CRR regulation for:

1) Total Capital Ratio (TCR),
2) Tier I capital ratio (T1),
3) Common Equity Tier I capital ratio (CET1).

Buffers need to be covered with Common Equity Tier 1 capital.

The combined buffer requirement is the sum of all applicable buffers, i.e. capital conservation buffer, countercyclical buffer, systemic risk buffer, and O-SII buffer. These buffers must be covered with Tier I capital.

Capital conservation buffer – imposed on all banks. The buffer will be increased on a yearly basis until its final, stable level of 2.5% (from 1 January 2019). As of 31 December 2017, the capital conservation buffer was equal to 1,25%. Since 1 January 2018, the security buffer is equal to 1.875%.

Countercyclical buffer – imposed with the aim of mitigating the systemic risk resulting from the credit cycle. Countercyclical buffer is introduced by the finance ministry during an increased lending activity and cancelled during its slowdown. For exposures located in each Member State, the countercyclical buffer rate is set by authority designated by that Member State. As at 31 December 2017 the countercyclical buffer rate was set at 2% for exposures located in Norway and Sweden, 1,25% for exposures located in Hong Kong and Iceland 0,5% and in the Czech Republic and Slovakia 0% for exposures located in remaining countries.

The Bank's Group specific countercyclical buffer is set taking into account the countercyclical buffer rates set by each country where exposures of the Bank are located. As at 31 December 2017 the bank specific countercyclical buffer of the Group was equal to 0%.

Table 6.1 and 6.2 present geographic distribution of exposures with corresponding countercyclical buffer rate for the Bank's Group.

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Table 6.1. Geographical distribution of credit exposures relevant for the calculation of the Bank's Group countercyclical capital buffer *

		2017											
		General credit exposures		Trading book exposures		Securitisation exposure		Own funds requirements				Own funds requirements weights	Countercyclical buffer rate
		Exposure value for SA	Exposure value for IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for the IMA	Exposure value for SA	Exposure value for IRB approach	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
		010	020	030	040	050	060	070	080	090	100	110	120
010	Breakdown by country												
1	Poland	256 115	0	5 719	0	0	0	13 471	260	0	13 730	0.983641	0.00
2	Luxembourg	368	0	0	0	0	0	6	0	0	6	0.000427	0.00
3	Norway	302	0	0	0	0	0	16	0	0	16	0.001147	2.00
4	Sweden	370	0	329	0	0	0	29	26	0	55	0.003935	2.00
5	Bahamas	202	0	0	0	0	0	16	0	0	16	0.001159	0.00
6	Germany	200	0	0	0	0	0	12	0	0	12	0.000886	0.00
7	Great Britain	176	0	0	0	0	0	13	0	0	13	0.000906	0.00
8	Liberia	146	0	0	0	0	0	12	0	0	12	0.000839	0.00
9	Cyprus	94	0	0	0	0	0	7	0	0	7	0.000500	0.00
10	Netherlands	78	0	0	0	0	0	5	0	0	5	0.000357	0.00
11	France	44	0	0	0	0	0	3	0	0	3	0.000214	0.00
12	Malta	36	0	0	0	0	0	3	0	0	3	0.000195	0.00
13	Czech Republic	31	0	0	0	0	0	2	0	0	2	0.000170	0.50
14	Ireland	9	0	0	0	0	0	1	0	0	1	0.000050	0.00
15	Switzerland	8	0	0	0	0	0	1	0	0	1	0.000053	0.00
16	Ukraine	941	0	0	0	0	0	75	0	0	75	0.005379	0.00
17	Belgium	5	0	0	0	0	0	0	0	0	0	0.000026	0.00
18	United Atates of America	4	0	0	0	0	0	0	0	0	0	0.000022	0.00
19	Italy	4	0	0	0	0	0	0	0	0	0	0.000019	0.00
20	Denmark	2	0	0	0	0	0	0	0	0	0	0.000014	0.00
21	South Korea	1	0	0	0	0	0	0	0	0	0	0.000011	0.00
22	Austria	1	0	0	0	0	0	0	0	0	0	0.000005	0.00
23	Spain	1	0	0	0	0	0	0	0	0	0	0.000005	0.00
24	Australia	1	0	0	0	0	0	0	0	0	0	0.000005	0.00
25	Estonia	1	0	0	0	0	0	0	0	0	0	0.000002	0.00

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26	Canada	1	0	0	0	0	0	0	0	0	0	0.000003	0.00
27	Russia	1	0	0	0	0	0	0	0	0	0	0.000004	0.00
28	Bulgaria	1	0	0	0	0	0	0	0	0	0	0.000002	0.00
29	Central African Republic	1	0	0	0	0	0	0	0	0	0	0.000001	0.00
30	Lithuania	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
31	Greece	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
32	Finland	0	0	0	0	0	0	0	0	0	0	0.000002	0.00
33	Kazakhstan	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
34	United Arab Emirates	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
35	Belarus	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
36	Portugal	0	0	0	0	0	0	0	0	0	0	0.000002	0.00
37	Moldova	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
38	Columbia	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
39	Iceland	0	0	0	0	0	0	0	0	0	0	0.000001	1.25
40	Brazil	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
41	Latvia	0	0	0	0	0	0	0	0	0	0	0.000001	0.00
42	Hong Kong	0	0	0	0	0	0	0	0	0	0	0.000002	1.25
43	Slovenia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
44	Armenia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
45	Slovakia	0	0	0	0	0	0	0	0	0	0	0.000000	0.50
46	India	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
47	Uganda	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
48	Romania	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
49	China	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
50	French Polynesia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
51	Georgia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
52	Afghanistan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
53	South Africa	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
54	Turkey	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
55	Israel	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
56	Nepal	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
57	Hungary	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
58	Saudi Arabia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
59	Vietnam	0	0	0	0	0	0	0	0	0	0	0.000000	0.00

(IN PLN MILLION)

60	Namibia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
61	Tunisia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
62	Egypt	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
63	Croatia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
64	Cuba	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
65	Uzbekistan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
66	Philippines	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
67	Azerbaijan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
68	Iran	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
69	Syria	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
70	Pakistan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
71	Nigeria	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
72	Panama	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
73	Macedonia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
74	Bangladesh	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
75	Grenada	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
76	Niue	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
77	Serbia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
78	Iraq	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
79	Japan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
80	Tajikistan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
81	Venezuela	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
82	Malaysia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
83	Mexico	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
84	Zambia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
85	Algeria	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
86	Lebanon	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
87	Sri Lanka	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
88	Western Sahara	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
89	British Virgin Islands	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
90	Kuwait	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
91	Libya	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
92	Ghana	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
93	Senegal	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
94	Cameroon	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
95	Jordan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00

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96	Mongolia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
97	Thailand	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
98	Kenya	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
99	Bosnia and Herzegovina	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
100	North Korea	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
101	Kyrgyzstan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
102	Marshall Islands	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
103	Belize	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
104	Albania	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
105	Turkmenistan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
106	Indonesia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
107	Morocco	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
108	Somalia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
109	Republic of the Congo	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
110	Yemen	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
111	Angola	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
112	Gibraltar	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
113	Seychelles	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
114	Liechtenstein	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
115	Ivory Coast	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
116	Ethiopia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
117	Argentina	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
118	Mali	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
119	Eritrea	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
120	Peru	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
121	New Zealand	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
122	Chile	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
123	Taiwan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
124	Zimbabwe	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
125	South Georgia and the South Sandwich Islands	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
126	Sudan	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
127	Laos	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
128	Malawi	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
129	Singapore	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
130	Guinea	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
131	Togo	0	0	0	0	0	0	0	0	0	0	0.000000	0.00

132	Curacao	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
133	Montenegro	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
134	Paraguay	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
135	Andorra	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
136	Bailiwick of Guernsey	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
137	Micronesia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
138	Bolivia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
139	Monaco	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
140	Burkina Faso	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
141	Gambia	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
142	Bouvet Island	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
143	Qatar	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
144	Chad	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
145	Tanzania	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
146	Benin	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
147	Dominican Republic	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
148	Djibouti	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
149	Bermuda	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
151	Ecuador	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
152	Guatemala	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
153	Vanuatu	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
154	Oman	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
155	Dominica	0	0	0	0	0	0	0	0	0	0	0.000000	0.00
156	Vatican City	0	0	0	0	0	0	0	0	0	0	-	0.00
020	Total	259 147	0	6 049	0	0	0	13 673	286	0			

* The value of the exposure equal to 0 results from rounding to PLN millions and is not equivalent to lack of exposured in particular country.

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Table 6.2 Countercyclical capital buffer specific for the Bank Group

		2017	2016
010	Total risk exposure amount	195 884	195 320
020	Institution specific countercyclical capital buffer rate	0	0
030	Institution specific countercyclical capital buffer rate requirement	-	-

Systemic risk buffer – used to prevent and reduce the long-term, non-cyclical risk or macro-prudential risk, which may cause severe negative consequences for the financial system and economy of the country. As of 31 December 2017 the systemic risk buffer was equal to 0%. This ratio since 1 January, 2018 has been set at 3%.

Other systemically important institutions (O-SII) buffer is an additional buffer for institutions that may generate systemic risk. On 10 October 2016 the Bank received the decision of the PFSA classifying the Bank as O-SII. On 24 November 2017 on the basis of an assessment of the systemic importance of the Bank in accordance with the Act on Macro-Prudential Supervision, the Bank received an individual PFSA decision to impose on the Bank a buffer 0.75% of total amount of the risk exposure calculated in accordance with art. 92 sec. 3 of the EU Regulation No. 575/2013. The buffer must be maintained both on an individual and on a consolidated basis.

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7. Leverage

The Bank's Capital Group calculates the leverage ratio as one of the capital adequacy measures.

The objective of leverage risk management is to ensure a proper relation between the amount of Tier I capital and the total balance and off-balance sheet assets. The principles of excessive financial leverage risk management have been described in the Bank's internal regulations regarding capital adequacy. The Risk Division (Capital Adequacy and Operational Risk Department) and Accounting Division (Accounting and Reporting Department) are responsible for the assessment of excessive leverage risk.

For the purpose of measuring of leverage risk, the leverage ratio is expressed as a percentage calculated as Tier I capital divided by total exposure. The Bank Group calculates the leverage ratio as at the reporting date. The leverage ratio as at 31st December 2017 was calculated both for Tier 1 capital and for the temporary definition of Tier 1 capital.

In order to maintain the leverage ratio at an acceptable level, a strategic limit and a threshold value are set, both monitored and verified at least on a yearly basis. Leverage risk is considered low when it is equal to or higher than the threshold, elevated when the leverage value is below the threshold and is equal to or greater than the strategic tolerance limit, and high when the value leverage ratio is below the strategic tolerance limit.

The leverage ratio is calculated, reported and forecasted for the next 4 quarters on a regular basis. In case of an observed high or elevated leverage risk, proposals for management actions are prepared, taking into account the current macroeconomic situation and costs associated with the proposed activities. The leverage ratio is estimated in the financial planning process and takes into account scheduled changes in business activity and assets structure of the Bank and of the Group. The Bank have developed the list of tools available in case of the need to increase Tier I capital or adjust balance sheet and off-balance sheet items structure in order to manage the leverage risk.

In 2017, leverage risk remained above internal and external limits, as well as above minimum level recommended by the PFSA.

Table 7.1 Summary reconciliation of accounting assets and leverage ratio exposures

		Leverage ratio exposures as in Capital Requirements Regulation	
		2017	2016
1	Total assets as per published financial statements	296 939	285 573
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-2 358	-2 559
4	Adjustments for derivative financial instruments	2 528	1 754
5	Adjustments for securities financing transactions (SFTs)	0	2
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	11 919	12 042
7	Other adjustments	-2 199	-2 005
8	Total leverage ratio exposure	306 830	294 807

CAPITAL ADEQUACY AND OTHER INFORMATION SUBJECT TO DISCLOSURE OF THE PKO BANK POLSKI SA GROUP FOR THE YEAR ENDED 31 DECEMBER 2017 (IN PLN MILLION)

Table 7.2 Leverage ratio. Exposures for leverage ratio calculation as described in the CRR

		Leverage ratio exposures as in Capital Requirements Regulation	
		2017	2016
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	294 748	282 962
2	Asset amounts deducted in determining Tier 1 capital	-2 831	-3 000
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)**	291 917	279 962
Derivative exposures			
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	1 133	1 362
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	2 528	1 754
7	Deductions of receivables assets for cash variation margin provided in derivatives transactions	-705	-389
11	**Total derivative exposures**	2 956	2 727
Securities financing transaction exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	38	74
14	Counterparty credit risk exposure for SFT assets	0	2
16	**Total securities financing transaction exposures**	38	76
Other off-balance sheet exposures			
17	Off-balance sheet exposures at gross notional amount	51 898	53 909
18	(Adjustments for conversion to credit equivalent amounts)	-39 979	-41 867
19	Other off-balance sheet exposures	11 919	12 042
Capital and total exposures			
20	Tier 1 capital	32 326	28 350
21	Total leverage ratio exposures	306 830	294 807
Leverage ratio			
22	Leverage ratio	10.54%	9.62%
Choice on transitional arrangements for the definition of the capital measure			
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional	Transitional

Table 7.3 On balance sheet exposures

	The Group Bank	2017	2016
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs), of which:**	**294 748 100**	**282 961 809**
EU-2	Trading book exposures	9 905 438	9 897 793
EU-3	Banking book exposures, of which:	284 842 662	273 064 016
EU-4	Covered bonds	0	0
EU-5	Exposures treated as sovereigns	56 980 026	50 888 735
EU-6	Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	9 458 093	9 603 991
EU-7	Institutions	4 789 711	4 575 749
EU-8	Secured by mortgages of immovable properties	55 018 830	49 010 661
EU-9	Retail exposures	92 679 540	93 033 611
EU-10	Corporate	42 684 873	42 396 364
EU-11	Exposures in default	5 878 641	6 212 521
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	17 352 948	17 342 383

The following factors influenced the leverage ratio in 2017:

1) Increase in the value of exposure resulting from:
   a) increase in credit exposures,
   b) increase in value of treasury bonds,,
2) Increase in the value of own funds results from inclusion of profit for 2016 into reserve capital with the PFSA's prior permission.

8. Internal capital (Pillar II)

As of 2018, the Group determines the internal capital in compliance with:

1) the CRR,
2) the Banking Law Act,
3) Regulation of the Minister of Development and Finance of 6 March 2017 on the risk management system and internal control system, remuneration policy and detailed method of internal capital assessment in banks,
4) PFSA Resolution No. 258/2011[14],
5) the Act on macro-prudential supervision,
6) internal regulations of the Bank and the Group.

Internal capital is the amount of capital that is required to cover all identified significant types of risk present in the business activity of the Bank and the Group and the effect of changes in the business environment, taken into account the anticipated risk level.

The purpose of internal capital assessment is to define the minimum level of own funds ensuring the safety of operations, taking account of changes in the profile and volume of conducted activities and unfavourable stress conditions.

For each risk classified as material, the Bank and the Group develop and implement methods for its assessment and measurement.

The Bank monitors on a cyclical basis the significance of individual types of risk related to the business activity of the Bank and the Group. Internal capital for specific risk types is calculated in compliance with internal regulations.

The total internal capital of the Bank Group is the sum of internal capital required to cover all significant risk types for which the Bank and the Group – including entities subject to prudential consolidation - are exposed. The correlation ratio used for the calculation of internal capital between particular risk types and Group entities is equal to 1.

The Bank’s internal capital to cover credit default risk, is determined as a difference between a maximum loss, that the Bank may incur within one year (estimated using the CR+ method), and the value of expected credit loss for entities other than financial institutions, countries or central banks and capital requirements for credit risk, for financial institutions, countries and banks, calculated using a modified standard method, as specified in the CRR. Internal capital to cover credit default risk is calculated for balance and off-balance exposures subject to credit risk. Entities of the Bank’s Capital Group, for which the credit default risk is significant, determine the internal capital to cover credit risk on the basis of own funds capital requirements for credit risk. Total internal capital for credit default risk is the sum of internal capital determined for separate exposure portfolios and entities of the Bank Group in which internal capital is estimated for credit risk.

To calculate the internal capital for interest rate risk and FX risk, the Bank uses the VaR methodology, taken into account the results of stress tests.

The internal capital to cover the liquidity risk comprises the total estimated cost of an accelerated sale of securities covering the stress-test related outflow of funds and the cost of acquisition of additional financing for intangible assets necessary to meet the required level of intangible assets.

The internal capital for the Bank's operational risk is equal to the Bank's capital requirement for operational risk calculated using AMA and BIA. The internal capital for the operational risk of the Group entities is adopted as follows:

1) for Group entities subject to prudential consolidation – as the additional own funds requirement for operational risk, calculated under the basic indicator approach,
2) for Group entities not subject to prudential consolidation, except for insurance companies – as equal to the maximum amount of the annual losses related to operational risk for the last 3 years, as suffered by a given entity.

The internal capital to cover business risk of the Bank is determined on the basis of analysis of historical volatility of deviations of realised net revenue from its expected values, in accordance with the earnings at risk concept (Earnings at Risk).

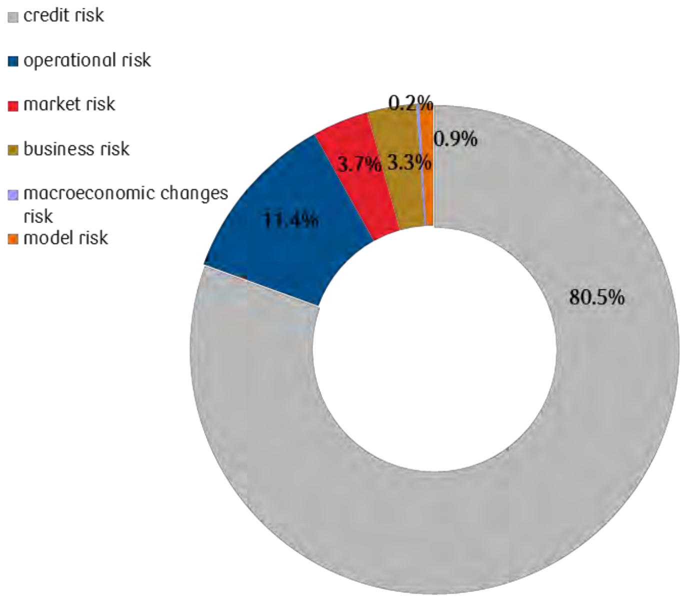
The internal capital for covering business risk of the Group is determined as the sum of internal capital of the Bank and the Group’s entities.

The internal capital to cover the macroeconomic changes risk is determined as a maximum shortage amount – determined by cyclical comprehensive stress tests - capital required in order to meet the minimum TCR ratio requirements set by the PFSA.

The Chart below presents the structure of internal capital by risk type, as estimated as at 31 December 2017 for the Group.

[14] PFSA Resolution No 258/2011 ceased to apply at the date of entry into force of the Regulation of the Minister of Development and Finance of 6 March 2017 on the risk management system and internal control system, remuneration policy and detailed method of internal capital assessment in banks,

Chart 8.1 Structure of internal capital of the Group as at 31.12.2017



The total internal capital is allocated by business areas, client segments and by the companies of the Group.

9. Capital adequacy

Capital adequacy is a process aiming to ensure that the risk level assumed by the Bank and the Group for the development of business operations can be covered by available capital within specified risk tolerance levels and time horizon. Capital adequacy management process involves, in particular, adherence to applicable supervisory regulations and risk tolerance levels set in the Bank and the Group, capital planning process, including policies related to sources of capital.

Basic regulations obligatory in the capital adequacy assessment process:

1) CRR Regulation,
2) The Banking Law Act,
3) The Act on macro-prudential supervision,
4) Regulation of the Minister of Development and Finance of 6 March 2017 on the risk management system and internal control system, remuneration policy and detailed method of internal capital assessment in banks.

The objective of capital adequacy management is to maintain, on an ongoing basis, the level of own funds that is adequate to the scale and risk profile of business activity of the Bank Group.

Capital adequacy management at the Bank comprises:

1) definition and implementation of desired capital adequacy objectives,
2) identification and monitoring of significant types of risk,
3) measurement or assessment of the amount of internal capital for individual significant types of risk and of total internal capital,
4) definition of internal capital adequacy limits,
5) forecasting, monitoring and reporting of internal capital levels and its structure as well as capital adequacy,
6) balance sheet structure management with the aim of optimization of quality of the Bank's own funds,
7) capital-related contingency actions,
8) stress tests
9) Planning and allocation of own funds requirement and internal capital to business areas, client segments and individual entities of the Group,
10) profitability assessment of business areas and client segments.

The measures of capital adequacy are as follows:

1) the total capital ratio (TCR),
2) Tier 1 (T1) capital ratio,
3) Common Equity Tier I capital (CET1) ratio,
4) the own funds to internal capital ratio,
5) leverage ratio.

The purpose of monitoring the level of capital adequacy measures is to determine the degree of compliance with supervisory standards and to identify cases requiring the activation of capital emergency actions.

According to art. 92 of the CRR, the minimum capital ratio levels maintained by the Bank Group are as follows:

- Total capital ratio (TCR) – 8.0%,
- Tier I (T1) – 6.0%,
- Common Equity Tier 1 (CET1) – 4.5%.

In accordance to the CRR Regulation and the Act on macro-prudential supervision, the Bank Group is obliged to maintain the requirement of a combined buffer, which is the sum of buffers in force. Detailed information on capital buffers is presented in Chapter 6 of this report.

Additionally, the Bank's Capital Group is obliged to maintain its own funds to cover an additional capital requirement in order to hedge the risk resulting from mortgage-secured foreign currency credits, loans to households, so-called a discretionary capital requirement. On 15 December 2017, the Bank received a letter from the PFSA concerning the individual recommendation to comply with an additional own funds requirement for consolidated capital ratios. Total capital ratio: 0.61 percentage points. Tier 1 capital ratio: 0.46 percentage points. Common Equity Tier 1 capital ratio: 0.34 percentage points.

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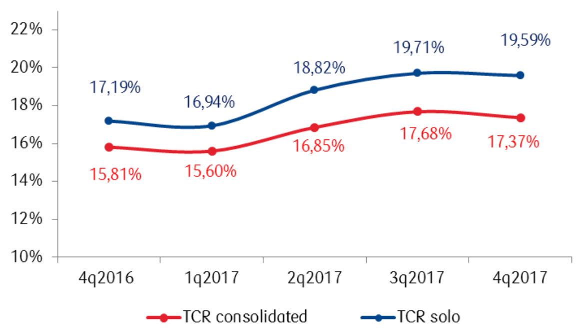
Table 9.1. Minimum levels of capital adequacy ratios of the Bank Group:

	TCR	T1	CET1
Minimum regulatory requirements	8.00%	6.00%	4.50%
Discretionary CHF requirement	0.60%	0.50%	0.30%
Requirement of a combined buffer	5.60%	5.60%	5.60%
Capital conservation buffer	1.90%	1.90%	1.90%
O-SII buffer	0.80%	0.80%	0.80%
Systemic risk buffer	3.00%	3.00%	3.00%
Total	**14.20%**	**12.10%**	**10.50%**

In 2017 and in 2016, the Bank Group maintained a safe capital base, above supervisory and regulatory limits.

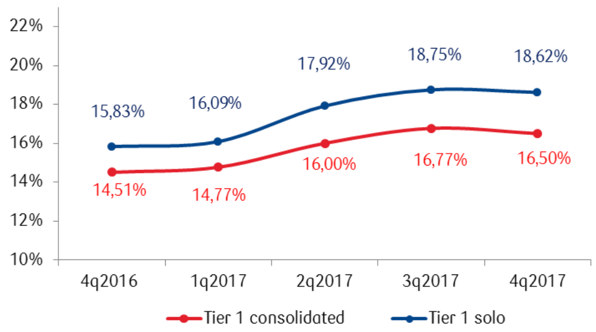
The chart below presents changes in the Total Capital Ratio calculated for the Bank and the Bank Group.

Chart 9.1 Total capital ratio.



The chart below presents changes in the Tier I (Common Equity Tier I) Ratio[15] for the Bank and the Bank Group.

Chart 9.2 Tier I capital ratio (T1)/common equity Tier I (CET 1) capital ratio



In 2017 the capital adequacy ratios remained above external and internal limits.

[15] Tier 1 and common equity Tier 1 ratios are identical in the Bank and the Group.

10. Remuneration policy

The basic internal regulation regard of remuneration policy is the policy of remuneration of the Bank's employees and the PKO BP Group (Policy) adopted by the resolution of the Supervisory Board No. 42/2017 of 14 June 2017. Until the implementation of the Policy, the individual principles of the remuneration system were dispersed in individual payroll regulations, including the Corporate Collective Labour Agreement (CCLA).

The policy ensures a consistent remuneration system by:

1) application of a remuneration system in line with market trends,
2) acquiring optimal job candidates,
3) adjusting the mechanisms of instruments and remuneration levels to the strategy and objectives of the Bank and the Bank's Capital Group,
4) taking into account the capabilities of the Bank's Capital Group in the scope of determining the desired mechanisms and levels of remuneration,
5) determining permanent wages based on job valuation,
6) determining the remuneration structure based on the achieved work effects and assessment of employees' competences,
7) building in employees a sense of responsibility for the carried out tasks, which are assessed on the basis of objectified criteria,
8) ensuring that volatile remuneration components will be so parameterized that they will take into account the cost of risk, capital cost and liquidity risk of the Bank and the Capital Group in the long-term perspective,
9) ensuring that monetary or non-monetary forms of remuneration do not encourage those involved to favor their own interests or interests of the Bank and entities of the Bank Group to the detriment of customers.

The CCLA concluded on 28 March, 1994 (as amended) with trade union organizations is the basis for granting following remuneration components to Bank employees:

1) the base remuneration,
2) additional remuneration for working overtime, as well as under conditions which are especially onerous and detrimental to health,
3) bonuses and awards for special achievements in professional work.

Base salaries and additional benefits granted to employees are defined on the basis of job grading (grading categories assigned to specific organisational positions) and analysis of market remuneration in the banking sector.

The Bank’s remuneration policy is consistent with sound principles of effective risk management, as confirmed by the analysis carried out in cooperation with an external consulting company with particular emphasis on policy objectives, long term value-grown for shareholders and stability of the Bank in particular. The policy did not encourage excessive risk taking and - given the financial situation of the Bank - was sustainable, supported the Bank's strategic objectives and its long-term development. The above assessment was included in the draft of "Assessment of the performance of the Remuneration Policy at PKO Bank Polski SA in 2017" Report. The following changes took place in the remuneration policy at the Bank in 2017:

1) The Bank's Supervisory Board accepted the document "Remuneration Policy for the Bank's employees and the PKO BP Capital Group". The policy takes precedence over to other internal remuneration provisions of the Bank and the Bank's Capital Group. The goal of the Policy is to ensure a consistent remuneration system, taking into account the adjustment of remuneration instruments and remuneration levels to individual positions and local labour market conditions, as well as the economic and financial condition of the Bank and entities of the Bank Group and supervisory requirements.
2) The principles of hiring and remuneration of the Members of the Bank Management Board were adjusted to requirements imposed on the Bank by the Act of 9 June 2016. The Act presents principles defining the remuneration of people managing certain companies and the resulting provisions of the aforementioned Remuneration Policy.
3) Works began on the implementation of provisions of the Remuneration Policy for the Bank's employees and the PKO BP Group in the entities of the Bank's Group.

10.1. Variable components of remuneration of Board members and key managers with a high impact on the Bank’s risk profile (Material Risk Takers – MRT)

Pertaining to the CRD IV and regulation 604/2014 of 4 March 2014[16], the Bank keeps the principles of determination of variable components of remuneration (bonuses and awards - implemented in 2012) up to date in the following resolutions:

1) Resolution of the Supervisory Board on “Policy of remuneration of employees of the Bank and PKO SA Group", and about the employment and remuneration of Management Board Members,
2) Resolution of the Management Board on the principles of remuneration of employees whose activities have a significant impact on the Bank's risk profile (Material Risk Takers).

The list of MRTs – other than Management Board Members - is defined by the Management Board on the basis of quantitative and qualitative criteria used for categorization of employees, whose activities influence the risk profiles enumerated Regulation No. 604/2014 Based on the aforementioned criteria, the following are classified as MRTs:

1) top management responsible for a material business unit, risk management and control functions,
2) staff members responsible for providing internal support which are crucial to the operation of the business, exposing the Bank to significant risk or other types or risk,

[16] Commission Delegated Regulation (EU) No 604/2014 of 4 March 2014 supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards with respect to qualitative and appropriate quantitative criteria to identify categories of staff whose professional activities have a material impact on an institution's risk profile.

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3) staff members generating credit and market risk, selected on the criteria of decision limits,
4) staff members with a total remuneration exceeding a certain threshold, which have a significant impact on the risk profile of the institution,
5) staff members, whose remuneration is on par with remuneration of top management and risk takers (with a significant impact on risk profile).

In 2017, separate regulations establishing the principles of determination of variable components of remuneration functioned also in selected entities of the Bank Group. Principles regarding determination of variable components of remuneration of the Management Board, have also been implemented by: PKO Bank Hipoteczny SA, PKO BP BANKOWY PTE SA, PKO Leasing SA, PKO Towarzystwo Ubezpieczeń SA and PKO Życie Towarzystwo Ubezpieczeń SA. At the same time selected managerial positions, whose professional activity has a significant impact on the company's risk profile in PKO Bank Hipoteczny SA, PKO Towarzystwo Ubezpieczeń SA and PKO Życie Towarzystwo Ubezpieczeń SA have been included in said principles.

Moreover, due to the Act of 27 May 2004 on investment funds and management of alternative investment funds and the Ordinance of the Minister of Finance of 30 August 2016 on detailed requirements to be met by remuneration policy of an investment fund, in 2017, a remuneration policy, setting the rules for variable remuneration components for both all members of the Management Board as well as for selected employees whose tasks include activities that significantly affect the company's risk profile or investment funds managed by the company, functioned in PKO Towarzystwo Funduszy Inwestycyjnych SA.[17]

10.1.1. The process of determination of variable components of remuneration of MRT

The preparation of the policy on variable components of remuneration involved the experts and the Bank's management from the following departments: the Human Resources and Performance Management Department (principles of bonus and remuneration payment), the Department of Labor Affairs, the Planning & Controlling Department (planning, imposing and checking financial objectives).

While preparing the policy, the Bank used external services rendered by a consulting company, PwC Polska. EY Polska provided support to the Bank during the update of aforementioned policy. The policy itself is modified and evaluated by the Supervisory Board on the basis of Management Board's recommendation and Remuneration Committee's opinion.

10.1.2.Supervisory Board remuneration committee (SBRC)

The SBRC operate in the Bank to support the Supervisory Board in fulfilment of its statutory obligations and execution of tasks defined in the legal regulations.

The SBRC is formed by the members of the Supervisory Board. (Table 10.1).

Table 10.1 Members of supervisory board of the Bank forming the remuneration committee

2017	
Name	Function
Piotr Sadownik	Chairman of the Committee
Grażyna Ciurzyńska	Vice-Chairman of the Committee
Wojciech Jasiński	Committee Member
Elżbieta Mączyńska-Ziemacka	Committee Member
Janusz Ostaszewski	Committee Member

The SBRC prepares opinion on the policy on variable components of remuneration – its amount and components - of the Bank's management, including regular and variable components of remuneration of the Management Board Members.

The SBRC is responsible in particular for accomplishment of the following tasks:

1) periodic review of principles of the policy on variable components of remuneration of the Bank's MRTs, with presentation of results of said reviews to the Supervisory Board,
2) preparing proposals for the Supervisory Board, regarding remuneration policy of the Management Board, including variable components of remuneration and base remuneration,
3) formulation of opinions regarding applications for consent for a member of the Management Board for competitive activities or participation in a competitive company as a partner in a civil partnership, partnership or as a member of a governing body of a capital company, or in another competitive legal person as a member of its body,
4) preparing report on the review of implementation of variable components of remuneration, prepared by the Audit Department,
5) preparation of a project of a report regarding functioning of the remuneration policy in the Bank, presented to the General Assembly by the Supervisory Board.

Five meetings of the Supervisory Board Remuneration Committee took place in 2017.

[17] In KBC Towarzystwo Funduszy Inwestycyjnych SA (a indirectly dependent entity of PKO Bank Polski SA since December 2017), in 2017 there was a remuneration policy which included management board members and all employees taking into account the requirements of the Regulation of the Minister of Finance of 30 August 2016 about detailed requirements to be met by the remuneration policy of an investment fund in the simplified scope, applicable to societies that are not significant investment fund associations (i.e. taking into account §6 section 2 of this Regulation), which does not provide for postponing payment of variable components of remuneration and payment of remuneration in a form other than cash.

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10.1.3. Most significant information on characteristics of variable components of remuneration system

The policy of remuneration of Bank's employees and the Bank's Capital Group as well as regulations applicable in companies describe the manner in which MRTs are granted variable components of remuneration bound to the results and effects of their work – including awards for exceptional achievements and bonuses.

The main principle of granting of variable components of remuneration is in particular bonus objectives assigned within the Management by Objectives System (MbO).

The rules included in Policy indicate that the assigned to MRT goals are to ensure the inclusion of the business cycle of the Bank and the risks associated with the ongoing operations – especially the Bank's profit, C/I ratio for the Bank Group, ROE indicator for the Capital Group, net profit on business operations of selected business areas, implementation of strategy-supporting project. The risk is taken into account by both determining appropriate risk-sensitive criteria for performance evaluation and reduction of bonus or even lack of it in case of degraded performance or financial losses of the Bank (including the use of malus with respect to deferred for three years part of the variable remuneration).

Assessment criteria of a MRT, including member of Management Board should include amongst others:

1) impact on regulatory capital, capital adequacy ratio and equity of the Bank in such a way that payment of variable remuneration does not limit possibilities of their strengthening,
2) Bank's result on the area of responsibility of a given person in respect to the results of the entire Bank.

The KPI structure combines different types of KPI, that is in particular quantitative and performance indicators resulting from possessed systemic data and coherent with specific nature of the organisation. All performance indicators are parameterised and of measurable nature. Due to nature of a given management position, different proportions of individual assessment levels and weights of the above mentioned KPI types are defined. Responsibilities for risk-adjusted long-term financial results and costs with different structure of objectives depending on a specific nature of accomplished tasks have been used. Positions responsible for control functions are evaluated on the basis of objectives independent from the results of the controlled structures.

Variable components of remuneration for a given period of time (a calendar year) are granted on the basis of Regulations, after bonus objectives have been settled, in the following forms:

1) non-deferred from – up to 60% of variable remuneration (in the first year after assessed period),
2) deferred from – up to 40% of variable remuneration (in equal instalments for the following three years after assessed period),

and both, non-deferred and deferred remuneration is granted in equal parts in cash and in form of financial instrument that is phantom shares (that are converted into cash according to updated prices of the Bank's shares after the retention period and in case of deferred remuneration – after deferment).

If the amount of variable remuneration for a given year is higher than PLN 1 million, PLN 400 million and 60% of the surplus over such PLN 1 million is to be deferred.

Table 10.2. Maximum levels of variable remuneration in PKO Bank Polski and in entities of the Bank's Group

As at 31 December 2017, variable remuneration could not exceed:

Bank, PKO TFI SA, Bank Hipoteczny SA*:	**PKO BP BANKOWY PTE SA, PKO Leasing SA:**	**PKO TU SA* i PKO Życie TU SA*:**
100% of annual fixed salary of the MRT and Bank Management Board members.	100% of annual fixed salary for Management Board members.	100% of annual fixed salary for MRT and 60% for Management Board members

*the aforementioned limit for variable remuneration for members of the Management Board at Bank Hipoteczny, PKO TU SA and PKO Życie TU SA can be raised up to 200% of the fixed component for remuneration for investment banking positions if approved by the General Meeting of Shareholders. No such increase has taken been applied so far.

50% of every variable component of remuneration of the MRT is related to the value of phantom shares, based on the share price (variable in time) of the Bank. Pursuant to the requirements of the law in PKO Bank Hipoteczny SA financial instruments are related to the book value of net assets, and in PKO TFI SA - with the value of units of investment funds.

Each calculated component of remuneration can be lowered as a result of:
1) violation of duties,
2) failure to comply with the law or customer service standards,
3) improper execution of designated duties,
4) behavior towards employees that breaches the rules of social conduct.

The bonus amount:

1) for member of the Board may be adjusted in minus or in plus by the certain rate - depending on the achieved results of the Bank specified in the Bank's Annual Note (a set of key indicators of management specified for a given calendar year),
2) for MRT who is not a member of the Board it may be adjusted in plus by certain rate depending on the results of the Bank specified in the Bank's Annual Note.

In case of members of the Management Boards, variable components are granted and released on the condition of approval of the financial statement for the given period of assessment by the General Meeting of Shareholders.

The respective Supervisory Board in relation the Bank's or Group company's Management Board and the Management Board in relation to management members may take a decision on possible pro rate reduction of funds for variable remuneration before every payment of such remuneration, taking into account:

1) impact on regulatory capital, capital adequacy ratio and the Bank's equity, so payment of variable compensation does not restrict possibilities of their strengthening,
2) impact on the capital cost, so payment of variable compensation does not restrict possibilities to maintain proper capital base,
3) required risk profile of the Bank,
4) financial results of the Bank in respect to long-term plans of development.

In case of:

1) significant deterioration in the Bank's results,
2) assessment of a significant negative change in equity,
3) violation of law or commitment of significant errors by MRT,
4) adjustment of implementation and completion degree of results or objectives of MRT,
5) performance deterioration of supervised or mentioned above managed structures,
6) granting of variable remuneration on the basis of incorrect, misleading information or MRT fraud

It is possible to use - respectively by the Supervisory Board or Board of Directors – malus-type solution reducing the size of the due variable compensation deferred in subsequent accounting periods.

Material Risk Takers (excluding Members of the Bank's Management Board) are entitled to the non-financial benefits that are available to all employees, i.e.: medical care, EPP, group insurance.

In case of granting the MRT severance related to the withdrawal from the function associated with the termination of employment (other than resulting from generally applicable laws) its sum reflects the assessment of the work in the last three years of employment. The Bank's regulations stipulate the maximum amount of severance pay.

Member of the Mangement Board is entitled to severance pay , providing that the person has fulfilled the function of a member of the Management Board for at least twelve months before the termination of the aforementioned agreement. The MRT severance pay can be granted under the condition of being employed at the MRT position for at least twelve months before the termination of the employment contract.
Members of the Board and selected MRT are additionally covered by non-competition agreements. The agreements provide payment of damages for refraining from hiring at competition after the termination of employment at the Bank. - for a maximum period of six months, in the amount of up to 100% of the fixed remuneration under the agreement.

Quantitative data on variable components of remuneration will be published in June 2018.

10.2. Variable components of remuneration of non-MRT employees

10.2.1. Bonuses

PKO Bank Polski SA has a remuneration and incentive system, in which the level of variable component of the salary is determined by the degree of achievement of the targets set. It consists of four pillars:

1) MbO (Management by Objectives) - covers managerial and expert positions crucial for the Bank's key objectives. The MbO consists of granting bonus which depends on the quality and degree of completion of the tasks.
2) Individual Bonus System (IBS) – a system of bonuses which depends on the degree of completion of specific tasks in the areas of sales and effectiveness. The system covers those employees who are performing business tasks, mainly in corporate and investment banking, as well as in debt collection.
3) Sales Bonus System (SBS) - aimed to positions in retail branches, which perform the sale of banking products.
4) Support Bonus System (SBS) - includes other employees not covered by the system MbO, IBS and Sales Bonus System.

The bonus targets of the remaining employees are linked to key management indicators of the Bank taken into account for the purposes of premium imposed on the individual units of the Bank. The principle of cascade included in the bonus rules, which is monitored for compliance purpose, requires assigning targets to workers employed under individual structures.

In addition, each object is placed in line with the SMART principle (S-specific, M-measurable, A-ambitious, R-real T-term), which is also subject to cyclical monitoring.

10.2.2. Awards

Regardless of the bonus system there is a system of rewarding employees.

Until December 2017, the Bank was obliged by the Staff Rewards Regulations of PKO Bank Polski, which regulated the procedure of awarding employees for special achievements. Since December 2017, the updated Employee Rewards Regulations of PKO Bank Polski have been in force, under which the Bank may create a fund of awards for:

1) individual discretionary awards to employees of the Bank, deriving outstanding results in their work or for achievements, which led to results important for the Bank,
2) awards for employees recommending candidates for employment. at the Bank,
3) activities related to the retention of key personnel.

10.2.3. Non-financial benefits for employees

10.2.3.1. Medical care

The Bank ensures its employees additional healthcare - besides occupational health services which are compulsory according to the regulations of the Polish Labour Code. Employees are entitled to various packages, addressed to particular groups of jobs. All employees have the opportunity to use medical consultations for all specialties and a wide range of diagnostic tests free of charge. Since 2011, the medical care for the employees was extended to include a health promotion program called 'Zdrowie jak w Banku', covering, i.e. a preventive health check and activities directed at health-oriented education and promoting a healthy life style.

Other entities of the Bank Group (in Poland) provide their employees with medical care on the terms negotiated with the supplier by the Bank, based on separate agreements.

10.2.3.2. EPP

As of July 2013, the Employee Pension Program (EPP) functions at the Bank, with which a long-term savings opportunity is available to each employee – complementing mandatory pension payments. The EPP was introduced in the form of a contract on the Bank making basic and additional contributions (3% of salary) on behalf of the employees to investment funds managed by PKO TFI SA.

Employee Pension Programs are also provided for their employees by larger entities of the Bank's Capital Group: PKO Życie Towarzystwo Ubezpieczeń SA, PKO Towarzystwo Ubezpieczeń SA, PKO BP Finat Sp. z o.o., PKO Leasing SA, PKO BP BANKOWY PTE SA and PKO Towarzystwo Funduszy Inwestycyjnych SA

10.2.3.3. Insurance

Employees are entitled to join the cost-effective group life insurance, the fee being incurred through the Bank.

10.2.3.4. Social benefits fund

The Bank gives its employees the possibility of using the cafeteria system called 'MyBenefit' as part of which each employee of the Bank may use the funds allocated to him/her from the Company Social Benefits Fund via an online platform on his/her own. The platform offers a broad range of benefits for the employees to choose from, including co-financing of leisure expenses for the employees and their children as well as sport cards of different comapnies .

The amount of funds received to be spent at the cafeteria is dependent on the amount of gross income per person in a given family.

Additionally, the Bank's employees are eligible for housing loans, social assistance funds and funds for additional events related to sport, culture and education, and integration events.

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11. Glossary of terms and abbreviation

ABS	asset back securities.
AFS	available for sale – a securities portfolio type under IAS.
AMA (Advanced Measurement Approach)	operational risk advanced measurement approach for the purpose of defining the own funds requirements for operational risk according to the CRR.
Application scoring method	a method for assessing the Bank's credit risk involved in the financing of clients on the basis of scores corresponding to information provided by the client.
Banking book	contains operations not included in the trading book, specifically related to credit facilities and loans and deposits extended or accepted within the bank's basic business activity or for the purposes of liquidity and interest rate risk management.
Basel III	a set of external regulations defining a new approach to the calculation of capital requirements and management of the risk in banks; in particular those defined in 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 and amending Regulation (EU) No 648/2012 (hereinafter referred to as the "CRR"), executive acts to the CRR, national acts transposing Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (hereinafter referred to as the "CRD IV").
Behavioural scoring system	a system for assessing the bank's credit risk involved in the financing of clients mainly on the basis of transactions on the current account, used for defining the revolving credit limits.
Business risk	the risk of loss resulting from unfavourable changes in the business environment, unfavourable decisions, improper implementation of decisions or a failure to take appropriate action in response to changes in the business environment; it specifically includes the strategic risk.
Total Capital Ratio (TCR)	the main measure of capital adequacy, calculated as the quotient of own funds and total own funds requirements multiplied by 12.5%.
Capital Risk	risk of inadequate, and thus insufficient in relation to the scale of the Bank's activities, level and structure of own funds for absorption of unexpected losses (taking into account both development plans and borderline cases).
CET 1 Ratio (Common Equity Tier 1 Ratio)	Tier 1 funds (exclusive of hybrid instruments and total capital requirements) multiplied by 8%.
CIRS (Currency Interest Rate Swap)	a currency interest rate swap transaction.
Commodities risk	risk of loss related to negative changes in prices of commodities, generated by through the maintenance of open positions in respective commodities.
Compliance risk	the risk of incurring legal sanctions or occurrence of financial losses or a loss of reputation as a result of failure on part of the bank, the bank's employees or entities operating on the Bank's behalf to observe legal provisions, internal regulations and the market standards adopted by the bank..
Concentration risk	the risk of a significant loss or change in the risk profile of the Bank as a result of significant concentration: 6)1)to exposures: a) related to specific entities or group of entities, b) to entities operating in the same sector, c) to entities operating in the same geographical area, d) to entities belonging to the Bank Group (operating both domestically and internationally), e) denominated in the same currency or indexed to the same currency. 7)2)related to credit mitigation techniques and large indirect credit exposures, such as a single issuer of collateral.
Conduct risk	risk of loss incurred by: 1) the client, 2) the Bank, 3) financial markets (credibility-wise), as a result of improper actions (also involuntary) or omission by the Bank, its employees or affiliates, regarding financial services.

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Confidence level	the probability, expressed usually as a proportion, that the variable (bank's loss) under analysis will not exceed a specific value.
Coverage ratio	a ratio of the credit and loan impairment write-downs to the value of credits and loans assessed by means of individual and portfolio approaches.
CRD IV	Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC..
Credit risk	the risk of incurring losses as a result of counterparty's default in settlement of liabilities towards the Bank or the risk of decrease in the economic value of the Bank's receivables as a result of deterioration of the clients ability to service its debt; credit risk comprises credit value adjustment (CVA) risk, which is the risk of loss as a result of changing market and credit conditions (in particular as a result of a change in the probability of a counterparty default)..
Credit Value-at-Risk (CVaR)	a potential loss that should not be exceeded in relation to credit risk on the maintained credit portfolio, on the assumption that a defined confidence level and holding period of the position are kept.
CRR Regulation	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 and amending Regulation (EU) No 648/2012.
CSA (Credit Support Annex)	a collateral agreement – annex to the framework agreement..
Cumulated adjusted liquidity gap	the sum of all partial contractual liquidity gaps from the first a'vista interval to the interval for which the cumulated contractual liquidity gap is calculated.
Cut-off point	the minimum number of points awarded as a result of client creditworthiness assessment made using the scoring system (for individual clients) or the client or joint rating class (for institutional clients), starting from which a loan transaction may be concluded with a specific client.
CVA (Credit Value Adjustment)	adjustment of the valuation of derivatives reflecting counterparty credit risk.
Derivatives risk	risk associated with a position in a financial instrument, meeting all of the following criteria: the value of the instrument changes with the change in the underlying instrument, no net investment is required or only a relatively small (in comparison to other agreements that react similarly to changes in the market conditions) net investment is necessary, it is to be settled in the future.
DVA (Debt Value Adjustment)	adjustment of the valuation of liabilities and derivatives reflecting the Bank's own credit risk.
EaR (Earnings at risk	defines maximum deviation of net business income from expected value with an assumed range of confidence in a specified time horizon.
Price risk of equity securities	risk of loss related to changes in prices of equity securities on the public market or securities exchange indices, generated through the maintenance of open positions in instruments that are sensitive to changes in such market parameters.
Leverage risk	risk resulting from vulnerability due to financial leverage or conditional leverage that may require unintended corrective actions of business plans, including emergency sale of assets which could result in losses or result in the need for valuation adjustments of other assets.
Expected Loss, EL	a statistically assessed value of the mean (expected) credit risk loss that the bank expects to incur on the portfolio within one year.
Fair value	an amount for which a specific asset might be exchanged, and a liability discharged, within a market transaction between interested and informed unrelated parties.
Foreign currency retail mortgages risk	the risk of loss as a result of client's default or the risk of a decrease in the economic value of the Bank's foreign currency mortgage loans.
Foreign Exchange (FX) risk	risk of loss due to changes in the foreign exchange rates, generated through maintaining open currency positions in individual currencies.
FRA (Forward Rate Agreement)	a forward agreement for the interest rate. Counterparties determine the interest rate that will apply in the future for a specified amount in the currency of the transaction for a predetermined period.
Framework agreement	an agreement between parties regulating the principles of the Bank's co-operation with counterparties on the financial market with respect to forward financial transactions.
Funded credit risk protection	a credit risk mitigation technique, where the bank's credit risk related to exposure is reduced by that bank's right - in the case of the counterparty's default in the discharge of its liabilities, insolvency, bankruptcy or another credit event affecting that counterparty and specified in the documentation of the transaction, and, if required for the depositary keeping the collateral – to liquidate, transfer, acquire, or retain specific assets or amounts.

FX Swap	a foreign currency exchange swap. Counterparties determine the interest rate that will apply in the future for a specified amount in the currency of the transaction for a predetermined period.
IAS	the International Accounting Standards
IBNR (incurred but not reported)	a collection of credit exposures, for which an impairment has been recognized, with no individual impairment premises regarding specific exposures falling into this group.
Individual position for a specific foreign currency (the currency position)	the difference between total assets in a currency, off-balance sheet liabilities received and assets indexed to that currency on the one hand, and total liabilities in that currency, off-balance sheet liabilities awarded and liabilities indexed to that currency on the other hand.
Insurance risk	the risk of loss or unfavourable change of value of insurance liabilities due to inadequate assumptions regarding valuation and creation of provisions (technical and settlement provisions in particular).
Interest rate risk	risk of loss on the Bank's balance sheet and off-balance sheet items sensitive to interest rate changes, resulting from unfavourable interest rate changes on the market.
Internal capital	amount of capital, that is required to cover all identified significant types of risk present in the Bank's business activity and the effect of changes in its business environment, taking into account the anticipated risk level.
IRB (Internal Ratings Based Approach)	an internal ratings method used to determine the capital requirement for credit risk.
IRS (Interest Rate Swap)	a transaction involving a swap of interest rates. Counterparties pay each other (at specified intervals during the term of contract) interest on the contractual nominal value of the contract, calculated at a different interest rate.
ISDA	the International Swap and Derivatives Association.
ISMA	the International Securities Market Association.
Key Performance Indicators, KPI	financial and nonfinancial indicators used as measures in the process of measurements of the level in which objectives of an organisation are achieved.
Key Risk Indicators, KRI	simplified operational risk measure that is significant for a given area, application or process.
LDA (Loss Distribution Approach)	an approach in which historical data on internal and external events are used, as well as the information on the development of business environment factors for statistical measurement of operational risk.
LGD (Loss Given Default)	a loss suffered by the Bank in case of client's default.
Liquidity reserve	the difference between the most liquid assets and expected and potential liabilities that mature in a given period for a given currency.
Liquidity risk	the risk of inability to timely discharge of liabilities due to non-availability of liquid means.
LMA	the Loan Market Association.
LTV	ratio of the credit exposure amount to the value of the real property offered as collateral of that exposure.
Macroeconomic risk	a risk of deterioration of the Bank's financial condition in result of adverse impact of changes in macroeconomic conditions.
Model risk	possibility of suffering losses in result of wrong business decisions taken on the basis of functioning models.
Material Risk Takers (MRT)	members of the Management Board and key managers with a significant impact on the risk profile of the Bank.
NBP	the National Bank of Poland.
Operational risk	the risk of losses resulting from inadequacy or unreliability of the internal processes, the human factor and systems, or from external events; it includes legal risk and does not include reputation risk and business risk.
Outsourcing	use of external resources.
Own funds requirements	total own funds requirements for particular risk types and own funds requirements for exceeded limits and other violations of norms described in the CRR and CRD IV.
Partial adjusted liquidity gap	the difference between total assets and total liabilities, calculated for each maturity range; tells about a mismatch between matured assets and matured liabilities in a given tenor, their real-terms maturity date taken into account.
PBA	the Polish Bank Association.
PCBA	the Polish Classification of Business Activity.

Pre-settlement risk	the risk of the counterparty's losing creditworthiness while its transaction with the bank is pending .
Probability of Default, PD	a statistical assessment of the probability of a borrower's insolvency on the annual scale (defines the portfolio-related credit risk to become materialised in the future).
Rating method	a method for assessing the bank's credit risk involved in the financing of institutional clients, incurred when awarding or changing the essential terms of a loan transaction and in the period of performance of such transaction.
Recommendation	a list of best practices and suggestions for banks enacted by the Polish Financial Supervision Authority
Reputation risk	risk of reputation loss among customers, counterparties, investors, supervisors and public opinion, due to business decisions, operational events, noncompliance or other events
Settlement risk	the risk resulting from the counterparty's default in the discharge of its liabilities at the moment of settlement of the contract.
Strategic tolerance limit	acceptable risk level defined by the Management Board.
Stress test	a risk management tool used for assessment of the potential impact on the bank's situation of a specific event and/or changes in the market parameters not described in the standard manner with statistical measures.
Trading book	all positions in financial instruments and commodities held by an institution either with trading intent, or in order to hedge positions held with trading intent.
Unexpected Loss, UL	the maximum difference between the Bank's incurred loss at given probability during the year and the expected loss.
Value at risk (VaR)	a potential loss resulting from changes in the present value of cash flows from financial instruments, or a potential loss on the maintained currency positions due to changes in the foreign exchange rates, on the assumption that a defined confidence level and holding period of the position are kept.

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Declaration of the Management Board of PKO Bank Polski SA

The Management Board of PKO Bank Polski SA certifies that:

- To the best of its knowledge, information disclosed in accordance with section eight of the CRR was prepared in conformity with internal control processes
- To the best of its knowledge, the adequacy of rules related to risk management in PKO Bank Polski SA - particularly with the liquidity risk, guarantees that the risk management systems utilized are well suited to the risk profile and strategy of the Bank and the Group.
- Approves the Report "Capital adequacy and other information subject to disclosure of the PKO Bank Polski SA Group as of 31 December 2017", which contains risk-related information, describes the general risk profile, including liquidity risk of the Bank and the Capital Group, related to their operational strategy, and contains key indicators and data, available to interested external parties, allowing for a comprehensive view of risk management in PKO Bank Polski SA and the Capital Group, including interaction between the Bank's risk profile and risk tolerance in the form of strategic tolerance limits, defined by the Management Board and accepted by the Supervisory Board.

Signatures of all members of the Management Board of PKO Bank Polski SA

17.04.2018	Zbigniew Jagiełło	President of the Management Board	.... (signature)
17.04.2018	Rafał Antczak	Vice-President of the Management Board	.... (signature)
17.04.2018	Rafał Kozłowski	Vice-President of the Management Board	.... (signature)
17.04.2018	Maks Kraczkowski	Vice-President of the Management Board	.... (signature)
17.04.2018	Mieczysław Król	Vice-President of the Management Board	.... (signature)
17.04.2018	Adam Marciniak	Vice-President of the Management Board	.... (signature)
17.04.2018	Piotr Mazur	Vice-President of the Management Board	.... (signature)
17.04.2018	Jakub Papierski	Vice-President of the Management Board	.... (signature)
17.04.2018	Jan Emeryk Rościszewski	Vice-President of the Management Board	.... (signature)