

2019

**Disclosures regarding capital adequacy
of mBank S.A. Group
as at 31 December 2019**



**Warsaw, 3 March 2020
(update – 11 August 2020)**

Contents

1.	Introduction.....	3
2.	Scope of prudential consolidation	3
3.	Capital adequacy	6
4.	Own funds	6
	4.1. Main information	6
	4.2. Structure of consolidated own funds.....	13
5.	Capital requirement.....	15
	5.1. Assessment of adequacy of internal capital – description of the approach	15
	5.2. Results of the internal capital adequacy assessment	15
	5.3. Additional information regarding AIRB	16
	5.4. Supervisory requirements regarding capital ratio	33
	5.5. Quantitative data regarding capital adequacy.....	36
6.	Leverage ratio	47
7.	Credit risk mitigation techniques	50
	7.1. Collateral valuation and management.....	50
	7.2. Main types of collateral	52
	7.3. Market or credit risk concentration	53
8.	Credit risk adjustments	59
	8.1. Overdue and impaired exposures – definitions used	59
	8.2. Quantitative information	60
9.	Operational risk	74
10.	Liquidity risk	75
11.	Transitional arrangements concerning IFRS 9	81
12.	Remuneration Policy for employees having material impact on the risk profile	82
13.	Remuneration policy for employees having material impact on the risk profile - update of the information after the approval of the variable part of remuneration, regarding 2019 year, by the competent authorities of mBank	88

1. Introduction

On the basis of Regulation (UE) 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 as amended (hereinafter referred to as CRR Regulation) and on the basis of other regulations laying down implementing technical standards with regard to information disclosure, Commission delegated regulations (EU) supplementing the CRR Regulation with regard to regulatory technical standards regarding disclosure of information, Guidelines of the European Banking Authority regarding disclosure of information, also in accordance with the Disclosure Policy of mBank SA (hereinafter referred to as mBank) available on website www.mbank.pl, information based on the data for mBank SA Group pru-

dentially consolidated (hereinafter referred to as mBank Group) according to the requirements of the CRR Regulation are contained in the presented document.

Entities included in prudential consolidation according to the rules of the CRR Regulation were taken into account in the process of calculation of consolidated own funds and consolidated own funds requirements as at 31 December 2019. The scope of entities included in prudential consolidation is different from the scope of entities included in accounting consolidation based on International Financial Reporting Standards (hereinafter referred to as the IFRS).

If not stated specifically further in the report, all the amounts are presented in PLN thousand.

2. Scope of prudential consolidation

According to the CRR Regulation, mBank as a significant subsidiary of an EU parent institution prepares the consolidated prudentially financial data based on the rules of prudential consolidation described in the CRR Regulation.

The consolidated prudentially financial data of mBank Group as at 31 December 2019 prepared in accordance with the CRR Regulation (hereinafter referred to as Prudentially consolidated financial data for the year 2019) is presented in the Explanatory Note 44 of mBank Group International Financial Reporting Standards Consolidated Financial Statements for 2019 (hereinafter referred to as the Consolidated Financial Statements for the year 2019).

The accounting policies applied for the preparation of the Prudentially consolidated financial data for 2019 are the same as those, which have been applied to the Consolidated Financial Statements for the year 2019, except for the consolidation standards presented below. The consolidated profit presented in the Prudentially consolidated financial data for the year 2019 may be included in consolidated Common Equity Tier 1 for the purpose of calculation of consolidated Common Equity Tier 1 capital ratio, consolidated Tier 1 capital ratio and consolidated total capital ratio with the prior permission of the Polish Financial Supervisory Authority (hereinafter referred to as PFSA) or the General Meeting decision on profit division.

Entities included in prudential consolidation are defined in the CRR Regulation as institutions, financial institutions or ancillary services undertakings, which are subsidiaries or undertakings in which a participation is held, except for entities in which the total amount of assets and off-balance sheet items of the undertaking concerned is less than the smaller of the following two amounts:

- EUR 10 million;
- 1% of the total amount of assets and off-balance sheet items of the parent undertaking or the undertaking that holds the participation.

The Prudentially consolidated financial data for the year 2019 include the following entities:

1. mBank S.A.
2. mBank Hipoteczny S.A.
3. mCentrum Operacji Sp. z o.o. w likwidacji
4. mFaktoring S.A.
5. mFinance France S.A.
6. mFinanse S.A.
7. mLeasing Sp. z o.o.
8. Tele-Tech Investment Sp. z o.o.
9. Future Tech Fundusz Inwestycyjny Zamknięty
10. Asekum Sp. z o.o.
11. LeaseLink Sp. z o.o.

Detailed information on consolidated entities included in accounting consolidation is presented in Explanatory Note 1 of the Consolidated Financial Statements for the year 2019.

Reconciliation between the Consolidated Financial Statements for the year 2019 and the Prudentially consolidated financial data for the year 2019 is presented below.

Reconciliation	Consolidated Financial Statements for the year 2019	Deconsolidation of entities not included in prudential consolidation	Prudentially consolidated financial data for the year 2019
ASSETS	31.12.2019	31.12.2019	31.12.2019
Cash and balances with the Central Bank	7 897 010	0	7 897 010
Financial assets held for trading and hedging derivatives	2 866 034	0	2 866 034
Non-trading financial assets mandatorily at fair value through profit or loss	2 267 922	7 850	2 275 772
Financial assets at fair value through other comprehensive income	22 773 921	0	22 773 921
Financial assets at amortised cost	118 779 885	-1 192	118 778 693
Non-current assets and disposal groups classified as held for sale	10 651	80 954	91 605
Intangible assets	955 440	0	955 440
Tangible assets	1 262 397	0	1 262 397
Current income tax assets	12 662	0	12 662
Deferred income tax assets	937 712	0	937 712
Other assets	956 949	-21	956 928
TOTAL ASSETS	158 720 583	87 591	158 808 174
LIABILITIES AND EQUITY			
LIABILITIES			
Financial liabilities held for trading and hedging derivatives	948 764	0	948 764
Financial liabilities measured at amortised cost	137 763 369	90 241	137 853 610
Fair value changes of the hedged items in portfolio hedge of interest rate risk	136	0	136
Liabilities classified as held for sale	1 315	-1 315	-
Provisions	739 296	0	739 296
Current income tax liabilities	161 534	0	161 534
Deferred income tax liabilities	82	0	82
Other liabilities	2 952 782	-1 335	2 951 447
TOTAL LIABILITIES	142 567 278	87 591	142 654 869
EQUITY			
Equity attributable to Owners of mBank S.A.	16 151 303	0	16 151 303
Share capital:	3 579 818	0	3 579 818
- Registered share capital	169 401	0	169 401
- Share premium	3 410 417	0	3 410 417
Retained earnings:	12 394 775	0	12 394 775
- Profit from the previous years	11 384 425	0	11 384 425
- Profit for the current year	1 010 350	0	1 010 350
Other components of equity	176 710	0	176 710
Non-controlling interests	2 002	0	2 002
TOTAL EQUITY	16 153 305	0	16 153 305
TOTAL LIABILITIES AND EQUITY	158 720 583	87 591	158 808 174

Below the reconciliation of equity is presented, from the items included in the Consolidated Financial Statements for the year 2019 via the Prudentially consolidated financial data for the year 2019, to the items included in Common Equity Tier 1 capital of mBank Group as at 31 December 2019.

Reconciliation	Consolidated Financial Statements for the year 2019	Deconsolidation of entities not included in prudential consolidation	Prudentially consolidated financial data for the year 2019	Items not included in own funds and regulatory adjustments	Own funds (Tier 1 capital)
Equity	31.12.2019	31.12.2019	31.12.2019	31.12.2019	31.12.2019
Share capital:	3 579 818	0	3 579 818	-71	3 579 747
- Registered share capital	169 401	0	169 401	-71	169 330
- Share premium	3 410 417	0	3 410 417	0	3 410 417
Retained earnings:	12 394 775	0	12 394 775	-762 550	11 632 225
- Other supplementary capital	9 826 282	0	9 826 282	0	9 826 282
- Other reserve capital	98 316	0	98 316	0	98 316
- General banking risk reserve	1 153 753	0	1 153 753	0	1 153 753
- Undistributed profit from the previous years	306 074	0	306 074	0	306 074
- Profit from the current year	1 010 350	0	1 010 350	-762 550	247 800
Other components of equity	176 710	0	176 710	0	176 710
- Exchange differences on translation of foreign operations	-5 435	0	-5 435	0	-5 435
- Cash flow hedges	119 142	0	119 142	0	119 142
- Valuation of financial assets at fair value through other comprehensive income	74 321	0	74 321	0	74 321
- Actuarial gains and losses related to post-employment benefits	-11 318	0	-11 318	0	-11 318
Non-controlling interests	2 002	0	2 002	-2 002	0
Regulatory adjustments:	0	0	0	-1 505 817	-1 505 817
- Intangible assets	0	0	0	-927 456	-927 456
- AIRB shortfall of credit risk adjustments to expected losses	0	0	0	-43 022	-43 022
- LLP's	0	0	0	-385 174	-385 174
- Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities	0	0	0	-2 166	-2 166
- Provision for cash flow hedging instruments	0	0	0	-119 142	-119 142
- Additional value adjustments	0	0	0	-28 857	-28 857
Total equity	16 153 305	0	16 153 305	-2 270 440	13 882 865

The prudentially consolidated profit & loss account for mBank Group as at 31 December 2019 presents the net profit amounting to PLN 1 010 252 thousand and the net profit for shareholders of mBank S.A. amounting to PLN 1 010 350 thousand.

3. Capital adequacy

One of the main tasks of the balance sheet management is to ensure an appropriate level of capital. Within the framework of the capital management policy of mBank Group, mBank prepares the guidelines for the most effective planning and use of capital basis which:

- are compliant with external and internal regulations in force,
- guarantee a continuity of financial targets achievement, which render an appropriate rate of return for shareholders,
- ensure the maintenance of a strong capital basis being a fundamental support for business development.

The capital management policy in mBank Group is based on two basic pillars:

- maintenance of an optimal level and structure of own funds with the application of available methods and means, like among others retention of net profit, subordinated loan or issue of shares,
- effective use of existing capital, among others through application of a set of measures

of effective use of the capital, limitation of activities that do not provide an expected rate of return and development of products with lower capital absorption.

Effective use of capital is an integral part of the capital management policy oriented at reaching an optimal rate of return on capital and as a result forming a stable fundament of reinforcement of the capital basis in future periods. This enables to maintain the Common Equity Tier 1 capital ratio (calculated as a quotient of Common Equity Tier 1 capital to the total risk exposure amount), Tier 1 ratio (calculated as a quotient of Tier 1 capital to the total risk exposure amount) and the total capital ratio (calculated as a quotient of own funds to the total risk exposure amount) at least on the level required by the supervision authority.

The capital strategic goals of mBank Group are aimed at maintaining the total capital ratio, as well as the Tier 1 capital ratio and the Common Equity Tier 1 capital ratio above the level required by the supervision authority. It allows business development while meeting the supervisory requirements in the long perspective.

4. Own funds

The consolidated own funds consist of Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital. Detailed information on particular elements of consolidated own funds of mBank Group as at 31 December 2019 is presented in point 4.1. In point 4.2 the structure of consolidated own funds of mBank Group as at 31 December 2019 is presented.

4.1. Main information

COMMON EQUITY TIER 1 CAPITAL

Capital instruments and the related share premium accounts

In the item Capital instruments and the related share premium accounts, the share capital and share premium capital from sales of shares over the nominal value of mBank Group prudentially consolidated were included as at 31 December 2019.

Capital instruments and the related share premium accounts	
Registered share capital	169 330
Share premium	3 410 417
Total	3 579 747

Detailed information on share and supplementary capital from sales of shares over the nominal value is described in Explanatory Notes 35 and 36 of the Consolidated Financial Statements for 2019.

Retained earnings

In Retained earnings item the profit from the previous years of mBank Group prudentially consolidated as at 31 December 2019 in the amount of PLN 306 074 thousand were included. Detailed information regarding retained earnings is described in Explanatory Notes 37 of the Consolidated Financial Statements for 2019.

Accumulated other comprehensive income (and other reserve capital)

Accumulated other comprehensive income as at 31 December 2019 amounted to PLN 176 710 thousand. The structure of accumulated other comprehensive income of mBank is presented below.

Accumulated other comprehensive income	
Exchange differences on translation of foreign operations	-5 435
Cash flow hedges	119 142
Valuation of financial assets at fair value through other comprehensive income	74 321
Actuarial gains and losses related to post-employment benefits	-11 318
Total	176 710

Other reserve capital mBank Group prudentially consolidated as at 31 December 2019 amounted to PLN 9 924 598 thousand. The structure of accumulated other comprehensive income of mBank Group prudentially consolidated as at 31 December 2019 is presented below.

Other reserve capital	
Other supplementary capital	9 826 282
Other reserve capital	98 316
Total	9 924 598

Accumulated other comprehensive income and other reserve capital of mBank Group prudentially consolidated as at 31 December 2019 amounted to PLN 10 101 308 thousand.

Funds for general banking risk

mBank Group transfers some of its net profit to the funds for general banking risk to cover unexpected risk and future losses. The funds for general banking risk can be distributed only on consent of shareholders at the General Meeting. As at 31 December 2019 the funds for general banking risk of mBank Group prudentially consolidated amounted to PLN 1 153 753 thousand.

Independently reviewed interim profits

Verified net profit of mBank Group prudentially consolidated for the first half-year of 2019, reduced by every foreseeable charges, was included in the calculation of consolidated Common Equity Tier 1 capital as at 31 December 2019 in accordance with the permission of PFSA obtained on 28 August of 2019 to include the net profit of mBank Group prudentially consolidated in Common Equity Tier 1 capital.

The net profit of mBank Group prudentially consolidated for the first half-year of 2019 reduced by every foreseeable charges amounted to PLN 247 800 thousand.

REGULATORY ADJUSTMENTS / DEDUCTIONS FROM THE COMMON EQUITY TIER 1 CAPITAL

Additional value adjustments

In accordance with Article 34 of the CRR Regulation, additional value adjustments have been calculated to all assets measured at fair value in accordance with the requirements of Article 105 of the CRR Regulation and included in Common Equity Tier 1 capital of mBank Group prudentially consolidated as at 31 December 2019 in the amount of PLN 28 857 thousand.

Intangible assets

In accordance with Article 37 of the CRR Regulation, intangible assets reduced by the amount of associated deferred tax liabilities are included in Common Equity Tier 1 capital. The value included in Common Equity Tier 1 capital of mBank Group prudentially consolidated as at 31 December 2019 amounted to PLN 927 456 thousand.

Reserve capital reflecting the fair value associated with gains or losses on cash flow hedging instruments

In accordance with Article 33 of the CRR Regulation, regulatory adjustments in the amount of PLN 119 142 thousand regarding accumulated other comprehensive income as at 31 December 2019 constituting the Reserve capital reflecting the fair value associated with gains or losses on cash flow hedging instruments item, correct the item accumulated other comprehensive income, mentioned above.

Negative amount resulting from the calculation of expected loss amounts

mBank Group, in calculating risk-weighted exposure amounts with the application of the AIRB approach, is obliged to include in calculation of own funds the negative amounts resulting from the calculation of expected loss amounts. According to Article 36 (1d), the negative amounts resulting from the calculation specified in Articles 158 and 159 of the CRR Regulation were included in consolidated Common Equity Tier 1 capital of mBank Group prudentially consolidated as at 31 December 2019 in the amount of PLN 43 022 thousand.

Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities

In accordance with Article 33(2) of the CRR Regulation, the fair value gains and losses arising from the mBank Group's own credit risk related to derivative liabilities are not offset profit and losses measured at fair value resulting from the mBank Group's own credit risk with similar profit and losses arising from its counterparty credit risk. As at 31 December 2019 the amount of PLN 2 166 thousand from fair value gains and losses measured at fair value was included in Common Equity Tier 1 capital of mBank Group.

Net impairment losses

In Net impairment losses item as at 31 December 2019 the impairment or reversal of impairment on financial assets not measured at fair value through profit or loss for the second half of the year 2019 were included in the amount of PLN 385 174 thousand. Applied approach is compliant with the provisions of the Commission delegated Regulation (EU) No 183/2014 of 20 December 2013 supplementing the CRR Regulation with regard to regulatory technical standards for specifying the calculation of specific and general credit risk adjustments.

ADDITIONAL TIER 1 CAPITAL

In mBank Group, items that could be treated as Additional Tier 1 capital are not identified.

TIER 2 CAPITAL

Capital instruments and the related share premium accounts

Pursuant to the PFSA decision dated 8 January 2015, mBank obtained a written permission to include in Tier 2 capital the amount of PLN 750 000 thousand constituting subordinated liabilities from the bonds issue dated 17 December 2014 on total nominal value of PLN 750 000 thousand with the redemption date on 17 January 2025. The issue meets all the requirements of the CRR Regulation.

Pursuant to the PFSA decision of 29 March 2018, mBank obtained a permission to classify cash in the amount of CHF 250 000 thousand as instruments in Tier 2 capital, in accordance with the terms of the loan agreement concluded between mBank S.A. and Commerzbank AG.

Pursuant to the PFSA decision of 28 November 2018, mBank obtained a permission to classify subordinated bonds with a nominal value of PLN 550 000 thousand, issued by the Bank on 9 October 2018 with the redemption date on October 10 October 2028, as instruments in Tier 2 capital.

Pursuant to the PFSA decision of 28 November 2018, mBank obtained a permission to classify subordinated bonds with a nominal value of PLN 200 000 thousand, issued by the Bank on 9 October 2018 with the redemption date on October 10 October 2030, as instruments in Tier 2 capital.

As at 31 December 2019 the amount of PLN 2 480 325 thousand was included in consolidated Tier 2 capital from the virtue of the above mentioned tranches of capital instruments.

In accordance with the provisions of Commission implementing Regulation (EU) No 1423/2013 of 20 December 2013 laying down implementing technical standards with regard to disclosure of own funds requirements for institutions according to the CRR Regulation (hereinafter referred to as Regulation No 1423/2013), the description of capital instruments' main features included in Tier 1 and Tier 2 capital of mBank Group prudentially consolidated as at 31 December 2019 is presented on subsequent pages of the current document, prepared based on Appendix No 2 to the Regulation No 1423/2013.

TOTAL CAPITAL

The amount of consolidated own funds of mBank Group prudentially consolidated as at 31 December 2019 was presented in Total capital item constituting the sum of consolidated Common Equity Tier 1 capital and consolidated Tier 2 capital.

The consolidated own funds of mBank Group as at 31 December 2019 amounted to PLN 16 363 190 thousand

Capital instruments' main features of Tier 1 capital

No	Items	Common Equity Tier 1 capital	
1	Issuer	mBank S.A.	
2	Unique identifier (eg. CUSIP or Bloomberg identifier for private placement)	PLBRE000012	
3	Governing law(s) of the instrument	Polish	
	<i>Regulatory treatment</i>		
4	Transitional CRR rules	CET1 capital	
5	Post-transitional CRR rules	CET1 capital	
6	Eligible at solo/(sub-)consolidated / solo & (sub-)consolidated	Solo and (sub-) consolidated	
7	Instrument type (types to be specified by each jurisdiction)	Common shares	
8	Amount recognised in regulatory capital (currency in m, as of most recent reporting date)	mPLN 169	
9	Nominal amount of instrument	PLN 4	
9a	Issue price	PLN 4	
9b	Redemption price	N/A	
10	Accounting classification	Equity capital	
11	Original issue date (Registration year, Number of shares issued)	Registration year	Number of shares
		1986	9,988,000
		1986	12,000
		1994	2,500,000
		1995	2,000,000
		1997	4,500,000
		1998	3,800,000
		2000	170,500
		2004	5,742,625
		2005	270,847
		2006	532,063
		2007	144,633
		2008	30,214
		2010	12,395,792
		2011	16,072
		2012	36,230
		2013	35,037
2014	36,044		
2015	28,867		
2016	41,203		
2017	31,995		
2018	20,344		
12	Perpetual or dated	Perpetual	
13	Original maturity date	No maturity	
14	Issuer call subject to prior supervisory approval	N/A	
15	Optional call date, contingent call dates and redemption amount	N/A	
16	Subsequent call dates, if applicable	N/A	

	<i>Coupons / dividends</i>	
17	Fixed or floating dividend/coupon	Floating
18	Coupon rate and any related index	N/A
19	Existence of a dividend stopper	No
20a	Fully discretionary or mandatory (in terms of timing)	Fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary
21	Fully discretionary, partially discretionary or mandatory (in terms of amount)	No
22	Noncumulative or cumulative	N/A
23	Convertible or non-convertible	Non-convertible
24	If convertible or non-convertible, conversion trigger(s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts info	N/A
30	Write-down features	No
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	N/A
36	Non-compliant transitional features	No
37	If yes, specify non-compliant features	N/A

Capital instruments' main features of Tier 2 capital

No	Tranche	750 mln PLN	250 mln CHF	550 mln PLN	200 mln PLN
1	Issuer	mBank S.A.	mBank S.A.	mBank S.A.	mBank S.A.
2	Unique identifier (eg. CUSIP or Bloomberg identifier for private placement)	ISIN: PLBRE0005185 Seria: MBKO170125	N/A	Seria: MBKO101028	Seria: MBKO101030
3	Governing law(s) of the instrument	Polish	German and Polish in relations to subordination	Polish	Polish
	<i>Regulatory treatment</i>				
4	Transitional CRR rules	Tier 2; Art. 63	Tier 2; Art. 63	Tier 2; Art. 63	Tier 2; Art. 63
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/(sub-)consolidated / solo & (sub-)consolidated	Solo and (Sub-) consolidated	Solo and (Sub-) consolidated	Solo and (Sub-) consolidated	Solo and (Sub-) consolidated
7	Instrument type (types to be specified by each jurisdiction)	Bond „instrumenty kapitałowe”- Polish Banking Act Art.127.2.2	Loan „pożyczki podporządkowane”- Polish Banking Act Art.127.2.2	Bond „instrumenty kapitałowe”- Polish Banking Act Art.127.2.2	Bond „instrumenty kapitałowe”- Polish Banking Act Art.127.2.2
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	mPLN 750	mCHF 250	mPLN 550	mPLN 200
9	Nominal amount of instrument	In issuance currency: PLN 750 million; in reporting currency: PLN 750 million	In issuance currency: CHF 250 million; in reporting currency: PLN 954 million	In issuance currency: PLN 550 million; in reporting currency: PLN 550 million	In issuance currency: PLN 200 million; in reporting currency: PLN 200 million
9a	Issue price	100.00%	Not applicable	100.00%	100.00%
9b	Redemption price	100.00%	Not applicable	100.00%	100.00%
10	Accounting classification	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original date of issue	17-12-2014	21-03-2018	09-10-2018	09-10-2018
12	Perpetual or dated	Dated	Dated	Dated	Dated
13	Original maturity date	17-01-2025	21-03-2028	10-10-2028	10-10-2030
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates and redemption amount	1) 17-01-2020 No minimum amount; at price 100%; 2) Redemption due to a regulatory event (PFSA consent required, notification of investors) at a price of 100%, at any Interest Payment Date	1) 21-03-2023; integral multiples of CHF 10 mn; notification of the lender, PFSA consent required; 2) Redemption due to a tax or regulatory event (PFSA consent required); at the end of Interest Period; notification of the lender	1) 10-10-2023 No minimum amount; at price 100%; 2) Redemption due to a regulatory event (PFSA consent required, notification of investors) at a price of 100%, at any Interest Payment Date	1) 10-10-2025 No minimum amount; at price 100%; 2) Redemption due to a regulatory event (PFSA consent required, notification of investors) at a price of 100%, at any Interest Payment Date
16	Subsequent call dates, if applicable	Redemption due to a regulatory event (PFSA consent required, notification of investors) at a price of 100%, at any Interest Payment Date	1) integral multiples of CHF 10 mn; notification of the lender, PFSA consent required; at the end of any Interest Period falling not earlier than the 5 th anniversary of the Drawdown Date 2) Redemption due to a tax or regulatory event (PFSA consent required); at the end of Interest Period; notification of the lender	Redemption due to a regulatory event (PFSA consent required, notification of investors) at a price of 100%, at any Interest Payment Date	Redemption due to a regulatory event (PFSA consent required, notification of investors) at a price of 100%, at any Interest Payment Date

No	Tranche	750 mln PLN	250 mln CHF	550 mln PLN	200 mln PLN
	<i>Coupons / dividends</i>				
17	Fixed or floating dividend/coupon	Floating	Floating	Floating	Floating
18	Coupon rate and any related index	WIBOR 6M + 2,10%	CHF LIBOR 3M + 2,75%	WIBOR 6M + 1,80%	WIBOR 6M + 1,95%
19	Existence of a dividend stopper	No	No	No	No
20a	Fully discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No
22	Noncumulative or cumulative	Noncumulative	Noncumulative	Noncumulative	Noncumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible or non-convertible, conversion trigger(s)	Not applicable	Not applicable	Not applicable	Not applicable
25	If convertible, fully or partially	Not applicable	Not applicable	Not applicable	Not applicable
26	If convertible, conversion rate	Not applicable	Not applicable	Not applicable	Not applicable
27	If convertible, mandatory or optional conversion	Not applicable	Not applicable	Not applicable	Not applicable
28	If convertible, specify instrument type convertible into	Not applicable	Not applicable	Not applicable	Not applicable
29	If convertible, specify issuer of instrument it converts into	Not applicable	Not applicable	Not applicable	Not applicable
30	Write-down features	No	No	No	No
31	If write-down, write-down trigger(s)	Not applicable	Not applicable	Not applicable	Not applicable
32	If write-down, full or partial	Not applicable	Not applicable	Not applicable	Not applicable
33	If write-down, permanent or temporary	Not applicable	Not applicable	Not applicable	Not applicable
34	If write-down, description of write-up mechanism	Not applicable	Not applicable	Not applicable	Not applicable
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Receivables from subordinated liabilities not included in the Bank's own funds, including interest and costs of enforcement	Receivables from subordinated liabilities not included in the Bank's own funds, including interest and costs of enforcement	Receivables from subordinated liabilities not included in the Bank's own funds, including interest and costs of enforcement	Receivables from subordinated liabilities not included in the Bank's own funds, including interest and costs of enforcement
36	Non-compliant transitioned features	No	No	No	No
37	If yes, specify non-compliant features	Not applicable	Not applicable	Not applicable	Not applicable

4.2 Structure of consolidated own funds

In accordance with the provisions of Regulation No 1423/2013, the structure of own funds is presented below based on Appendix No 4 to the Regulation No 1423/2013.

	Common Equity Tier 1 capital (instruments and reserves)	Amount at disclosure date
1	Capital instruments and the related share premium accounts	3 579 747
2	Retained earnings	306 074
3	Accumulated other comprehensive income (and other reserve capital)	10 101 308
3a	Funds for general banking risk	1 153 753
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	247 800
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	15 388 682
Common Equity Tier 1 capital: regulatory adjustments		
7	Additional value adjustments	-28 857
8	Intangible assets (net related tax liability)	-927 456
11	Reserve capital reflecting the fair value associated with gains or losses on cash flow hedging instruments	-119 142
12	Negative amount resulting from the calculation of expected loss amounts	-43 022
14a	Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities	-2 166
14b	Net impairment losses	-385 174
28	Total regulatory adjustments to Common Equity Tier 1	-1 505 817
29	Common Equity Tier 1 capital	13 882 865
Additional Tier 1 capital: instruments		
36	Additional Tier 1 capital before regulatory adjustments	0
Additional Tier 1 capital: regulatory adjustments		
43	Total regulatory adjustments to Additional Tier 1 capital	0
44	Additional Tier 1 capital	0
45	Tier 1 capital (CET1 + AT1)	13 882 865
Tier 2 capital: instruments and provisions		
46	Capital instruments and the related share premium accounts	2 480 325
51	Tier 2 capital before regulatory adjustments	2 480 325
Tier 2 capital: regulatory adjustments		
57	Total regulatory adjustments to Tier 2 capital	0
58	Tier 2 capital	2 480 325
59	Total capital (T1 + T2)	16 363 190
60	Total risk weighted assets	84 105 802
Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	16,51%
62	Tier 1 (as a percentage of risk exposure amount)	16,51%
63	Total capital (as a percentage of risk exposure amount)	19,46%
63a	Additional own funds requirement related to Pillar II adjustments to cover FX lending risk to unhedged borrowers*	3,11%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systematic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	6,14%
65	of which: capital conservation buffer requirement	2,50%
66	of which: countercyclical buffer requirement	0,06%
67	of which: systemic risk buffer requirement	2,83%
67a	of which: Global Systemically Important Institution (G-SII) or Other System Important Institution (O-SII) buffer	0,75%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount), after covering additional own funds requirement related to Pillar II adjustments	8,18%

Amounts below the deduction thresholds (before risk weighting)		
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	0
73	Direct and indirect holdings by an institution of the CET1 instruments of financial sector entities where the institution have a significant investment in these entities (amount below 10% threshold and net of eligible short positions)	85 319
75	Deferred tax assets arising for temporary differences (amount below 10% threshold, net related tax liability where the conditions in Article 38 (3) are met)	965 783
Applicable caps on the inclusion of provisions in Tier 2		
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	0
77	Cap on inclusion of credit risk adjustment in T2 under standardised approach	0
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	0
79	Cap on inclusion of credit risk adjustment in T2 under internal ratings-based approach	0

* Additional own funds requirement related to Pillar II adjustments updated in 2019 based on an administrative decision of PFSA of October 15th, 2018 and subsequent correspondence of November 29th, 2019 . Detailed information on additional own funds requirement related to Pillar II are available in section 5.4 Supervisory requirements regarding capital ratios.

5. Capital requirement

5.1. Assessment of adequacy of internal capital – description of the approach

On 4 July 2012 PFSA and Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) granted consent to the application of the advanced internal rating based approach (AIRB approach) by mBank to the calculation of the capital requirement for credit risk for the corporate portfolio and the retail mortgage loan portfolio. Additionally, on 27 August 2012 BaFin in cooperation with PFSA granted consent to the application of internal rating based approach concerning the risk weighting for specialized lending exposures (IRB slotting approach) by mBank Hipoteczny SA (hereinafter referred to as the mBH) to the calculation of the capital requirement for credit risk.

On 22 September 2016 mBank SA obtained approval from ECB and PFSA to the application of AIRB approach to the calculation of the capital requirement for credit risk for the specialized lending exposures - income producing real estate. On 25 July 2016 mLeasing obtained approval from ECB and PFSA to the application of the AIRB approach to the calculation of capital requirement for credit risk.

On 4 November 2014 mBank SA received conditional consent of PFSA to use AIRB approach to the calculation of capital requirement for credit risk.

5.2. Results of the internal capital adequacy assessment

mBank Group adjusts the own funds to the level and type of risk, mBank Group is exposed to and to the nature, the scale and the complexity of its operations. For that purpose Internal Capital Adequacy Assessment Process (ICAAP) is realized in mBank Group. The aim of this process is to maintain own funds at the level adequate to the profile and the level of risk in mBank Group's operations.

Internal capital is the amount of capital estimated by mBank and required to cover all material risks identified in mBank Group's operations. Internal capital is the total sum of the economic capital to cover risks included in economic capital calculation and capital necessary to cover other risks (including hard to quantify risks).

In 2019 mBank calculated the economic capital at the 99,91% confidence level over a one-year time horizon for credit, market and business risk. The economic capital for operational risk was calculated using an algorithm based on the new Basel 4 standard (new standardized approach).

The standardized approach applied to calculation of the capital charge for operational risk. Bank calculated capital to cover other risk types (including hard

to quantify risks). Diversification between different risks was not included while calculating total economic capital.

to quantify risks). Diversification between different risks was not included while calculating total economic capital.

tion of capital requirement for credit risk with respect to non-mortgage retail exposures. On 22 May 2017 mBank SA received consent to remove the supervisory floor, according to which the minimum own funds requirement for credit risk in this portfolio had to be maintained at least at the level required in the standardised approach. On 6 May 2015 mBank SA received conditional consent of PFSA to use AIRB approach for retail mortgage loan portfolio (micro companies) and for the portfolio of commercial banks.

On 31 January 2018 mBank SA obtained approval from European Central Bank and PSFA to the application of material change in PD model for subsidiary mLeasing.

In the calculation of the total capital ratio of mBank Group as of 31 December 2019, when calculating the total capital charge, the mBank Group applies the AIRB approach pursuant to the provisions of the CRR Regulation to calculate a capital charge for credit and counterparty credit risk and pursuant to obtained AIRB approvals.

- risk inventory in mBank Group,
- calculation of internal capital for coverage of risk,
- capital aggregation,
- stress tests,
- setting limits on the utilization of capital resources,
- planning and allocation of capital,
- monitoring consisting in a permanent identification of risk involved in the business of mBank Group and the analysis of the level of capital for risk coverage.

In order to assess the adequacy of internal capital mBank calculates risk coverage potential (RCP), i.e. economic own funds. Having estimated internal capital as well as RCP both under normal and under stressed conditions Bank determines risk absorbance

capacity. On this basis and taking into account the forecast values limits for economic capital for particular risks are determined.

Risk Coverage Potential in mBank Group stays well above economic capital.

5.3. Additional information regarding AIRB

Description of the internal rating process, provided separately for each class of exposures, addressing disclosure requirements of art. 452 (c) of CRR

Corporates and Commercial Banks

The process of rating corporate banking clients is an integral part of the lending process. Without a rating it is impossible to make a credit decision.

There are two types of rating used to assess corporate clients and exposures:

- 1) PD-rating - (PD - Probability of Default) assessment of the client's risk of default construed as the probability of default (client's default on obligations) over a 12-month period,
- 2) EL-rating - (EL - Expected Loss) assessment of the probability of a loss, taking into account the client's risk of default, structure and nature of credit products, and type and size of accepted collateral.

In order to ensure unbiased assessment and management of credit risk, mBank applies uniform rules based, in particular, on the separation of credit risk assessment function from the sales function at all levels. The sales units make the initial assessment of a client and propose a PD-rating which is then subject to independent assessment and approval of Risk Line representatives. By approving the credit risk level, the Risk Line representatives take full responsibility for its correct assessment.

Correct assessment of credit risk requires complete, valid and reliable information on the client. At a further stage of the analysis, the information affects not only PD-rating, but also other risk parameters (Exposure at Default (EAD), Loss Given Default (LGD), and consequently EL-rating). mBank indicated a list of documents which the clients are obliged to submit for the purpose of assessing their risk level and required collateral. Furthermore, in the credit agreements mBank specifies a list of documents the clients undertake to submit to mBank for the purpose of verifying/updating their assessment and updating the valuation of collateral, and obliges the clients to notify mBank of any events affecting their creditworthiness. When submitted, the documents are veri-

fied in terms of compliance with mBank's requirements and formal correctness.

The internal capital adequacy assessment process is accepted by the Supervisory Board of mBank. The whole internal capital adequacy assessment process is reviewed annually. The Management Board of mBank is responsible for the internal capital adequacy assessment process in mBank Group.

Acting in line with the Banking Law and Basel recommendations, when assessing credit risk mBank takes into account the mutual relations and links between entities, as they may lead to a situation when financial problems faced by one entity translate into financial problems of another. The relations referred to above are verified by way of analysing the entity's affiliation to a group of related entities (GPP), and then are taken into account in credit risk assessment, mainly through:

- calculating PD-rating based on consolidated data, provided that the entity draws up Consolidated Financial Statements;
- including the PD-rating of the dominant entity in the assessment of its subsidiary, proportionally to the degree of the group's integration.

When assessing foreign entities (non-residents), mBank takes into account the risk of the country of their origin.

The assessment and PD-rating calculation for corporate clients take place in one of the following systems:

- 1) RC-POL,
- 2) Central Commerzbank PD model for Commercial Banks,
- 3) System for Property Insurance Institutions,
- 4) System for Life Insurance Institutions,
- 5) System for Investment Funds,
- 6) System for Pension Funds,
- 7) System for Local Governments (JST),
- 8) System for Specialized Lending Entities (SPL),
- 9) Brokerage operations – expert system for selected clients (who meet specific criteria) who conduct brokerage operations connected with the securities and commodities market,
- 10) Model PD for Sovereigns (central Commerzbank model for governments and central banks)
- 11) Expert System – dedicated to the remaining corporate banking clients.

The RC-POL system covers 2 rating segments (SME and Corporations) used depending on the amount of the client's average, annual net revenues from the sales of products, commodities and materials:

- a) RC-POL SME revenues \leq PLN 50 million,
- b) RC-POL Corporations revenues $>$ PLN 50 million.

The detailed principles for assigning corporate banking clients to a given rating system are set out in mBank's internal regulations.

The process of assigning PD-rating is supported by Credit System (SK), an IT application based on a workflow platform. The process takes place individually for each entity applying to mBank for a credit risk product. The calculation of PD-rating takes the following into account: analysis of financial data comprised in the annual financial statements, analysis of mid-year financial data, quality analysis and analysis of other factors.

The complete course of the PD-rating calculation process is registered in SK, including all the data which forms a basis for the assessment, and decisions of authorities approving the assessment.

Upon completing the analysis, the system automatically proposes the final PD-rating, which in exceptional and justified cases may be corrected on an expert basis (the so-called overriding). Usually, overriding may change the rating by 1 notch on a 25-point rating scale. The Bank allows a wider scope of overriding:

- full-scale overriding is possible in the case of non-residents and selected client classes,
- extended overriding (by a maximum of 5 notches) in a limited scope (defined in Bank's internal regulations) is allowed for entities for which during the financial year an unitary business event occurred, which due to the accounting method could not be included in the rating model.

mBank systematically analyses all the events of overriding, which is aimed at preventing its excessive use. On the basis of results of the client's risk assessment and his financial needs, the amount and structure of the General Limit (LG) are determined. LG is the maximum permissible financial exposure of mBank to the Client. The LG structure defines: the permissible structure of credit products, amounts and terms, required minimum level and type of collateral, and other conditions specific to particular types of funding.

EL-rating, which determines the maximum risk acceptable by mBank in the case of a given client or GPP under the conditions established in the decision, constitutes a comprehensive assessment of the risk posed by the entire exposure to the client or GPP. Exposures to clients and GPP must go through a multi-level system of credit decisions. The key criteria qualifying exposures to particular decision-making levels include total exposure and EL-rating. When taking a decision on total exposure to a given client, mBank takes into account also the client's exposure to mBank Group subsidiaries (i.e. mLeasing, mBank Hipoteczny and mFaktoring). Clients generating high capital requirements must undergo a special decision-making procedure. In such a case, the decisions are made by mBank's Management Board.

PD-rating of each credit client is updated at least once a year based on the latest audited annual financial statements and the most recent information on the client. According to the monitoring matrix mBank reviews all its credit clients in order to check whether the PD-rating determined during the annual review is adequate to their current situation assessed on the basis of the latest mid-year data. Each quarterly monitoring may end with the reassignment of rating. Moreover, each time mBank obtains new and relevant information on its obligors or exposures in the time between the quarterly assessments, another analysis of their situation may be carried out and on the basis of its results mBank may decide to take new actions. Once a year, the client's assessment is combined with a review of his exposures; consequently, a credit decision is made on further cooperation with the client.

For the assessment of exposures classified as specialized lending, the Bank uses two independent rating models:

- a model built internally by the Bank, dedicated to the assessment of specialized lending exposure, classified as financing of: goods, facilities, projects, leveraged acquisition (SPL TOP), which replaced in 2018 a simulation model built by Commerzbank,
- a model built by mBank Hipoteczny SA, dedicated to the assessment of specialized lending exposures, classified as the financing of commercial real estate (SPL FN).

Both models are based on a list of questions covering supervisory requirements and results in the EL parameter in accordance with the values predefined by the Supervisor.

The Bank applies individualized rating sheets within a given rating model. The individualization of rating sheets under the specialized lending consists in the fact that:

- for SPL FN depending on the type of real estate (offices, shopping centres, warehouse centres / logistics centres, developer housing projects, hotels) and type of transaction (financing/refinancing),
- for SPL TOP, depending on the type of financing (goods, facilities, projects, leveraged acquisition)

an appropriate, separate format of the rating sheet is used.

The rating for SPL TOP and SPL FN is supported by Bank's systems through dedicated calculation processes for this parameter.

The Bank performs transactions generating credit risk in relation to banks, credit institutions and international financial institutions within the limits of credit exposure designated for these entities. The element used in determining these limits is PD rating of the entity, obtained from Commerzbank AG and setting on the basis of a central rating model dedicated to the appropriate institution type.

The process of setting exposure limits for these entities is carried out using the methodology contained in the "Criteria for assessment and setting limits of banks and international financial institutions credit exposure".

The criteria include:

- a) the rating of the financial strength of the counterparty / issuer based on:
 - assessment of the probability of incurring losses by the bank / international financial institution (analysis of credit risk of assets and liabilities, analysis of liquidity risk, assessment of other relevant information indicating the possibility of bank losses),
 - assessment of the bank's ability to withstand critical situations in relation to the risks incurred (analysis of financial results, assessment of capital adequacy, assessment of other relevant information indicating the ability to withstand critical situations),
- b) rating including the assessment of counterparty / issuer integration in the group,
- c) the financial rating of the counterparty / issuer - rating including a credit risk assessment of the country of origin and country of risk of the counterparty / issuer (in accordance with the "Criteria for credit risk assessment of the country and setting the county credit exposure limit"),

An integral part of the criteria is the Business Model Risk Assessment Block consisting of:

- a) identification of the structure of used intangible assets,
- b) analysis of the features of the broadly understood business model (analysis of the intangible assets model),
- c) assessing the sensitivity of the broadly understood business model.

In addition, the criteria include:

- a) the method of setting the maximum limit of credit exposure,
- b) rules for updating temporary tenors for which limits on transactions are set,
- c) the method of setting the financial rating of the counterparty / issuer according to the shortened credit risk assessment formula,
- d) an early warning model.

Retail

The assessment of a retail banking customer, applying for a loan/change of loan terms, is focused, in accordance with the provisions of the Banking Law and PFSA recommendations, on two areas:

- assessment of the customer's credit capacity, which consists in determining the loan amount available to the customer;
- assessment of the customer's creditworthiness, that is assessment of default risk during the service of the loan, expressed in the form of PD Rating (PD – Probability of Default).

These areas are assessed independently from each other, that is the lack of credit capacity may not be compensated for with a very good PD Rating; and high credit capacity may not offset unacceptable PD Rating. In order to ensure the high accuracy of the determined PD Rating, data from all available sources are used, i.e.:

- data from the loan application (application scoring, specific for different product segments of the portfolio);
- data on customers behaviour in relations with mBank (internal behavioural scoring);
- data on customers behaviour in relations with other banks (external behavioural scoring based on BIK - Credit Bureau information).

Depending on the availability of data from individual areas and the context of making the assessment (customer's credit application / offer provided to the customer by mBank), the above data sources are used in various combinations. Each application for a credit product for individuals / small enterprises is registered in a loan application processing IT system. After registering the application, the information from internal and external data sources are downloaded. The verification results are again registered in the application processing system, and then the set of data required for calculating risk parameters is handed over to the decision-making engine, integrated with application processing system.

On the basis of the information obtained, PD score is calculated in the decision-making engine and the customer is assigned to the appropriate rating class (consistently within the Commerzbank Group). Moreover, risk parameters LGD (Loss Given Default) and EL (Expected Loss) are calculated on the basis of data related to the assessed transaction. At the subsequent stage of the process, decision rules based on threshold values of risk parameters (PD Rating, LGD, EL) are applied, in accordance with the rules of the decision-making policy accepted at mBank. The result of the assessment is then returned to the application system. The process of PD Rating assignment and the calculation of the remaining risk parameters is, thanks to the use of IT applications, strictly structured and automated.

Customer's rating and the values of other risk parameters are made available to persons taking credit decisions. The level of authority required for taking an individual credit decision is dependent, i.a. on the value of risk parameters (PD Rating / LGD / EL). In the case of retail customers, mBank does not allow for arbitrary rating amendments, hence the persons taking credit decisions are not allowed to modify the registered values.

Taking a positive decision in spite of a negative assessment in the system (PD Rating or another risk parameter that is beyond the accepted range) is treated as a non-standard decision and requires approval by a superior decision-making level. mBank monitors the quality of loans granted on the basis of non-standard decisions that is independent from the quality monitoring of the entire credit portfolio.

In retail banking, risk parameter values (including PD Rating) are updated:

- periodically – on the basis of a monthly recalculation of behavioural scoring and updating the delinquency data,
- ad hoc – in the process of customer's applying for new loans.

The rating process is under constant supervision in terms of quality of data that are used. Data quality assessment is conducted by a dedicated unit.

Retail foreign branches (Czech and Slovak market)

The risk assessment of a retail banking customer applying for a loan/change of loan terms in retail foreign branches, for the purposes of credit decisions, is based on the internal PD rating model. In order to ensure both: the high accuracy of the determined PD Rating and usage of all available sources of information model consist of modules based on different types of data:

- application scoring (specific for different product segments of the portfolio, based on the information from application form);
- internal behavioural scoring, (based on the data on customers behaviour and delinquencies in relations with mBank);
- external behavioural scoring form Credit Bureaus (based on the history of relations with other banks).

Depending on the availability of data and the assessment purpose (customer's credit application / offer provided to the customer by mBank), the

above data sources are used in various combinations. On the basis of the gathered information, the percentage value of probability of default for each customer is calculated in the decision-making engine and the customer is assigned to the appropriate rating class which, combined with defined policy rules, is the basis for a later credit decision.

Similarly as in the Polish retail area PD parameter is updated:

- periodically – on the basis of a monthly recalculation of behavioural scoring and updating the delinquency data,
- ad hoc – in the process of customer's applying for new loans.

The rating process is under constant supervision in terms of quality of data that are used. Data quality assessment is conducted by a dedicated unit.

Form EU CRE – IRB approach – Backtesting of PD per exposure class, addressing disclosure requirements of Art. 452 letter i) of CRR Regulation.

Portfolio (model name)	Model type	Scope of use	Control mechanisms	Reporting process	Most important features of the model
PD models					
Retail exposures portfolio (PD retail rating model)	<ul style="list-style-type: none"> group model, developed locally, used locally in the Bank and in the Group (mBank Hipoteczny) statistical with expert influence 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Bank data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of "bad" observation methods used in the model building process: logistic regression, WoE, kernel density estimation methods used in the model back testing process: GINI, ETLA test internal data (application and behavioural data about clients) and external (Credit Information Bureau) from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process differences between PD and default rates result from the Bank's conservative approach, ie PD> DR
Corporate exposures portfolio for enterprises (RC-POL rating model)	<ul style="list-style-type: none"> group model, developed locally, used locally in the Bank and in the Group (mLeasing) statistical with expert influence 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal data (Bank and Group) annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of "bad" observation methods used in the model building process: logistic regression, WoE, ln(odds), kernel density estimation methods used in the model back testing process: GINI, ETLA test internal Group data (mBank and mLeasing) from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process description of differences between PD and default rates, see below *
Corporate exposures portfolio for commercial banks (rating model for banks)	<ul style="list-style-type: none"> central model (origin CommerzBank AG), used locally (mBank) statistical with expert influence 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual validation/monitoring performed by the CommerzBank AG with special consideration of mBank portfolio annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of "bad" observation methods used in the model building process: logistic regression, ln(odds), kernel density estimation methods used in the model back testing process: AUC, GINI. in the development process internal data of CommerzBank and external data (Bankscope base, Fitch agency) from at least 5-year time horizon covering all observations eligible for the rating system were used possible differences between PD and default rates result from the specificity of the low default portfolio at mBank

Portfolio (model name)	Model type	Scope of use	Control mechanisms	Reporting process	Most important features of the model
PD models					
Corporate exposures portfolio for special lending of real estates (SPL-FN model)	<ul style="list-style-type: none"> group model (origin mBank Hipoteczny), used locally in mBank and in the group (mBank Hipoteczny) expert model 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of internal risk measures calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal data (Bank and Group) validation performed by an independent Validation Unit in two-year cycles 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of "bad" observation methods used in the model building process: linear regression (least squares method) methods used in the model back testing process: GINI internal Group data (mBank and mBank Hipoteczny) from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process
mLeasing retail exposures portfolio (PD retail Leasing rating model)	<ul style="list-style-type: none"> group model, used in the Group (mLeasing) statistical model 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of internal risk measures calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Group data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of "bad" observation methods used in the model building process: logistic regression, WoE, kernel density estimation methods used in the model back testing process: GINI, ETLA test internal Group data from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process differences between PD and default rates result from the Bank's conservative approach, ie PD > DR

Portfolio (model name)	Model type	Scope of use	Control mechanisms	Reporting process	Most important features of the model
LGD models					
Retail exposures portfolio (LGD model)	<ul style="list-style-type: none"> local model, developed locally, used locally in the Bank statistical with expert influence 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Bank data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of default methods used in the model building process: mean conservative approach: conservative corrections and haircuts, e.g. downturn haircut, lack of recoveries after certain time in default methods used in the model back testing process: ROC, GINI, calibration of model values to empirical values internal data from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process
Retail exposures portfolio (CCF model)	<ul style="list-style-type: none"> local model, developed locally, used locally in the Bank statistical model 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Bank data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: green light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of default methods used in the model building process: mean methods used in the model back testing process: ROC, GINI internal data from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process
Corporate exposures portfolio (LGD model)	<ul style="list-style-type: none"> local model, developed locally, used locally in the Bank statistical with expert influence 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Bank data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: yellow light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of default methods used in the model building process: mean, linear regression (least squares method) conservative approach: conservative corrections and haircuts, e.g. downturn haircut methods used in the model back testing process: ROC, GINI, calibration of model values to empirical values internal data from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process

Portfolio (model name)	Model type	Scope of use	Control mechanisms	Reporting process	Most important features of the model
LGD models					
Corporate exposures portfolio (CCF model)	<ul style="list-style-type: none"> local model, developed locally, used locally in the Bank statistical model 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Bank data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: yellow light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank, including definition of default methods used in the model building process: mean methods used in the model back testing process: ROC, GINI internal data from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process
Corporate exposures portfolio for commercial banks (LGD/EAD model)	<ul style="list-style-type: none"> central model (origin CommerzBank AG), used locally (mBank) statistical model 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual validation/monitoring performed by the CommerzBank AG with special consideration of mBank portfolio annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: yellow light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of CommerzBank AG, including definition of default methods used in the model building process: mean conservative approach: conservative corrections and haircuts, e.g. risk transfer haircut internal data of CommerzBank AG from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process
mLeasing exposures portfolio (LGD model)	<ul style="list-style-type: none"> group model, used in the Group (mLeasing) statistical with expert influence 	<ul style="list-style-type: none"> calculation of regulatory measures calculation of reserves calculation of the Bank's financial result / regulatory capital (AIRB) credit decisions 	<ul style="list-style-type: none"> annual monitoring performed by the Modelling Unit based on internal Group data annual validation performed by the independent Validation Unit 	<ul style="list-style-type: none"> compliant with the internal Management Information System with a quarterly / half-year / annual frequency depending on the recipient Committee / Forum / Management Board and Supervisory Board the scope of reporting includes the risk assessment of the model along with a synthetic summary of the results of the last monitoring and validation of the model model quality assessment from the last reporting cycle for the model: yellow light 	<ul style="list-style-type: none"> definitions compliant with external regulations (CRR package) and internal ones of the Bank and the Group, including definition of default methods used in the model building process: mean conservative approach: conservative corrections and haircuts, e.g. downturn haircut, lack of recoveries after certain time in default methods used in the model back testing process: ROC, GINI, calibration of model values to empirical values internal Group data from at least 5-year time horizon covering all observations qualifying for the rating system were used in the model development process

* differences between PD and default rate values result from the data presentation schema defined in the EU-CR9 form where average PD value with number of obligors were given as at the end of the previous period (portfolio snapshot on 31/12/2018) with number of obligors for which loss event was realized in the horizon from the end of previous period (31/12/2018) to the end of current period (31/12/2019), such a scheme is adequate for models in which PD is calculated on a monthly basis but in the case of models where PD is calculated annually (as in the RC-POL model where PD is calculated at least annually, where the trigger of recalculation is obtaining of new financial statement or negative qualitative information requiring rating renewal) this indicates situation where realization of PD parameter is verified in a time horizon longer than 12 months from the moment of PD calculation – max. 23 months (as in given example: realisation of PD calculated on 15/01/2018 in EU-CR9 data set on 31/12/2018 is verified in time horizon 31/12/2018 – 31/12/2019 so up to 12 months old) what generates the occurrence of default cases in low rating classes as well as the occurrence of a DR>PD relationship in selected rating classes, additionally it should be noted that the reported portfolio is characterized by a relatively low number of defaults (about several dozen cases per year) which in the case of disaggregation of the data into 24 rating classes leads to a situation where the DR>PD relationship is determined by the occurrence of 1 more case of default

Rating systems' validation

Validation is an internal, complex process of independent and objective assessment of model operation, which is consistent with Recommendation W requirements and, in the case of the AIRB method, meets the supervisory guidelines set out in the CRR. The validation rules are set out in general in the "Model Management Policy" and described in details in other mBank's internal regulations. The validation covers models directly and indirectly used in the assessment of capital adequacy under the AIRB approach and other models indicated in the Model Register maintained in mBank.

There is assured an independence of validation unit in the organizational structures of the Bank or the Group's subsidiary in relation to the units involved in the model's construction/maintenance, i.e. the model owner and users. The Validation Unit (Division in Integrated Risk Management Department) is responsible for the validation in mBank.

The scope of validation performed by the Validation Unit covers the assessment of:

- models,
- model implementation,
- their application process.

Depending on the materiality and complexity of the model, as well as the type of validation task to be performed, the validation may be advanced (covers both quantitative and qualitative elements) or basic (mainly focused on the quantitative analyses and selected qualitative elements). The validation results are documented in the validation report containing, in particular, an assessment used for the purpose of approving the model, and recommendations, if any, in form of precautionary and remedial actions, about the irregularities found.

Validation tasks are performed in accordance with the annual validation plan. Both validation plan and the results of performed validation tasks are approved by the Model Risk Committee.

All the models used for the purpose of calculating capital requirements for credit risk under the AIRB method were validated.

Below we present results of historical verification (back-testing) of PD and LGD parameters based on comparison of average values of model results with realized empirical realizations within the observation period for each exposure classes qualifying for AIRB approach.

In the table below (with a breakdown to exposure classes) we present PD values, the number of obligors as well the default rate calculated in line with the rules described in EU CR9 form.

EU CR9 – IRB approach – Backtesting of PD per exposure class, addressing disclosure requirements of Art. 452 letter i) of CRR Regulation.

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate
					End of previous year	End of the year			
09. Institutions	(0; 0,000191]	AAA	N/A	N/A	0	0	0	0	N/A
	(0,000191; 0,00032]	AA+	0,03%	0,03%	5	5	0	0	0,00%
	(0,00032; 0,000526]	AA, AA-	0,04%	0,04%	29	28	0	0	0,00%
	(0,000526; 0,000848]	A+, A	0,07%	0,07%	11	19	0	0	0,00%
	(0,000848; 0,00134]	A-	0,11%	0,11%	8	10	0	0	0,00%
	(0,00134; 0,002074]	BBB+	0,17%	0,16%	7	5	0	0	0,00%
	(0,002074; 0,003144]	BBB	0,26%	0,24%	11	14	0	0	0,00%
	(0,003144; 0,004666]		0,37%	0,38%	6	11	0	0	0,00%
	(0,004666; 0,006775]	BBB-	0,51%	0,52%	6	7	0	0	0,00%
	(0,006775; 0,009621]	BB+	0,74%	0,79%	8	5	0	0	0,00%
	(0,009621; 0,013355]	BB	1,06%	1,16%	2	5	0	0	0,00%
	(0,013355; 0,01811]		1,45%	1,45%	1	4	0	0	0,00%
	(0,01811; 0,023979]	BB-	2,26%	2,15%	3	2	0	0	0,00%
	(0,023979; 0,030982]		2,77%	2,77%	2	1	0	0	0,00%
	(0,030982; 0,03904]	B+	N/A	N/A	2	0	0	0	6,25%
	(0,03904; 0,048571]	B	4,01%	4,01%	0	1	0	0	N/A
	(0,048571; 0,06043]		5,12%	5,03%	2	2	0	0	0,00%
	(0,06043; 0,075185]		N/A	N/A	0	0	0	0	N/A
	(0,075185; 0,093541]	B-	8,39%	8,39%	1	1	0	0	0,00%
	(0,093541; 0,11638]		N/A	N/A	0	0	0	0	0,00%
	(0,11638; 0,144795]	CCC+ to C	N/A	N/A	0	0	0	0	0,00%
(0,144795; 0,180147]	15,98%		15,98%	0	1	0	0	0,00%	
(0,180147; 0,224131]	N/A		N/A	0	0	0	0	0,00%	
(0,224131; 1)	N/A		N/A	1	0	0	0	0,00%	
1	DEFAULT		100,00%	100,00%	0	0	0	0	N/A

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate
					End of previous year	End of the year			
10. Corporates: thereof SMEs	(0; 0,000191]	AAA	N/A	N/A	0	0	0	0	N/A
	(0,000191; 0,00032]	AA+	0,03%	0,03%	66	44	0	0	0,35%
	(0,00032; 0,000526]	AA, AA-	0,04%	0,04%	69	63	0	0	0,00%
	(0,000526; 0,000848]	A+, A	0,07%	0,07%	63	66	1	0	1,79%
	(0,000848; 0,00134]	A-	0,11%	0,11%	107	90	0	0	0,00%
	(0,00134; 0,002074]	BBB+	0,17%	0,17%	86	96	2	1	1,05%
	(0,002074; 0,003144]	BBB	0,27%	0,26%	104	142	0	0	0,00%
	(0,003144; 0,004666]		0,40%	0,40%	195	247	0	0	0,26%
	(0,004666; 0,006775]	BBB-	0,58%	0,57%	392	390	5	3	1,08%
	(0,006775; 0,009621]	BB+	0,80%	0,81%	432	579	6	3	0,79%
	(0,009621; 0,013355]	BB	1,13%	1,14%	475	565	2	2	0,49%
	(0,013355; 0,01811]		1,53%	1,55%	473	583	5	1	1,75%
	(0,01811; 0,023979]	BB-	2,11%	2,09%	389	501	6	4	1,32%
	(0,023979; 0,030982]		2,73%	2,73%	319	319	13	4	3,24%
	(0,030982; 0,03904]	B+	3,46%	3,50%	214	263	9	3	4,73%
	(0,03904; 0,048571]	B	4,33%	4,35%	131	136	3	0	2,17%
	(0,048571; 0,06043]		5,35%	5,45%	78	94	10	0	6,92%
	(0,06043; 0,075185]		6,88%	6,71%	63	64	3	0	5,33%
	(0,075185; 0,093541]	B-	8,42%	8,46%	56	57	4	0	4,21%
	(0,093541; 0,11638]		10,10%	10,49%	40	33	2	0	10,79%
(0,11638; 0,144795]	13,17%		13,09%	27	21	3	1	4,01%	
(0,144795; 0,180147]	CCC+ to C	16,53%	16,26%	13	19	2	0	5,93%	
(0,180147; 0,224131]		20,08%	20,21%	16	16	0	0	6,31%	
(0,224131; 1)		32,38%	36,25%	52	46	2	0	3,48%	
1		DEFAULT	100,00%	100,00%	62	69	62	2	N/A

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate
					End of previous year	End of the year			
12. Corporates: thereof other	(0; 0,000191]	AAA	N/A	N/A	0	0	0	0	0,00%
	(0,000191; 0,00032]	AA+	0,03%	0,03%	10	9	0	0	0,00%
	(0,00032; 0,000526]	AA, AA-	0,04%	0,04%	30	35	0	0	0,00%
	(0,000526; 0,000848]	A+, A	0,07%	0,07%	36	31	0	0	0,00%
	(0,000848; 0,00134]	A-	0,12%	0,11%	43	31	0	0	0,00%
	(0,00134; 0,002074]	BBB+	0,16%	0,17%	63	56	0	0	0,00%
	(0,002074; 0,003144]	BBB	0,27%	0,26%	97	104	0	0	0,00%
	(0,003144; 0,004666]		0,40%	0,39%	155	185	0	0	0,26%
	(0,004666; 0,006775]	BBB-	0,56%	0,56%	173	184	0	0	0,34%
	(0,006775; 0,009621]	BB+	0,81%	0,81%	208	213	1	0	0,37%
	(0,009621; 0,013355]	BB	1,14%	1,14%	174	213	1	0	0,92%
	(0,013355; 0,018111]		1,56%	1,55%	156	173	4	1	0,77%
	(0,018111; 0,023979]	BB-	2,12%	2,08%	106	121	1	0	0,96%
	(0,023979; 0,030982]		2,70%	2,72%	100	106	6	1	1,96%
	(0,030982; 0,03904]	B+	3,56%	3,59%	88	97	4	0	4,35%
	(0,03904; 0,048571]	B	4,36%	4,38%	58	47	4	0	4,70%
	(0,048571; 0,06043]		5,56%	5,42%	33	53	3	0	4,71%
	(0,06043; 0,075185]		6,72%	6,73%	38	35	3	0	6,35%
	(0,075185; 0,093541]	B-	8,53%	8,43%	64	43	2	0	3,28%
	(0,093541; 0,11638]		10,51%	10,75%	10	54	1	0	3,18%
	(0,11638; 0,144795]	CCC+ to C	12,96%	12,87%	13	23	0	0	2,84%
(0,144795; 0,180147]	16,64%		16,28%	12	9	0	0	3,07%	
(0,180147; 0,224131]	19,58%		19,76%	11	25	0	0	2,02%	
(0,224131; 1)	43,11%		44,65%	161	186	7	1	3,10%	
1		DEFAULT	100,00%	100,00%	343	352	343	2	N/A

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate	
					End of previous year	End of the year				
13. Retail: thereof secured by mortgages / SMEs	(0; 0,000191]	AAA	N/A	N/A	0	0	0	0	0,00%	
	(0,000191; 0,00032]	AA+	N/A	N/A	0	0	0	0	0,00%	
	(0,00032; 0,000526]	AA, AA-	N/A	N/A	0	0	0	0	0,00%	
	(0,000526; 0,000848]	A+, A		0,08%	0,08%	3	48	0	0	0,00%
	(0,000848; 0,00134]	A-		0,12%	0,11%	44	534	0	0	0,06%
	(0,00134; 0,002074]	BBB+		0,17%	0,17%	259	1151	0	0	0,06%
	(0,002074; 0,003144]	BBB		0,25%	0,25%	913	1018	0	0	0,05%
	(0,003144; 0,004666]			0,39%	0,39%	989	760	0	0	0,07%
	(0,004666; 0,006775]	BBB-		0,55%	0,55%	1127	784	1	0	0,34%
	(0,006775; 0,009621]	BB+		0,79%	0,79%	625	501	1	0	0,24%
	(0,009621; 0,013355]	BB		1,13%	1,13%	393	209	1	0	0,46%
	(0,013355; 0,01811]			1,53%	1,53%	374	274	1	1	0,54%
	(0,01811; 0,023979]	BB-		2,09%	2,08%	201	117	2	0	0,77%
	(0,023979; 0,030982]			2,67%	2,71%	102	120	0	0	1,14%
	(0,030982; 0,03904]	B+		3,36%	3,44%	62	52	2	0	1,61%
	(0,03904; 0,048571]	B		4,34%	4,37%	46	41	0	0	2,00%
	(0,048571; 0,06043]			5,43%	5,45%	33	27	0	0	2,29%
	(0,06043; 0,075185]			6,67%	6,74%	44	30	2	0	4,52%
	(0,075185; 0,093541]	B-		8,51%	8,36%	25	39	2	0	3,22%
	(0,093541; 0,11638]			10,46%	10,33%	64	40	2	0	3,32%
	(0,11638; 0,144795]	CCC+ to C		12,97%	13,16%	53	36	3	0	6,12%
(0,144795; 0,180147]			15,88%	16,22%	48	35	5	0	11,30%	
(0,180147; 0,224131]			19,81%	19,98%	40	37	5	0	13,14%	
(0,224131; 1)			33,62%	32,51%	82	94	24	1	26,61%	
1		DEFAULT	100,00%	100,00%	291	260	291	0	N/A	

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate
					End of previous year	End of the year			
14. Retail: thereof secured by mortgages / non-SMEs	(0; 0,000191]	AAA	0,02%	0,02%	0	40	0	0	0,01%
	(0,000191; 0,00032]	AA+	0,03%	0,03%	122	1592	0	0	0,03%
	(0,00032; 0,000526]	AA, AA-	0,04%	0,04%	15739	23803	9	1	0,04%
	(0,000526; 0,000848]	A+, A	0,07%	0,07%	29521	34969	10	0	0,05%
	(0,000848; 0,00134]	A-	0,11%	0,11%	18623	42181	10	0	0,08%
	(0,00134; 0,002074]	BBB+	0,16%	0,16%	19007	20156	13	0	0,06%
	(0,002074; 0,003144]	BBB	0,25%	0,25%	12684	8591	8	0	0,13%
	(0,003144; 0,004666]		0,38%	0,38%	8264	5550	18	0	0,18%
	(0,004666; 0,006775]	BBB-	0,55%	0,55%	5141	3428	25	0	0,36%
	(0,006775; 0,009621]	BB+	0,80%	0,79%	1772	1937	12	0	0,62%
	(0,009621; 0,013355]	BB	1,13%	1,13%	1022	998	12	0	0,87%
	(0,013355; 0,01811]		1,55%	1,56%	732	849	7	0	0,95%
	(0,01811; 0,023979]	BB-	2,09%	2,09%	686	580	13	0	1,25%
	(0,023979; 0,030982]		2,67%	2,68%	495	615	11	0	1,89%
	(0,030982; 0,03904]	B+	3,45%	3,45%	443	457	7	0	1,93%
	(0,03904; 0,048571]	B	4,36%	4,37%	365	430	16	0	3,10%
	(0,048571; 0,06043]		5,40%	5,42%	345	421	15	0	4,33%
	(0,06043; 0,075185]		6,81%	6,80%	494	546	21	0	4,29%
	(0,075185; 0,093541]	B-	8,56%	8,57%	503	799	21	0	4,90%
	(0,093541; 0,11638]		10,25%	10,27%	821	661	40	0	5,79%
(0,11638; 0,144795]	12,85%		12,88%	511	380	23	0	5,80%	
(0,144795; 0,180147]	CCC+ to C	16,22%	16,32%	433	363	31	0	8,65%	
(0,180147; 0,224131]		19,81%	19,97%	424	293	42	0	11,54%	
(0,224131; 1)		30,46%	30,45%	455	402	91	0	21,18%	
1		DEFAULT	100,00%	100,00%	2540	2263	2540	4	N/A

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate
					End of previous year	End of the year			
16. Retail: thereof other / SMEs	(0; 0,000191]	AAA	N/A	N/A	1	0	0	0	0,00%
	(0,000191; 0,00032]	AA+	0,03%	0,03%	18	31	0	0	0,00%
	(0,00032; 0,000526]	AA, AA-	0,05%	0,05%	35	36	0	0	0,00%
	(0,000526; 0,000848]	A+, A	0,07%	0,07%	95	622	0	0	0,03%
	(0,000848; 0,00134]	A-	0,11%	0,11%	1595	6043	3	0	0,09%
	(0,00134; 0,002074]	BBB+	0,17%	0,17%	7719	11702	22	2	0,15%
	(0,002074; 0,003144]	BBB	0,26%	0,26%	13536	13583	34	5	0,15%
	(0,003144; 0,004666]		0,39%	0,39%	16477	16191	72	11	0,24%
	(0,004666; 0,006775]	BBB-	0,57%	0,57%	18980	20581	87	16	0,27%
	(0,006775; 0,009621]	BB+	0,80%	0,81%	19883	19534	92	20	0,40%
	(0,009621; 0,013355]	BB	1,14%	1,14%	17334	14447	237	32	0,73%
	(0,013355; 0,01811]		1,56%	1,56%	12606	11993	180	32	1,01%
	(0,01811; 0,023979]	BB-	2,08%	2,08%	9528	9455	197	45	1,38%
	(0,023979; 0,030982]		2,70%	2,74%	8243	8321	258	42	1,97%
	(0,030982; 0,03904]	B+	3,48%	3,48%	5742	5967	199	67	2,99%
	(0,03904; 0,048571]	B	4,36%	4,37%	4605	5475	222	56	3,91%
	(0,048571; 0,06043]		5,40%	5,43%	3889	6265	165	37	4,11%
	(0,06043; 0,075185]		6,69%	6,70%	3429	4956	214	35	5,11%
	(0,075185; 0,093541]	B-	8,36%	8,36%	2906	3700	199	42	6,00%
	(0,093541; 0,11638]		10,44%	10,42%	2940	2999	278	51	8,02%
	(0,11638; 0,144795]		13,04%	13,02%	2454	2504	276	41	9,88%
(0,144795; 0,180147]	CCC+ to C	16,22%	16,22%	2702	2939	409	59	11,84%	
(0,180147; 0,224131]		19,96%	20,04%	2374	2759	456	81	12,98%	
(0,224131; 1)		32,09%	34,39%	6053	5534	1753	324	23,83%	
1		DEFAULT	100,00%	100,00%	12703	12980	12703	209	N/A

a) Exposure class	b) PD range	c) External rating equivalent	d) Weighted average PD	e) Arithmetic average PD by obligors	f) Number of obligors		g) Defaulted obligors in the year	h) Of which new obligors	i) Average historical annual default rate
					End of previous year	End of the year			
17. Retail: thereof other / non-SMEs	(0; 0,000191]	AAA	0,02%	0,02%	29	1	0	0	0,00%
	(0,000191; 0,00032]	AA+	0,03%	0,03%	41	93	0	0	0,04%
	(0,00032; 0,000526]	AA, AA-	0,04%	0,04%	9924	12905	5	0	0,05%
	(0,000526; 0,000848]	A+, A	0,07%	0,07%	11485	19335	9	0	0,06%
	(0,000848; 0,00134]	A-	0,11%	0,11%	32043	36772	24	2	0,11%
	(0,00134; 0,002074]	BBB+	0,17%	0,17%	106379	42943	130	2	0,08%
	(0,002074; 0,003144]	BBB	0,26%	0,26%	100002	70999	160	11	0,12%
	(0,003144; 0,004666]		0,39%	0,39%	67777	114363	226	38	0,23%
	(0,004666; 0,006775]	BBB-	0,56%	0,56%	71367	90049	308	44	0,33%
	(0,006775; 0,009621]	BB+	0,82%	0,82%	67149	81243	414	51	0,54%
	(0,009621; 0,013355]	BB	1,14%	1,13%	70724	78297	661	127	0,76%
	(0,013355; 0,01811]		1,55%	1,55%	59093	50734	852	177	1,26%
	(0,01811; 0,023979]	BB-	2,10%	2,10%	41100	46128	996	262	1,81%
	(0,023979; 0,030982]		2,71%	2,70%	29698	41405	821	230	2,24%
	(0,030982; 0,03904]	B+	3,48%	3,47%	37450	22986	944	273	2,65%
	(0,03904; 0,048571]	B	4,32%	4,33%	19994	26630	804	218	4,06%
	(0,048571; 0,06043]		5,40%	5,41%	14741	11562	784	261	5,39%
	(0,06043; 0,075185]		6,71%	6,72%	12718	9651	676	161	5,93%
	(0,075185; 0,093541]	B-	8,42%	8,46%	8258	7972	713	157	7,91%
	(0,093541; 0,11638]		10,44%	10,46%	8846	6764	746	146	8,96%
(0,11638; 0,144795]	CCC+ to C	13,03%	13,03%	7085	5716	1292	149	12,80%	
(0,144795; 0,180147]		16,27%	16,21%	5690	6861	934	159	16,35%	
(0,180147; 0,224131]		20,13%	20,11%	5178	7752	1060	133	20,90%	
(0,224131; 1)		30,05%	30,14%	11033	8617	3758	1054	30,88%	
1		DEFAULT	100,00%	100,00%	33764	33255	33764	994	N/A

The following table presents the average model LGD values as of 31.12.2019 for retail mortgage, retail non-mortgage, corporate and commercial banks and mLeasing portfolio based on long-term historical series for non-defaulted exposures and compared with observed (realized) loss rates based on historical observation.

Indicators	Retail mortgages exposures	Retail non-mortgages exposures	Corporate exposures	Commercial banks exposures	mLeasing exposures
Mean model LGD (31.12.2019)	20,19%	46,86%	47,87%	43,79%	19,77%
Mean model LGD weighted by EAD (31.12.2019)	28,09%	50,47%	45,86%	47,41%	17,40%
Mean empirical LGD*	15,01%	32,96%	40,09%	18,87%	10,63%
Mean empirical LGD weighted by EAD*	20,11%	45,32%	34,12%	18,87%	13,04%

* Retail mortgages exposures and Retail non-mortgages exposures (01.2006-12.2018), Corporate exposures (01.2006-05.2019), Commercial banks exposures (01.2006 - 06.2019), mLeasing exposures (01.2007 - 06.2019)

Higher expected value of model LGD parameter compared to the empirical LGD observations in the analyzed period reflects required margin of conservatism for model estimates.

5.4. Supervisory requirements regarding capital ratio

According to provisions of the CRR Regulation the Bank and the Group are required to meet minimum regulatory level of capital ratios, i.e. to maintain a minimum total capital ratio above 8%, Tier 1 capital ratio above 6% and common equity Tier 1 capital ratio above 4,5%.

Provisions of CRD IV, in particular provisions regarding capital buffers, were transposed into a national legislation, which took place in 2015 with the endorsement of the Act on Macro-prudential Supervision over the Financial System and Crisis Management in the Financial System (Act) and with an update of the Banking Law. The act stipulates capital buffers banks in Poland should meet once buffers are implemented by competent authorities indicated in the Act.

As of 31 December 2019 mBank Group was obliged to ensure adequate own funds to meet conservation capital buffer of 2,5% of total risk exposure amount, as defined in the Act.

As of the end of December 2019 the countercyclical capital buffer rate set for relevant exposures in Poland according with the article 83 of the Act amounted to 0%. The ratio shall be effective until it is changed by way of an ordinance of the Minister of Finance.

mBank Group calculates the bank-specific countercyclical capital buffer in accordance with the provisions

of the Act as the weighted average of the countercyclical buffer rates that apply in the countries where the relevant credit exposures of the Group are located. Exposures of foreign branches in Czech Republic and in Slovakia, where countercyclical buffer rates as of 31 December 2019 amounted to 1,5%, and 1,5% in each, had an impact on the mBank Group specific countercyclical capital buffer.

According to Commission delegated Regulation (EU) 2015/1555 of 28 May 2015 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for the disclosure of information in relation to the compliance of institutions with the requirement for a countercyclical capital buffer in accordance with Article 440, below are disclosed: the amount of the Group institution-specific countercyclical capital buffer and the Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

The amount of the Group institution-specific countercyclical capital buffer

	31.12.2019
Total risk exposure amount	84 105 802
Institution specific countercyclical buffer rate (%)	0,057092%
Institution specific countercyclical buffer requirement*	48 017

*Calculated as the institution-specific countercyclical buffer rate applied to the total risk exposure amount

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer in thous. PLN

Breakdown by country:	General credit exposures		Trading book exposures		Securitisation exposures		Own funds requirements				Own funds requirement weights	Countercyclical capital buffer rate	
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total			
1	Poland	18 668 655	103 988 652	2 715 265	0	0	0	5 403 051	42 886	0	5 445 938	94,66725	0,0000
2	Czech Republic	3 977 090	9 247	0	0	0	0	161 521	0	0	161 521	2,80770	0,0421
3	Slovakia	1 177 241	35	0	0	0	0	49 836	0	0	49 836	0,86630	0,0130
4	Luxemburg	263 821	39 344	0	0	0	0	24 640	0	0	24 640	0,42830	0,0000
5	Germany	11 074	266 823	0	0	0	0	21 787	0	0	21 787	0,37870	0,0000
6	Netherlands	0	221 272	0	0	0	0	15 331	0	0	15 331	0,26650	0,0000
7	United States of America	141 136	12 524	0	0	0	0	11 465	0	0	11 465	0,19930	0,0000
8	Cyprus	80 089	49 012	0	0	0	0	9 298	0	0	9 298	0,16160	0,0000
9	Sweden	42 360	346	0	0	0	0	3 402	0	0	3 402	0,05910	0,0015
10	Romania	0	20 098	0	0	0	0	2 290	0	0	2 290	0,03980	0,0000
11	Bahamas	0	23 647	0	0	0	0	2 167	0	0	2 167	0,03770	0,0000
12	United Kingdom	312	14 991	0	0	0	0	1 883	0	0	1 883	0,03270	0,0003
13	Austria	4	8 588	0	0	0	0	967	0	0	967	0,01680	0,0000
14	Ireland	6 003	7 110	0	0	0	0	960	0	0	960	0,01670	0,0002
15	Russian Federation	44 035	9 586	0	0	0	0	762	0	0	762	0,01330	0,0000
16	Belgium	1 428	86	0	0	0	0	110	0	0	110	0,00190	0,0000
17	Hungary	0	2 379	0	0	0	0	108	0	0	108	0,00190	0,0000
18	France	0	2 122	0	0	0	0	45	0	0	45	0,00080	0,0000
19	Italy	20	166	0	0	0	0	44	0	0	44	0,00080	0,0000
20	Malta	57	549	0	0	0	0	28	0	0	28	0,00050	0,0000
21	Switzerland	250	1 640	0	0	0	0	24	0	0	24	0,00040	0,0000
22	Spain	0	715	0	0	0	0	14	0	0	14	0,00020	0,0000
23	Denmark	45	189	0	0	0	0	12	0	0	12	0,00020	0,0000
24	Australia	0	579	0	0	0	0	10	0	0	10	0,00020	0,0000
25	Portugal	20	481	0	0	0	0	10	0	0	10	0,00020	0,0000
26	Norway	0	500	0	0	0	0	9	0	0	9	0,00020	0,0000
27	Israel	17	88	0	0	0	0	9	0	0	9	0,00020	0,0000
28	Andorra	0	112	0	0	0	0	4	0	0	4	0,00010	0,0000
29	Malaysia	50	0	0	0	0	0	4	0	0	4	0,00010	0,0000
30	United Arab Emirates	0	198	0	0	0	0	3	0	0	3	0,00010	0,0000
31	Estonia	37	0	0	0	0	0	3	0	0	3	0,00010	0,0000
32	Ukraine	2	52	0	0	0	0	2	0	0	2	0,00000	0,0000
33	Lithuania	26	0	0	0	0	0	2	0	0	2	0,00000	0,0000
34	Singapore	0	70	0	0	0	0	1	0	0	1	0,00000	0,0000
35	Hongkong	19	0	0	0	0	0	1	0	0	1	0,00000	0,0000
36	Panama	0	52	0	0	0	0	1	0	0	1	0,00000	0,0000
37	Canada	0	42	0	0	0	0	1	0	0	1	0,00000	0,0000
38	Other	3	283	0	0	0	0	0	0	0	0	0,00000	0,0000
	Total	24 413 794	104 681 578	2 715 265	0	0	0	5 709 805	42 886	0	5 752 692	100	0,0571

In 2016 Bank received an administrative decision of the PFSA (KNF), in which mBank has been identified as other systemically important institution (O-SII). mBank was subject to a capital buffer which on the basis of KNF administrative decision of October 14th, 2019 amounted to 0,75% of the total risk exposure amount, calculated in accordance with article 92(3) of CRR Regulation, to be maintained on individual and consolidated levels.

Starting from 1st January 2018 the Regulation of the Minister of Development and Finance with regard to systemic risk buffer entered into force. The Regulation introduced systemic risk buffer of 3% of the total risk exposure amount applied to all exposures located in Poland. Due to the fact that not all exposures are located in Poland, due to mBank two foreign branches in Czech Republic and in Slovakia, the systemic risk buffer rate applicable to mBank Group amounted to 2,83% in December 2019.

Consequently, the combined buffer requirement set for the mBank Group as of the end of December 2019 amounted to 6,14% of the total risk exposure amount.

Additionally, as a result of the annual risk assessment carried out in 2019 by the PFSA within the supervisory review and evaluation process (SREP), in particular with regard to the evaluation of risk related to the portfolio of foreign exchange retail mortgage loans, mBank Group received an individual recommendation to maintain own funds on the consolidated level to cover additional capital requirement of 3,11% in order to mitigate the risk and 2,33% for Tier 1 capital (on individual basis: 3,62% and 2,71% respectively). Additional capital requirement in Pillar II encompasses also additional risk factors related to the FX mortgage loan portfolio such as operational risk, market risk or risk of collective default of borrowers.

The high level of additional capital requirement in Pillar II resulted from the fact that the PFSA applied one methodology to all banks in Poland. This did not take into account the results of internal models applied by mBank to the calculation of capital

requirements for credit risk. According to PFSA's methodology, the calculation of the additional capital requirement for each and every bank uses the risk weight under the standardised approach as a starting point (risk weight 150%). Consequently, more than half of the additional capital requirement calculated by the PFSA for mBank Group comes from "aligning" the capital requirement to the requirement calculated under the standardised approach. The second important component with effect on an additional capital requirement within Pillar II was related to the BION score quantifying the risk of foreign exchange retail mortgage loans portfolio, taking into account the specific nature of the Bank portfolio, the following factors were taken into account:

- the share of loans with LTV >100% in total FX lending portfolio,
- the level of margin realised in the Bank on FX lending portfolio,
- sensitivity of total capital ratio to exchange rate and interest rate changes,
- Bank's readiness to absorb losses of a potential portfolio currency conversion.

The level of the required capital ratios for mBank Group encompasses in total:

- the basis requirement resulting from CRR provisions to maintain the total capital ratio of 8% and the Tier 1 ratio of 6%,
- the combined buffer requirement of additional 6,14%,
- the additional capital charge in Pillar II on consolidated basis associated with the portfolio of FX housing loans: 3,11% at the level of total capital ratio and 2,33% at the level of Tier 1 capital (on individual basis: 3,62% and 2,71% respectively).

Capital ratios in 2019 were above the required values. With a considerable surplus of own funds mBank Group comfortably meets the additional own funds requirement related to Pillar II and the combined buffer requirement.

mBank Group	31.12.2019		30.09.2019	
Capital ratio	Required level	Reported level	Required level	Reported level
Total capital ratio (TCR)	17,25%	19,46%	17,51%	19,79%
Tier 1 ratio*	14,47%	16,51%	14,60%	16,82%

*Tier 1 ratio reported in mBank Group is equal to CET 1 ratio

5.5. Quantitative data regarding capital adequacy

Capital ratios are calculated on the basis of total risk exposure amount that corresponds to the sum of risk exposure amounts for particular risk types that are calculated according to provisions of the CRR Regulation.

Total risk exposure amount of mBank Group consists of:

- risk weighted exposure amount for credit risk, counterparty credit risk, dilution risk and free deliveries calculated under AIRB approach as regards the large part of the credit exposures portfolio,
- risk exposure amount for market risk, including position risk, foreign exchange risk and commodities risk calculated under standardised approaches,
- risk exposure amounts for operational risk calculated under standardised approach,
- risk exposure amount for credit valuation adjustments, calculated under standardised approach,
- other risk exposure amounts including supervisory floor.

The template presents all components of the total risk exposure amount of mBank Group, a denominator for capital ratios calculated according with art. 92 of CRR Regulation.

EU OV1 – Overview of RWAs, addressing disclosure requirements of art. 438 letters c) to f) of CRR Regulation.

		RWAs		Minimum capital requirements	
		31.12.2019	30.09.2019	31.12.2019	
	1	Credit risk (excluding CCR)	71 500 004	71 543 264	5 720 000
art. 438 lit. c) i d)	2	Of which the standardised approach	17 279 081	16 760 439	1 382 326
art. 438 lit. c) i d)	3	Of which the foundation IRB (FIRB) approach	0	0	0
art. 438 lit. c) i d)	4	Of which the advanced IRB (AIRB) approach	54 220 923	54 782 825	4 337 674
art. 438 lit. d)	5	Of which equity IRB under the simple risk-weighted approach or the IMA	0	0	0
art. 107 art. 438 lit. c) i d)	6	CCR	1 209 536	1 486 941	96 763
art. 438 lit. c) i d)	7	Of which mark to market	1 022 717	1 260 379	81 817
art. 438 lit. c) i d)	8	Of which original exposure	0	0	0
	9	Of which the standardised approach	0	0	0
	10	Of which internal model method (IMM)	0	0	0
art. 438 lit. c) i d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	2 474	2 495	198
art. 438 lit. c) i d)	12	Of which CVA	184 345	224 067	14 748
art. 438 lit. e)	13	Settlement risk	0	0	0
art. 449 lit. o) i)	14	Securitisation exposures in the banking book (after the cap)	0	0	0
	15	Of which IRB approach	0	0	0
	16	Of which IRB supervisory formula approach (SFA)	0	0	0
	17	Of which internal assessment approach (IAA)	0	0	0
	18	Of which standardised approach	0	0	0
art. 438 lit. e)	19	Market risk	913 708	920 925	73 097
	20	Of which the standardised approach	913 708	920 925	73 097
	21	Of which IMA	0	0	0
art. 438 lit. e)	22	Large exposures	0	0	0
art. 438 lit. f)	23	Operational risk	7 993 942	7 993 942	639 515
	24	Of which basic indicator approach	0	0	0
	25	Of which standardised approach	7 993 942	7 993 942	639 515
	26	Of which advanced measurement approach	0	0	0
art. 437 ust. 2), art. 48 i art. 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	2 488 612	2 314 166	199 089
art. 500	28	Floor adjustment	0	0	0
	29	Total	84 105 802	84 259 238	6 728 464

EU CR10 – IRB, specialised lending and equities, addressing disclosure requirements of Art. 438 and art. 452 letters d) and e) of CRR Regulation.

mBank Group does not apply AIRB approach to calculate risk weighted assets for equity exposures.

Specialised lending							
Regulatory categories	Remaining maturity	On- balance-sheet amount	Off-Balance-sheet amount	Risk weight	Exposure amount	RWAs	Expected losses
Category 1	Less than 2.5 years	305 442	19 405	50%	311 323	155 661	0
	Equal to or more than 2.5 years	43 213	20	70%	43 229	29 997	173
Category 2	Less than 2.5 years	1 644 390	783 028	70%	1 855 675	1 293 962	7 422
	Equal to or more than 2.5 years	5 393 195	325 045	90%	5 415 384	4 855 912	43 323
Category 3	Less than 2.5 years	28 160	2 186	115%	28 793	32 976	806
	Equal to or more than 2.5 years	244 318	52 403	115%	244 337	280 674	6 842
Category 4	Less than 2.5 years	0	0	250%	0	0	0
	Equal to or more than 2.5 years	36 649	0	250%	36 649	91 624	2 932
Category 5	Less than 2.5 years	180 033	0	0%	180 033	0	90 017
	Equal to or more than 2.5 years	305 955	0	0%	305 955	0	152 977
Total	Less than 2.5 years	2 158 025	804 619		2 375 824	1 482 599	98 245
	Equal to or more than 2.5 years	6 023 330	377 468		6 045 554	5 258 207	206 247
Equity under the simple risk-weighted approach							
Categories	On- balance-sheet amount	Off-Balance-sheet amount	Risk weight	Exposure amount	RWAs	Capital requirements	
Private equity exposures			190%				
Exchange-traded equity exposures			290%				
Other equity exposures			370%				
Total							

EU CR8 – RWA flow statements of credit risk exposures, including IRB approach, addressing disclosure requirements of Art. 438 letter d) of CRR Regulation.

<i>mBank Group in PLN m</i>		Risk weighted exposure amount for credit and counterparty credit risk, including supervisory floors	Capital requirements
1	Risk weighted exposure amount as of 30 September 2019	67 983	5 439
2	Asset size	7 705	616
3	Asset quality	-881	-70
4	AIRB model updates	-394	-32
5	Methodology and policy	586	47
6	Acquisitions and disposals	0	0
7	Foreign exchange movements	15	1
8	Risk weighted exposure amount as of 31 December 2019	75 014	6 001

Asset size

The category covers structural changes of the credit portfolio capturing among others new and matured credit exposures. In the 2019 a significant increase in corporate and retail lending was recorded.

Asset quality

This category covers: rating migrations, reclassification of exposures to defaulted status and the returns to a non-defaulted status.

Model updates

In light of AIRB approach applied to calculation of risk-weighted exposure amount for credit and counterparty credit risk, model recalibrations had a significant impact on RWA movement in the 2019.

The coverage of the credit portfolio of mBank Group by AIRB approach amounted to 82% at the end of 2019, based on risk-weighted assets. As of 31 December 2019 the AIRB approach was applied to the calculation of own funds requirement for credit and counterparty credit risk for the following portfolios:

- mBank corporate portfolio,
- mBank retail mortgage loan portfolio,
- mBank real estate-related specialized lending exposures (IRB slotting approach),
- mBank retail non-mortgage exposures,
- mBank retail microenterprises mortgage loan portfolio (conditional consent),
- bank exposures (conditional consent),
- mLeasing credit exposures,

- mBank Hipoteczny specialized lending - income producing real estate exposures (IRB slotting approach).

In the case of portfolios with a conditional consent to the application of AIRB approach mBank Group applies supervisory floor. It means that where own funds requirement for credit risk calculated under AIRB approach is lower than the own funds requirement for credit risk calculated under standardised approach, it is necessary to supplement it up to the level of the own funds requirement calculated under the standardised approach.

In the case of mBank retail microenterprises mortgage loan portfolio and commercial bank exposures high significance conditions specified by the bank supervision have been met which has to be confirmed by supervisory authority.

The percentage coverage of the Group's loan portfolios by the AIRB approach is presented below, addressing disclosure requirements of art. 452 letter. a) of CRR Regulation.

AIRB stage	Asset class	% share in risk-weighted assets (% of RWA STA)
AIRB first stage portfolios	mBank exposures, including:	68%
	Corporate exposures	23%
	Specialised lending exposures – income producing real estate	4%
	Retail exposures – mortgage loans	28%
	Retail exposures – non-mortgage loans	9%
	Retail exposures of microenterprises – mortgage loans	1%
	Retail exposures of microenterprises – non-mortgage loans	2%
	Bank exposures	1%
	Exposures of mBank Hipoteczny – specialised lending exposures (income producing real estate)	4%
	Exposures of mLeasing	7%
	Non-credit assets	3%
	AIRB first stage	82%
Roll-out portfolios	mBank – other specialised lending exposures	3%
	mBank Hipoteczny - Retail exposures – mortgage loans	2%
	Roll-out	5%
Permanent partial use		11%
Total		100%

Methodology and policy

In the first half of 2019, the IFRS16 accounting standard was implemented, which resulted in the creation of a new category of non-credit assets and an increase in RWA.

The risk weight for exposures to central governments and central banks denominated in a currency other than the reporting currency also increased, in accordance with the provisions of the CRR Regulation. This did not have a significant impact on the capital adequacy ratio of the mBank Group.

Foreign exchange movements

An important part of the mBank Group's loan portfolio in 2019 were credit exposures in foreign currencies. Exchange rate fluctuations during 2019 did not affect the significant change in the value of risk-weighted exposures compared to the end of 2018.

Information about the structure of risk-weighted assets

Templates below provide more information on risk weighted assets, applied approaches to calculate RWA and the scope of credit risk and counterparty credit risk mitigation techniques in place.

EU CR4 – Standardised approach – Credit risk exposure and counterparty credit risk with CRM effects, addressing disclosure requirements of art. 453 letter g) of CRR Regulation.

		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	41 652 734	3 002	41 697 626	643	2 372 251	5,69%
2	Regional government or local authorities	298 366	24 559	410 612	10 922	84 303	20,00%
3	Public sector entities	56 750	63 490	8 860	20 805	15 553	52,43%
4	Multilateral development banks	2 243 849	0	2 243 849	0	0	0,00%
5	International organisations	0	0	0	0	0	0,00%
6	Institutions	491 389	53 084	679 693	11 474	231 817	33,54%
7	Corporates	8 298 474	5 685 799	7 989 528	1 540 511	9 450 666	99,17%
8	Retail	3 003 337	670 069	3 003 337	142 359	2 357 307	74,94%
9	Secured by mortgages on immovable property	10 445 114	33 603	10 445 114	16 801	4 178 331	39,94%
10	Exposures in default	418 863	3 989	369 770	1 184	463 609	124,98%
11	Exposures associated with particularly high risk	67 133	0	67 133	0	100 699	150,00%
12	Covered bonds	0	0	0	0	0	0,00%
13	Institutions and corporates with a short-term credit assessment	0	0	0	0	0	0,00%
14	Collective investment undertakings	0	0	0	0	0	0,00%
15	Equity	321 097	0	321 097	0	418 468	130,32%
16	Other items	13 847	41 880	13 847	41 880	55 727	100,00%
17	Total	67 310 953	6 579 475	67 250 466	1 786 579	19 728 731	28,58%

EU CR5 - Standardised approach, addressing disclosure requirements of art. 444 letter e) of CRR Regulation and presents regulatory exposure values post conversion factor and post risk mitigation techniques for a part of credit and credit counterparty portfolio where Group applies standardized approach, broken down by assets classes and risk weights.

	Exposure classes	Risk weight								
		0%	2%	4%	10%	20%	35%	50%	70%	75%
1	Central governments or central banks	40 351 968	0	0	372 291	43 480	0	0	0	0
2	Regional government or local authorities	19	0	0	0	421 515	0	0	0	0
3	Public sector entities	0	0	0	0	0	0	28 225	0	0
4	Multilateral development banks	2 243 849	0	0	0	0	0	0	0	0
5	International organisations	0	0	0	0	0	0	0	0	0
6	Institutions	0	122 203	0	0	183 947	0	384 868	0	0
7	Corporates	0	0	0	0	0	0	95 822	0	0
8	Retail	0	0	0	0	0	0	0	0	3 145 688
9	Secured by mortgages on immovable property	0	0	0	0	0	9 466 484	265 619	0	0
10	Exposures in default	0	0	0	0	0	0	0	0	0
11	Exposures associated with particularly high risk	0	0	0	0	0	0	0	0	0
12	Covered bonds	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
14	Collective investment undertakings	0	0	0	0	0	0	0	0	0
15	Equity	0	0	0	0	0	0	0	0	0
16	Other items	0	0	0	0	0	0	0	0	0
17	Total	42 595 836	122 203	0	372 291	648 942	9 466 484	774 534	0	3 145 688

	Exposure classes	Risk weight					Others	Deducted	Total	Of which unrated
		100%	150%	250%	370%	1250%				
1	Central governments or central banks	0	0	930 530	0	0	0	0	41 698 269	2 383 108
2	Regional government or local authorities	0	0	0	0	0	0	0	421 534	114 645
3	Public sector entities	1 440	0	0	0	0	0	0	29 665	1 441
4	Multilateral development banks	0	0	0	0	0	0	0	2 243 849	0
5	International organisations	0	0	0	0	0	0	0	0	0
6	Institutions	149	0	0	0	0	0	0	691 167	411 792
7	Corporates	9 434 217	0	0	0	0	0	0	9 530 039	9 434 217
8	Retail	8	0	0	0	0	0	0	3 145 696	3 145 696
9	Secured by mortgages on immovable property	717 753	12 059	0	0	0	0	0	10 461 915	10 461 916
10	Exposures in default	185 644	185 310	0	0	0	0	0	370 954	370 954
11	Exposures associated with particularly high risk	0	67 133	0	0	0	0	0	67 133	67 133
12	Covered bonds	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
14	Collective investment undertakings	0	0	0	0	0	0	0	0	0
15	Equity	256 182	0	64 915	0	0	0	0	321 097	321 097
16	Other items	55 727	0	0	0	0	0	0	55 727	55 727
17	Total	10 651 120	264 502	995 445	0	0	0	0	69 037 045	26 767 726

EU CR6 – IRB approach – Credit risk and counterparty credit exposures by exposure class and PD range, addressing disclosure requirements of art. 452 letter d) to g) and j) of CRR Regulation.

The table below presents exposure values, the amount of undrawn commitments, the average CCF, PD and LGD in percentage, risk-weighted exposure values for particular exposure classes for a part of credit and counterparty credit portfolio where Group applies AIRB approach.

		a	b	c	d	e	f	g	h	i	j	k	l
	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Exposure class		Retail mortgage portfolio (microfirms)											
	od 0.00 do 0.15	219 779	19 951	82,88%	236 314	0,13%	711	32,40%	-	17 728	7,50%	98	
	od 0.15 do 0.25	530 087	56 906	84,22%	578 011	0,19%	1 515	33,65%	-	60 333	10,44%	368	
	od 0.25 do 0.50	584 652	66 490	90,91%	645 097	0,37%	1 578	36,30%	-	117 081	18,15%	853	
	od 0.50 do 0.75	351 769	49 331	91,05%	396 683	0,60%	923	36,16%	-	102 746	25,90%	865	
	od 0.75 do 2.50	358 074	44 817	106,05%	405 600	1,32%	1 088	35,81%	-	172 763	42,59%	1 912	
	od 2.50 do 10.00	132 899	5 827	111,54%	139 399	4,20%	369	32,68%	-	106 430	76,35%	1 884	
	od 10.00 do 100.00	102 361	171	402,99%	103 050	24,31%	240	29,54%	-	133 908	129,94%	7 589	
	100.00 (Default)	134 905	99	0,00%	134 905	100,00%	252	56,89%	-	291 326	215,95%	58 403	
	Subtotal	2 414 526	243 592	92,18%	2 639 059	6,72%	6 676	35,87%	-	1 002 315	37,98%	71 972	67 582
Exposure class		Retail mortgage portfolio (natural persons)											
	od 0.00 do 0.15	17 494 793	717 755	60,16%	17 926 592	0,09%	107 197	26,74%	0	1 054 507	5,88%	4 094	
	od 0.15 do 0.25	4 026 017	169 850	63,04%	4 133 088	0,19%	23 012	27,94%	0	468 592	11,34%	2 176	
	od 0.25 do 0.50	2 526 369	155 382	65,20%	2 627 674	0,35%	14 697	29,48%	0	490 296	18,66%	2 682	
	od 0.50 do 0.75	682 929	42 596	65,49%	710 823	0,60%	4 176	29,58%	0	197 048	27,72%	1 262	
	od 0.75 do 2.50	893 094	38 325	63,82%	917 553	1,35%	4 908	28,53%	0	411 525	44,85%	3 480	
	od 2.50 do 10.00	704 018	5 924	59,15%	707 523	5,83%	2 883	25,96%	0	669 925	94,69%	10 717	
	od 10.00 do 100.00	512 623	2 413	59,39%	514 056	17,95%	1 624	27,15%	0	780 145	151,76%	25 416	
	100.00 (Default)	720 143	25	0,00%	720 143	100,00%	1 865	60,10%	0	1 223 259	169,86%	351 954	
	Subtotal	27 559 986	1 132 270	61,60%	28 257 452	3,19%	160 362	28,14%	0	5 295 297	18,74%	401 781	392 568
Exposure class		Retail non-mortgage portfolio (microfirms)											
	od 0.00 do 0.15	116 003	424 709	78,38%	448 899	0,12%	15 500	49,48%	0	50 504	11,25%	265	
	od 0.15 do 0.25	336 058	654 508	75,72%	831 629	0,20%	29 547	49,99%	0	134 221	16,14%	818	
	od 0.25 do 0.50	1 118 826	550 286	80,18%	1 560 067	0,38%	42 659	35,39%	0	281 438	18,04%	2 064	
	od 0.50 do 0.75	1 499 698	298 993	86,63%	1 758 701	0,62%	42 720	31,23%	0	388 893	22,11%	3 415	
	od 0.75 do 2.50	3 464 829	489 179	93,28%	3 921 120	1,39%	101 090	34,16%	0	1 301 924	33,20%	18 556	
	od 2.50 do 10.00	2 229 148	162 551	104,64%	2 399 236	4,93%	64 782	35,03%	0	1 075 945	44,85%	41 529	
	od 10.00 do 100.00	1 026 863	18 733	120,82%	1 049 496	20,59%	27 481	31,39%	0	634 898	60,50%	68 013	
	100.00 (Default)	652 786	2 223	0,07%	652 788	100,00%	18 770	66,66%	0	389 997	59,74%	423 431	
	Subtotal	10 444 211	2 601 182	83,72%	12 621 936	8,40%	342 549	37,11%	0	4 257 820	33,73%	558 091	586 833

		a	b	c	d	e	f	g	h	i	j	k	l
	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Exposure class		Retail non-mortgage portfolio (natural persons)											
	od 0.00 do 0.15	642 298	1 196 814	71,11%	1 493 327	0,10%	172 708	48,65%	0	185 309	12,41%	710	
	od 0.15 do 0.25	590 584	932 030	71,18%	1 253 967	0,20%	132 066	48,99%	0	261 681	20,87%	1 220	
	od 0.25 do 0.50	1 404 207	1 926 110	67,28%	2 700 059	0,37%	376 053	49,50%	0	851 279	31,53%	4 974	
	od 0.50 do 0.75	1 336 674	511 788	75,97%	1 725 474	0,62%	225 445	50,44%	0	741 980	43,00%	5 369	
	od 0.75 do 2.50	4 487 562	634 443	77,72%	4 980 681	1,39%	647 672	51,04%	0	3 024 332	60,72%	35 237	
	od 2.50 do 10.00	2 507 152	144 028	84,21%	2 628 439	4,54%	287 817	50,76%	0	2 057 377	78,27%	60 525	
	od 10.00 do 100.00	849 991	25 254	84,80%	871 406	19,81%	103 978	50,95%	0	1 007 987	115,67%	88 166	
	100.00 (Default)	888 856	6 070	0,00%	888 856	100,00%	81 205	69,54%	0	932 961	104,96%	575 555	
	Subtotal	12 707 324	5 376 537	71,33%	16 542 209	7,70%	2 026 944	51,30%	0	9 062 906	54,79%	771 756	824 146
Exposure class		Corporations - medium and small enterprises											
	od 0.00 do 0.15	274 840	437 503	38,04%	441 250	0,08%	275	42,26%	2	71 367	16,17%	140	
	od 0.15 do 0.25	161 838	177 972	32,97%	220 516	0,20%	114	33,91%	2	52 245	23,69%	142	
	od 0.25 do 0.50	856 822	405 414	51,28%	1 064 712	0,37%	404	37,20%	2	415 907	39,06%	1 451	
	od 0.50 do 0.75	938 689	516 489	43,02%	1 160 883	0,64%	460	31,64%	3	512 311	44,13%	2 296	
	od 0.75 do 2.50	4 699 638	1 650 204	49,49%	5 516 352	1,45%	2 129	37,34%	2	3 609 062	65,42%	30 069	
	od 2.50 do 10.00	2 048 320	433 463	44,00%	2 239 043	3,97%	889	31,85%	2	1 615 296	72,14%	28 459	
	od 10.00 do 100.00	122 371	41 266	34,60%	136 652	19,56%	122	31,08%	2	175 979	128,78%	8 307	
	100.00 (Default)	127 583	5 908	50,40%	130 560	100,00%	69	64,05%	2	199 499	152,80%	78 662	
	Subtotal	9 230 101	3 668 219	45,80%	10 909 968	3,10%	4 462	35,96%	2	6 651 666	60,97%	149 526	124 980
Exposure class		Corporations - other											
	od 0.00 do 0.15	1 033 578	3 156 731	33,74%	2 098 678	0,09%	124	45,55%	2	492 815	23,48%	846	
	od 0.15 do 0.25	279 606	1 019 237	18,13%	464 396	0,21%	68	48,12%	2	196 891	42,40%	463	
	od 0.25 do 0.50	2 926 465	2 243 564	41,46%	3 856 549	0,37%	260	49,57%	3	2 714 670	70,39%	7 012	
	od 0.50 do 0.75	1 770 160	1 096 161	50,26%	2 321 045	0,60%	207	44,58%	2	1 762 122	75,92%	6 219	
	od 0.75 do 2.50	6 371 051	3 937 611	45,10%	8 146 893	1,32%	680	43,60%	2	7 904 714	97,03%	47 341	
	od 2.50 do 10.00	1 569 235	1 465 106	43,33%	2 204 008	3,79%	361	44,56%	2	2 818 546	127,88%	35 907	
	od 10.00 do 100.00	318 469	190 479	34,71%	384 589	13,07%	289	42,94%	2	785 763	204,31%	21 032	
	100.00 (Default)	894 571	184 214	22,40%	935 838	100,00%	350	70,52%	2	961 437	102,74%	726 925	
	Subtotal	15 163 135	13 293 103	39,49%	20 411 996	5,92%	2 339	46,47%	2	17 636 958	86,40%	845 745	800 790
Exposure class		Corporations - specialized lending exposures											
	Subtotal	8 181 354	1 182 087	20,31%	8 421 378	0,00%	542	0,00%	4	6 740 806	80,04%	304 492	272 056

	a	b	c	d	e	f	g	h	i	j	k	l
	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Exposure class	Institutions											
od 0.00 do 0.15	90 179	3 776 165	1,46%	1 249 114	0,00%	73	2,27%	1	262 631	1,00%	342	
od 0.15 do 0.25	80 654	76 411	2,12%	114 640	0,01%	13	2,03%	2	58 413	2,43%	92	
od 0.25 do 0.50	35 554	78 338	2,28%	73 127	0,02%	18	2,13%	1	36 766	2,39%	118	
od 0.50 do 0.75	11 264	16 259	2,08%	18 362	0,03%	7	2,28%	3	16 447	4,27%	55	
od 0.75 do 2.50	66 512	16 583	1,84%	72 920	0,09%	12	2,86%	1	100 367	6,55%	827	
od 2.50 do 10.00	5 484	54 055	2,16%	30 012	0,16%	3	2,30%	1	44 693	7,09%	495	
od 10.00 do 100.00	7 921	0	0,00%	7 921	0,76%	1	2,16%	5	24 529	14,75%	574	
100.00 (Default)	0	0		0	0,00%	0	0,00%	0	0	0,00%	0	
Subtotal	297 568	4 017 811	1,50%	1 566 096	0,01%	127	2,27%	1	543 846	1,65%	2 504	1 928
Total (all portfolios)	85 998 205	31 514 801	2,32%	101 370 094	0,23%	2 544 001	1,70%	3	51 191 614	2,40%	3 105 867	3 070 883

EU CR7 – IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques addressing disclosure requirements of art. 453 letter g) of CRR Regulation.

mBank Group does not disclose this information as credit derivatives are not used as CRM techniques with an impact on RWA.

6. Leverage ratio

Since 2014 mBank Group calculates leverage ratio according to the CRR Regulation provisions. The purpose of the introduction of the supplementary measure depicting relation between Tier I capital and exposure measure for balance and off balance sheet exposures by the regulators was to reduce excessive and unsustainable debt of credit institutions that may be inadequate to capital base in place.

Information regarding leverage ratio presented below are compliant with regulatory reporting provided by mBank to NBP. Calculations are made according to the rules of CRR Regulation taking into account Commission Delegated Regulation 2015/62 as of 10 October

2014 amending Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to the leverage ratio. Disclosures regarding leverage ratio follow the rules defined in Commission Implementing Regulation 2016/200 of 15 February 2016 laying down implementing technical standards with regard to disclosure of the leverage ratio for institutions, according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.

The table below presents a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements.

Table LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

		31.12.2019
1	Total assets as per published financial statements	158 720 583
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	87 591
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	0
4	Adjustments for derivative financial instruments	1 775 242
5	Adjustment for securities financing transactions (SFTs)	-3 058 494
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	12 063 254
EU-6A	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	0
EU-6B	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	0
7	Other adjustments	-1 340 448
8	Leverage ratio total exposure measure	168 247 728

The table below presents a breakdown of the total exposure measure applied to calculation of the leverage ratio, information on Tier 1 capital, leverage ratio and how the institution applies Article 499(2) of the CRR Regulation.

Table LRCom: Leverage ratio common disclosure

		31.12.2019
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	154 638 038
2	(Asset amounts deducted in determining Tier 1 capital)	-1 505 817
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	153 132 221
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	635 429
5	Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	2 099 589
EU-5A	Exposure determined under Original Exposure Method	0
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	0
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	0
8	(Exempted CCP leg of client-cleared trade exposures)	0
9	Adjusted effective notional amount of written credit derivatives	0
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	0
11	Total derivatives exposures	2 735 018
SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	291 762
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	0
14	Counterparty credit risk exposure for SFT assets	25 473
EU-14A	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation (EU) No 575/2013	0
15	Agent transaction exposures	0
EU-15A	(Exempted CCP leg of client-cleared SFT exposure)	0
16	Total securities financing transaction exposures	317 235
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	4 426 003
18	(Adjustments for conversion to credit equivalent amounts)	7 637 251
19	Other off-balance sheet exposures	12 063 254
Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off balance sheet)		
EU-19A	(Intragroup exposures (solo basis) exempted in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	0
EU-19B	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	0
Capital and total exposure measure		
20	Tier 1 capital	13 882 865
21	Leverage ratio total exposure measure	168 247 728
Leverage ratio		
22	Leverage ratio	8,25%
Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	transitional
EU-24	Choice on transitional arrangements for the definition of the capital measure	0

mBank as a significant subsidiary of a EU parent institutions which is of material significance for its local market, discloses information indicated in article 13(1) of CRR Regulation on a sub-consolidated basis.

Description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers.

Exposure value, Tier 1 capital and leverage ratio of mBank Group calculated in accordance with a transitional definition of Tier 1 capital as of 31 December 2019 and 30 June 2019.

	31.12.2019	30.06.2019
Exposure value	168 247 728	169 911 067
Capital and regulatory adjustments		
Tier 1 capital - transitional definition	13 882 865	14 169 540
Regulatory adjustments - Tier 1 - transitional definition	-1 505 817	-1 317 317
Leverage ratio		
Leverage Ratio - using a transitional definition of Tier 1	8,25%	8,34%

The leverage ratio of the Group in the second half of 2019 was driven by the following factors:

- inclusion in Common Equity Tier I capital the verified net profit of the mBank Group for the first half of 2019, net of expected charges and dividends, on the basis of the PFSA decisions of 28 August 2019,
- inclusion in Common Equity Tier I capital the verified net profit of the mBank Group for 2018, net of expected charges and dividends, in the previously not included in own funds,
- expansion of the mBank Group business activity,
- changes of foreign exchange rates.

Description of the processes used to manage the risk of excessive leverage

Capital Management Committee performs the essential role in management of risk of excessive leverage in mBank Group. Management of this risk comprises two fundamental perspectives: calculation and monitoring of leverage ratio and analysis of mismatches between assets and obligations including the calculation of measures: NSFR (net stable funding ratio), M3 (coverage ratio of non-liquid assets with own funds), M4 (coverage ratio of non-liquid assets and limited liquidity assets with own funds and stable external funds). Both elements of the procedure, calculation of the leverage ratio according to CRR requirements and mismatches analysis, are performed by the Integrated Risk Management Department. Actual leverage ratio is regularly monitored and compared to peer group. In order to assure fulfilment of upcoming regulatory requirement mBank Group has aspiration to keep

leverage ratio at the level of 7%. Target is monitored and verified at least on a yearly basis.

mBank counteracts risk of excessive leverage taking into account potential increase in mentioned risk caused by own funds drop associated with expected or incurred losses. Annual planning process includes forecast of year end leverage ratio as well as plan of the ratio in a four-year time horizon. The projection is updated depending on the macroeconomic environment. Moreover, in the light of rapidly changing market environment, mBank also examines capital adequacy in adverse macroeconomic scenarios, understood as risk scenario accepted by the Management Board.

7. Credit risk mitigation techniques

The information presented in this chapter fulfill the presentation requirements of EU CRC Qualitative disclosure requirements related to CRM techniques, addressing disclosure requirements of art. 453 letters a) to e) of CRR Regulation.

7.1. Collateral valuation and management

The policies and processes for on- and off-balance sheet netting

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

Collateral

Retail

mBank mitigates the credit risk of the retail portfolio by requesting legal collaterals for granted loans. In the case of property-secured transactions, major components of the collateral policy include maximum admissible levels of LtV (Loan to Value – the ratio of loan amount to value of property used as collateral) and the rules of accepting collaterals.

Retail properties

When drafting the LtV policy for mortgage loans, mBank adheres to Recommendation S, which is a set of good practices in the field of mortgage-secured retail credit exposure risk management. In the case of commercial real properties, due to lower liquidity of the collateral, mBank takes on a more prudent approach in terms of admissible LtV values than the one that is required by the regulator.

mBank carries out a careful selection of real properties which may serve as collateral. Within the analysis of a credit application, a liquidity assessment of a local real property market and of the nature of a real property (typical, non-typical) is conducted – that is aimed at ensuring the assumed effectiveness of recovery from the collateral accepted.

Prior to taking a credit decision, mBank in each case determines the value of the real property accepted as collateral. Value verification in the retail sales process is based on an appraisal report, which is verified in terms of its assumptions and parameters by analysts. The determined value is confirmed by the analysis of similar real estate transaction prices from the internal real estate database and the AMRON interbank database, rental rates or information from available publications regarding the real estate market. For standard

The main types of guarantor and credit derivative counterparty and their creditworthiness

As at 31 December 2019 mBank Group did not hold credit derivatives.

types of residential real estate, the Bank has introduced the possibility of an internal opinion on the value, based on the note from the inspection of real estate and also analysis of transaction prices of similar real estate originating from the internal real estate database and the interbank AMRON database. The internal valuation of the collateral uses the same valuation approaches and methods as in the external valuations delivered to the Bank.

Real estate value is updated regularly by analysts - at least once every 3 years in the case of residential real estate and not less frequently than once a year in the case of commercial real estate. The value of the selected pool of contracts is updated individually by the Bank analyst. The value of other residential real estate portfolio is updated using the price change index.

Vehicles

In the car loan segment, mBank mitigates credit risk by the downpayment policy. When determining the collateral portfolio structure, mBank diversifies requirements related to downpayment depending on the age of the vehicle and its value. The approved minimum required levels of downpayment take account of loss of vehicle's value during the lending period and the possibility of selling it in the case of vehicle repossession.

Requirements regarding the collateral valuation are dependent on the type of the financed vehicle. In the case of new vehicles purchased from an authorised dealer, a credit analyst accepts the vehicle value based on the invoice. In the case of used vehicles, mBank's analyst makes a valuation of the vehicle based on a market value catalogue of vehicles, or

accepts the value indicated on the motor hull insurance (AC) delivered by the customer, which includes a value verified by the insurance company. In the case where a specific vehicle model is not included in the

Corporates

The credit risk taken by mBank when granting credit products to clients may be mitigated by collateral. The types of collateral accepted by mBank, rules for establishing collateral, principles of evaluating and verifying value of collaterals and concerning management of collaterals are set out in detailed internal instructions of mBank. mBank has a dedicated collateral policy in the area of corporate banking. The most important elements of this policy are:

- indication of collateral preferred and not recommended,
- recommendations regarding the requirements of collateral in specific situations,
- frequency of collateral monitoring,
- Bank's approach to collateral with MRV parameter equal to zero.

mBank's policy is based on the assumption that mBank's decision to grant a credit product entails an effort to obtain collateral of the highest quality and value adequate to the scale of risk taken. The collateral value should be correlated not only with the borrower's creditworthiness, but also with the amount of the product posing credit risk and the risk level arising from the specific qualities of the credit product. In the case of mortgage-secured loans, mBank uses level of LtV ratio in line of regulatory requirements. Under justified circumstances, mBank may refrain from asking for collateral. Moreover, in the case of personal collateral (e.g. surety, guarantee) the standing and

catalogue, the analyst may require that the customer submits a valuation made by an appraiser. The same approach is also used in the case of doubts related to the value or the technical condition of a vehicle..

reliability of the collateral provider is evaluated using the standards applicable to the assessment of borrowers. The value of fixed assets accepted as collateral is determined on the basis of an appraisal report compiled by a licensed expert. The report is submitted to mBank and verified by a team of specialists located in the risk area who analyse it in terms of correctness of the assumed market value and assess the liquidity of the collateral from mBank's viewpoint.

On a regular basis, mBank monitors the quality of collateral. The monitoring covers in particular the effectiveness of the legal establishment of collateral, completeness of collateral documentation, update of collateral value and adequacy of collateral value and present amount of exposure. The process of valuing and monitoring collateral is supported by an IT application called Credit System. The system gathers information on:

- necessary data on collateral and its providers/owners,
- original valuation and its updates,
- participants and course of the process of collateral registration, valuation and monitoring.

In addition, mBank systematically supervises the control of credit risk monitoring in the scope of accepted collateral.

7.2. Main types of collateral

Retail

Mortgage on real property

Mortgage on a financed (or other) real property is a basic collateral for mortgage loans. mBank accepts only a first lien mortgage.

Conditional transfer of ownership

Conditional transfer of ownership of a vehicle is a standard collateral for loans for the purchase of a vehicle. The customer enters into an agreement on the transfer of ownership with mBank, by which they undertake to transfer the ownership of a vehicle to mBank in the case of a failure to repay the loan when due.

The „de minimis“ guarantee

The guarantee provided by Polish state bank Bank Gospodarstwa Krajowego within the governmental aid program addressed to entrepreneurs, covering the working capital loans and investment loans. The guarantee might secure up to the 60% of the loan amount and not more than PLN 3,5 million.

The COSME guarantee

The guarantee provided by Polish state bank Bank Gospodarstwa Krajowego within the governmental aid program addressed to entrepreneurs, covering the working capital loans and investment loans. The guarantee might secure up to the 80% of the loan amount and not more than PLN 0,48 million.

Corporates

When making a decision on granting funding to a client, mBank aims at obtaining collateral adequate to the risk taken. mBank prefers highly liquid property collateral or personal collateral provided by entities characterised by high PD-rating and having assets and financial strength acceptable by mBank.

The accepted collateral acts as credit risk mitigant, provided that it carries a specified real value at the time of potential enforcement and meets the qualitative requirements making it possible to recover the debt by way of enforcement. The quality of property collateral is evaluated in terms of liquidity and market value, while the quality of personal collateral is assessed in terms of the financial standing of the collateral provider.

The most frequently used collateral types include:

- property collateral. i.e. mortgage, marine mortgage, registered pledge, transfer of ownership rights, assignment of rights to the creditor, security deposit or blockade of funds on bank account,
- personal collateral, i.e. guarantee (e.g. BGK guarantees de minimis and guarantees issued within COSME programme for exposures of SME and micro- companies), surety, bill of exchange, aval, loan repayment insurance.

The assessment of collateral includes the evaluation of the possibility to establish the collateral and assessment of legal state of the subject of collateral, in particular analysis of any encumbrances in favour of other creditors (verification of land and mortgage registers, entries in the pledge register, etc.). It is essential that the validity period of collateral is longer than the maturity period of the product backed by it, so that mBank has enough time to perform all the legal acts necessary to satisfy its claims.

Moreover, in Bank's internal regulations, mBank indicates a separate group of properties which are not recommended as collateral due to their specific qualities making it impossible for mBank to satisfy its claims due to quick loss of value by the property or difficulties with its disposal.

EU CR3 – Credit risk mitigation techniques – overview, addressing disclosure requirements of art. 453 letter g) of CRR Regulation, presenting the carrying amount of exposures net of allowances /impairments divided into unsecured and secured exposures, including collateral categories:

		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	74 748 298	49 548 325	48 098 992	1 449 333	N/A
2	Total debt securities	34 017 649	57 061	34 090	22 971	N/A
3	Total exposures	135 673 496	56 076 116	53 400 749	2 675 367	N/A
4	Of which defaulted	1 242 037	830 522	822 392	8 130	N/A

7.3. Market or credit risk concentration

Taking into account the reduction of the concentration risk arising from the exposure to a single currency (or indexed to a single currency), mBank monitors - on a monthly basis the currency structure of the portfolio.

mBank reduces exposures to a single entity/group of affiliated entities by setting a General Limit (approved by the appropriate decision-making body) for exposures to a customer/group of affiliated customers.

On a daily basis, mBank monitors exposures in terms of identification of large exposures and exceeding of concentration limit of exposures defined in line with CRR Regulation.

mBank maintains a list of entities for which there is a risk a default (Watch List) and analyses (on a quarterly basis) concentration risk of exposures exposed to the default risk.

In order to control and reduce concentration risk arising from exposures to entities representing the same sector, mBank sets the limits for sectors in which mBank's exposure exceeds 5% of the total amount of exposures.

mBank controls risk arising from concentration of exposures to entities representing the same geographical region as well as individual countries by setting and monitoring country or regional limits.

Within control of concentration risk arising from exposures secured with the same type of collateral or by the same provider, mBank sets and monitors limits for mortgage-backed exposures. mBank also analyses its concentration in such collaterals as corporate personal collaterals.

On a quarterly basis, mBank analyses the Group's credit portfolio in terms of concentration, taking into account the largest exposures to customers/groups of affiliated customers.

As at 31 December 2019 there was no substantial level of geographical concentration in the credit portfolio of mBank Group. In terms of exposure relating to countries other than Poland there was no substantial share of exposure with value loss.

The geographic distribution of the exposures and distribution of exposures by sector

EU CRB-B – Total and average net amount of exposures, addressing disclosure requirements of art. 442 letter c) of CRR Regulation which presents the distribution of the net exposure of mBank Group by exposure class for credit and counterparty credit risk portfolio.

It includes the allocation into exposures for standardized and IRB Approach.

		a)	b)
		Net value of exposures at the end of the period	Average net exposures over the period
1	Central governments or central banks	0	0
2	Institutions	4 313 450	5 346 075
3	Corporates	49 520 174	49 707 297
4	<i>Of which: Specialised lending</i>	9 091 386	8 931 534
5	<i>Of which: SMEs</i>	12 773 340	12 151 064
6	Retail	60 608 480	57 559 886
7	<i>Secured by real estate property</i>	30 890 223	29 212 359
8	<i>SMEs</i>	2 590 535	2 460 154
9	<i>Non-SMEs</i>	28 299 688	26 752 205
10	<i>Qualifying revolving</i>	0	0
11	<i>Other retail</i>	29 718 257	28 347 527
12	<i>SMEs</i>	12 458 558	11 876 234
13	<i>Non-SMEs</i>	17 259 699	16 471 293
14	Equity	0	0
15	Total IRB approach	114 442 104	112 613 258
16	Central governments or central banks	41 655 736	38 062 844
17	Regional governments or local authorities	322 926	452 136
18	Public sector entities	120 241	109 126
19	Multilateral development banks	2 243 849	2 421 513
20	International organisations	0	0
21	Institutions	544 473	480 158
22	Corporates	13 984 273	13 349 005
23	<i>Of which: SMEs</i>	2 285 646	2 320 545
24	Retail	3 673 399	3 208 294
25	<i>Of which: SMEs</i>	17 332	23 690
26	<i>Secured by mortgages on immovable property</i>	10 478 724	10 529 375
27	<i>Of which: SMEs</i>	15 674	18 397
28	Exposures in default	422 852	400 072
29	Items associated with particularly high risk	67 133	50 184
30	Covered bonds	0	0
31	Claims on institutions and corporates with a short-term credit assessment	0	0
32	Collective investments undertakings	0	0
33	Equity exposures	321 096	260 925
34	Other exposures	55 727	26 287
35	Total standardised approach	73 890 429	69 349 919
36	Total	188 332 533	181 963 177



EU CRB-C – Geographical breakdown of exposures, addressing disclosure requirements of art. 442 letter d) of CRR Regulation which presents net exposure of mBank Group by material countries. It includes the allocation into exposures for standardized and IRB Approach.

		Poland (PL)	Czech Republic (CZ)	Slovakia (SK)	Germany (DE)	Great Britain (GB)	Luxemburg (LU)	Other countries	Total
1	Central governments or central banks	0	0	0	0	0	0	0	0
2	Institutions	174 276	9 554	2 000	2 172 975	1 042 576	1 200	910 869	4 313 450
3	Corporates	48 604 737	11 305	70	503 550	5 758	38 951	355 803	49 520 174
4	Retail	60 573 142	71	0	6 061	8 249	377	20 580	60 608 480
5	Equity	0	0	0	0	0	0	0	0
6	Total IRB approach	109 352 155	20 930	2 070	2 682 586	1 056 583	40 528	1 287 252	114 442 104
7	Central governments or central banks	37 733 615	3 800 181	45 191	0	0	0	76 749	41 655 736
8	Regional governments or local authorities	322 906	0	0	0	0	0	20	322 926
9	Public sector entities	120 241	0	0	0	0	0	0	120 241
10	Multilateral development banks	0	0	0	0	0	2 243 849	0	2 243 849
11	International organizations	0	0	0	0	0	0	0	0
12	Institutions	154 638	115 808	6 738	0	225 177	2 720	39 392	544 473
13	Corporates	13 035 045	6 388	41	10 931	494	263 581	667 793	13 984 273
14	Retail	1 101 852	1 901 770	669 459	0	0	0	318	3 673 399
15	Secured by mortgages on immovable property	7 366 872	2 458 097	653 244	0	127	0	384	10 478 724
16	Exposures in default	369 353	7 012	2 380	0	5	15	44 087	422 852
17	Items associated with particularly high risk	67 133	0	0	0	0	0	0	67 133
18	Covered bonds	0	0	0	0	0	0	0	0
19	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0
20	Collective investments undertakings	0	0	0	0	0	0	0	0
21	Equity exposures	186 215	0	0	0	0	0	134 881	321 096
22	Other exposures	55 727	0	0	0	0	0	0	55 727
23	Total standardised approach	60 513 597	8 289 256	1 377 053	10 931	225 803	2 510 165	963 624	73 890 429
24	Total	169 865 752	8 310 186	1 379 123	2 693 517	1 282 386	2 550 693	2 250 876	188 332 533

Group's exposures are located in Europe, therefore the table above does not present geographical areas. Materiality of countries was determined based on its share in the credit portfolio and with application of materiality threshold above 1% in the net value of the portfolio. Countries below the threshold were included in 'other countries' category.



EU CRB-D – Concentration of exposures by industry, addressing disclosure requirements of art. 442 letter e) of CRR Regulation which presents net exposure of mBank Group by industries and exposure classes for credit and counterparty credit risk portfolio. It includes the allocation into exposures for standardized and AIRB Approach.

	a)	b)	c)	d)	e)	f)	g)	h)	i)	j)	k)	l)	
	AGRICULTURE, FORESTRY AND FISHING	MINING AND QUARRYING	MANUFACTURING	ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	CONSTRUCTION	WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	TRANSPORTATION AND STORAGE	ACCOMMODATION AND FOOD SERVICE ACTIVITIES	INFORMATION AND COMMUNICATION	FINANCIAL AND INSURANCE ACTIVITIES	REAL ESTATE ACTIVITIES	
1	Central governments or central banks	0	0	0	0	0	0	0	0	0	0	0	
2	Institutions	0	0	0	0	0	0	0	0	0	4 266 150	0	
3	Corporates	104 714	177 516	14 451 882	1 489 853	528 379	8 298 586	10 918 579	2 287 800	192 111	1 780 619	319 966	5 464 939
4	Retail	130 795	36 251	1 682 099	21 231	115 313	1 533 314	3 399 731	1 234 783	654 504	903 650	365 340	862 383
5	Equity	0	0	0	0	0	0	0	0	0	0	0	0
6	Total IRB approach	235 509	213 767	16 133 981	1 511 084	643 692	9 831 900	14 318 310	3 522 583	846 615	2 684 269	4 951 456	6 327 322
7	Central governments or central banks	0	0	0	0	0	0	0	0	0	0	12 342 404	0
8	Regional governments or local authorities	0	0	0	0	0	0	0	0	0	0	0	0
9	Public sector entities	0	0	0	0	0	0	580	0	0	0	0	0
10	Multilateral development banks	0	0	0	0	0	0	0	0	0	2 243 849	0	0
11	International organisations	0	0	0	0	0	0	0	0	0	0	0	0
12	Institutions	0	0	0	0	0	0	0	0	0	499 991	0	0
13	Corporates	123 574	4 057	2 989 448	640 776	89 309	380 212	3 273 675	331 627	97 083	507 778	3 191 455	332 191
14	Retail	24	2	186	2	5	176	512	136	40	158	86	25
15	Secured by mortgages on immovable property	300	0	3 991	0	0	119 104	21 240	4 957	293 589	3 858	4 385	492 881
16	Exposures in default	1	0	78 569	2 380	0	75 019	5 085	86	1	407	44 123	84 856
17	Items associated with particularly high risk	0	0	0	0	0	0	0	0	18 341	1 490	0	0
18	Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0
19	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0
20	Collective investments undertakings	0	0	0	0	0	0	0	0	0	0	0	0
21	Equity exposures	0	0	0	0	0	6 693	0	0	11 055	0	67 403	93 141
22	Other exposures	0	0	0	0	0	0	0	0	0	2 562	0	0
23	Total standardised approach	123 899	4 059	3 072 194	643 158	89 314	581 204	3 300 512	337 386	401 768	530 542	18 397 748	1 003 094
24	Total	359 408	217 826	19 206 175	2 154 242	733 006	10 413 104	17 618 822	3 859 969	1 248 383	3 214 811	23 349 204	7 330 416



	m)	o)	p)	q)	r)	s)	t)	u)	m)	
	PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	EDUCATION	HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	ARTS, ENTERTAINMENT AND RECREATION	OTHER SERVICE ACTIVITIES	ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE	ORGANIZACJE I ZESPÓŁY EKSTERYTORIALNE	TOTAL
1	Central governments or central banks	0	0	0	0	0	0	0	0	0
2	Institutions	0	0	0	0	0	0	47 300	0	0
3	Corporates	2 498 379	523 121	350	17 658	44 913	267 771	145 883	7 155	0
4	Retail	2 196 223	307 363	2 285	233 245	955 326	137 919	45 822 162	0	14 563
5	Equity	0	0	0	0	0	0	0	0	0
6	Total IRB approach	4 694 602	830 484	2 635	250 903	1 000 239	405 690	45 968 045	54 455	14 563
7	Central governments or central banks	524 121	0	26 049 613	0	0	0	943 411	0	1 796 187
8	Regional governments or local authorities	268	0	322 637	0	0	21	0	0	0
9	Public sector entities	0	0	36 007	34 323	40 264	7 626	1 441	0	0
10	Multilateral development banks	0	0	0	0	0	0	0	0	0
11	International organisations	0	0	0	0	0	0	0	0	0
12	Institutions	11 860	0	0	0	0	0	0	0	32 622
13	Corporates	975 637	190 459	0	35 190	108 432	153 516	550 227	8 910	717
14	Retail	215	73	0	29	32	17	2 571 830	0	1 099 851
15	Secured by mortgages on immovable property	1 275	0	0	0	2 983	0	3 155 715	0	6 374 446
16	Exposures in default	48 332	2	981	16 061	475	0	46 298	0	20 176
17	Items associated with particularly high risk	47 302	0	0	0	0	0	0	0	0
18	Covered bonds	0	0	0	0	0	0	0	0	0
19	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0
20	Collective investments undertakings	0	0	0	0	0	0	0	0	0
21	Equity exposures	7 923	133 774	0	0	0	0	1 099	0	8
22	Other exposures	0	0	0	0	0	52 656	0	0	509
23	Total standardised approach	1 616 933	324 308	26 409 238	85 603	152 186	161 159	6 378 188	953 420	9 324 516
24	Total	6 311 535	1 154 792	26 411 873	336 506	1 152 425	566 849	52 346 233	1 007 875	9 339 079



EU CRB-E – Maturity of exposures, addressing disclosure requirements of art. 442 letter f) of CRR Regulation which presents a breakdown of net exposures by residual maturity and exposure classes for credit and counterparty credit risk portfolio. It includes the allocation into exposures for standardized and AIRB Approach.

	a)	b)	Net exposure value			f)
			c)	d)	e)	
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1 Central governments or central banks	0	0	0	0	0	0
2 Institutions	2 786 469	880 668	324 579	234 832	86 902	4 313 450
3 Corporates	5 154 683	14 125 428	16 646 793	9 048 018	4 545 252	49 520 174
4 Retail	3 895 827	6 277 540	5 076 705	34 333 938	11 024 470	60 608 480
5 Equity	0	0	0	0	0	0
6 Total IRB approach	11 836 979	21 283 636	22 048 077	43 616 788	15 656 624	114 442 104
7 Central governments or central banks	0	5 625 250	23 817 539	1 328 887	10 884 060	41 655 736
8 Regional governments or local authorities	24 479	25 755	228 051	43 868	773	322 926
9 Public sector entities	26 990	41 242	7 885	44 094	30	120 241
10 Multilateral development banks	0	0	1 434 237	809 612	0	2 243 849
11 International organisations	0	0	0	0	0	0
12 Institutions	53 412	15 135	793	0	475 133	544 473
13 Corporates	1 638 455	6 257 795	4 009 253	1 106 083	972 687	13 984 273
14 Retail	267 763	175 356	290 574	2 531 765	407 941	3 673 399
15 Secured by mortgages on immovable property	300	3 172	123 104	9 387 175	964 973	10 478 724
16 Exposures in default	61	56 825	53 073	103 790	209 103	422 852
17 Items associated with particularly high risk	0	0	0	0	67 133	67 133
18 Covered bonds	0	0	0	0	0	0
19 Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0
20 Collective investments undertakings	0	0	0	0	0	0
21 Equity exposures	0	0	0	0	321 096	321 096
22 Other exposures	0	353	0	0	55 374	55 727
23 Total standardised approach	2 011 460	12 200 883	29 964 509	15 355 274	14 358 303	73 890 429
24 Total	13 848 439	33 484 519	52 012 586	58 972 062	30 014 927	188 332 533

8. Credit risk adjustments

8.1. Overdue and impaired exposures – definitions used

The following qualitative description addresses the requirements of the EU CRB-A table – Additional disclosed information related to the credit quality of assets.

mBank applies uniform default definition in all areas of the credit risk management, i.e. for the purpose of calculating expected credit losses and capital requirement. The default definition is based on the definition included in CRR Regulation.

The customer is reclassified to the default category in the case of loss event occurrence. Reclassification of at least one customer credit liability to the default category reclassifies all credit and non-credit liabilities of the customer to the default category.

Corporate portfolio - Impairment triggers

The list of definite loss events in corporate portfolio:

1. The number of days past due is above 90 days (14 days in the case of banks) and the overdue amount exceeds PLN 3,000 and PLN 500 for Private Banking.
2. The Bank has sold exposures with a significant economic loss related to the decrease of the debtor creditworthiness.
3. The Bank performed enforced restructuring of the exposure, which resulted in the change of the loan/transaction service schedule due to the lack of possibility of the obligor to meet his obligations under loan/transaction agreement, as initially stipulated, which resulted in:
 - a. reduction of financial liabilities by remitting part of these obligations, or
 - b. postponing the repayment of the substantial part of the principal, interest or (if it refers to) commission; provided that the lack of approval for restructuring would cause more than 90 calendar days delay in repayment of substantial part of the obligation.
4. Filing by the debtor or filing by the Bank, the parent or subsidiary entity of the Bank a bankruptcy motion against debtor or filing similar motion in respect of credit obligations of the debtor towards the Bank, the parent or subsidiary entity of the Bank.
5. Bankruptcy of debtor or acquiring by him a similar legal protection resulting in his evasion of or delay in repayment of credit obligations towards the Bank, the parent or subsidiary entity of the Bank.

6. Termination of part or whole credit agreement by the Bank and the beginning of restructuring/collection procedures.
7. Client's fraud.
8. Bank expects a loss on a client's exposure.

In addition the Bank identifies so-called 'soft' loss events, introduced in order to signal situations, which may result in the loss of the debtor's ability to repay loan to the Bank. Credit analyst in this case assesses additionally whether the event impacted adversely the obligor's creditworthiness.

Retail portfolio - Impairment triggers

In mBank's retail banking in Poland, a debtor-oriented approach, including all exposures of the customers, is applied for the identification of impairment triggers. Transactional approach, in which each exposure is analyzed independently, is applied in the foreign branches (in Czechia and Slovakia).

The list of definite loss events in retail portfolio:

1. The main impairment trigger is delay in repayment, which is identified in different ways depending on the abovementioned approach. In the retail banking in Poland, impairment trigger is identified, when the total of all customer's exposures past due more than 30 days exceeds PLN 500 and the eldest delay exceeds 90 days. In the Czech and Slovak branches, an individual exposure is considered impaired when the overdue amount exceeds CZK 3000 or EUR 120, respectively, while the delay is more than 90 days.
2. Enforced restructuring of debt.
3. Bankruptcy of debtor.
4. Recognition of the contract as fraudulent.
5. Sale of the exposure with considerable economic loss.

6. Uncollectable status of debt.
7. Payout of low downpayment insurance.

Restructuring definition

Restructuring activities are understood as actions aimed at bringing back the regular servicing of receivables, in particular by extending the terms of payments or extending the payment deadline (an annex to the existing contract or repayment agreement), providing a repair product, carrying out restructuring proceedings, joining the debt by a third party, taking over debt by a third party, conversion of receivables into shares or stocks, taking over the asset (including the debt collateral) in exchange for the release from debt.

8.2. Quantitative information

The following subscriptions address the requirements of the EU CRB-A table – Additional disclosed information related to the credit quality of assets.

How exposures are classified to stages

mBank, by implementing International Financial Reporting Standards classifies credit exposures to stages:

- Stage 1 – exposures for which the risk did not increase significantly since the initial recognition in the loan portfolio,
- Stage 2 – exposures for which, as at the reporting date, a significant deterioration in credit quality was identified compared to the date of their initial recognition,
- Stage 3 – exposures for which credit-impairment was found during its lifetime in portfolio,
- POCI (purchased or originated credit-impaired asset) – assets identified as credit-impaired at initial recognition.

In the Bank the assignment of exposure to stage 2 takes place according to the Transfer Logic algorithm, which defines the qualitative and quantitative criteria indicating a significant increase of credit risk, while the classification exposure to the stage 3 is determined by loss-events (described in chapter 8.1).

Once the quantitative or qualitative criteria that were used to classify the exposure in Stage 2 at the reporting date are no longer met (the client and the exposure assigned to him or her no longer meet any of the Transfer Logic qualitative criteria or quantitative criteria), the exposure will be moved from Stage 2 to Stage 1. In the case of exposures classified as forbearance, the additional condition for reclassification to Stage 2 is the 24 month probation period during which the loan has a performing status.

The exposure may also be transferred from Stage 3 to Stage 2 or to Stage 1 in case of the retail part of the portfolio when the impairment triggers are no longer met (except for the restructuring), and in the case of the corporate customers when:

1. the loss events that caused the classification of a client to the stage 3 do not longer exist, and
2. the economic and financial situation of the debtor has improved to the extent which gives a high probability of repayment of all credit obligations in accordance with the conditions resulting from the original agreement or from the contract specifying the restructuring terms, and
3. the overdue debt has been repaid, and
4. the indebtedness is timely handled for at least 12 months after the change of contractual terms, or
5. the balance of the client's credit and non-credit obligations equals to zero as a result of: their total repayment by the customer, recovery of the Bank's receivables as a result of the debt collection activities or the receivables write-off.

Significant deterioration of credit quality (classification to stage 2)

A significant deterioration in credit quality is recognised for the asset concerned on the basis of quantitative and qualitative criteria, with the asset being transferred to Stage 2 once at least one of such qualitative or quantitative criteria is met.

Qualitative criteria are:

- More than 30 days past due, involving materiality threshold (The number of days for which the longest overdue amount of the

exposure concerned is greater than or equal to 31 days. At the same time, the amount of capital or an off-balance-sheet commitment is greater than or equal to PLN 500 in case of retail exposure and greater than or equal to PLN 3 000 in case of corporate exposure).

- Occurrence of the Forborne flag (the client status shows that he or she is experiencing difficulties in repaying the loan commitment, as defined by the Bank).
- Occurrence of the Watch flag (the Bank's internal process designed to identify corporate clients who are subject to increased monitoring in terms of changes in credit quality, in accordance with the Watch List classification rules adopted by the Bank).

The quantitative criterion of the Transfer Logic is based on a significant deterioration in credit quality, which is assessed on the basis of a relative long-term change in Probability of Default (PD), specified for the exposure at the reporting date, relative to the long-term PD specified on initial recognition.

Low credit risk criteria

For exposures whose characteristics are indicative of low credit risks (LCR), expected credit losses are always determined on a 12-month basis. Exposures designated as LCR may not be transferred from Stage 1 to Stage 2, although they can be moved from Stage 1 to Stage 3 upon being recognized as credit-impaired. The Bank applies the LCR criterion to clients from the K1 segment with a PD rating grade greater than or equal to class 2.8. The LCR criterion is also applied to clients from segments such as: Governments and Banks, Local Government Units and NBFI (Non-Banking Financial Institution). The LCR criteria is not used in the retail banking segment.

Calculation of expected credit losses

Valuation expected credit losses (ECL) are measured at the level of a single contract or exposure (agreement). In the portfolio approach, expected credit losses are the multiplication of individual for each exposure estimated value of PD, LGD and EAD and the final value of expected credit losses is the sum of expected credit losses in particular periods discounted with the effective interest rate. If on the reporting date the exposure credit risk did not increase significantly since the initial recognition, expected credit losses are calculated in 12-month horizon (12m ECL). If the exposure credit risk increased significantly since the initial recognition (exposure is in the stage 2), the Bank cal-

culates expected credit losses in the life-time horizon (Lt ECL).

In the case of non-financial guarantees, the Group applied an approach that the expected credit losses are always included in lifetime horizon (Lt ECL).

The individual approach concerns all balance sheet and off-balance sheet credit exposures with an impairment in the corporate loan portfolio and Private Banking loan portfolio, which is registered in corporate systems, as well as selected credit exposures with an impairment in the retail microfirms loan portfolio (used in the case of exposures with mortgage collateral with a debt balance over PLN 300 thousand PLN and arrears over 1 year). The expected credit losses are calculated as a difference between the gross carrying amount of the asset and the present value of the estimated future cash flows discounted with the effective interest rate. The method of calculating the expected recoveries takes place in scenarios and depends on the Bank's chosen strategy for the client. In the case of restructuring strategy, considered scenarios are developed for exposures and assume a significant share of recoveries from the customer's own payments. In the case of vindication strategy, the scenarios are developed for each recovery source (collateral) separately. Bank identifies scenarios per exposure/recovery source, minimum 2 are considered obligatory, provided one of them reflects a partial loss on exposure/recovery source. The weight of scenario results from an expert assessment of the likelihood of scenarios based on the relevant facts of the case, in particular, on existing security and their type, client's financial situation, client's willingness to cooperate, the risks that may occur in the case and micro- and macroeconomic factors.

Use of macroeconomics scenarios in ECL estimation

mBank is required to set an expected credit loss in a way which meets the expectations for various forward-looking macroeconomic scenarios. In the case of portfolio estimation of ECL, the non-linearity factor (NLF) is set in order to adjust the value of an expected credit loss (calculated every month). The values of NLF are used as scaling factors for individual ECLs. The NLF factor is determined separately for retail and corporate segments at least once a year. NLFs are used as scaling factors for individual ECLs that are determined at the level of individual exposures in each segment. NLFs are calculated based on results from 3 simulation calculations at the same reporting date, which result from relevant macroeconomic scenarios. In particular, NLF for a given segment is calculated as:

1. the probability-weighted average of the expected loss from 3 macroeconomic scenarios ('average estimation') comprising: baseline scenario, optimistic scenario, pessimistic scenario. The weights of scenarios are consistent with probabilities of realization each scenario – 60% for base, 20% for optimistic and 20% for pessimistic.

2. divided by the expected loss determined under baseline scenario (reference estimate).

Simulation calculations, whose results are used to calculate NLF, are carried out on the basis of the same input data on exposure characteristics, but involve different risk parameter vectors, if the macroeconomic expectations defined in the scenarios are such as to affect the value of these parameters. Additionally, the inclusion of forward-looking information takes place in the models of all three credit risk parameters estimated in the lifetime horizon (LtPD, LtEAD, LtLGD). Forward-looking data is used to determine parameter values over a period of over 12 months to 3 years, which allows for consistency with macroeconomic forecasts performed by the Bank and mid-term planning. In the estimates the Bank uses, among others, generally available macroeconomic and financial indicators (employment in the enterprise sector, employment rate, level of export/import, salaries, monetary financial institutions receivables from households, profitability of bonds), expectations regarding interest rates and exchange rates, as well as changes in property prices. In the case of individual estimation of ECL, the assumed recovery scenarios take into account various modeling conditions of macroeconomic environment.

Fair Value for credit assets

If the conditions for the measurement of a credit asset at amortized cost (IFRS 9, point 4.1.2) are not met, then it is measured at FVtPL (Fair Value through Profit & Loss) or by FVOCI (Fair Value through Other Comprehensive Income).

▪ **Fair value valuation of non-impaired credit assets**

The valuation for non-impaired exposure is based on its discounted estimated future cash flows.

Future cash flows are determined taking into account:

- repayment schedule, and in the absence of a schedule (revolving products) - based on a statistical estimation of the annual credit limit utilization in expected behavioral exposure period.
- time value of money, based on risk-free interest rates set in the process of forecasting interest flows,
- cash flows amount and their schedule fluctuations stemming from the option of prepayment (early partial or full repayment of the principal) included in the loan agreement by applied by prepayment factors,
- uncertainty of cash flows resulting from credit risk throughout the forecasted lifetime of the exposure by modifying contract flows using multi-year credit risk parameters LT PD and LT LGD.
- other factors that would be taken into consideration by the potential exposure buyer (overhead costs and the profit margin expected by market participants) during the process of calibration of the discount rate used in the valuation process.

Due to requirements of IFRS 13 for the exposures for which there are no quotes on an active market, the Bank calibrates the discount rate based on fair value at the date of the initial recognition (i.e. the cost price of exposure). Calibration margin reflects market valuation of costs related to maintaining exposures in the portfolio and market expectations about profit margin realized on similar exposures.

▪ **Fair value valuation of impaired financial assets**

Impaired Financial assets are valued based on expected recoveries. In the case of retail financial assets the valuation reflected by LGD parameters, and for corporate financial assets refers to individual recovery scenarios.



Non-performing and forborne exposures

In accordance with the EBA guidelines on management of non-performing and forborne exposures, which came into force from 30th June 2019, Banks are obliged to monitor and manage the NPL portfolio. Banks should strive to maintain the value of the NPL portfolio below the threshold set by the regulator at 5%. As of December 31, 2019, the NPL ratio for mBank Group (ratio calculated according to EBA guidelines) was at 4.03%. The change in the ratio compared to the end of 2018 (4.24%) is mainly due to the the realization of debt collection processes.

Impaired and overdue exposures

EU CR1-A – Credit quality of exposures by exposure class and instrument, addressing disclosure requirements of art. 442 letter g) and h) of CRR Regulation which presents a breakdown of the defaulted and non-defaulted exposures by exposure classes for credit risk and counterparty credit risk. The information is provided separately for exposures under the standardised approach and the IRB approach.

		a)	b)	c)	d)	e)	f)	g)
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					
1	Central governments or central banks	0	0	0	0	0	0	0
2	Institutions	0	4 315 378	1 928	0	0	0	4 313 450
3	Corporates	1 212 276	49 505 723	1 197 825	0	115 753	-96 594	49 520 174
4	<i>Of which: Specialised lending</i>	0	9 363 442	272 056	0	0	-10 928	9 091 386
5	<i>Of which: SMEs</i>	133 491	12 764 829	124 980	0	10 891	-3 336	12 773 340
6	Retail	2 405 106	60 074 507	1 871 133	0	269 643	-110 875	60 608 480
7	<i>Secured by real estate property</i>	855 172	30 495 201	460 150	0	75 537	-51 525	30 890 223
8	<i>SMEs</i>	135 004	2 523 113	67 582	0	16 435	-8 485	2 590 535
9	<i>Non-SMEs</i>	720 168	27 972 088	392 568	0	59 102	-43 040	28 299 688
10	<i>Qualifying revolving</i>	0	0	0	0	0	0	0
11	<i>Other retail</i>	1 549 934	29 579 306	1 410 983	0	194 106	-59 350	29 718 257
12	<i>SMEs</i>	655 009	12 390 382	586 833	0	61 863	-13 756	12 458 558
13	<i>Non-SMEs</i>	894 925	17 188 924	824 150	0	132 243	-45 594	17 259 699
14	Equity	0	0	0	0	0	0	0
15	Total IRB approach	3 617 382	113 895 608	3 070 886	0	385 396	-207 469	114 442 104



		a)	b)	c)	d)	e)	f)	g)
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					
16	Central governments or central banks	0	41 655 738	2	0	0	0	41 655 736
17	Regional governments or local authorities	0	323 160	234	0	0	0	322 926
18	Public sector entities	0	120 284	43	0	0	0	120 241
19	Multilateral development banks	0	2 243 849	0	0	0	0	2 243 849
20	International organisations	0	0	0	0	0	0	0
21	Institutions	0	544 834	361	0	0	0	544 473
22	Corporates	0	14 024 780	40 507	0	2 079	-29	13 984 273
23	Of which: SMEs	0	2 300 899	15 253	0	1 499	-4	2 285 646
24	Retail	0	3 776 627	103 228	0	619	-14	3 673 399
25	Of which: SMEs	0	46 463	29 131	0	0	0	17 332
26	Secured by mortgages on immovable property	0	10 478 855	131	0	0	0	10 478 724
27	Of which: SMEs	0	15 674	0	0	0	0	15 674
28	Exposures in default	1 218 326	0	795 474	0	22 345	-76 469	422 852
29	Items associated with particularly high risk	0	67 133	0	0	0	0	67 133
30	Covered bonds	0	0	0	0	0	0	0
31	Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0
32	Collective investments undertakings	0	0	0	0	0	0	0
33	Equity exposures	0	344 168	23 072	0	0	0	321 096
34	Other exposures	0	55 727	0	0	0	0	55 727
35	Total standardised approach	1 218 326	73 635 155	963 052	0	25 043	-76 512	73 890 429
36	Total	4 835 708	187 530 763	4 033 938	0	410 439	-283 981	188 332 533
37	Of which: Loans	4 545 796	123 173 706	3 842 314	0	410 439	-282 945	123 877 188
38	Of which: Debt securities	98 446	34 070 853	55 094	0	0	-1 036	34 114 205
39	Of which: Off-balance-sheet exposures	191 466	23 392 574	113 385	0	0	0	23 470 655

EU CR1-B - Credit quality of exposures by industry, addressing disclosure requirements of art. 442 letter g) of CRR Regulation which presents a breakdown of the defaulted and non-defaulted exposures by industry for credit and counterparty credit risk.

		a)		c)	d)	e)	f)	g)
		Non-defaulted exposures						
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
1	Agriculture, Forestry And Fishing	11 072	359 342	11 006	0	0	-1 997	359 408
2	Mining And Quarrying	97 092	217 751	97 017	0	0	-2 751	217 826
3	Manufacturing	844 212	18 991 853	629 890	0	3 190	-40 570	19 206 175
4	Electricity, Gas, Steam And Air Conditioning Supply	18 774	2 152 812	17 344	0	3 170	-2 558	2 154 242
5	Water Supply; Sewerage, Waste Management And Remediation Activities	18 843	729 459	15 296	0	97	-827	733 006
6	Construction	553 333	10 278 487	418 716	0	90	-21 124	10 413 104
7	Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	534 793	17 569 123	485 094	0	40 284	-28 167	17 618 822
8	Transportation And Storage	135 268	3 820 256	95 555	0	464	-1 614	3 859 969
9	Accommodation And Food Service Activities	32 809	1 257 423	41 849	0	0	-5 819	1 248 383
10	Information And Communication	98 600	3 212 000	95 789	0	2 521	-10 709	3 214 811
11	Financial And Insurance Activities	112 838	23 312 175	75 809	0	2	-2 222	23 349 204
12	Real Estate Activities	144 273	7 441 030	254 887	0	0	-10 293	7 330 416
13	Professional, Scientific And Technical Activities	249 212	6 280 827	218 504	0	50 094	-3 936	6 311 535
14	Administrative And Support Service Activities	43 486	1 152 073	40 767	0	47	-2 022	1 154 792
15	Public Administration And Defence; Compulsory Social Security	1 045	26 411 158	330	0	0	0	26 411 873
16	Education	38 704	319 772	21 970	0	1	-1 878	336 506
17	Human Health And Social Work Activities	13 112	1 156 286	16 973	0	0	-196	1 152 425
18	Arts, Entertainment And Recreation	7 811	567 482	8 444	0	0	-453	566 849
19	Other Service Activities	1 849 280	51 967 725	1 470 772	0	235 105	-146 846	52 346 233
20	Activities Of Households As Employers; Undifferentiated Goods- And Services-Producing Activities Of Households For Own Use	0	1 007 875	0	0	0	0	1 007 875
21	Activities Of Extraterritorial Organisations And Bodies	0	0	0	0	0	0	0
22	Other	31 151	9 325 852	17 924	0	75 374	0	9 339 079
23	Total	4 835 708	187 530 761	4 033 936	0	410 439	-283 982	188 332 533

EU CR1-C – Credit quality of exposures by geography, addressing disclosure requirements of art. 442 letter g) of CRR Regulation which presents a breakdown of the defaulted and non-defaulted exposures by significant countries for credit and counterparty credit risk.

Group's exposures are located in Europe, therefore the table above does not present geographical areas. Materiality of countries was determined based on its share in the credit portfolio and with application of materiality threshold above 1% in the net value of the portfolio. Countries below the threshold were included in 'other countries' category.

		a)	b)	c)	d)	e)	f)	g)
		Gross Carrying values		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges Defaulted exposures	Gross Carrying values
		Defaulted exposures	Non-defaulted exposures					
1	Poland (PL)	4 372 397	169 078 050	3 584 695	0	387 913	-229 708	169 865 752
2	Czech Republic (CZ)	94 505	8 320 206	104 525	0	15 436	-29 472	8 310 186
3	Slovakia (SK)	83	2 694 585	1 151	0	2	-4	2 693 517
4	Germany (DE)	15	2 551 583	905	0	0	0	2 550 693
5	Great Britain (GB)	52 257	1 383 942	57 076	0	7 083	-21 816	1 379 123
6	Luxemburg (LU)	595	1 283 424	1 633	0	0	-14	1 282 386
7	Other	315 856	2 218 971	283 951	0	5	-2 968	2 250 876
8	Total	4 835 708	187 530 761	4 033 936	0	410 439	-283 982	188 332 533

Credit quality of performing and non-performing exposures by past due days - addressing disclosure requirements (replacing EU CR1 – Ageing of past due exposures) of art 442 of CRR Regulation.

	a)	b)	c)	d)	e)	f)	g)	h)	
	Gross carrying amount/nominal amount								
	Performing exposures			Non-performing exposures					
	Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years		
1	Loans and advances	114 296 374	113 569 307	727 067	4 793 393	1 266 593	300 959	473 795	1 043 121
2	<i>Central banks</i>	9 987 869	9 987 869	0	0	0	0	0	0
3	<i>General governments</i>	304 370	304 370	0	1 048	0	0	0	0
4	<i>Credit institutions</i>	995 825	995 825	0	0	0	0	0	0
5	<i>Other financial corporations</i>	1 282 731	1 282 458	273	20 348	0	0	1	637
6	<i>Non-financial corporations</i>	44 056 005	43 651 033	404 972	2 337 984	832 633	124 390	185 925	343 422
7	<i>Of which SMEs</i>	17 019 186	16 760 718	258 468	1 248 945	341 571	90 687	63 000	197 946
8	<i>Households</i>	57 669 574	57 347 752	321 822	2 434 013	433 960	176 569	287 869	699 062
9	Debt securities	34 452 436	34 452 436	0,00	38 368	38 368	0	0	0
10	<i>Central banks</i>	3 219 627	3 219 627	0	0	0	0	0	0
11	<i>General governments</i>	27 430 904	27 430 904	0	0	0	0	0	0
12	<i>Credit institutions</i>	2 508 341	2 508 341	0	0	0	0	0	0
13	<i>Other financial corporations</i>	358 602	358 602	0	17 531	17 531	0	0	0
14	<i>Non-financial corporations</i>	934 962	934 962	0	20 837	20 837	0	0	0
15	Off-balance-sheet exposures	35 682 236			0				
16	<i>Central banks</i>	3 002			0				
17	<i>General governments</i>	87 508			0				
18	<i>Credit institutions</i>	4 036 261			0				
19	<i>Other financial corporations</i>	282 829			0				
20	<i>Non-financial corporations</i>	21 174 285			190 444				
21	<i>Households</i>	10 098 351			5 399				
22	Total	184 431 046	148 021 743	727 067	4 831 761	1 304 961	300 959	473 795	1 043 121

		i)	j)	k)	l)
		Gross carrying amount/nominal amount			
		Non-performing exposures			
		Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
1	Loans and advances	625 296 324	307 736 017	497 066 390	3 666 341 716
2	Central banks	0	0	0	0
3	General governments	0	0	1 775	0
4	Credit institutions	0	0	50	0
5	Other financial corporations	19 708 555	0	1 311	20 342 454
6	Non-financial corporations	129 633 766	114 747 465	336 171 826	1 389 798 546
7	Of which SMEs	46 726 637	32 053 633	255 227 194	590 013 015
8	Households	475 954 003	192 988 552	160 891 428	2 256 200 716
9	Debt securities	0	0	0	
10	Central banks	0	0	0	0
11	General governments	0	0	0	0
12	Credit institutions	0	0	0	0
13	Other financial corporations	0	0	0	17 530 547
14	Non-financial corporations	0	0	0	20 836 975
15	Off-balance-sheet exposures				202 089 842
16	Central banks				0
17	General governments				0
18	Credit institutions				0
19	Other financial corporations				0
20	Non-financial corporations				194 658 724
21	Households				7 431 118
22	Total	625 296 324	307 736 017	497 066 390	3 868 431 558



Performing and non-performing exposures and related provisions - addressing disclosure requirements (replacing EU CR1 – Ageing of past due exposures) of art 442 of CRR Regulation.

		a)	b)	c)	d)	e)	f)	g)	h)	i)
		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
		Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions		
			Of which stage 1	Of which stage 2		Of which stage 1	Of which stage 2		Of which stage 1	Of which stage 2
1	Loans and advances	114 296 374	106 848 441	7 441 037	4 793 392	172 567	4 266 654	557 833	302 967	238 758
2	<i>Central banks</i>	9 987 869	9 952 635	0	0	0	0	0	0	0
3	<i>General governments</i>	304 370	206 914	0	1 048	0	1 046	224	195	0
4	<i>Credit institutions</i>	995 825	981 913	0	0	0	0	1 061	1 061	0
5	<i>Other financial corporations</i>	1 282 731	1 241 142	8 606	20 348	3	20 343	9 040	8 992	47
6	<i>Non-financial corporations</i>	44 056 005	40 792 457	3 436 237	2 337 983	100 832	2 170 913	185 795	107 977	61 739
7	<i>Of which SMEs</i>	17 019 186	14 982 595	2 036 591	1 248 944	366 405	875 505	94 376	70 603	23 975
8	<i>Households</i>	57 669 574	53 673 380	3 996 194	2 434 013	71 732	2 074 352	361 713	184 742	176 972
9	Debt securities	34 452 436	34 377 425	0	38 368	0	38 368	4 920	4 920	0
10	<i>Central banks</i>	3 219 627	3 219 627	0	0	0	0	0	0	0
11	<i>General governments</i>	27 430 904	27 430 904	0	0	0	0	72	72	0
12	<i>Credit institutions</i>	2 508 341	2 508 341	0	0	0	0	1 264	1 264	0
13	<i>Other financial corporations</i>	358 602	283 591	0	17 531	0	17 531	934	934	0
14	<i>Non-financial corporations</i>	934 962	934 962	0	20 837	0	20 837	2 650	2 650	0
15	Off-balance-sheet exposures	35 682 236	34 291 763	1 390 473	195 843	0	195 843	70 043	44 926	25 116
16	<i>Central banks</i>	3 002	3 002	0	0	0	0	0	0	0
17	<i>General governments</i>	87 508	87 508	0	0	0	0	33	33	0
18	<i>Credit institutions</i>	4 036 261	4 036 261	0	0	0	0	895	895	0
19	<i>Other financial corporations</i>	282 829	281 998	831	0	0	0	588	499	89
20	<i>Non-financial corporations</i>	21 174 285	20 064 021	1 110 264	190 444	0	190 444	34 960	20 594	14 366
21	<i>Households</i>	10 098 351	9 818 973	279 378	5 399	0	5 399	33 567	22 905	10 661
22	Total	184 431 046	175 517 629	8 831 510	5 027 603	172 567	4 500 865	632 796	352 813	263 874



	j	k	l	m	n	o
	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
	Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Accumulated partial write-off	Collateral and financial guarantees received		
	Of which stage 1	Of which stage 2		On performing exposures	On non-performing exposures	
1	2 866 569	14 139	2 658 788	0	42 268 828	910 941
2	0	0	0	0	0	0
3	67	0	67	0	47 890	0
4	0	0	0	0	0	0
5	15 388	0	15 388	0	0	2 917
6	1 389 494	1 100	1 368 216	0	3 846 014	417 132
7	685 989	165 977	519 969	0	9 134 192	284 637
8	1 461 620	13 039	1 275 117	0	38 374 924	490 892
9	24 461	0	24 461	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	4 318	0	4 318	0	0	0
14	20 143	0	20 143	0	0	0
15	81 822	0	81 822		0,00	0,00
16	0	0	0		0	0
17	0	0	0		0	0
18	0	0	0		0	0
19	0	0	0		0	0
20	81 804	0	81 804		0	0
21	18	0	18		0	0
22	2 972 852	14 139	2 765 071	0	42 268 828	910 941


Credit quality of forborne exposures - addressing disclosure requirements (replacing EU CR1-E – Non-performing and forborne exposures) of art 442 of CRR Regulation.

	a	b	c	d	e	f	g	h
	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit		Collateral received and financial guarantees received on forborne exposures	
	Performing forborne	Non-performing forborne		Of which: impaired	On performing forborne exposures	On nonperforming forborne exposures		Of which collateral and financial guarantees received on nonperforming exposures with forbearance measures
		Of which: defaulted						
Loans and advances	880 185	1 331 621	1 300 283	1 231 836	23 253	660 751	955 117	955 117
<i>Central banks</i>	0	0	0	0	0	0	0	0
<i>General governments</i>	0	0	0	0	0	0	0	0
<i>Credit institutions</i>	0	0	0	0	0	0	0	0
<i>Other financial corporations</i>	0	3 310	3 310	3 310	0	1 643	1 667	1 667
<i>Non-financial corporations</i>	404 613	998 961	994 465	926 851	11 925	532 884	409 999	409 999
Loans and advances	475 572	329 350	302 508	301 675	11 328	126 224	543 451	543 451
Debt securities	17 531	17 531	17 531	17 531	0	4 318	0	0
Loan commitments given	139 238	179 198	179 644	176 240	1 895	78 447	0	0
Total	1 036 954	1 528 350	1 497 458	1 425 607	25 148	743 516	955 117	955 117

Reconciliation of changes in the specific and general credit risk adjustments

EU CR2-A – Changes in the stock of general and specific credit risk adjustments, addressing disclosure requirements of art. 442 letter i) of CRR Regulation which presents changes in stock of general and specific credit risk adjustments held against loans and debt securities that are defaulted or impaired.

		a)	b)
		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	Opening balance 30.06.2019	3 325 800	0
2	Increases due to amounts set aside for estimated loan losses during the period	594 473	0
3	Decreases due to amounts reversed for estimated loan losses during the period	-210 053	0
4	Decreases due to amounts taken against accumulated credit risk adjustments	-469 493	0
5	Transfers between credit risk adjustments	432	0
6	Impact of exchange rate differences	4 648	0
7	Business combinations, including acquisitions and disposals of subsidiaries	0	0
8	Other adjustments	0	0
9	Closing balance 31.12.2019	3 245 807	0
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	-3	0
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	0	0

EU CR2-B –Changes in the stock of defaulted and impaired loans and debt securities, the table below is supplementary to the previous one and presents reconciliation of defaulted exposures.

		a)
		Gross carrying value defaulted exposures
1	Opening balance 30.06.2019	5 126 461
2	Loans and debt securities that have defaulted or impaired since the last reporting period	700 040
3	Returned to non-defaulted status	-159 228
4	Amounts written off	-515 306
5	Other changes	-107 542
6	Closing balance 31.12.2019	5 044 424

Information on collateral obtained by taking possession and execution processes

As at 31 December 2019 mBank Group did not have collateral obtained by taking possession and execution processes

9. Operational risk

Operational risk is understood as the risk of loss resulting from inadequate or faulty internal processes, systems, errors or actions of a bank employee or external events.

While organizing the operational risk management process, the bank takes into account regulatory requirements, which are the starting point for preparation of framework for the operational risk control and management system in the Group.

General principle of operational risk management in the bank is to minimize it, that is to reduce the causes of operational events, the probability of their occurrence and the severity of potential consequences. Cost vs benefits analysis is considered while deciding on an acceptable operational risk level.

Operational risk control and management consists of a set of activities aimed at identifying, monitoring, measurement, assessment, reporting as well as reduction, avoidance, transfer or acceptance of operational risk, the Bank is exposed to in particular areas of its operations. It is based on quantitative and qualitative methods and tools for operational risk control.

mBank operates in a number of major business areas nationwide, and through its foreign branches, also outside of Poland. The Bank offers a wide and diverse range of financial products to its customers from various market segments. Bank's customers include both major corporations operating in Poland and large, medium-size, small and micro-enterprises, as well as individual customers in Poland and abroad.

Based on CRR Regulation for the purpose of collecting operational loss data, the operations are classified into the following business lines:

- Corporate finance,
- Trading and sales,
- Commercial banking,
- Retail banking,
- Payment and settlement,
- Agency services (custody services).
- Asset management,
- Retail brokerage services.

This diverse range of products addressed to a very wide spectrum of customers makes the bank naturally exposed to operational risks which may and actually do derive from a variety of sources.

The vast majority of Bank Group's operational losses refers to the lines: retail banking and commercial banking.

Losses are also monitored by risk categories:

- Internal fraud,
- External fraud,
- Malicious Damage,
- Employee practices and workplace safety,
- Clients, products and business practices,
- Disasters and public safety,
- Technology and interface failures,
- Execution, delivery and process management.

In terms of such division of losses, the Bank incurs the highest losses in three categories of operational risk: crimes committed by outsiders; execution, delivery and process management; customers, products and business practices.

Using the database available in mBank Group, the data on operational risk losses are recorded taking into consideration causes of their occurrence and analysed in terms of the necessary corrective actions.

10. Liquidity risk

Liquidity risk is understood as the risk of losing the ability to fund assets and timely execute payments arising from the Bank's balance sheet and off-balance sheet items on terms and conditions convenient for the Bank and at a market price.

The purpose of liquidity risk management is to ensure and maintain the Bank's ability to meet both current and future obligations. The Bank accomplishes this goal by diversifying stable sources of funding in relation to customer groups (from which it obtains deposits), products and currencies, maintaining the liquidity buffer, while optimizing the balance sheet in terms of profitability. mBank's long-term activities in this area are implemented taking into account the conditions as to the possibility of obtaining funding and profitability of the business. To this end, the Bank is preparing a funding strategy, which is an element of long-term liquidity management at the Group level. It is to provide, among others effective diversification of sources and funding period. The strategy is based on business plans, describes the main sources of funding and factors affecting the Group's ability to obtain appropriate funding.

In 2019, the liquidity situation was monitored and maintained at a safe level by adjusting the level of the deposit base and launching additional sources of funding in the form of loans from banks and bond issues depending on the development of lending and other liquidity needs.

Risk management organization

The organization of liquidity risk management in the Group has a hierarchical structure. The Bank's Supervisory Board approves and supervises the implementation of the Liquidity Risk Management Strategy adopted by the Bank's Management Board.

The liquidity management process consists of a set of activities aimed at identifying, measuring, controlling, monitoring, reducing and determining the acceptable level of risk exposure.

Strategic liquidity risk management is the responsibility of the Bank's Management Board, which delegates part of its responsibilities to appropriate committees, i.e. the Balance Sheet Management Committee, the mBank Group Asset and Liability Committee and the Financial Market Risk Committee

The roles and tasks in the area of liquidity risk management were organized according to the three defense lines model. The following entities participate in this process.

- **Treasury Department** - the first line of defense, fulfills treasury functions at the Bank, within the framework of short-term liquidity management, is responsible for providing funds for settlements on the Bank's accounts as part of managing intraday liquidity risk, shaping the structure of future cash flows within limits, maintaining specific volumes and the structure of the liquidity portfolio (as part of the Bank's Liquidity Reserves). He is also responsible for managing long-term liquidity by analyzing the Bank's demand for long-term funding and preparing the funding strategy to ensure effective diversification of sources and funding period.
- **Financial Markets Settlement and Services Department** – the first line of defense is responsible for operational supervision over the correctness of account flows.
- **Custody Services Department** – the first line of defense fulfills functions in the area of securities transaction settlement.
- **Balance Risk Management Department** - second line of defense, is responsible for control and ongoing monitoring of the Bank's liquidity risk level. Monitors the level of financial liquidity on a daily basis.
- **Internal Audit Department** – third line of defense, makes independent assessments of first and second line of defense.

Centralization level of Liquidity risk management

The Bank is the parent company in the mBank Group. Therefore, as part of consolidated supervision and liquidity risk management at the Group level, the Bank's Management Board sets the rules for intra-group funding and sets liquidity limits for individual entities of the Group. Nevertheless, the management boards of individual subsidiaries are responsible for managing liquidity risk in their companies. They are also responsible for complying with intra-group limits accepted by them.

Measuring, limiting and reporting liquidity risk

The Bank has a process of cyclical reporting of liquidity risk. It includes both the delivery of a standard daily management information package for entities dealing with liquidity risk management and persons controlling the liquidity risk management process at the operational level and for the purposes of making strategic decisions regarding liquidity risk.

The following measures are reported daily:

- regulatory measures,
- level of liquidity gap for mBank, mBank Group and subsidiaries significant from the point of view of liquidity risk along with the use of limits imposed on them in:
 - base scenario within one year and above one year time horizons,
 - stress scenarios,
- SLRR (Stress Liquidity Reserve Requirement), i.e. the requirement of a stress reserve calculated as the difference between the base scenario and the minimum of the stress scenarios and SLRP (Stress Liquidity Reserve Portfolio) - a portfolio of liquid assets that serve as a buffer for the survival of defined crisis conditions. The value of the liquidity reserve under stress (SLRP) should exceed the reserve requirement (SLRR) over a survival horizon of 1 month,
- intraday liquidity,
- other internal measures of liquidity risk.

The following measures are reported weekly:

- early warning indicators (EWI). The liquidity risk monitoring system is supported by a set of early warning indicators (EWI), consisting of indicators monitoring the level of use of regulatory and internal limits, indicators monitoring significant changes in market factors, changes in the balance sheet structure, as well as market perception of the Bank.

The following measures are reported monthly:

- regulatory and internal liquidity measures for members of the Bank's Management Board,
- regulatory and internal liquidity measures for the Financial Markets Risk Committee (KRF),
- regulatory measures, internal liquidity measures and forecasts of liquidity measures including business development forecasts for the mBank Group Asset and Liability Management Committee (ALCO).

The following measures are reported quarterly:

- regulatory and internal liquidity measures for the Bank's Supervisory Board.

The basic measure reflecting the Bank's liquidity position is the mismatch gap resulting from the future cash flows, taking into account behavioral modeling for selected items. It includes all assets, liabilities and off-balance

sheet items of the Bank for all currencies within set time horizons.

For the purposes of ongoing liquidity monitoring, the Bank calculates the values of the actual, cumulative cash flow mismatch gap. The adjusted gap is calculated on the basis of contractual flows.

Primarily, the subject to adjustment are the cash flows resulting from the portfolio of deposits of non-banking customers, the portfolio of overdraft facilities and cash flows of the portfolio of term loans. When calculating liquidity measures, the Bank takes into account the potential possibilities of obtaining funds from liquidation or pledging of securities comprising the Bank's Liquidity Reserves.

Stress tests

The Bank regularly conducts liquidity risk stress tests. Tests are carried out on each reporting day. The results are included in the daily report sent to persons involved in the liquidity risk management process, as well as to bodies and committees operating at the Bank.

Stress test results inform the Bank's Management Board and management about the impact of adverse and unexpected conditions associated with various types of risk on the Bank's liquidity position, and also indicate the balancing capacity necessary to limit the adverse effects of market shocks.

In order to determine the Bank's resistance to adverse, significant events that may lead to loss of liquidity, scenario analyzes are carried out covering extreme assumptions regarding the functioning of financial markets and / or behavioral phenomena concerning the Bank's clients.

For this purpose, stress test scenarios are regularly calculated in the short and long term, in the bank, market and combined scenarios.

Stress tests are used at the Bank to manage liquidity risk on an ongoing basis.

An integrated stress test is carried out annually taking into account the impact of materialization of other types of risk on the liquidity position and an in-depth liquidity analysis covering the scenario of credit risk materialization at the Bank and Group level.

In addition to the set of liquidity stress tests, reverse scenario is carried out annually to identify the most significant risk factors and to determine the liquidity risk appetite and severity of liquidity risk stress scenarios.

Currently, the material risk factors for the Bank's are:

- volatility of deposit base, taking into account the division into major business,

- increase in potential drawing of unused off-balance sheet commitments,
- sensitivity to changes in the valuation of derivative transactions resulting in the need to top up collateral.

On a monthly basis, the Bank performs stress scenarios based on forecasted liquidity risk measures. The first scenario assumes the inability to execute the planned issuances of debt securities, the second scenario additionally assumes the materialization of the outflow of identified large deposits.

Contingency plan

The Bank has a Liquidity Contingency Plan, which defines the strategy and procedure to be followed in the case of liquidity shortages in the event of a liquidity threat by the mBank Group in order to neutralize this threat.

The provisions of the Contingency Plan specify the division of tasks between mBank's organizational units, in the scope of:

- ongoing assessment of mBank and mBank Group liquidity,
- analysis and identification of the risk of an emergency situation related to the threat of liquidity loss,
- the procedure to be followed in a situation when this risk materializes.

Description of the emergency procedure includes:

- general rules of conduct in case various emergency scenarios materialize, including:
 - a) scope of duties and responsibilities,
 - b) authorization to make a decision regarding the initiation and termination of emergency procedure,
 - c) determining the time needed to start actions,
 - d) decision-making paths,
- outline - when and how to act in the event of a disruption in mBank's ability to fund operations at reasonable costs,
- defined sources of funding in the event of deterioration of liquidity,
- identifying a set of alternative funding sources potentially available in an emergency,
- clarifying the rules for the internal exchange of information on mBank's current liquidity situation during emergency proceedings,

- developing communication rules with external entities and internal stakeholders to limit reputational risk.

In addition, the Bank conducts tests of the Contingency Plan and based on its results changes are made to the provisions of the Plan. The results of the Contingency Plan test are reported and analyzed at the level of the KRF Committee and the Bank's Management Board.

Other information and quantitative data

Execution of the strategy of ensuring liquidity of the Bank consists in active management of balance sheet structure of future cash flows and keeping liquidity reserves adequate to the liquidity needs, resulting from the activity and structure of the balance sheet of the Bank, obligations to subsidiaries and the current market situation as well as the demand for liquid assets, resulting from the conducted stress tests.

Bank keeps a surplus of liquid and unencumbered assets constituting the Liquidity Reserves, for which there is a possibility of pledging, transaction on repo market or selling at any time without significant loss in value.

The Liquidity Reserve in the form of securities includes:

- Polish Government debt securities in PLN and EUR,
- bills issued by the National Bank of Poland in PLN,
- debt securities issued by European Investment Bank in PLN,
- Czech Republic's Government debt securities in CZK,
- bills issued by Czech National Bank in CZK.

The amount of mBank's liquidity reserve in the years 2019 - 2018 is presented in the table below:

Value of Liquidity Reserves (in PLN million)	
31.12.2019	31.12.2018
32 750	25 700

In the Group the Liquidity Reserves are held also by mBank Hipoteczny. Liquidity Reserves of mBank Hipoteczny were composed of the Polish Government debt securities in PLN and bills issued by the National Bank of Poland in PLN and amounted to:

Value of Liquidity Reserves (in PLN million)	
31.12.2019	31.12.2018
1 010	1 051

In order to support the process of liquidity risk management, a system of early warnings indicators and recovery indicators was developed in the Bank. It is composed of indicators monitoring the level of regulatory and internal limits and additionally, indicators monitoring significant changes of market factors, as well as changes in the Bank's balance sheet structure. Exceedance of thresholds by defined indicators may be a trigger for the launch of the Contingency Plan or the Recovery Plan.

Due to the use by the Bank of FX swap i CIRS instruments to convert surpluses in local currencies into foreign currencies, internal limits are in place on the use of these instruments. Moreover, in order to limit the concentration in FX swaps, the amounts obtained in such transactions are monitored in monthly time bands up to 1 year.

Other measures of liquidity risk are calculated and reported in the Bank as follows:

- concentration of funding sources,

- stability of deposit base,
- early withdrawals of deposits,
- ratio of long-term funding for the real estate market,
- liquidity risk concentration within off-balance sheet positions related to related to financial and guarantee liabilities.

For the purpose of current monitoring of liquidity, the Bank establishes values of realistic, cumulated gap of cash flows. The realistic gap is calculated on the basis of contractual cash flows. Mainly cash flows in portfolios of non-banking customers' deposits, overdrafts and term loans are amended. In the calculation of the liquidity measures the Bank takes into account the possibilities of raising the funds by selling or pledging the debt securities from the Bank's Liquidity Reserves.

In the LAB methodology, the LAB Base Case measure is the primary management measure and it is also used for limiting the liquidity gap in particular foreign currencies.

Value of realistic cumulative gap of cash flows misfit (in PLN million)				
Time bucket	LAB Base Case - 31.12.2019		LAB Base Case - 31.12.2018	
	bucket	cumulative	bucket	cumulative
up to 1 working day	18 801	18 801	19 207	19 207
up to 3 working days	-1 210	17 591	417	19 625
up to 7 calendar days	0	17 591	-2 987	16 638
up to 15 calendar days	-568	17 023	64	16 702
up to 1 month	-2 340	14 683	-330	16 371
up to 2 months	1 979	16 662	1 937	18 308
up to 3 months	-6	16 656	-574	17 734
up to 4 months	-94	16 562	-2 218	15 516
up to 5 months	-476	16 086	-1 105	14 412
up to 6 months	-13	16 073	-933	13 479
up to 7 months	-225	15 848	-12	13 467
up to 8 months	-335	15 513	-366	13 101
up to 9 months	-2 318	13 195	150	13 251
up to 10 months	-565	12 630	761	14 012
up to 11 months	-142	12 488	-109	13 903
up to 12 months	361	12 849	349	14 252

The above values should be interpreted as liquidity surplus/deficit in relevant time buckets. The dynamics of the development of non-bank term deposits and current accounts (PLN 13.8 billion - the exchange rate of 31 December 2019 was used in calculation) had a positive impact on the level of liquidity gap, exceeding the dynamics of the development of lending activities (PLN 10.1 billion - the exchange rate of 31 December 2019 was used in calculation).

LAB cash flows gaps mismatch in terms up to 1 month and up to 1 year within 2019 and values of regulatory measures M3–M4 and LCR are presented in the following table:

	31.12.2019	31.12.2018
LAB Base Case 1M	16 536	18 278
LAB Base Case 1Y	14 319	16 246
M3	4,30	4,96
M4	1,38	1,38
LCR	190%	231%

The long-term coverage ratios (M3, M4) are characterized by high stability on safe level, above minimum established by regulatory authority equal to 1. The LCR measure remained on safe level, significantly exceeding 100%.

As at December 31, 2019, the Bank's high-quality liquid assets (HQLA) used to calculate the LCR ratio consist only

of level 1 assets, including primarily Treasury bonds in PLN.

As at December 31, 2019, the impact of the adverse market scenario on derivatives, financing transactions and other contracts accounted for 0.3% of the total unweighted value of outflows recognized in the LCR.

The Bank identifies three significant currencies in accordance with art. 4 clause 5 of the EU Commission Delegated Regulation 2015/61 and art. 415 paragraph 2 of Regulation (EU) No 575/2013: PLN, CZK and EUR, of which the LCR ratio was above 100% for PLN and CZK. The CZK and EUR currencies are associated with running two foreign branches in the Czech Republic and Slovakia. The currency mismatch is limited at the level of the actual liquidity gap in individual currencies.

In the below table quantitative data regarding LCR are (in PLN million).

Quantitative information of LCR									
		Total unweighted value (average)				Total weighted value (average)			
Quarter ending on:		2019-03-31	2019-06-30	2019-09-30	2019-12-31	2019-03-31	2019-06-30	2019-09-30	2019-12-31
Number of data points used in the calculation of averages		3	3	3	3	3	3	3	3
HIGH-QUALITY LIQUID ASSETS									
1	Total high-quality liquid assets (HQLA)					32 745	31 029	30 007	30 714
CASH - OUTFLOWS									
2	Retail deposits and deposits from small business customers, of which:	70 989	73 403	76 021	79 549	5 171	5 328	5 486	5 779
3	Stable deposits	53 869	55 683	57 913	60 267	2 693	2 784	2 896	3 013
4	Less stable deposits	17 120	17 720	18 108	19 282	2 478	2 544	2 590	2 766
5	Unsecured wholesale funding	25 919	27 182	27 007	28 249	11 622	11 787	11 626	11 748
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	9 567	10 664	10 880	11 922	2 261	2 526	2 588	2 818
7	Non-operational deposits (all counterparties)	15 400	16 266	15 786	16 097	8 409	9 008	8 697	8 700
8	Unsecured debt	952	252	341	230	952	252	341	230
9	Secured wholesale funding					0	0	0	0
10	Additional requirements	10 226	10 465	11 113	10 023	1 276	1 262	1 261	1 225
11	Outflows related to derivative exposures and other collateral requirements	428	464	483	515	428	464	483	515
12	Outflows related to loss of funding on debt products	0	0	0	0	0	0	0	0
13	Credit and liquidity facilities	9 798	10 001	10 630	9 508	848	798	778	710
14	Other contractual funding obligations	663	1 087	709	622	467	861	480	406
15	Other contingent funding obligations	21 874	22 344	23 271	23 556	2 169	2 196	2 175	2 278
16	TOTAL CASH OUTFLOWS					20 705	21 434	21 028	21 436



CASH - INFLOWS									
17	Secured lending (e.g. reverse repos)	0	0	0	0	0	0	0	0
18	Inflows from fully performing exposures	8 533	8 512	8 924	9 189	5 812	5 839	6 186	6 409
19	Other cash inflows	449	260	296	210	423	179	216	129
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)	X				0	0	0	0
EU-19b	(Excess inflows from a related specialised credit institution)	X				0	0	0	0
20	TOTAL CASH INFLOWS	8 982	8 772	9 220	9 400	6 235	6 018	6 402	6 538
EU-20a	<i>Fully exempt inflows</i>	0	0	0	0	0	0	0	0
EU-20b	<i>Inflows subject to 90% cap</i>	0	0	0	0	0	0	0	0
EU-20c	<i>Inflows subject to 75% cap</i>	8 982	8 772	9 220	9 400	6 235	6 018	6 402	6 538
TOTAL ADJUSTED VALUE									
EU-21	LIQUIDITY BUFFER	X				32 745	31 029	30 007	30 714
22	TOTAL NET CASH OUTFLOWS	X				14 470	15 416	14 626	14 898
23	LIQUIDITY COVERAGE RATIO	X				226%	201%	205%	206%



11. Transitional arrangements concerning IFRS 9

The Bank decided, for the purpose of capital adequacy calculation, including calculation of own funds, based on the Regulation (EU) 2017/2395 of the European Parliament and of the Council of 12 December 2017 (Regulation) amending Regulation (EU) No 575/2013 in light of Article 1 paragraph 9 of the Regulation, not to apply the transitional arrangements that would mitigate the impact on capital resulting from the introduction of IFRS9.

Information on own funds, capital ratios and leverage ratio, presented in the document already reflect the full impact of IFRS 9.

12. Remuneration Policy for employees having material impact on the risk profile

mBank S.A. (hereinafter referred to as the “Bank”), subject to CRR Regulation and the Banking Law of 29 August 1997 (Journal of Laws of 2015, item 128, as amended), is obliged to announce qualitative and quantitative information regarding the remuneration policy in a generally accessible manner.

Information on the process of determining the policy of variable components of remuneration

The Bank has in place the “Remuneration policy for employees having a material impact on the risk profile of mBank S.A.” (hereinafter referred to as the “Remuneration Policy”), which was adopted for the first time during the meeting of the Supervisory Board in December 2011. Since then, the Remuneration Policy has been subject to annual verification. The last amendment of the Policy applicable in 2019 was approved by Resolution of the Supervisory Board No. 119/18 of 6 December 2018.

Remuneration Policy is compliant with:

- 1) EBA (European Banking Authority) guidelines on sound remuneration policies under Articles 74 (3) and 75 (2) of Directive 2013/36/EU and disclosures under Article 450 of Regulation (EU) No. 575/2013 – EBA/GL/2015/22 of 27 June 2016,
- 2) Polish Banking Law Act of 29 August 1997 implementing 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,
- 3) Regulation of the Minister of Development and Finance of 6 March 2017 on the Risk Management System, Internal Control System, Remuneration Policy, and Detailed Method for Banks’ Internal Capital Assessment.

The aim of the Remuneration Policy is to support sound and effective risk management, ensure that decisions made do not expose the Bank to excessive risk, i.e. risk exceeding the general level Bank’s risk appetite accepted by the Supervisory Board, support the implementation of the strategy and limit conflicts of interest.

The “Risk Takers Identification Policy of mBank S.A.” (hereinafter referred to as the “Identification Policy”), approved by the Management Board, the Remuneration Committee and the Supervisory Board of the Bank, stipulates the rules of identifying persons whose professional activities have material impact on the

Bank’s risk profile, and meets the following requirements arising from:

- 1) 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 material impact on an institution's risk profile,
- 2) Regulation of the Minister of Development and Finance of 6 March 2017 on the Risk Management System, Internal Control System, Remuneration Policy and Detailed Method for Banks’ Internal Capital Assessment.

The Identification policy, similarly to the Remuneration policy for employees having a material impact on the risk profile, has been subject to annual verification.

Remuneration Committee of the Supervisory Board

In March 2012, the Remuneration Committee of the Supervisory Board was established and has been operating in the Bank since then. The Committee supports the Supervisory Board in fulfilling its statutory obligations and conducting its activities resulting from the law. The Remuneration Committee is composed of the members of the Bank’s Supervisory Board. As at the end of 2019, the Committee was composed of:

1. Stephan Engels – Committee Chairman
2. Maciej Leśny – Committee Member
3. Tomasz Bieske – Committee Member

Pursuant to the applicable Rules of the Remuneration Committee, its main tasks include:

- I. With respect to mBank:
 - 1) issuing opinions on the remuneration policy (and proposed changes in this respect) applicable in the mBank and submitting its opinion to the Supervisory Board,
 - 2) monitoring the remuneration policy applicable in the Bank and assisting the Bank’s bodies in matters regarding the development and implementation of this policy,



- 3) verifying on an annual basis the “Remuneration Policy for Employees Having Material Impact on the Risk Profile of mBank S.A.” and the “Risk Takers identification policy” adopted by the Supervisory Board, and proposing potential modifications in these policies,
 - 4) verifying the bonus pool of mBank Group calculated on the basis of EP index (Economic Profit),
 - 5) assessing on an annual basis the appropriateness of the remuneration policy and procedures applicable in mBank Group in line with the existing regulatory requirements; submitting the assessment results to the Supervisory Board,
 - 6) issuing recommendations to the Supervisory Board on general guidelines for the Management Board on the remuneration level and structure of the top managerial staff, including in particular the head of the compliance unit and the head of the internal audit unit, whose remuneration should not differ from the remuneration of other persons holding key positions in the Bank; monitoring the level and structure of remuneration, in particular risk takers’ remuneration,
 - 7) determining on an annual basis the components of the Group’s results applied to the risk takers who are not Management Board members (i.e. the status of the Group’s results for the risk takers of mBank Group who are not Management Board members),
 - 8) verifying the remuneration paid to risk takers. The amounts of bonuses and basic remuneration paid to risk takers are reported to the Remuneration Committee every year within 60 calendar days following the approval of the Consolidated Financial Statements of mBank Group for a given year by the Annual General Meeting,
 - 9) issuing opinions and monitoring the variable remuneration of the persons holding managerial positions in the area of risk management, compliance and internal audit.
- II. With respect to the Management Board members of mBank:
- 1) considering matters concerning the rules and amounts of remuneration of the Management Board members, including:
 - a) approving management contracts,
 - b) determining the amounts of remuneration and severance pay,
 and issuing recommendations in this respect to the Supervisory Board.
 - 2) approving and setting the MBO goals (Management By Objective) and results for the Management Board members,
 - 3) preparing on an annual basis the score cards of the risk takers who are Management Board members of mBank,
 - 4) verifying the Bonus Pool for the Management Board members and recommending its division among the Management Board members to the Supervisory Board,
 - 5) issuing opinions for the Supervisory Board on reducing, suspending or returning the payment in whole or in part or on decreasing the amount of the deferred and non-deferred bonus of the Management Board members in accordance with the provisions of the “Remuneration Policy for Employees Having Material Impact on the Risk Profile of mBank S.A.”,
 - 6) issuing opinions for the Supervisory Board on suspending the payment in whole or in part or decreasing the amount of severance pay for members of the Management Board under the provisions of the management contract,
 - 7) determining on an annual basis the situation of mBank Group in relation to Article 142 (2) of the Banking Law (i.e. solvency / liquidity status of mBank Group) for the purposes connected with determination of bonuses for the Management Board members, recommending to the Supervisory Board a suspension in whole or a decrease in the amount of the aforementioned bonus,
 - 8) presenting opinions concerning approval for the Management Board members to engage in competitive activity or to sit on management or supervisory boards of companies outside mBank Group,
 - 9) making other decisions or carrying out other activities defined in or arising from the “Remuneration Policy for Employees Having Material Impact on the Risk Profile of mBank

S.A.” or the contracts concluded with the Management Board members.

In 2019, the Remuneration Committee of the Supervisory Board held 4 meetings, whereas the Supervisory Board, being a governing body supervising remuneration in the Bank, held 6 meetings.

Process of determining the policy of variable remuneration components

The annual process of verifying and introducing appropriate amendments to policies concerning remuneration and identification of employees having material impact on the risk profile of the Bank is coordinated by the Director of the Corporate Governance Department (organisational unit reporting directly to the President of the Management Board of mBank) supported by a team of employees responsible for HR, risk management, legal issues and compliance (in issues related to the selection of criteria indicating the positions having material impact on the risk profile, compliance of applicable policies with regulatory requirements and market practices in this scope.)

The policies of the risk takers remuneration and identification of positions having material impact on the risk profile of the Bank are assessed and modified by the Supervisory Board based on the recommendation of the Management Board, taking into account the opinion of the Remuneration Committee.

The most relevant information concerning the determination of remuneration in 2019

The total remuneration of the Management Board members or other employees having material impact on the risk profile of the Bank has been divided into a fixed part (annual basic remuneration and fixed benefits) and a variable part. The variable remuneration is composed of a bonus granted to a member of the Management Board or other employees having material impact on the risk profile of the Bank for a given financial year. The fixed remuneration is determined in a clear and verifiable manner, ensuring effective implementation of the Remuneration Policy. The maximum level of the variable remuneration components of the persons who are subject to the Remuneration Policy cannot exceed 100% of the basic remuneration (in the case of the Management Board members) or the fixed remuneration (in the case of other employees) paid for a given financial year.

A part of the variable remuneration is paid in the form of subscription warrants issued and executed pursuant to the rules and within the deadlines set forth in the

Incentive Programme and the Incentive Programme Rules.

Members of the Management Board:

The Supervisory Board determines the bonus amount for a given calendar year for each Management Board member individually, based on the assessment of MBO achievement with respect to a period of at least 3 years, with the proviso that the bonus amount depends on the bonus pool. The bonus pool is a total of the base amounts calculated for each Management Board member. The base amount is calculated as a multiple of the basic salary, which depends on the Economic Profit (EP); EP is calculated for a period of 3 years pursuant to the rules specified in the Risk Takers Remuneration Policy.

MBO is set by a member of the Management Board and the Remuneration Committee of the Supervisory Board for the following financial year by the end of the year preceding the financial year. In accordance with the rules of determining the business and development objectives MBO for the Management Board Members, approved, among others, by the Remuneration Committee of the Supervisory Board:

- 1) team quantitative objectives (at the level of mBank Group) account for 25% to 65% of the objectives (the cost to income ratio, capacity to pay out dividends, the NII ratio, gross profit),
- 2) individual quantitative objectives account for 15% to 50% of the objectives (objectives determined depending on the responsibility of a given Management Board Member),
- 3) individual qualitative objectives account for up to 40% of the objectives.

The bonus consists of a non-deferred part (40% of the bonus) and a deferred part (60% of the bonus).

Both the deferred part and the non-deferred part are divided into equal portions: 50% paid in cash and 50% paid in subscription warrants. The non-deferred part in cash is paid in the year when the bonus is awarded. The other half of the non-deferred part (50%) is paid in the form of subscription warrants, not earlier than after the lapse of 12 months from the AGM date.

The deferred part, both the cash portion and the subscription warrant portion, is paid in 5 equal annual tranches. In each tranche, the cash portion is paid once the Consolidated Financial Statements of mBank Group for the previous calendar year have been approved, and the subscription warrant portion is paid not earlier than after the lapse of 12 months from the

date on which the Consolidated Financial Statements are approved.

Employees who are not Management Board Members:

The Management Board of mBank assesses the performance of an employee on an annual basis as well as in longer time intervals and in the case when it finds that the employee met the annual/long-term business and development MBO objective (Management By Objective), upon having taken into account the value of the total remuneration of the employee, it can decide to determine the bonus amount. The decision on the bonus amount is made at the sole discretion of the Management Board of the Bank, which in accordance with its independent assessment and decision confirms the accomplishment of MBO, taking into account the situation in financial markets in the last/previous financial periods. The bonus amount can reach the amount of the annual fixed remuneration of the employee (total of the basic remuneration paid to the employee every month in the year for which the bonus and fixed benefits are awarded).

MBO is determined by the Management Board of mBank (the objectives result from the objectives determined for the Management Board of mBank - the rule of cascading objectives down through management levels) for the next financial year until 31 December of the year preceding the financial year. In accordance with the rules of determining the business and development objectives MBO for mBank, approved, among others, by the Remuneration Committee of the Supervisory Board:

- 1/ team quantitative objectives (at the level of mBank Group) account for 10% to 20% of the objectives (depending on the area, they include: the cost to income ratio, economic profit, net profit of the business line, the NII ratio; their weights depend on the impact an individual manager has on them),
- 2/ individual quantitative and qualitative objectives account for 65% to 90% of the objectives (objectives determined depending on the responsibility in a given position, the objectives cascaded by the Management Board Member supervising this position). In particular, objectives related to management efficiency have weights of up to 10%.

If the amount of the variable remuneration component determined by the Management Board does not exceed the limit of PLN 200,000, the Management Board of the Bank may decide not to defer the variable remuneration for the following years and pay the

variable remuneration in whole in the form of non-deferred cash instead. The aforesaid limit for the employees who are not Management Board Members was introduced taking into account local factors, such as the level of remuneration paid to key position holders, and aiming at unifying the rules of paying variable remuneration adopted under the Group's remuneration policy by Commerzbank, which is the majority shareholder of the Bank.

If the amount of the variable remuneration exceeds the limit, the bonus consists of the non-deferred part (60% of the bonus) and the deferred part (40% of the bonus).

Both the deferred part and the non-deferred part are divided into equal portions: 50% paid in cash and 50% paid in subscription warrants. The non-deferred part in cash is paid in the year when the bonus is awarded. The other half of the non-deferred part (50%) is paid in the form of subscription warrants, not earlier than after the lapse of 12 months from the AGM date.

The deferred part, both the cash portion and the subscription warrant portion, is paid in 3 equal annual tranches. In each tranche, the cash portion is paid once the consolidated financial statements of mBank Group for the previous calendar year have been approved, and the subscription warrant portion is paid not earlier than after the lapse of 12 months from the date on which the consolidated financial statements are approved.

The costs resulting from the deferred tranches in the form of shares are settled in accordance with the International Financial Reporting Standards.

Information on the performance assessment criteria which form the basis for the entitlement to remuneration components

The Supervisory Board of mBank, based on recommendation of the Remuneration Committee of the Supervisory Board in the case of Management Board Members, and the Management Board in the case of employees who are not Management Board Members may decide to withhold in whole or reduce the amount of a deferred tranche if it concludes that in a time horizon longer than one financial year (i.e., a period of at least 3 years), a Risk Taker had a direct and negative impact on the financial result or the market position of the Bank or mBank Group in the period under assessment, or directly contributed to significant financial losses, where at least one of the score card components has not been met or any of the premises stipulated in Article 142 (2) of the Banking Law Act has occurred.



The Management Board of mBank may take a decision on suspending in whole or decreasing the amount of the discretionary bonus for a given financial year, as well as the amount of the discretionary bonus or a deferred tranche not paid out yet, in a situation when there is a balance sheet loss or a threat of its occurrence or when the Bank is threatened by insolvency (Article 142 (2) of the Banking Law Act). Suspending in whole or decreasing the discretionary bonus as well as any deferred tranche by the Management Board of mBank can also apply to the discretionary bonus and/or the deferred tranche paid out to the employee upon termination or expiry of the employment agreement.

Moreover, a Risk Taker may be obliged, under the rules and within the time limit determined under a decision of the Supervisory Board of mBank / the Management Board of mBank, to return the bonus awarded and paid for a given calendar year (i.e. the non-deferred part and all deferred parts), if he/she has violated the rules and standards adopted in mBank Group, has materially violated the generally applicable law or has directly contributed to significant financial losses being the consequence of his/her deliberate adverse actions to the detriment of mBank Group, or has contributed to financial sanctions being imposed on the Bank by supervisory bodies under a final and non-appealable decision.

The decision on the occurrence of the said events may be taken by the end of the calendar year when the last tranche of the deferred part of the bonus awarded for the year in which the event occurred is paid.

Aggregated quantitative information concerning the remuneration paid to the holders of positions having impact on the risk profile, divided by business lines used in managing the Bank

Remuneration costs in 2019	
Financial Markets Area	8 487
Corporate and Investment Banking Area	16 896
Retail Banking Area	21 541
Head of Operations and IT	9 476
Finance Area	8 029
Risk Management Area	10 014
General Area	14 563
mBank	89 006

Aggregated quantitative data regarding the remuneration paid to holders of managerial positions in the Bank

Number of persons		Management Board Members	Other Risk Takers
		7	75
Fixed remuneration paid in 2019		15 462	32 027
Variable remuneration for 2019 ¹		-	-
Non-deferred part	Cash	-	-
	Financial instrument - number of shares	-	-
	Financial instrument - amount of the component ²	-	-
Deferred part	Cash	-	-
	Financial instrument - number of shares	-	-
	Financial instrument - amount of the component ²	-	-
Variable remuneration awarded in the previous years - paid in 2019 ³	Cash	3 323	9 563
	Financial instrument - number of shares	4 242 shares	4 837 shares
	Financial instrument - amount of the component ²	1 649	1 847
Variable remuneration awarded in the previous years - deferred ³	Cash	4 134	2 950
	Financial instrument - number of shares	12 992 shares	11 174 shares
	Financial instrument - amount of the component ²	5 595	5 002
Amount of deferred remuneration awarded in 2019, paid and reduced due to the adjustment made on account of results		-	-
Amount of variable remuneration lost due to termination of a contract / employment agreement		-	755
Payments related to commencement and termination of the employment relationship - severance pay	Number of persons	-	1
	Value	-	60
	Highest payment	-	60
Number of persons who received total remuneration in the amount of at least EUR 1 million (remuneration in the range between EUR 1M – 1.5M)		1	-

Deferred variable remuneration paid in 2019 to former Risk Takers ⁴	Cash	981	2 369
	Financial instrument - number of shares	2 680 shares	2 015 shares
	Financial instrument - amount of the component ²	981	732
Former Risk Takers ⁴ variable remuneration deferred to the next years	Cash	667	501
	Financial instrument - number of shares	1 538	1 175
	Financial instrument - amount of the component ²	666	498

¹As at the date of publishing this report, the variable remuneration for 2019 for the employees indicated in the table above has not yet been approved by competent authorities of the Bank. This document will be modified by including in it information on the variable remuneration for 2019 awarded in 2020, after the Annual General Meeting approves the financial statements for 2019.

²As per the value on the award date.

³Together with the variable remuneration paid to the Risk Takers after terminating their employment.

⁴ Former Risk takers are understood as employees who terminated their contract / employment agreement with the Bank or who changed their position within the Bank to one that does not impact on the Bank's risk profile.

13. Remuneration policy for employees having material impact on the risk profile - update of the information after the approval of the variable part of remuneration, regarding 2019 year, by the competent authorities of mBank

Aggregated quantitative data regarding the remuneration paid to holders of managerial positions in the Bank

Number of persons		Management Board Members	Other Risk Takers
		7	75
Fixed remuneration paid in 2019		15 462	32 027
Variable remuneration for 2019		8 800	15 710
Non-deferred part	Cash	1 760	10 614
	Financial instrument - number of shares	4 802 shares	5 962 shares
	Financial instrument - amount of the component ¹	1 760	2 184
Deferred part	Cash	2 640	1 456
	Financial instrument - number of shares	7 195 shares	3 968 shares
	Financial instrument - amount of the component ¹	2 640	1 456
Variable remuneration awarded in the previous years - paid in 2019 ²	Cash	3 323	9 563
	Financial instrument - number of shares	4 242 shares	4 837 shares
	Financial instrument - amount of the component ¹	1 649	1 847
Variable remuneration awarded in the previous years – deferred ²	Cash	4 134	2 950
	Financial instrument - number of shares	12 992 shares	11 174 shares
	Financial instrument - amount of the component ¹	5 595	5 002
Amount of deferred remuneration awarded in 2019, paid and reduced due to the adjustment made on account of results		-	-
Amount of variable remuneration lost due to termination of a contract / employment agreement		-	755
Payments related to commencement and termination of the employment relationship - severance pay	Number of persons	-	1
	Value	-	60
	Highest payment	-	60
Number of persons who received total remuneration in the amount of at least EUR 1 million (remuneration in the range between EUR 1M – 1.5M)		1	-

Deferred variable remuneration paid in 2019 to former Risk Takers ³	Cash	981	2 369
	Financial instrument - number of shares	2 680 shares	2 015 shares
	Financial instrument - amount of the component ¹	981	732
Former Risk Takers ³ variable remuneration deferred to the next years	Cash	667	501
	Financial instrument - number of shares	1 538	1 175
	Financial instrument - amount of the component ¹	666	498

¹As per the value on the award date.

²Together with the variable remuneration paid to the Risk Takers after terminating their employment.

³ Former Risk takers are understood as employees who terminated their contract / employment agreement with the Bank or who changed their position within the Bank to one that does not impact on the Bank's risk profile.



Name	Position	Signature
Cezary Stypułkowski	President of the Management Board, Chief Executive Officer	(signed electronically)
Lidia Jabłonowska-Luba	Vice-President of the Management Board, Chief Risk Officer	(signed electronically)
Frank Bock	Vice-President of the Management Board, Head of Financial Markets	(signed electronically)
Andreas Böger	Vice-President of the Management Board, Chief Financial Officer	(signed electronically)
Krzysztof Dąbrowski	Vice-President of the Management Board, Head of Operations and IT	(signed electronically)
Cezary Kocik	Vice-President of the Management Board, Head of Retail Banking	(signed electronically)
Adam Pers	Vice President of the Management Board, Head of Corporate & Investment Banking	(signed electronically)