



**Qualitative and quantitative disclosures
relating to capital adequacy and
variable components of remuneration
of the ING Bank Śląski S.A. Group
published for 2019**

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I. Capital adequacy

Introduction

Pursuant to the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 and the Banking Law Act of 29 August 1997 (Journal of Laws of 2015, item 128 as amended), hereinafter referred to as the "Banking Law Act", ING Bank Śląski S.A., hereinafter referred to as the Bank, is obliged to make qualitative and quantitative disclosures relating to the capital adequacy, excluding information immaterial, proprietary or confidential.

Pursuant to the "Policy of disclosing qualitative and quantitative information on capital adequacy and variable components of remuneration of ING Bank Śląski S.A.", disclosures relating to the ING Bank Śląski S.A. Group, hereinafter referred to as the Group, are published.

Disclosures in this document are based on the data from the 2019 annual consolidated financial statements of the ING Bank Śląski S.A. Group.

1. Own funds

1.1 Full reconciliation of own funds items to audited financial statements

The capital comprises: the share capital, the supplementary capital - issuance of shares over nominal value, accumulated other comprehensive income and retained earnings. All capitals and funds are recognised at their face value.

The share capital is recognised at its face value, in accordance with the charter and entry into the commercial register.

The share premium account comprises the share premium earned from the issue of shares less the direct costs thereof.

Other comprehensive income is created as a result of:

- valuation of financial instruments classified for measurement at fair value through other comprehensive income,
- valuation of derivatives for the element being the effective cash flow hedge,
- valuation of non-current assets at fair value, and
- actuarial gains and losses.

The deferred tax assets and liabilities resulting from above mentioned valuations are included in the other comprehensive income. The other comprehensive income is not subject to profit distribution.

Retained earnings represent the profits earned by the Group in the previous period less paid up dividends. Retained earnings comprise:

- other supplementary capital,
- capital reserve,

- general risk fund,
- revaluation of share-based payments,
- undistributed profit/loss of past years, and
- net financial result for shareholders of the dominant entity.

Other supplementary capital is established from earnings after tax with the aim of covering the balance sheet loss. The decision on using the supplementary capital is taken by the General Meeting.

The capital reserve is established separately from the supplementary capital from earnings after tax in the amount decided by the General Meeting. The capital reserve is earmarked for covering special losses and expenses. The decision on using the capital reserve is taken by the General Meeting.

The General Risk Fund is established under the Banking Law Act from earnings after tax and is earmarked for covering unidentified risk of banking operations. The decisions on using the fund are taken by the Management Board.

Revaluation of share-based payments - this item is presented as the fair value valuation of options granted under the Group's incentive schemes addressed to Bank employees.

The own funds include profit in the process of approval and the net profit of the current reporting period less expected charges and dividend in the amount not exceeding profit as verified by the chartered accountant.

As at 31.12.2019 in the own funds of the Group was recognized Bank's net profit in the amount of PLN 849.3 million for the period from 01.01.2019 to 30.09.2019, after deducting the expected charges and dividend, based on the decisions of the Financial Supervision Authority: of September 13 and December 3, 2019.

Unrealised gains and losses on debt and equity instruments available for sale are recognized in own funds in accordance with the guidelines in Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 and the Banking Law Act. In accordance with the article 171a of the Banking Law Act, unrealised gains and unrealised are included in own funds in 100%.

Group decreases own funds by the following values:

- goodwill and other intangible assets,
- difference between the amount of provisions and the amount of expected losses (the value computed for the bank calculating risk-weighted exposure amounts using IRB approach), and
- value adjustment due to the requirements for prudent valuation.
- adjustment in the transitional period due to adaptation to IFRS 9 requirements.

The table below presents calculation of regulatory own funds.

	items of the consolidated statement of financial position	adjustments resulting from the application of prudential consolidation	items of the consolidated statement of financial position, taking into account the prudential consolidation	items not recognized in the regulatory own funds	items recognized in the regulatory own funds
ASSETS					
Intangible assets	429.9	-12.8	417.1	-	-417.1
LIABILITIES AND EQUITY					
Share capital	130.1	0.0	130.1	0.0	130.1
Supplementary capital - issuance of shares over nominal value	956.3	0.0	956.3	0.0	956.3
Accumulated other comprehensive income	1 867.3	0.0	1 867.3	1 534.6	332.7
- revaluation of financial assets measured at fair value through OCI - debt securities	268.9	0.0	268.9	0.0	268.9
- revaluation of financial assets measured at fair value through OCI - equity instruments	69.9	0.0	69.9	0.0	69.9
- property, plant and equipment	7.1	0.0	7.1	0.0	7.1
- cash flow hedging instruments (effective part)	1 527.2	0.0	1 527.2	1 527.2	0.0
- hedging instruments (elements not designated)	7.4	0.0	7.4	7.4	0.0
- actuarial gains/losses	-13.2	0.0	-13.2	0.0	-13.2
Retained earnings	12 269.6	0.0	12 269.6	809.4	11 460.2
- other supplementary capital	393.6	0.0	393.6	0.0	393.6
- reserve capital	9 052.8	0.0	9 052.8	0.0	9 052.8
- general risk fund	1 215.2	0.0	1 215.2	0.0	1 215.2
- revaluation of share-based payments	51.9	0.0	51.9	0.0	51.9
- result of past years	-102.6	0.0	-102.6	0.0	-102.6
- net income for the current year	1 658.7	0.0	1 658.7	809.4	849.3
Equity attributable to shareholders of ING Bank Śląski S.A.	15 223.3	0.0	15 223.3	2 344.0	12 879.3
Non-controlling interests	0.0	0.0	0.0	0.0	0.0
Total equity	15 223.3	0.0	15 223.3	2 344.0	12 879.3
Equity recognized in the regulatory own funds					12 879.3
Other elements of own funds (decreases and increases), including:					
- subordinated liabilities					2 129.3
- goodwill and other intangible assets					-417.1
- goodwill included in the valuation of significant investments					-104.4
- shortage/surplus adjustments for credit risk to the expected loss under AIRB					-67.4

	items of the consolidated statement of financial position	adjustments resulting from the application of prudential consolidation	items of the consolidated statement of financial position, taking into account the prudential consolidation	items not recognized in the regulatory own funds	items recognized in the regulatory own funds
- adjustment in the transitional period due to adaptation to IFRS 9 requirements					220.3
- value adjustment due to the requirements for prudent valuation					-48.3
Regulatory own funds adopted for the calculation of the total capital ratio					14 591.7

1.2 Description of the main features of capital instruments issued by the Bank

The main characteristics of the Common Equity Tier 1 instruments issued by the Bank are presented in the table below. The presentation complies with the requirements of the Commission Implementing Regulation (EU) No. 1423/2013.

The main characteristics of the capital instruments		
1	Issuer	ING Bank Śląski S.A.
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	ISIN code: PLBSK0000017
3	Governing law(s) of the instrument	Polish
	<i>Regulatory treatment</i>	Yes
4	Transitional CRR rules	Common Equity Tier 1 Partial issue reclassification to lower category of capital - not applicable.
5	Post-transitional CRR rules	Common Equity Tier 1
6	Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Solo & (Sub-)consolidated
7	Instrument type (types to be specified by each jurisdiction)	Instrument type: ordinary share. Classification - Common Equity Tier 1 instrument in accordance with Article 28 of Regulation (EU) No. 575/2013. Nominal value: PLN 92.6 million (series A) PLN 37.5 million (series B) Agio: PLN 956.3 million (series B)
8	Amount recognised in regulatory capital (currency in million, as at the last reporting date)	Total capital worth: PLN 92.6 million (series A) PLN 993.8 million (series B) All parts of the instrument are included in the same category of regulatory capital. The amount recognized in regulatory capital does not differ from the amount of the issued instrument.
9	Nominal amount of instrument	PLN 130.1 million
9a	Issue price	Series A: PLN 5 (after the denomination and after the shares split*) Series B: PLN 26.5 (after the shares split*)
9b	Redemption price	Not applicable

The main characteristics of the capital instruments		
10	Accounting classification	Equity
11	Original issue date	08 October 1991
12	Perpetual or dated	Perpetual
13	Original maturity date	No maturity
14	Issuer call subject to prior supervisory approval	No
15	Optional call date, contingent call dates and redemption amount	Not applicable
16	Subsequent call dates, if applicable	Not applicable
	<i>Coupons/dividends</i>	<i>Dividends</i>
17	Fixed or floating dividend/coupon	Floating
18	Coupon rate and any related index	Not applicable
19	Existence of a dividend stopper	Yes
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing) - in relation to the payment of the coupon/dividend	Partially discretionary; causes: - decisions of the Supervisory Board - results - administrative decisions
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount) - in relation to the payment of the coupon/dividend	Fully discretionary
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Noncumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	Not applicable
25	If convertible, fully or partially	Not applicable
26	If convertible, conversion rate	Not applicable
27	If convertible, mandatory or optional conversion	Not applicable
28	If convertible, specify instrument type convertible into	Not applicable
29	convertible, specify issuer of instrument it converts into	Not applicable
30	Write-down features	No
31	If write-down, write-down trigger(s)	Not applicable
32	If write-down, full or partial	Not applicable
33	If write-down, permanent or temporary	Not applicable
34	If temporary write-down, description of write-up mechanism	Not applicable
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Not applicable
36	Non-compliant transitional features	No
37	If yes, specify non-compliant features	Not applicable

*) In 2011, the nominal value of shares was split. As a result, the nominal value of shares was reduced from PLN 10 to PLN 1 per share.

1.3 Information on the nature and amount of certain own funds items

The table below presents nature and amount of certain own funds items. The presentation complies with the requirements of the Commission Implementing Regulation (EU) No. 1423/2013.

No.*	Description	Amount at disclosure date	Regulation (EU) No. 575/2013 Article reference
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	1 086.4	26 (1), 27, 28, 29
	of which: ordinary share	130.1	EBA list 26 (3)
2	Retained earnings	169.7	26 (1) (c)
	revaluation of share-based payments	51.9	
	result of past years	-102.5	
	adjustment in the transitional period due to adaptation to IFRS 9 requirements	220.3	
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	9 779.0	26 (1)
3a	Funds for general banking risk	1 215.2	26 (1) (f)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	849.3	26 (2)
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	13 099.6	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	-48.3	34, 105
8	Intangible assets (net of related tax liability) (negative amount)	-521.5	36 (1) (b), 37
12	Negative amounts resulting from the calculation of expected loss amount	-67.4	36 (1) (d), 40, 159
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	-637.2	
29	Common Equity Tier 1 (CET1) capital	12 462.4	
Additional Tier 1 (AT1) capital: instruments			
36	Additional Tier 1 (AT1) capital before regulatory adjustments	0.0	
Additional Tier 1 (AT1) capital: regulatory adjustments			
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	0.0	
44	Additional Tier 1 (AT1) capital	0.0	
45	Tier 1 capital (T1 = CET1 + AT1)	12 462.4	
Tier 2 (T2) capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	2 129.3	62, 63
51	Tier 2 (T2) capital before regulatory adjustments	2 129.3	
Tier 2 (T2) capital: regulatory adjustments			
57	Total regulatory adjustments to Tier 2 (T2) capital		
58	Tier 2 (T2) capital	2 129.3	
59	Total capital (TC = T1 + T2)	14 591.7	
60	Total risk weighted assets	86 477.3	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	14.41%	92 (2) (a)
62	Tier 1 (as a percentage of risk exposure amount)	14.41%	92 (2) (b)
63	Total capital (as a percentage of risk exposure amount)	16.87%	92 (2) (c)
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	5 149.9	CRD 128, 129, 130, 131, 133
65	of which: capital conservation buffer requirement	2 161.9	
66	of which: countercyclical buffer requirement	1.6	
67	of which: systemic risk buffer requirement	2 554.0	

No.*	Description	Amount at disclosure date	Regulation (EU) No. 575/2013 Article reference
67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	432.4	CRD 131
The amounts below the thresholds of deductions (before weighing risk)			
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	464.5	36 (1) (c), 38, 48

*) numbering in accordance with Annex VI of the Commission Implementing Regulation (EU) No. 1423/2013

2. Regulatory capital requirements calculation

ING Bank Śląski S.A. reports capital requirement for credit risk under the AIRB approach for exposure classes: institutions and entrepreneurs. The Bank applies such presentation method pursuant to the letter of De Nederlandsche Bank (DNB) of 04 July 2013, wherein DNB together with the Polish Financial Supervision Authority approved application of the full AIRB approach by the Bank therefore.

In case of retail exposures, Bank introduced so called roll-out plan of implementation of AIRB method. Due to conducted works by ING Groep NV on the new default definition implementation and currently used AIRB models adjustment with respect to EBA guidelines the initial dates of AIRB application for portfolios under standardized approach are being discussed.

According to the letter received from the Polish Financial Supervision Authority dated on July 24, 2017, from July 2017, the Group does not include setting the total capital requirement, the so-called a regulatory floor calculated in accordance with 80% of the total comparative capital requirement (the total comparative capital requirement is calculated as the sum of the capital requirements for specific risks calculated using standard methods), but follows the literal interpretation of Art. 500 CRR Resolution, i.e. maintains own funds at a level no less than the amount of the regulatory floor (indicated under the relevant Q&A EBA).

The Group is required to maintain T1 and TCR at 11.955% and 13.955% respectively.

The requirement arises from the guidelines of the Polish Financial Supervision Authority and incorporates: provisions of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 and the Act on macroprudential supervision over the financial system and crisis management in the financial system of 05 August 2015:

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

ING Bank Śląski S.A. Group subsidiaries calculate capital requirements for credit risk with the use of the SA method, except ING Lease (Polska) Sp. z o.o., which uses the AIRB method.

The standard approach compliant with Basel III is used to calculate the requirement for market risk, settlement/delivery risk and the requirement due to exposure concentration limit and large exposures limit overrun. The capital requirement for operational risk was estimated using the Basic Indicator Approach (BIA).

Risk-weighted exposure and capital requirements for particular risks as at 31 December 2019 are presented in the table below (in accordance with the EU OV1: Regulatory Capital Requirements template shown in the EBA/GL/2016/11 Guidelines).

EU OV1: Regulatory Capital Requirements

		RWA amounts				Minimum capital requirements			
		as of 31 Dec 2019	as of 30 Sep 2019	as of 30 Jun 2019	as of 31 Mar 2019	as of 31 Dec 2019	as of 30 Sep 2019	as of 30 Jun 2019	as of 31 Mar 2019
1	Credit risk (excluding CCR)	74 109.7	73 501.3	72 967.1	68 492.9	5 928.8	5 880.1	5 837.3	5 479.4
Article 438(c)(d)	2 Of which the standardised approach	41 606.0	39 812.8	37 530.6	35 446.6	3 328.5	3 185.0	3 002.4	2 835.7
Article 438(c)(d)	3 Of which the foundation IRB (FIRB) approach								
Article 438(c)(d)	4 Of which the advanced IRB (AIRB) approach	32 503.7	33 688.5	35 436.5	33 046.3	2 600.3	2 695.1	2 834.9	2 643.7
Article 438(d)	5 Of which equity IRB under the simple risk-weighted approach or the IMA	747.0	780.6	610.7	553.4	59.8	62.4	48.9	44.3
Article 107	6 CCR	558.5	710.0	623.4	602.5	44.7	56.8	49.9	48.2
Article 438(c)(d)	7 Of which mark to market	341.4	430.0	407.0	341.3	27.3	34.4	32.6	27.3
Article 438(c)(d)	8 Of which original exposure								
	9 Of which the standardised approach								
	10 Of which internal model method (IMM)								
Article 438(c)(d)	11 Of which risk exposure amount for contributions to the default fund of a CCP	186.1	233.6	162.9	199.4	14.9	18.7	13.0	16.0
Article 438(c)(d)	12 Of which CVA	31.0	46.4	53.5	61.8	2.5	3.7	4.3	4.9
Article 438(e)	13 Settlement risk								
Article 449(o)(i)	14 Securitisation exposures in the banking book (after the cap)	43.6	34.9			3.5	2.8		
	15 Of which IRB approach								
	16 Of which IRB supervisory formula approach (SFA)								
	17 Of which internal assessment approach (IAA)								
	18 Of which standardised approach								
Article 438(e)	19 Market risk	1 964.3	2 211.7	1 982.4	1 767.5	157.1	176.9	158.6	141.4
	20 Of which the standardised approach	1 964.3	2 211.7	1 982.4	1 767.5	157.1	176.9	158.6	141.4
	21 Of which IMA								
Article 438(e)	22 Large exposures								
Article 438(f)	23 Operational risk	8 762.9	8 762.9	8 762.9	8 762.9	701.0	701.0	701.0	701.0
	24 Of which basic indicator approach	8 762.9	8 762.9	8 762.9	8 762.9	701.0	701.0	701.0	701.0
	25 Of which standardised approach								
	26 Of which advanced measurement approach								

EU OV1: Regulatory Capital Requirements

			RWA amounts				Minimum capital requirements			
			as of 31 Dec 2019	as of 30 Sep 2019	as of 30 Jun 2019	as of 31 Mar 2019	as of 31 Dec 2019	as of 30 Sep 2019	as of 30 Jun 2019	as of 31 Mar 2019
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	1 038.3	899.3	925.2	845.5	83.1	71.9	74.0	67.6
Article 500	28	Floor adjustment								
	29	Total	86 477.3	86 120.1	85 261.0	80 471.3	6 918.2	6 889.5	6 820.8	6 437.6

The capital requirement for credit risk represents approx. 88% of the Group's overall capital requirement and has the greatest impact on capital adequacy calculation.

The capital requirement for credit valuation adjustment risk (CVA) refers to the adjustment of the market value in accordance with the provisions of Basel III. The Bank calculates the adjustment for overhead capital requirement under the standard method in accordance with Article 384 of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013.

To calculate the capital requirement for risk of contribution to fund the CCP in case of default, the Bank uses method, described in Article 306-309 of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013. London Clearing House (LCH) and KDPW_CCP SA are the eligible central counterparty for ING Group and ING Bank Śląski S.A. Group.

The tables below present exposures by class according to the AIRB and SA methods – in accordance with the following templates shown in the EBA/GL/2016/11 Guidelines:

- EU CR5: Standardised approach,
- EU CR6: IRB - Credit risk exposures by exposure class and PD range,
- EU CR8: RWA flow statements of credit risk exposures under the IRB approach.

EU CR5: Standardised approach

	Exposure classes	Risk weight										Total
		0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	
1	Central governments or central banks	26 718.8	3 834.2	3 834.2	0.0	0.0	0.0	0.0	0.0	415.3	0.0	30 968.3
2	Regional government or local authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 236.7
3	Public sector entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Multilateral development banks	3 628.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 628.9
5	International organisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Institutions	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
7	Corporates	0.0	0.0	0.0	0.0	0.0	0.0	5 094.8	0.0	0.0	0.0	5 094.8
8	Retail	0.0	0.0	0.0	0.0	0.0	26 813.1	0.0	0.0	0.0	0.0	26 813.1
9	Secured by mortgages on immovable property	0.0	0.0	0.0	27 764.8	0.0	32.7	307.0	907.6	0.0	0.0	29 012.1
10	Exposures in default	0.0	0.0	0.0	0.0	0.0	0.0	312.5	74.0	0.0	0.0	386.5
11	Exposures associated with particularly high risk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Covered bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Collective investment undertakings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Other items	733.9	0.0	0.0	0.0	0.0	0.0	2 026.9	0.0	0.0	13.4	2 774.2
17	Total	31 081.6	3 834.2	3 834.2	27 764.8	0.1	26 845.8	7 741.2	981.6	415.3	13.4	101 914.7

EU CR6: IRB - Credit risk exposures by exposure class and PD range

	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
Institutions*	0.00 to <0.15	7 352.1	1 722.4	0.4	8 078.1	0.1	346.0	31.0	1.9	990.5	0.1	1.9	
	0.15 to <0.25	490.3	66.2	0.1	498.0	0.2	68.0	16.5	-3.4	113.3	0.2	0.3	
	0.25 to <0.50	1 626.0	471.7	0.3	1 778.6	0.3	34.0	30.8	2.7	487.0	0.3	2.2	
	0.50 to <0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.75 to <2.50	22.5	84.7	0.1	31.0	1.4	48.0	6.6	0.9	28.1	0.9	0.2	
	2.50 to <10.00	0.8	45.5	0.2	8.8	5.8	23.0	0.0	1.9	18.0	2.0	0.2	
	10.00 to <100.00	0.5	0.9	0.9	1.3	16.3	45.0	4.0	2.7	3.2	2.5	0.1	
	100.00 (Default)	4.9	14.4	0.0	5.1	100.0	31.0	38.2	1.1	0.7	0.1	4.7	
	Subtotal	9 497.1	2 405.8	0.4	10 400.9	0.2	595.0	30.2	1.7	1 640.8	0.2	9.6	6.2
es Specialis	0.00 to <0.15	676.7	0.0	0.0	676.7	0.1	14.0	1.9	2.3	13.6	0.0	0.0	
	0.15 to <0.25	1 514.8	75.7	1.0	1 590.3	0.2	24.0	34.9	2.7	646.9	0.4	1.2	
	0.25 to <0.50	3 802.2	411.6	0.9	4 190.8	0.4	152.0	25.3	3.3	1 749.4	0.4	3.8	

EU CR6: IRB - Credit risk exposures by exposure class and PD range

	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
	0.50 to <0.75	2.9	0.0	0.0	2.9	0.6	3.0	1.4	1.0	0.0	0.0	0.0	
	0.75 to <2.50	1 196.2	146.2	0.9	1 327.7	0.9	95.0	27.9	2.9	747.1	0.6	2.9	
	2.50 to <10.00	226.8	69.7	0.8	282.1	6.6	7.0	31.6	3.3	333.3	1.2	4.8	
	10.00 to <100.00	66.6	0.5	0.5	66.8	22.7	25.0	32.3	2.1	123.7	1.9	4.0	
	100.00 (Default)	468.5	0.0	0.0	468.5	100.0	13.0	30.8	1.8	312.3	0.7	118.9	
	Subtotal	7 954.7	703.7	0.9	8 605.8	6.2	333.0	26.2	2.9	3 926.3	0.5	135.6	139.1
Corporates SME	0.00 to <0.15	114.9	21.1	0.2	119.1	0.1	257.0	30.8	1.1	12.7	0.1	0.0	
	0.15 to <0.25	689.2	440.9	0.9	1 076.3	0.2	389.0	28.4	3.0	246.5	0.2	0.5	
	0.25 to <0.50	1 666.9	974.3	0.5	2 136.1	0.3	854.0	27.7	2.6	643.8	0.3	2.0	
	0.50 to <0.75	2 847.2	552.5	0.8	3 293.0	0.6	1 127.0	25.3	2.5	1 098.5	0.3	4.9	
	0.75 to <2.50	5 553.7	1 941.6	0.4	6 308.9	1.6	2 929.0	25.3	2.2	2 887.2	0.5	25.8	
	2.50 to <10.00	2 578.7	832.9	0.3	2 838.1	4.9	1 860.0	23.0	2.0	1 540.6	0.5	31.4	
	10.00 to <100.00	254.9	56.2	0.1	260.3	18.1	594.0	18.4	2.0	165.8	0.6	8.6	
	100.00 (Default)	497.3	207.9	0.0	507.0	100.0	622.0	38.6	1.6	420.2	0.8	218.6	
Subtotal	14 202.8	5 027.4	0.5	16 538.8	5.0	8 632.0	25.8	2.3	7 015.3	0.4	291.8	255.8	
Corporates Other	0.00 to <0.15	5 334.1	3 742.6	0.4	6 811.3	0.1	77.0	32.0	2.2	1 488.9	0.2	2.4	
	0.15 to <0.25	2 614.0	2 030.3	0.5	3 637.6	0.2	285.0	29.1	2.1	981.6	0.3	2.0	
	0.25 to <0.50	4 235.5	4 420.8	0.4	5 995.4	0.4	586.0	32.9	2.4	2 714.2	0.5	7.2	
	0.50 to <0.75	2 923.4	664.4	0.7	3 437.0	0.6	590.0	28.2	2.4	1 698.7	0.5	5.7	
	0.75 to <2.50	9 751.8	5 237.0	0.4	12 009.1	1.4	1 709.0	28.0	2.4	7 942.9	0.7	47.2	
	2.50 to <10.00	2 673.9	932.3	0.3	2 998.5	4.8	2 147.0	25.0	2.4	2 561.7	0.9	36.0	
	10.00 to <100.00	561.6	162.9	0.3	615.7	18.8	5 103.0	17.2	2.2	557.7	0.9	19.2	
	100.00 (Default)	1 449.3	997.1	0.1	1 564.6	100.0	1 046.0	44.3	1.6	1 569.9	1.0	813.3	
Subtotal	29 543.6	18 187.4	0.4	37 069.2	5.5	11 543.0	29.9	2.3	19 515.6	0.5	933.0	901.5	
Total (all portfolios)	61 198.2	26 324.3	0.4	72 614.7	4.7	21 103.0	28.6	2.3	32 098.0	0.4	1 370.0	1 302.6	

*) Local government units are permanently excluded from the institutions exposure class in the IRB approach and are permanently reported under the SA method as a result of the AIRB approach approval.

**) As far as corporate exposures are concerned, the Bank and the whole ING Group identify the so-called specialized lending transactions that comprise the following types of financing: Commercial Property Finance, Trade and Commodity Finance as well as Project Finance, out of which Commercial Property Finance stands for the largest exposure of the Bank. For those types of financing, the Bank uses dedicated PD rating models developed on the ING Group's level.

EU CR8: RWA flow statements of credit risk exposures under the IRB approach

	a)	b)
	RWA amounts	Capital requirements
1 RWAs as at the end of the previous reporting period	35 016.5	2 801.3
2 Asset size	-819.4	-65.6
3 Asset quality	-285.8	-22.9
4 Model updates	0.0	0.0
5 Methodology and policy	1 578.3	126.3
6 Acquisitions and disposals	0.0	0.0
7 Foreign exchange movements	-166.2	-13.3
8 Other	0.0	0.0
9 RWAs as at the end of the reporting period	35 323.4	2 825.8

Equity exposures are calculated using the following approaches:

- simplified method (for the risk weight of 290% and 370%), and
- using exemption thresholds for deductions from own funds items (for the risk weight of 250%).

Under the simplified risk weighting method, the weight of 290% is used for traded equity exposures; the weight of 370% is applied to the other exposures identified in the portfolio covered by the simplified method and not included in the weight of 190% under this method.

Detailed information on equity exposure is presented in the table below (in accordance with the EU CR10: IRB (specialized lending and equities) template shown in the EBA/GL/2016/11 Guidelines).

EU CR10: IRB (specialised lending and equities)

Regulatory categories	On balance sheet amount		Off balance sheet amount		RW	Off balance sheet amount		RWA		Capital requirements	
	as of 31 Dec 2019	as of 30 Jun 2019	as of 31 Dec 2019	as of 30 Jun 2019		as of 31 Dec 2019	as of 30 Jun 2019	as of 31 Dec 2019	as of 30 Jun 2019	as of 31 Dec 2019	as of 30 Jun 2019
Exchange traded equity exposures	-	-	-	-	290%	-	-	-	-	-	-
Private equity exposures	-	-	-	-	190%	-	-	-	-	-	-
Other equity exposures	225,3	165,0	-	-	370%	225,3	165,0	747,0	610,7	59,8	48,9
Total	225,3	165,0	-	-	-	225,3	165,0	747,0	610,7	59,8	48,9

3. Capital buffers

The provisions of the CRD IV, in particular on regulatory capital buffers were implemented to the domestic regulations in 2015 by adopting the Act on macroprudential supervision over the financial system and crisis management in the financial system and relevant amendment of the Banking Law Act.

The Act set out the capital buffers that will need to be observed by banks in Poland as of January 2016.

As at 31 December 2019, the Group accounts for the following values in the calculation of capital buffers:

- capital conservation buffer which equals 2,5%,
- other systemically important institution buffer (O-SII) at 0.5% imposed by the PFSA decision of 19 December 2017 and upheld with the PFSA letter of 2 August 2018 and of 19 August 2019,
- a countercyclical buffer applied to exposure to which such buffer was imposed by competent authorities. The countercyclical buffer varies over time depending on the structure of the relevant exposures and the levels of countercyclical buffer rates imposed on the relevant exposures (as at December 2019 the countercyclical buffer was effectively 0.002%),
- Regulation of the Minister for Economic Development and Finance of 1 September 2017 on the systemic risk buffer introducing a systemic risk buffer of 3% of the total risk exposure amount for all exposures located in the territory of the Republic of Poland (because the Group has a small pool of the so-called foreign exposure, the effective level of systemic risk buffer is variable over time and as at 31 December 2019 it was 2.953%).

The tables below present information on: the geographical distribution of the relevant credit exposures and the amount of the institution-specific countercyclical capital buffer - in accordance with Commission Delegated Regulation (EU) 2015/1555.

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements			Total	Own funds requirement weights	Countercyclical capital buffer rate
	Exposure value for SA	Exposure value IRB	Sum of long and short position of trading book	Value of trading book exposure 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			
010 Breakdown by country	010	020	030	040	050	060	070	080	090	100	110	120
Poland	64 038.0	60 694.5	0.0	0.0	0.0	0.0	5 664.0	0.0	0.0	5 664.0	98.6	0.0
Norway	0.5	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	2.5
Sweden	0.3	11.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	2.5
Hong Kong	0.0	74.5	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.1	2.0
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Czech Republic	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Slovakia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Denmark	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
United Kingdom	5.4	74.6	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.1	1.0
Ireland	0.5	519.9	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.1	1.0
Lithuania	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Bulgaria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
France	0.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Other countries	34.7	1 060.2	0.0	0.0	0.0	0.0	68.9	0.0	0.0	68.9	1.2	0.0
020 Total	64 080.5	62 439.5	0.0	0.0	0.0	0.0	5 742.3	0.0	0.0	5 742.3	100.0	

Amount of institution-specific countercyclical capital buffer		
010	Total risk exposure amount	71 779.4
020	Institution specific countercyclical buffer rate	0
030	Institution specific countercyclical buffer requirement	1.6

4. Leverage ratio

The calculation of regulatory leverage ratio in the ING Bank Śląski S.A. Group as at 31 December 2019, was based on provisions of Commission Delegated Regulation (EU) 2015/62 of 10 October 2014 amending Regulation (EU) No. 575/2013 of the European Parliament and of the Council with regard to the leverage ratio (hereinafter referred to as the "Regulation 2015/62").

Leverage ratio is calculated as Tier 1 capital measure divided by the total exposure measure and expressed as a percentage. Total exposure measure is the sum of the exposure value calculated in accordance with the Regulation 2015/62 of all assets and off-balance sheet items not deducted when calculating the Tier 1 capital measure.

The table below presents the reconciliation of total exposure to the calculation of the leverage ratio with the value of assets in the published annual financial statements in accordance with the Commission Implementing Regulation (EU) 2016/2005.

LRSum: Summary reconciliation of accounting assets and leverage ratio exposures		Applicable Amount
1	Total assets as per published financial statements	158 636.5
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	19.8
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)	0.0
4	Adjustments for derivative financial instruments	2 634.1
5	Adjustment for securities financing transactions (SFTs)	173.3
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	11 432.5
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)	0.0
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)	
7	Other adjustments	-416.8
8	Leverage ratio total exposure measure	172 479.4

The table below presents information on the financial leverage ratio as at 31 December 2019 and the breakdown of the total exposure measure comprising the leverage ratio in accordance with the Commission Implementing Regulation (EU) 2016/2005.

LRCom: Leverage ratio common disclosure		CRR leverage ratio exposures
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	157 256.1
2	(Asset amounts deducted in determining Tier 1 capital)	-416.8
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	156 839.3
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	3 081.2
5	Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	1 494.0
EU-5a	Exposure determined under Original Exposure Method	0.0
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	0.0
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-540.9
8	(Exempted CCP leg of client-cleared trade exposures)	0.0
9	Adjusted effective notional amount of written credit derivatives	0.0
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	0.0
11	Total derivatives exposures (sum of lines 4 to 10)	4 034.3
SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	171.5
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	0.0
14	Counterparty credit risk exposure for SFT assets	1.8
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation (EU) No 575/2013	0.0
15	Agent transaction exposures	0.0
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	0.0
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	173.3
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	36 460.5
18	(Adjustments for conversion to credit equivalent amounts)	-25 028.0
19	Other off-balance sheet exposures (sum of lines 17 and 18)	11 432.5
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))	0.0
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	0.0
Capital and total exposure measure		
20	Tier 1 capital	12 462.4
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	172 479.4
Leverage ratio		
22	Leverage ratio	7.23
Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	transitional
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	

On the basis of CRD IV Directive and implementing standards, the Group prepared and implemented "The procedure of preparing the report: Leverage Ratio". This document describes the recipients and detailed rules of leverage ratio calculation in LIREP application for NBP reporting by Accounting Department.

Within the ICAAP process, the excessive leverage ratio risk has been identified as immaterial. The metric used for materiality assessment has been the cost of capital needed to keep the ratio at the required level. Despite risk immateriality, the Group has implemented a management process for this type of risk, including: "Excessive financial leverage risk management policy" and "Leverage ratio planning procedure". The documents sets responsibilities of departments and ALCO Committee within the process.

The Accounting Department is responsible for:

- the leverage ratio calculating methodology (in agreement with the Group Treasury) and current calculation of the ratio,
- carrying out the obligatory reporting process to external entities of the Bank, such as NBP, KNF.

The Controlling Department is responsible for preparing plans of on-balance and off-balance positions, which are necessary for calculating the components of the leverage ratio.

The Group Treasury is responsible for planning the leverage ratio and initiating actions, which aim to maintain the leverage ratio at the required level.

Market Risk Management is responsible for:

- reporting and monitoring the leverage ratio, as well as informing the Management Board on this issue,
- setting a limit of the leverage ratio,
- the methodology of estimating the economic capital for the excessive leverage ratio risk, in case of qualifying this risk as significant and carrying out stress tests including the excessive leverage ratio risk.

For internal purposes the required ratio limit is 5%. In order to limit the risk of the leverage ratio falling below the required level, the Market Risk Management controls whether the ratio reaches (or may reach in the forecast horizon) the following levels:

- below 3% - considered as unacceptable,
- between 3% and 5% - considered as the level under observation,
- above 5% considered - as desired.

If the current or planned leverage ratio falls below the unacceptable level, the Market Risk Management informs the ALCO Committee and the Management Board. Based on the information received, ALCO may decide on recommending the Management Board one of the following actions:

- not paying or reducing the amount of dividend,
- issuance of capital, which could be included to Tier I,
- limiting the development of the Bank's lending activity,
- securitization or sale of certain loan portfolios,
- other actions resulting in the ratio improvement.

Based on the ALCO's recommendation, the Management Board decides on the next steps and indicates the unit responsible for carrying out these actions.

In 2018 the leverage ratio has been above internal and regulatory limit. The main influencing factors have been:

- credit dynamics (nominator) – as a result of Bank strategy,
- recognition in Tier I capital 2018 and three quarters of 2019 year (denominator) – a consequence of Bank strategy to improve capital adequacy ratio,
- inclusion of transition periods in own funds calculation (denominator).

If the Bank decides to identify the excessive leverage ratio risk as material and the ratio will not be at the required level in stress test for the mild recession scenario, Market Risk Management calculates the appropriate economic capital. The economic capital is a shortage of capital needed to maintain the ratio at the required level.

5. Liquidity

5.1 Introduction

ING Bank Śląski S.A. recognises the process of stable management of liquidity and funding risk as a major process at the Bank.

Liquidity and funding risk is understood by the Bank as the risk of the lack of ability to perform financial liabilities under on- and off-balance sheet items at reasonable prices. The Bank maintains liquidity so that the Bank's financial liabilities can always be repaid with the available funds, inflows from maturing transactions, available funding sources at market prices and/or liquidation of negotiable assets.

The information in this document has been disclosed on the basis of data from the annual consolidated financial statements of the ING Bank Śląski S.A. Group for 2019.

5.2 Liquidity and funding risk management process

In order to optimise the liquidity and funding risk management process, the Bank has developed the Management policy of liquidity and funding risk at ING Bank Śląski S.A. which sets forth the principles ensuring adequate funding sources and mitigation of risks and costs related to funding. The Policy describes a general approach to the liquidity and funding risk management process in the Bank. The core objective of the liquidity and funding risk management process is to maintain an adequate liquidity level to ensure secure and stable operation of the Bank in normal market conditions and in crisis.

The Policy was developed on the basis of the market management strategy in business, approved by the Supervisory Board (including the liquidity and funding risk management strategy). In particular, it reflects the risk appetite specified in the strategy and approved by the Supervisory Board.

Additionally, the Bank prepares a report on the ILAAP process. In a comprehensive and consistent manner, it presents the core indicators and numbers relating to the Bank's liquidity risk profile. It provides for the strategy, funding plan and risk tolerance by the Bank. The results of the report are approved by the Management Board which informs the Supervisory Board of the results.

The general approach to liquidity and funding risk management is composed of five recurring activities: 1) risk identification, 2) risk assessment, 3) risk control, 4) monitoring, and 5) reporting.

- Risk identification and assessment. Risk identification is performed on an annual basis by organising risk identification workshops. Each identified risk is assessed in order to determine its materiality for the Bank. Risk identification is also performed when new products are launched. Risk valuation and its materiality are assessed in terms of likelihood of risk occurrence and the financial effects should such risk materialise.
- Control. Risks are controlled with actions that mitigate the likelihood or risk occurrence or with actions that mitigate the effects should such risk materialise. Important elements of risk management include ongoing verification if the implemented controls are performed.

Definition of acceptable risk levels is an element of risk control. Regular inspection should evidence that risk control actions are effective. Adequate reporting is a major element of the liquidity and funding risk management process which provides the managers with information required for risk management.

- **Monitoring and reporting.** Risk monitoring serves three important objectives: ongoing verification if the implemented risk control is performed; if risk control actions are effective. Such actions support their confidence which is a major element in banking. Well organised and designed regular controls or monitoring that are referred to as risk management are indispensable for correct risk management. Adequate reporting provides information to managers as is indispensable for risk management.

In accordance with PFSA's resolution No. 386/2008 and Recommendation S, the Bank makes a detailed analysis of long-term liquidity with focus on mortgage loans. The above liquidity analysis shows risk levels related to long-term funding of mortgage loans.

The Bank pursues an active policy of liquidity management with reference to core currencies. For those currencies, liquidity risk measurement and limitation is made per currency and the management of operational liquidity is performed separately for each currency and it is incorporated in the risk transfer system.

Intraday liquidity is actively managed by the Group Treasury. The process manages the position and risk of short-term liquidity (one day and intraday). The objective is to comply with payment and settlement duties in a timely manner in regular operations and in extraordinary/stress situations.

The Bank operates a risk transfer system within which market risks, including liquidity risk, are transferred to the Group Treasury. Applying adequate tools, it manages the risks in a centralised manner within the limit system applied by the Bank.

5.3 Risk types

The Bank splits liquidity risk into two groups:

- liquidity risk resulting from external factors, and
- risk of internal factors relating to the specific bank.

The Bank's objective is to apply a conservative approach to liquidity risk management to support safe survival of events that are specified to ING Bank Śląski S.A. and the entire banking sector.

In terms of time horizon, the Bank splits liquidity risk into:

- operational – focused on current funding of the Bank's position and on managing intraday liquidity,
- strategic – focused on ensuring that the Bank's structural liquidity positions are at an acceptable level.

Considering the tenor and customers' behaviour (the two aspects affecting the Bank's liquidity), the Bank identifies three types of liquidity and funding risk:

- structural – understood as a potentially adverse impact on the Bank's revenues due to a mismatch between the anticipated maturities of the Bank's assets and liabilities as well as the risk of no re-financing possibilities in the future,
- related to customers' behaviour – understood as a potentially adverse impact on the Bank's revenues due to the embedded liquidity options in the products offered by the Bank,
- related to stress conditions – understood as a risk of lack of possibility by the Bank to comply with its financial obligations when due to insufficient available funds or when the generation of such funds is impossible at any price which results in immediate insolvency of the Bank.

5.4 Structure and organisation of the risk management process

The structure of risk and control at the Bank is based on the Three Lines of Defence Model. The model is designed to ensure a stable and effective framework for risk management by defining and implementing three risk management “levels” with distinct roles, responsibilities and oversight responsibilities:

- **First line of defence** – business management at the Bank. The heads of particular business units bear the primary responsibility for the actions. operations. compliance with norms and effective risk control affecting the particular business unit, The business management participate in the process of liquidity and funding risk management at all levels of organization.
- **Second line of defence** – risk and finance management functions. The risk management functions and finance management functions, if applicable, are performed through:
 - development of policies, standards and guidance for their particular risk areas,
 - coordination, supervision and control of the actions taken by the first line of defence within the scope of assigned tasks and the management, control and reporting risks generated by the first line of defence,
 - escalating/vetoing of the business unit’s activities that could possibly generate risks unacceptable for the Bank.
- **Third line of defence** – Internal Audit Department. The Internal Audit Department is responsible for ensuring independent assessment and opinion on:
 - the design and effectiveness of internal controls of the risks resulting from the Bank’s activity,
 - the design and effectiveness of risk management performed by the first and second line of defence.

The Bank's Management Board and the Asset and Liability Committee (ALCO) play a specific role in liquidity and funding risk management.

The Bank's Management Board is responsible for:

- designing a strategy related to liquidity and funding risk, the target liquidity position, the relevant funding methods and liquidity risk profile,
- determination of an acceptable risk level (risk appetite), liquidity risk tolerance and submission thereof to the Supervisory Board for approval,
- acceptance of a liquidity and funding risk management policy and major modifications thereto, in particular limits adequate to the general level of acceptable risk approved by the Supervisory Board,
- ensuring the allocation of adequate human resources and ITC resources in the Bank to implement the policy.

The Asset and Liability Committee (ALCO) is responsible for:

- implementation of the Bank's strategy with respect to liquidity and funding risk,
- management of a liquidity buffer within the relevant policies and limits approved by the Bank's Management Board, the related operational actions are delegated to the Group Treasury,
- supervision and monitoring of liquidity risk levels as well as the funding structure in the Bank's balance sheet,
- monthly analysis of short-, medium- and long-term liquidity profile (strategic liquidity positions) presented in the reports defined by the regulator and in internal reports,
- implementation of limits under the approved risk appetite (approved by the Bank's Management Board), approval of assumptions to reports and models,

- analysis of all proposed modifications to the liquidity and funding policies and submission of positively reviewed modifications to the Bank's Management Board.

5.5 Framework risk management principles

The framework liquidity and funding risk management principles contain all material methods with respect to intraday, shorty-term, medium-term and long-term liquidity and funding risk management. This is made up of the following key elements:

- limit system and liquidity risk measurement,
- monitoring of funding sources and concentration risk,
- liquidity reserve management,
- management of intraday liquidity,
- management of hedging items,
- stress tests and contingency plans.

Limit system and liquidity risk measurement

Formal limits are set by the regulator of the banking sector and/or the Bank for various liquidity risk measures. The admissible level of funding and liquidity risk is defined with a system composed of several elements: the general level of risk acceptable to the Bank, approved by the Supervisory Board, and a limit system, approved by the Bank's Management Board. The Supervisory Board is provided with information on compliance with the measures, minimum on a quarterly basis.

The limit level is based on the Bank's strategic objectives, identified liquidity risks, results of stress tests and the principles set forth by regulatory authorities. The limits are taken into account in planning processes (implementation of the approved plans may not result in the limits being exceeded). In most instances, the limits have a pre-defined warning level, set above (or below) supervisory limits. The admissible liquidity risk level is determined and updated minimum once a year.

The limit system is more detailed than the risk level approved by the Supervisory Board.

The admissible risk level is guaranteed by risk monitoring in various reports concerning liquidity and funding risk in the course of the Bank's normal/regular activity and in extraordinary/extreme situations. Inter alia, the Bank monitors funding concentration risk, the internal liquidity safety buffer and verifies the stability of external funding.

M3-M4

Resolution No. 386/2008 of the Polish Financial Supervision Authority obliges the Bank to calculate the following liquidity measures:

- M3 – coverage ratio of illiquid assets with equity (minimum value: 1,00), and
- M4 – coverage ratio of illiquid assets and assets of limited liquidity with own funds and stable external funds (minimum value: 1.00).

The Bank is obliged to perform daily monitoring and comply with the limits set forth in PFSA's resolution for M3 and M4 measures. In 2019 the Bank maintained all liquidity standards above minimum values.

As at 31 December 2019, supervisory liquidity measures for ING Bank Śląski S.A. were as follows:

Liquidity measures		Minimum value	2019	2018
M3	Coverage ratio of illiquid assets with equity	1	9.39	11.38
M4.	Coverage ratio of illiquid assets and assets of limited liquidity with own funds and stable external funds	1	1.17	1.15

Deposit base stability

Verification of the stability of the deposit base by calculating the stable part of stable external funding is a major element in the calculation of supervisory liquidity measures. The analysis is performed with an internal model. The model considers the following aspects:

- funding received from major depositors,
- distribution of changes,
- estimation of volatility and time scaling,
- long- and short term trends,
- impact of FX rate volatility on the stability of the deposit base.

The model is a subject to an annual review that covers a detailed analysis of its functioning, an analysis of the underlying assumptions and backtesting.

Liquidity coverage ratio (LCR) and net stable funding ratio (NSFR)

In compliance with the duties and principles set forth in Regulation (EU) No 575/2013 of the European Parliament and of the Council and Commission Delegated Regulation (EU) No 2015/61, the Bank calculates the following regulatory liquidity measures:

- short-term liquidity measures (LCR – Liquidity Covered Ratio) – this is to ensure that the Bank holds adequate liquid high quality assets to cover liquidity needs for 30 calendar days in stress conditions. In 2019 a limit of 100% applied.
- long-term liquidity measures (NSFR – Net Stable Funding Ratio) – this is to ensure a minimum level of available funding in medium- and long-term.

The Bank is obliged to report the liquidity measures to the regulator on a monthly and quarterly basis.

As at 31 December 2019 and 31 December 2018, the supervisory liquidity measures for the Group of ING Bank Śląski S.A. were as follows:

Liquidity measures		Minimum value	2019	2018
LCR	Liquidity coverage ratio	100%	130%	133%
NSFR	Stable funding ratio	n/a*	130%	131%

*) in compliance with Regulation (EU) No 575/2013 of the European Parliament and of the Council, the target regulatory limit for NSFR was not yet in force; starting from 28.06.2021, in accordance with Regulation (EU) No 2019/876 of the European Parliament and of the Council, the minimum ratio value will be at least 100%.

In compliance with the Guidelines on the disclosure of the net outflow coverage ratio, in addition to the disclosure of information on liquidity risk management issued by EBA, the Bank is obliged to disclose components of the ratio in the form as specified in the table below (net outflow coverage ratio – total). It contains the following information:

- high quality liquid assets – a “weighted” amount subject to value reduction,
- cash outflows – weighted and unweighted outflows,

- cash inflows – weighted and unweighted inflows.

Such weighted inflows and outflows are calculated as values after application of inflow and outflow ratios. The presented numbers cover the values for each of the four calendar quarters in 2019. Those are average observed values at the end of each month in the 12-month period preceding the end of each quarter.

The information presented in the table covers all positions irrespective of the denomination currency and are presented in PLN. The net outflow coverage ratio contains all important elements for the Bank's liquidity profile.

Apart from the presented values of the net outflow coverage ratio calculated for all currencies, the Bank also monitors ratios calculated for major currencies – PLN and EUR.

For the EUR ratio, the Bank identifies mismatch in the net outflow coverage ratio and as a result its value is below the ratio calculated for all currencies.

The above mismatch consists in the existence of long-term assets of EUR loans and their funding method. In terms of LCR, inflows under the loans are restricted to the next principal and interest instalment. The deposits funding those positions are only in part retail deposits characterised with a low outflow ratio. The other positions funding EUR loans in terms of LCR are characterised with a higher outflow ratio. Such calculated amount of EUR outflows is not fully covered with liquid assets in the currency thus resulting in a lower net outflow ratio in EUR versus the ratio calculated for all currencies.

Net outflow coverage ratio

		TOTAL UNWEIGHTED VALUE (AVERAGE)				TOTAL WEIGHTED VALUE (AVERAGE)			
		31 March 2019	30 June 2019	30 September 2019	31 December 2019	31 March 2019	30 June 2019	30 September 2019	31 December 2019
Number of data points used to calculate the averages		12	12	12	12	12	12	12	12
HIGH QUALITY LIQUID ASSETS									
1	Total high quality liquid assets					28 892	29 274	30 132	31 006
OUFLOWS OF CASH FUNDS									
2	Retails deposits and deposits from small enterprises, of which:	96 969	100 187	103 481	106 617	7 613	7 871	8 119	8 350
3	Stable deposits	61 948	63 983	66 180	68 366	3 097	3 199	3 309	3 418
4	Less stable deposits	35 021	36 204	37 302	38 251	4 515	4 671	4 810	4 932
5	Uncommitted wholesale funding	15 424	15 931	16 343	16 840	9 118	9 304	9 400	9 548
6	Operational deposits (all counterparties) and deposits within the network of cooperating network of cooperative banks	0	0	0	0	0	0	0	0
7	Non-operational deposits (all counterparties)	15 424	15 931	16 343	16 840	9 118	9 304	9 400	9 548
8	Unsecured debt					0	0	0	0
9	Committed wholesale funding					0	0	0	0
10	Additional requirements	22 384	22 711	22 900	22 995	2 912	2 945	2 988	3 015
11	Outflows related to exposure to derivative instruments and other requirements related to hedges	937	910	925	935	937	910	925	935
12	Outflows related to loss of funding under debt products	0	0	0	0	0	0	0	0
13	Credit instruments and liquidity support instruments	21 447	21 801	21 975	22 060	1 975	2 035	2 063	2 080
14	Other contractual liabilities relating to funding	6 421	6 608	6 646	6 847	6 290	6 462	6 480	6 666
15	Other conditional liabilities relating to funding	12 730	12 952	13 371	13 757	0	0	0	0
16	TOTAL OUFLOWS OF CASH FUNDS					25 933	26 582	26 987	27 579
INFLOWS OF CASH FUNDS									
17	Secured credit transactions (e.g. with a repurchase obligation)	43	75	184	245	1	1	2	3
18	Inflows from fully serviced exposures	2 362	2 403	2 488	2 567	952	987	1 019	1 028
19	Other cash inflows	2 155	2 210	2 029	1 809	2 155	2 210	2 029	1 809
EU-19a	(Difference between the sum of total weighted inflows and the sum of total weighted outflows resulting from transactions in third countries which apply transfer restrictions or transactions denominated in non-convertible currencies)								
EU-19b	(Surplus of inflows from related specialised credit institutions)								
20	TOTAL INFLOWS OF CASH FUNDS	4 560	4 688	4 701	4 621	3 108	3 198	3 050	2 840
EU-20a	Totally excluded inflows	0	0	0	0	0	0	0	0
EU-20b	Inflows subject to limitation of 90%	0	0	0	0	0	0	0	0
EU-20c	Inflows subject to limitation of 75%	4 560	4 688	4 702	4 621	3 108	3 198	3 050	2 840
						TOTAL ADJUSTED VALUE			
21	HEDGING AGAINST IMPAIRMENT					28 892	29 274	30 132	31 006
22	TOTAL NET INFLOWS OF CASH FUNDS					22 826	23 383	23 937	24 739
23	NET OUTFLOW COVERAGE RATIO (%)					1.27	1.25	1.26	1.25

Net stable funding ratio

	31.03.2019	30.06.2019	30.09.2019	31.12.2019
amounts of stable funding available	119 439.7	121 051.4	125 692.0	131 711.8
the amount of stable funding required	93 572.7	94 902.9	99 477.3	101 185.4
stable net financing rate	1.28	1.28	1.26	1.30

Herebelow there is a breakdown of level 1 liquid assets used by the Group to calculate the LCR ratio (as defined in the Commission Delegated Regulation (EU) No 2015/61) as at the end of 2019 and 2018. Level 1 liquid assets cover assets characterised with very high liquidity and credit quality.

	2019	2018
Level 1 liquid assets		
Cash	733.8	1 117.6
Cash in nostro accounts with the Central Bank net of the required reserve	1.2	23.6
Other exposures to the Central Bank (O/N deposit, cash bills)	229.9	0.0
Unencumbered Treasury bonds	27 705.1	26 713.6
Unencumbered BGK bonds	525.6	556.9
Unencumbered bonds of the European Investment Bank	3 554.2	3 267.8
Total	32 749.9	31 679.5

In level 1 liquid assets, securities are presented by their market value. The Group's liquidity position is reduced by encumbered securities (constituting collateral, blocked) and increased by securities received as collateral in reverse-repo transactions.

Additional liquidity monitoring measures (ALMM)

In compliance with the Commission Implementing Regulations (EU) 2016/313, the Bank reports a set of additional monitoring ratios for liquidity reporting.

The reports include:

- mismatch by maturity,
- financial concentration by counterparty,
- financial concentration by product type,
- prices for various financing periods,
- prolonged financing,
- concentration of ability to balance liquidity by issuer.

Internal liquidity reports

Another major element in the Bank's liquidity management risk process covers internally defined reports presenting detailed and varied approach by the Bank to measurement and management of the risk. The Bank models liquidity characteristics, both of its assets and liabilities in order to provide for customers' anticipated/actual behaviour. Modelling is mixed. This means that an analysis of customers' behaviour relies on historic data and expert judgement.

A structural liquidity report is one of such internal liquidity reports. The report presents the gap between the Bank's assets and liabilities in time buckets on correctly functioning markets. The report is used to monitor and manage medium- and long-term liquidity positions. It serves as a support in the planning process of the balance sheet and funding. It also indicates all major funding needs in the future.

The report is a scenario for the current balance sheet in normal market conditions. It does not cover any additional projections of balance sheet development. However, it provides for customers' typical behaviour observed in previous periods. For instance: cash flows under mortgage loans provide for prepayments and cash flows for savings accounts and current accounts are allocated subject to characteristics of liquidity.

Report of structural liquidity:

	1-6 months	7-12 months	1-5 years	6-10 years	11-15 years	over 15 years
2019 (PLN million)						
Liquidity gap	24 321.7	9 459.2	23 514.3	-718.7	-45 972.5	-10 604.0
Cumulated liquidity gap	24 321.7	33 780.9	57 295.1	56 576.4	10 604.0	0.0
2018 (PLN million)						
Liquidity gap	24 357.0	9 580.6	27 303.6	5 724.7	-57 139.0	-9 826.9
Cumulated liquidity gap	24 357.0	33 937.6	61 241.2	66 965.9	9 827.0	0.0

In the Group of ING Bank Śląski S.A., the Bank follows liquidity risk monitoring and limiting based on measurements of the cumulated gap. In order to properly exercise supervision over liquidity risk in the Group entities, limits are set separately for each company.

Monitoring of funding sources and concentration risk

Minimum once a year, the Bank determines the Bank's overall business strategy and the resultant medium-term (3 years) financial plan with a general risk strategy. Financial plan is an indispensable element of the strategy which provides for an effective diversification of funding sources and tenors.

ALCO actively manages the funding base. Additionally, it monitors funding sources in order to:

- verify compliance with the strategy and financial plan,
- identify potential risks related to funding.

Customers' deposits (retail and corporate) are the core funding source for ING Bank Śląski S.A. The Bank monitors the funding structure and thus verifies concentration risk by analysing its deposit base split into:

- type of financing,
- customer segment,
- product type,
- currencies,
- geographical region, and
- concentration of large deposits.

Periodical analyses also monitor the risk generated by related customers (within Groups).

The existing funding structure is well diversified. Herebelow, there is the funding structure as at the end of 2019 and 2018, split into direct and mutual funding. Direct funding is provided mainly by retail and corporate customers while mutual funding comprised primarily funds acquired from other banks.

Direct funding:

Core customer segments	2019		2018	
	direct funding	% share	direct funding	% share
Banks	1 606	1.1%	899	0.7%
Corporate customers.	41 362	28.2%	38 092	29.1%
Retail customers	87 877	60.0%	78 241	59.9%
Own issues	2 129	1.5%	1 375	1.1%
Equity	13 590	9.3%	12 105	9.3%

Mutual funding:

Core customer segments	2019		2018	
	mutual funding	% share	mutual funding	% share
Banks	8 994	99.5%	8 077	96.4%
Corporate customers.	43	0.5%	299	3.6%
Retail customers	0	0.0%	0	0.0%

Liquidity reserve management

Maintenance of an adequate liquidity buffer is a major element in managing the Bank's liquidity. The liquidity buffer presents the available liquidity, required to cover the gap between cumulated outflows and inflows within a relatively short time. It covers assets that are "unencumbered" and easily available to acquire liquidity. Unencumbered assets are understood as assets that are free of any legal, regulatory, contractual restrictions to have them disposed of by the Bank. The liquidity buffer is crucial in the times of a crisis when the Bank has to obtain liquidity in a short time when the standard funding sources are unavailable or insufficient.

The liquidity buffer is maintained as a safeguard against materialisation of various extraordinary scenarios, providing for needs of additional liquidity which may arise at any time in extraordinary circumstances and in normal conditions.

The table below presents the structure of the liquid asset buffer as at 31 December 2019:

Structure of the liquidity buffer	% share
Treasury bonds or bonds issued by the central bank (PLN)	76.0%
Treasury bonds or bonds issued by the central bank (EUR)	13.7%
bonds of BGK and EIB	10.3%

The Bank provides for realistic reductions due to impairment of securities with the level thereof being regularly reviewed and approved by ALCO. The reductions are assessed inter alia on the basis of market liquidity and depth, volatility of market prices, requirements of the central bank.

The Bank also observes asset concentrations ensuring their safe diversification in terms of issuer, maturity and currency.

Management of intraday liquidity

The Bank actively manages positions and risks of short-term (one-day and intraday) liquidity in order to comply with its payment and settlement obligations when due in normal market conditions and in extraordinary/stress situations.

The intraday liquidity management process is critical for correct functioning of the Bank as a whole and applies to normal market conditions and extraordinary (crisis) situations. It is a component of

current operational liquidity management. Managing its intraday liquidity, the Bank applies intraday ratios. Intraday liquidity ratios are monitored on an ongoing basis and presented to the competent liquidity risk management units and to ALCO.

Intraday liquidity management includes the maintenance of readiness to comply with the Bank's obligations also in crisis circumstances. In this connection, it is necessary to maintain an adequate liquidity buffer on the basis of information on the potential worsening of the Bank's access to intraday liquidity as a result of a market stress. In order to maintain an adequate liquidity buffer, the Bank applies intraday stress tests in its stress test program.

Management of hedging items

The management of hedging items covers both positions under CSA and GMRA contracts as well as positions of liquid assets related to operations with the central bank. This is performed on the level corresponding to the provided services, the Bank's portfolio, funding profile and liquidity requirements.

Most of the Bank's counterparties in derivative transactions have signed Credit Support Annexes (CSA) to ISDA agreements. They regulate the issue of support to portfolios of derivative transactions. They provide for the right to demand margin deposits by parties whose valuation of the portfolio is positive on a specific day (the party's portfolio is in-the-money) and the right to demand release of the margin when the valuation changes. Within the strategy of setting margins for each counterparty to CSA, the transaction portfolio is measured daily for margin requirements.

Derivative instruments such as FRA and IRS are settled via CCP (Central Clearing Party) clearing houses. This provides for effective management of margin deposits and mitigates the counterparty settlement risk. ING Bank Śląski S.A. has signed agreements with KDPW CCP and London Clearing House (LCH).

Stress tests and contingency plans

In compliance with regulatory requirements, the Bank has implemented a stress test program. It guarantees that such tests are planned, designed, held and analysed in order to identify sources of potentially restricted liquidity. Additionally, it stresses that such situations may be prevented so that the existing exposures remain within the approved limits. The Bank pays special attention to the test process under which every six months the Bank holds measurements and analyses the sensitivity of liquidity risk in various scenarios.

The results of stress tests are relied on in the following instances:

- development of the strategy,
- implementation of remedial actions or actions aimed at reducing the Bank's exposure to risk,
- designing of contingency plans should stress situations materialise,
- day-to-day practice of risk management,
- setting the risk appetite and internal limits, and
- adaptation and enhancement of internal regulations in the Bank.

The test program includes a scenario analysis, sensitivity tests and reversed tests. Such scenario analysis combined shock elements that are likely to materialise at the same time.

Three variants are analysed in the tests:

- idiosyncratic – specific for the Bank: market conditions remain good, the banking sector is not subject to stress conditions,
- systemic – an external market crisis: the Bank is affected by stress tests as a result of deteriorated market conditions,
- mixed – a combination of the variants specified above.

In each variant a number of risk factors are analysed and a set of scenarios are developed. As a rule, the test scenarios are designed on conservative assumptions.

The objective of sensitivity analyses is to understand the Bank's sensitivity to various risk factors.

Reversed tests are additional elements which are to analyse potential hazards to the Bank. The tests are held in the entire Bank and cover various risks in order to obtain a complete and comprehensive picture of risks prevailing at the Bank. In the liquidity test process, an important element covers specific scenarios to intraday liquidity hazards as well as intraday liquidity ratios and measures.

The results of the tests held in 2019 confirm a stable and secure position of the Bank. The Bank holds liquidity reserves on an adequate level.

An important process of liquidity risk management covers the development of a contingency liquidity plan for the Bank which is related to the stress test program. The Contingency Funding Plan developed by the Bank provides guidelines relating to identifying a liquidity crisis and should such crisis be identified – actions to be taken to overcome the crisis. The Contingency Funding Plan covers the Bank's entire business. The Liquidity Crisis Team plays the key role when the Contingency Funding Plan is activated.

The Contingency Funding Plan is subject to periodic testing. The tests held in 2019 confirmed the adequacy of the actions detailed in the Contingency Funding Plan to overcome liquidity crises.

5.6 Centralised organisation of the risk management process

The liquidity risk management process is fully centralised in treasury and risk management functions. Liquidity risk (along with the generated liquidity position) of each business line is transferred to the Group Treasury for central management.

The Bank provides for costs and benefits of various types of liquidity risks in the system of internal transfer pricing, in its measurement of profitability and the approval process of new products in all major business areas (both on- and off-balance sheet). The Group Treasury manages the positions transferred to its books over the risk transfer system, including the management of liquidity risk related to resetting the premium for liquidity.

In order to ensure correct, independent and centralised performance of the tasks in the liquidity risk management process (including risk management and reporting as well as preparation, review and updates of documentation), the Bank operates the Market Risk Management Department which reports to a Deputy President of the Management Board.

5.7 Reporting and liquidity risk management system

Liquidity risk reporting and measurement processes are automated. The Bank holds tools automatically generating a set of liquidity reports on a daily or monthly basis. Information of risk measures supports ongoing monitoring of liquidity profiles and control of basic measures. The reports on liquidity risk are submitted to units involved in the risk management process.

5.8 Risk management in subsidiaries

The balance sheet totals of the Bank's subsidiaries are insignificant compared to the Bank's balance sheet in the context of liquidity risk, and thus the approach adopted to managing liquidity risk and financing is much simpler than in the case of the Bank's liquidity. The principle was adopted that the liquidity risk and financing should be kept to a minimum, if possible, in subsidiaries, as companies should not be exposed to liquidity risk.

In the case of ING Bank Hipoteczny, the above description is not fully applicable. ING Bank Hipoteczny S.A. performs an important role in managing the Group's long-term liquidity. Its role is to raise long-term liquidity so that the Group:

- improves funding stability,

- ensures diversified funding for the mortgage loan portfolio,
- is able to better manage any mismatch of its assets and liabilities.

In 2019 ING Bank Hipoteczny issued mortgage bonds under its International Mortgage Bond Program for PLN 500 million.

5.9 Maturity analysis of financial assets and liabilities and derivative financial instruments by contractual payment days

The table below presents financial assets split by remaining (from the reporting date) contractual maturities.

2019 (PLN million)	without a specific date	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
Cash, funds with Central Bank	0.0	1 402.9	0.0	0.0	0.0	0.0
Loans and other receivables granted to other banks	0.0	602.6	10.6	46.2	237.4	0.0
Financial assets held for trading	0.0	174.7	25.5	2.5	250.8	254.3
Investment Securities	110.6	388.1	2 661.4	1 045.4	20 741.6	10 687.0
Loans and other receivables granted to customers	0.0	18 482.6	4 230.2	16 403.7	41 034.7	42 037.3
Other assets	0.0	1.5	14.9	23.2	0.0	0.0

2018 (PLN million)	without a specific date	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
Cash, funds with Central Bank	0.0	1 237.4	0.0	0.0	0.0	0.0
Loans and other receivables granted to other banks	0.0	733.9	0.4	25.7	17.6	0.0
Financial assets held for trading	0.0	637.4	0.3	2.0	727.7	158.0
Investment Securities	83.3	0.0	0.0	291.3	24 009.6	9 520.1
Loans and other receivables granted to customers	0.0	16 769.7	4 500.2	14 077.6	35 433.6	35 046.2
Other assets	0.0	14.7	13.5	331.9	0.0	0.0

The table below presents financial liabilities split by remaining (from the reporting date) contractual maturities. The presented values provide for future interest payments. With respect to contingent liabilities granted, the maturity analysis covers the closest possible performance of the liabilities by the Group.

2019 (PLN million)	without a specific date	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
Due to other banks	0.0	2 812.4	174.0	807.5	2 373.8	88.5
Financial liabilities measured at fair value through profit and loss account	0.0	80.7	0.0	0.0	85.9	81.3
Due to customers	0.0	127 969.6	933.9	1 368.3	177.7	41.1
Debt securities issued	0.0	0.0	4.7	0.0	437.1	0.0
Subordinated liabilities	0.0	0.9	6.4	21.8	116.3	2 224.7
Other liabilities	0.0	741.2	233.5	296.4	24.6	366.0
Contingent liabilities granted	0.0	30 669.0	537.1	2 454.9	2 089.1	797.6

2018 (PLN million)	without a specific date	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
Due to other banks	0.0	1 974.7	272.2	641.0	2 211.3	97.8
Financial liabilities measured at fair value through profit and loss account	0.0	84.6	0.0	109.6	36.1	879.2
Due to customers	0.0	114 897.4	1 084.9	1 594.3	95.0	27.4
Debt securities issued	0.0	0.0	0.0	304.1	0.0	0.0
Subordinated liabilities	0.0	1.0	3.1	12.4	66.4	1 123.2
Other liabilities	0.0	692.2	159.4	248.5	0.7	1.2
Contingent liabilities granted	0.0	34 284.1	0.0	0.0	0.0	0.0

The tables below present a maturity analysis of derivative financial instruments with a negative valuation as at the reporting date. The analysis is based on remaining contractual maturities.

Derivative financial instruments settled in net amounts

Derivative financial instruments settled by the Bank on a net basis cover IRS, FRA, options and FX Forward NDF transactions. The data below reflects – in case of IRS transactions – non-discounted future interest cash flows; in case of other transactions, the cash flows equivalent to the valuation as at 31 December 2019 and 31 December 2018 respectively.

2019 (PLN million)	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
IRS transactions, of which:	-97.6	90.7	249.3	-182.5	-299.0
hedging transactions in hedge accounting	10.0	38.2	80.3	-152.0	-175.7
other derivatives	-10.6	-8.0	-11.8	-24.1	0.0

2018 (PLN million)	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
IRS transactions, of which:	-157.7	-291.5	-222.5	-39.4	284.9
hedging transactions in hedge accounting	-46.2	-84.2	4.7	-44.2	81.1
other derivatives	-10.4	-11.6	-18.5	-7.9	-0.1

Derivative instruments settled in gross amounts

Derivative financial instruments settled by the Bank on a gross basis cover FX Swap, FX Forward and CIRS transactions. The above data reflects non-discounted contractual cash outflows and inflows of nominals and – in case of CIRS transactions – as interest, as at 31 December 2019 and 31 December 2018 respectively.

2019 (PLN million)	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
outflows	-2 799.0	-1 527.2	-1 502.1	-725.2	-252.1
inflows	2 786.3	1 514.6	1 477.5	659.4	244.4

2019 (PLN million)	up to 1 month	1-3 months	3-12 months	1-5 years	over 5 years
outflows	-2 472.1	-1 046.7	-1 326.2	-759.3	-313.9
inflows	2 461.0	1 016.4	1 307.4	769.5	311.0

5.10 Summary up

In the period under report, the liquidity and funding risk profile and the risk management methods were not materially changed. With respect to risk measurements, the core changes resulted from guidelines of the supervisory authorities, including PFSA and EBA.

6. Credit risk

6.1 Credit risk adjustments

6.1.1 Accounting definitions of past due and impaired items

For the accounting and regulatory purposes, the Bank classifies the past due exposures as material financial exposures with the capital or interest default. Days past due are calculated from the due date of the earliest payment defined in the credit agreement with the client. The Bank defined the materiality of the financial assets item for current accounts for corporate and retail clients as PLN 1 000 and PLN 500 respectively. The materiality of the financial assets item in subsidiaries is determined by the specificity of their operations.

The Bank classifies to impaired portfolio those credit exposures that are impaired and the loss resulting from the impairment has been incurred providing the following two conditions were met:

- there is objective evidences of impairment loss resulting from one or more events taking place after the initial balance sheet presentation of the credit exposure in the account books,
- the event(s) causing the loss has/have impact on the expected future cash flows under the balance sheet credit exposure or a group of balance sheet credit exposures that can be reliably estimated.

Delay in the execution by the client of any material loan obligations to the Bank, the parent company or any of its subsidiaries exceeding 90 days is the customer's default. The definition of customer's default is consistent with the definition of impairment.

The Bank defined the objective evidences of impairment loss, whose occurrence has a direct impact on the estimates of future cash flows related to the particular exposure. The objective evidences of impairment loss mirror the specificity of retail and corporate portfolios (including financial institutions and banks) and meet the requirements of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013, in particular:

- the Bank discontinues to recognise the credit obligation on the accrual basis,
- the Bank sells the credit obligation at a material credit-related economic loss,

- the Bank consents to a distressed restructuring of the credit obligation where it is likely to result in a diminished financial obligation caused by the material forbearance, or postponement of principal, interest or (where relevant) fees payment,
- the Bank has filed for the obligor's bankruptcy or a similar request in respect of an obligor's credit obligation to the Group,
- the obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of a credit obligation to the Group,
- the obligor is past due more than 90 days on any material credit obligation to the Group. Days past due commence once an obligor has breached the limit awarded or has been awarded a limit smaller than current outstandings, and
- the results of the analyses (impairment tests) on potential losses resulting from the impairment trigger identification - only for corporate clients.

Credit exposure is assessed for impairment during defined periods in the monitoring process for performing and non-performing portfolios. In addition, the Bank monitors the client's debt repayment timeliness (both for performing and non-performing portfolios) with the use of available tools and reports, which results in early identification of the threat of objective evidences of impairment loss or impairment trigger occurrence in the future before its actual materialization. In case of impairment trigger identification on any of client's account, impairment is calculated for the whole credit exposure of the client. In case the objective evidence of impairment loss is identified the client is reclassified to impaired portfolio directly without analyses (impairment tests) performance. The Bank defines the events enabling impairment loss reversal. Later occurrence of the circumstances specified in the definition of default would lead to the next default event.

Subsidiaries have analogous rules of classification of exposures to impaired financial assets and the list of impairment triggers.

6.1.2 Description of approaches and methods adopted for determining specific and general credit risk adjustments

Since 1 January 2018 the Bank has calculated the provisions for impaired financial assets according to new IFRS 9 standard measured at amortized cost (financial assets held to collect contractual cash flows) and at fair value through other comprehensive income (financial assets both held to collect contractual cash flows and to sell financial assets) according to new IFRS 9 standard.

In new standard the Bank still distinguishes two types of provision calculations for impaired credit exposures, namely: individual provisions and collective provisions. Subsidiaries do not calculate provisions for off-balance part of credit exposures due to the specificity of their operations.

Individual provisions

According to IFRS 9 individual provisions are formed for the impaired individually significant financial assets (ISFA) when there is evidence that the impairment loss on the single financial assets item or group of financial assets was incurred and results from one or more default events, whose occurrence impacts the estimates of future cash flows related to the particular financial assets item. Individual provisions are calculated for financial assets classified to 20, 21 or 22 risk class.

Individual provisions are calculated with the use of discounted future cash flows methodology. To define future cash flows it is necessary to determine the exact amount and the date of the particular

cash flow. The estimated proceeds may stem from different sources and be positive (cash inflow to the Bank) or negative (cash outflow from the Bank). They include in particular: debt repayment, additional disbursement, repayment from operational activity of the client, proceeds from collection and workout activities - collateral liquidation, sale of the loan.

In terms of collection and workout activities, in ISFA provisions calculation, the appropriate recovery rates are applied for particular collaterals which are included in the estimation of future cash flows. The recovery rate ratios are determined, among others, by the type of the collateral, the value of the mortgage-backed exposure, valuation date and the book value of the collateral. Amounts and dates of proceeds inflows are based mainly on expert knowledge, however, the Bank defined the principles of application of the future cash flows scenarios and the maximum recovery rates from the collateral liquidation. Subsidiaries estimate future cash flows on the basis of expert knowledge only.

Collective provisions

The collective provisioning method applies to exposures that do not meet the classification criterion for the portfolio calculated using the individual method. We distinguish among them assets for which evidence of impairment occurred or cases of default occurred. These assets are classified in risk classes 20, 21, 22. If no evidence of impairment is found when assessing a financial asset, this asset is included in the group of financial assets with similar credit risk characteristics that indicate the debtor's ability to repay the entire liability in accordance with the terms of the contract. Assets defined in this way without recognized impairment are classified in risk classes 1-19.

Collective provisions are calculated in accordance with collective provisions methodology that is based on adjusted risk parameters (PD, LGD and EAD/CCF) in line with requirements specified in IFRS 9 (and IAS 37). Risk parameters models for portfolios covered by advanced internal rating-based approach (AIRB) and those in use-test within AIRB roll-out plan were developed in compliance with Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26th June 2013 on prudential requirements for credit institutions and investment firms. Models for portfolio permanently excluded from AIRB approach fulfill the requirements specified in IFRS 9 and IAS 37.

IFRS 9 Standard has introduced different methodology of assessing provisions that bases on estimation of expected credit losses, instead of incurred losses, as it was in IAS 39.

The assessment of provisions applied by the Bank depends on the change of credit risk level of exposure in relation to the risk level determined at a granting date (initial recognition). Based on the change of credit risk level, the exposure are classified to one of 3 stages, with different calculation of expected credit loss:

- Stage 1 - performing exposures with no significant credit risk increase since the date of granting the exposure. Provision will be calculated based on 12-month expected credit loss.
- Stage 2 - performing exposures with significant increase of credit risk since the date of granting the exposure. Provision will be calculated based on lifetime expected credit loss (calculated from the date of granting the exposure until its maturity).
- Stage 3 - exposures with impairment (default) recognized. Provision will be calculated based on lifetime expected credit loss with PD=100%. Rules of classifying exposures to Stage 3 will be the same as the binding under MSR 39 process of assessment the impairment occurrence.

Estimation of expected loss (EL) under IFRS 9, requires forecasting of changes in risk parameters PD, LGD, EAD ($EL = PD \times LGD \times EAD$) in the whole lifetime of exposure. The forecast is based on, functional relations between change of risk parameters and change of macroeconomic factors determined from historical data.

Final provisions on exposures under Stage 2 and Stage 3 result from the sum of expected losses calculated in each year in the future up to maturity, using discounting.

Expected loss is calculated as the average probability weighted using multiple macroeconomic scenarios with different probability of occurrence.

Current PD, LGD and EAD models, which were built for AIRB capital requirements purposes, remain in use. However, for the purpose of IFRS 9 provisions calculating, parameters of these models have been calibrated according to PIT ("point-in-time") approach and forecasted in perspective of 30 years. Repayment schedules were taken into account in EAD parameter according to credit agreements.

Definition of default and the evidence/triggers of default remain unchanged, the same as the loss loan provisioning rules for ISFA portfolio.

The Bank identifies significant increase of credit risk (classification to Stage 2) based on the following signals:

- Significant increase of PD parameter in whole life of exposure ("lifetime") determined on reporting date in relation to the "lifetime" PD from the origination date (initial recognition) in the perspective of the whole remaining period from reporting date to maturity,
- Classification the exposure/client as Watch List,
- Rating 18/19,
- Customer service by the restructuring unit DKZR/CKD (does not apply to customers classifying to the Easy Lending path),
- Forbearance,
- Delay > 30 days in repayment of credit obligations,
- Bonds modified due to credit reasons,
- The client has a mortgage in CHF in ING Bank or other bank.

The Bank has defined also the methodology, calculation and reporting processes of provisions/value adjustments for exposures stemming from financial markets transactions. The Bank identifies two categories of such exposures for which the provisions/value adjustments are made:

- Bank receivables identified from the settlement of transactions on financial markets that were not repaid by the counterparty - Failed Settlement,
- potential receivables of the Bank that may arise at the moment transactions on financial markets are settled - Credit and Debit Value Adjustments (CVA/DVA).

Subsidiaries do not calculate the provisions/value adjustments for the exposures stemming from financial markets transactions due to the specificity of their operations.

6.2 Use of credit risk mitigation techniques

6.2.1 Rules and procedures as well as the scope of on- and off-balance sheet netting

In line with the rules applicable at the Bank, prior to initiation of a derivative transaction, each corporate client and financial institution is obliged to sign an appropriate Agreement with the Bank which enables the "netting" of transactions made. The system entry of the limits awarded to the customer, which are necessary to make a transaction, is conditioned upon signing legal documents by the customer. Conclusion of derivative transactions without appropriate Agreements signed with the Counterparties, is forbidden.

The Bank holds letters of legal advice and monitors changing regulations.

6.2.2 Rules and procedures of collateral valuation and management

The Bank's regulations on collateral describe the valuation method for each type of collateral across the tangible and personal collateral group.

The Bank identifies the following collateral values:

- face value,
- adjusted face value, and
- fair value.

Collateral face value is the value expressed in the collateral currency, established on the basis of current prices, excluding the influence of other factors (in particular: market value, book value, value of the accounts receivable transferred to the Bank), and set for each collateral individually.

Adjusted face value is the value of collateral realigned taking into account the factors omitted in the calculation of face value. Such value is worked out if in the Bank's opinion there exist factors which were omitted while calculating collateral face value or were included but to an insufficient degree and have an adverse impact on collateral value.

Collateral fair value is calculated as the product of recovery rate on collateral (defined using the parameters of an appropriate LGD model) and collateral value accepted by Bank (face value or adjusted face value providing the triggers of its calculation have emerged).

The fair value is corrected in the case of mismatch between the date of collateral maturity and the exposure maturity day.

Value of property is verified by the Bank's Appraisal Team. The aforementioned obligation to verify the value by the Bank arises from the Polish Financial Supervision Authority's recommendations.

When appraising the value and liquidity of tangible collateral one takes into account the assets use/occupancy period, their age and market for specialist collateral items.

Depending on the type of collateral, the value is monitored at specified intervals, aligned with the provisions of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013.

The list of the aspects analysed in the course of the credit approval process, collateral establishment and collateral monitoring includes the following issues:

- verification of the collateral value,
- physical check of the tangible collateral (inspections),
- check of the collateral formal-and-legal status (if put in place, if legally binding, if insured), and
- verification of the guarantor's financial standing (setting the risk rating).

At the same time, it is recommended for the decision-makers to consider that if certain circumstances occur, the frequency of monitoring should be increased.

Such circumstances are, inter alia:

- collateral risk,
- collateral value fluctuation risk, and
- reputation risk.

If the Bank decides that collateral value should be monitored at shorter intervals, they should take into consideration the economic effectiveness, i.e. the relation between the cost and effects of monitoring.

Monitoring performed at shorter intervals, e.g. in the case of property, is required under the circumstances of substantial fluctuations in the market conditions; the frequency of monitoring also depends on the specific nature of such property and individual factors affecting its value.

With respect to other tangible collateral, beside the material fluctuations in the market conditions, more frequent monitoring may be dictated by the technical condition of machines and equipment, means of transport, etc.

The Bank's regulations also define the way in which collateral is presented and approved in the process of credit exposure award in accordance with the credit mandates and the rules of collateral monitoring presentation and approval.

ING Lease (Polska) Sp. z o.o. (ING LP)

For lease facilities, ownership of the leased object is the main security collateral of lease transactions. Principles of collateralizing arise from the nature of leasing. The principles of valuation of the collaterals in terms of requirements under Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 are governed not only by the nature of leasing itself but also from the Collateral Management Policy referring to the estimation of the recoveries and capital requirements calculation at ING Lease (Polska) Sp. z o.o. introduced in 2015.

ING LP as a lease company buying the leased object from a supplier becomes its owner and then, as the owner, gives the lease object to the lessee (customer) for use. The purchase from the supplier of the assets item to be leased, under the law, is made at the market price. Acquisition value of the leased assets item from the supplier is the initial value of the lease transaction.

The principles for verifying the leased assets at ING LP are included in two regulations. For movables it is the "Supplier and leased asset verification procedure", for properties it is a the "Real estate policy paper".

Purchase price (market value) of a new object – movable acquired from a supplier unrelated to the lessee can be verified under so called internal verification based on:

- supplier status (applies to suppliers with no trusted status in ING LP),
- type of leased asset, and
- the value of the transaction.

In other cases, the market value of the new movable object is generally not verified.

The value of second-hand assets item - movable (regardless who is the seller) or the value of the new assets item - movable but purchased from a customer or a company associated with the customer is verified with an independent expert's valuation or, if possible, internal market value verification.

The value of the property to be financed is always verified in an appraisal prepared by an independent valuator.

The values of financed movables are not verified throughout the lease contract duration.

Market values of financed properties are verified at least every two years on the basis of an appraisal prepared by an independent valuator. Additionally, in those years when the external valuation of the property is not required, ING LP prepares an internal market value verification of the financed property.

ING Commercial Finance S.A. (ING CF)

Primary collateral for standard factoring transactions (both with and without recourse) are the receivables accepted and purchased from the Client by ING CF.

At the stage of the factoring application analysis and throughout the factoring agreement duration, ING CF makes ongoing assessments of the quality of receivables (analysis of the history of collaboration between client and debtor, quality of the settlements, the provisions of trade agreements) and monitors the debtors' financial situation.

ING CF occasionally uses other forms of collateral, such as mortgage, assets alienation or bank guarantees. The principles of collateral value verification are defined in the ING CF's "Credit Risk Manual". In accordance with these principles in the case of establishment of:

- mortgages - at the proposal stage clients are obliged to provide property appraisal, no older than 12 months, an extract from the land and property register and a copy of property insurance policy. In the case the mortgage is registered to another bank, the information on the current status of the debt secured by the mortgage.
- pledge on assets/assets alienation - at the proposal stage, clients are obliged to provide the documents proving the value of assets such as an insurance policy or stock value reports.
- bank guarantee - Front Office is required to obtain the opinion of the Bank on the risk of the bank issuing the guarantee.
- the factor guarantee (credit cover) - taking over the risk of foreign debtor's insolvency by the foreign factor, ING CF verifies whether the factor is one from the list of the factors accepted by ING Group.

Since usage of additional collateral is rare occurrence in ING CF, the "Credit Risk Manual" includes a clause that collateral liquidity assessment and valuation are made in accordance with the Bank's rules.

ING CF applies the secondary risk management procedure for non-recourse factoring. Insurance policies are accepted within the limits granted to insurers, allowing monitoring of the risk secured by individual insurers.

6.2.3 Description of the main types of collateral taken by the Bank

Bank

The Bank accepts all permitted legal forms of collateral, at the same time specifying their preference as to their application in the collateral regulations.

Yet, the collateral should be chosen based on:

- correlating the value and quality of collateral with the probability of client's default. It means that the worse the client's risk rating is, the better the collateral for credit exposure should be put in place,
- seeking to fulfil the conditions specified in the regulations which enable, inter alia, including the recovery rates assigned to collateral items in the process of calculation of capital requirements and provisions,
- respecting the limitations in accepting collateral and accounting for the guidelines presented in the regulations, aimed at the minimisation of the negative departure of the actual recovery rates from those estimated in the LGD model, and
- optimising the collateral catalogue for a given credit exposure when there is a specific pool of collateral items available.

In retail area, the Bank uses the standard method for regulatory capital calculation. To use preferential risk weights for mortgaged exposures, the quality criteria described in Articles 124, 208 and 229 section 1 of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 have to be fulfilled.

The Bank has identified the following collateral groups:

- Tangible collateral which makes it possible for the Bank to recover debt in the event of a client's default by liquidating the collateral provider's specific assets – funded credit protection.

The Bank recognises the following types of assets that may serve as tangible collateral for the Bank's receivables under credit exposure:

- properties,
 - movable assets - things with specified identity,
 - movable assets - inventory or things of a specified type,
 - cash (security deposits, term deposits and funds deposited as letter of credit coverage),
 - accounts receivable,
 - Treasury bonds,
 - bonds traded on a stock exchange,
 - bonds not traded on a stock exchange/investment certificates,
 - shares traded on a stock exchange,
 - shares not traded on a stock exchange,
 - participation units in Open-end Mutual Funds, and
 - purchased receivable with recourse.
- Personal collateral which makes it possible for the Bank to recover debt in the event of a client's default by resorting to any component of the collateral provider's assets - unfunded credit protection.

The Bank recognises the following forms of personal collateral:

- surety under the Bills of Exchange Law or Civil Code,
 - bank guarantee/reguarantee and corporate guarantee, and
 - debt accession.
- In some LGD models applied by the Bank the recovery rate on the unsecured part of exposure is also affected by the so-called “negative pledge” covenant which obliges a client not to create any collateral on the client's assets or to significantly limit the collateral

created in favour of other creditors. The client's acceptance of such a clause increases the recovery rate on the unsecured part of exposure.

- There are also additional types of collateral used by the Bank that strengthen their position in negotiations or expand the Bank's control entitlements as the creditor. Additional collateral includes (inter alia):
 - letter of intent/letter of comfort/statement of comfort,
 - blank promissory note,
 - assignment of rights under property insurance policy,
 - credit insurance coverage from an insurance company, and
 - insurance coverage for domestic accounts receivable (an insurance policy issued to ING BSK or insurance policy assignment).

In addition, Bank introduced rules on identification of agricultural properties taken as collateral as a result of entering into force the Act on Formation of the Agricultural System and Act on Land and Mortgage Registers and Mortgages dated 6th July, 2016.

Structure of individual collateral groups is diversified. The collateral with the biggest share is the following:

- mortgages - their share results from the fact that mortgage is usually used to secure longterm capex loans. In addition, mortgage is the main collateral in the case of commercial property loans,
- corporate sureties and guarantees - this group of collateral includes guarantors from various industries having diversified financial standing. Therefore, there is no material risk of concentration. If a particular recovery rate has been assumed, higher than 0%, it is necessary to investigate the guarantor's financial standing and assign a risk rating thereto,
- non-current and current assets, and
- accounts receivable.

Bank guarantees and securities have a small share in the overall pool of collateral accepted by the Bank.

ING Lease (Polska) Sp. z o.o. (ING LP)

In the case of lease facilities, ownership of the leased assets item is the main security of lease transactions. The principles for pledging collateral and determining their value stem from the very nature of leasing itself and the "Collateral Management Policy concerning estimation of recoveries and capital requirements at w ING Lease (Polska) Sp. z o.o." referring to capital requirements calculation at ING Lease (Polska) Sp. zo.o. introduced in 2015.

ING Commercial Finance S.A. (ING CF)

Primary collateral for the standard factoring (both with and without recourse) are the receivables accepted and purchased from the Client by ING CF.

In addition to the assignment of receivables ING CF also acquires as a collateral promissory note issued by the client, often guaranteed by its owners, and power of attorney to client's bank account. Factoring without recourse is secured by the insurance covering the risk of debtor's insolvency issued in one of the accepted insurance companies.

For the reverse factoring the basic collateral is a power of attorney to the client's bank account. , This is due to the fact that the product is targeted only at selected customers (in a very good financial situation) from the strategic customers segment.

ING CF occasionally uses other forms of collateral, such as mortgage, assets alienation or bank guarantees.

6.2.4 Main types of guarantors and credit derivative counterparties and their creditworthiness

The following table presents the main types of guarantors and own their collateral value. The Bank does not use credit derivatives.

Guarantee delivery type	Value of collateral*	Share%
Companies - "investment" category (rating below 10)	4 904.5	51.5%
Companies - "speculative" category (ratings 11-17)	2 678.9	28.1%
Companies - "irregular" category (ratings 18-22)	96.4	1.0%
Local authorities (GL prefix)	1 852.2	19.4%
Total	9 531.9	100%

*) The value presented in the table is the value of collateral, and not of exposure.

6.2.5 Market or credit risk concentrations within the credit mitigation taken

Since the institution has a significant exposure to financing the purchase of residential and commercial properties, mortgages (68,1% of the total) form the main collateral.

Collateral type	Collateral value *	Share %
Mortgages	91 433.6	68.1%
Inventory	7 186.1	5.4%
Guarantees	9 531.9	7.1%
Machinery and equipment	19 571.4	14.6%
Debts	5 388.1	4.0%
Cash	475.6	0.4%
Securities	578.7	0.4%
Total	134 165.3	100%

*) The value presented in the table is the value of collateral, and not of exposure.

6.3 Use of IRB approach to credit risk

6.3.1 Structure of internal rating systems and relations between internal and external ratings

Determination of the client's risk class is an integral part of the Bank's credit risk evaluation process for credit exposures. The risk class itself is determined by coherently-used rating system. The rating assignment process is finalized before the credit decision is made.

Exposures to companies and institutions

As far as the exposures to companies and institutions are concerned, ING Group applies a 22-grade rating scale with respect to entrepreneurs where classes reflect the borrower's risk. Some credit risk models used by the Bank assign rating sub-classes to have better granularity of the rating scale. Those subclasses should be treated as a part of the full rating class.

The Bank most often applies 17 full risk classes (6-22). Sometimes a better risk class may be applicable, usually in the Strategic Clients portfolio. The customer is assigned to a given risk class based on the rating models, using the data from the customer's financial reports, evaluation of qualitative factors and, in particular cases, financial standing of the parent company.

Risk rating is assigned to the customer in the first place in line with the value of probability of default given by rating model. The following description of characteristics for each risk class is treated alternatively, in particular when ratings assigned on the basis of models are subject to appeal.

Risk classes can be divided into 3 basic groups:

- group equivalent to investment grades (risk classes 1-10),
- group equivalent to speculative grades (risk classes 11-17), and
- problem loan grades (risk classes 18-22).

Group of low risk classes (1-10) include borrowers with solid income and margin levels, strong balance sheet structure and stable long-term perspectives. In the top grades of this range, the borrowers occupying the position of market leaders are classified who are relatively less susceptible to adverse market fluctuations. Such borrowers have free, that is "at their discretion", access to the financing available on the markets at any time.

Group of medium and increased risk classes (11-17) covers a relatively large range of risk levels, and can be divided into:

- The borrowers with the best grades within this class, who currently meet their financial obligations, however their debt servicing capacity (the principal and interest) may turn out to be uncertain over a longer period of time. So the safety margin is limited. In adverse business environment or unfavorable economic conditions there is a real threat that credit risk may increase.
- The borrowers assigned higher risk grades (the worst grades in this class) which, in a longer perspective, may be characterized by: uncertainty as to their income perspectives, lower quality of assets and risk of the capital level mismatch that may translate into possible losses.

Problem loan grades (18-22) is a group that includes the borrowers who show clear indications of problems with debt servicing or are in the situation referred to as 'an event of default' has already occurred. This group includes also the clients whose exposures are in forbearance status in case the delinquency of debt repayment exceeded 30 calendar days on the exposure with forbearance status or having granted the consecutive forbearance on the particular exposure.

Risk classes 1-2

Entities included in this range are characterised by the lowest risk. In a longer perspective, they have solid and stable income, substantial liquidity and extremely strong balance sheet structure maintained for a long period of time. The probability of default by those borrowers is very low. Entities classified to this group usually:

- operate in global/large markets characterised by attractive margins, a strong potential for growth and high entry barriers,
- experience weak or no pressure on prices thanks to no or few direct competitors present,
- have strong position versus suppliers, and strong and well-known global brand(s), and
- are subject to no foreseeable threats.

Risk classes 3-4

High quality entities, with slightly higher long-term risk potential than the entities classified to risk classes 1 or 2. Nevertheless, in a longer perspective they are assessed as very strong entities with stable income, good financial liquidity and strong balance sheet structure.

Risk classes 5-7

These classes include strong entities who operate on a cycle basis or entities in good condition whose income is to some extent fluctuating. The analysis of these entities may prove that they are prone to future weakening of their financial situation. The entities classified to this group:

- often operate on more competitive markets with low customer loyalty levels,
- have a good debt profile, characterised by relatively low risk, and thus are fully capable of meeting their financial obligations,
- have to allocate substantial company resources to maintain their market share,
- have limited ability to dictate prices and/or terms and conditions of cooperation with suppliers.

For global models (which are commonly used at ING Group) and local models (used only by the Bank) for certain risks classes (8-17) different descriptions are used for the customers classified in those classes.

Risk classes 8-10 for global models

Entities classified to this range are susceptible to fluctuations in economic climate that may affect their creditworthiness, yet their current situation is still good. Entities classified to this group are usually characterised by:

- ability to differentiate products or services from those offered by competitors when faced with pressure from the market,
- small or no influence on prices of materials they purchase,
- management who may implement riskier strategies or who may be judged as less stable than the management of a company with a higher rating.

Risk classes 11-13 for global models

Entities classified to this class are characterised by a relatively good financial standing but their ability to service debt over a longer period is not guaranteed. Past cash flows of these companies show some irregularity. These companies may have suffered losses in the previous years. Although at present they are more or less profitable, they show a certain margin of safety and they are still ranked among the acceptable borrowers. In addition, the entities classified to this range:

- may have problems with maintaining their position in the market in the face of growing competition,
- have little or no influence on prices of materials they purchase,
- it is possible that their management is not of the highest quality.

Risk classes 14-17 for global models

The companies classified to this range enter the endangered financial standing zone. Possible symptoms: considerable decrease in profitability, substantial weakening of the balance sheet structure, irregular cash flows with outflows predominating over inflows and tighten capability to service debts. Such entities often:

- operate in a sector that is in a downward phase,
- have to face the increasing pressure from their competitors,
- have very limited or no influence on prices of materials they purchase and their relations with suppliers,
- may have a weak management characterized by e.g. lack of experience, no stability or poor commitment.

The borrowers classified to the 16-17 range are additionally affected by the following circumstances:

- despite servicing all obligations by the borrower on an ongoing basis there are strong premises that the borrower's financial standing or creditworthiness may diminish,
- at present there are no predictions as to the occurrence of the situation referred to as "default" but more intensive monitoring is necessary, and
- actions aimed at improvement of the Bank's position as the creditor, or limitation or complete cancellation of the Bank's involvement in a borrower or transaction financing are required.

Risk class 15/only for global model for large corporates

Apart from the general conditions presented above and used to classify an entity to the range 14-17, grade 15 is additionally characterised by the following circumstances:

- material symptoms of the borrower's financial standing/creditworthiness deterioration, and
- substantial symptoms of the risk profile impairment that will result in the borrower's failure to timely meet all of their debt obligations in the future.

While all of the following conditions have been met:

- the borrower has not applied for any change (extension) of the principal repayment date,
- in a short term perspective (up to 1 year) the borrower will not require additional financing that would have resulted from the financial liquidity deterioration,
- the borrower is sufficiently capable of servicing their debt, and

- a positive assessment of the borrower's main markets prospects.

Furthermore, as far as the customers with risk grade 15 are concerned for whom additional covenants have been defined, the following events of default may occur:

- the Bank predicts that a borrower will breach one or more conditions, and
- the Bank may waive a condition, on a one-off basis, for the period of up to one year.

Risk class 16/only for global model for large corporates

Apart from the overall conditions presented above and used to classify an entity to the range 14-17, the following circumstances occur:

- material symptoms of the borrower's financial standing/creditworthiness deterioration, and
- substantial symptoms of the risk profile impairment that will result in the borrower's failure to timely meet all of their debt obligations in the future.

But all of the following conditions have been met:

- the borrower has not applied for any change (extension) of the principal repayment date,
- in a short term perspective (up to 1 year) the borrower will not require additional financing that would have resulted from the financial liquidity deterioration, and
- positive or neutral assessment of the borrower's main markets prospects.

Furthermore, as far as the customers with risk grade 16 are concerned for whom additional covenants have been defined, the following events of default may occur:

- the borrower failed to meet one or more conditions, and
- the borrower advised the Bank that they would not be able to meet one or more of these conditions.

Risk class 17/only for global model for large corporates

Apart from the overall conditions presented above and used to classify an entity to the range 14-17, the following circumstances occur:

- material symptoms of the borrower's financial standing/creditworthiness deterioration, and
- substantial symptoms of the risk profile impairment that will result in the borrower's failure to timely meet all of their debt obligations in the future.

In addition, one or more of the following symptoms have occurred:

- the borrower has applied for a change (extension) of the principal repayment term, or there is high probability that they may submit such an application where the change (extension) of the principal repayment term does not (will not) result in the Bank's loss because the terms of such prolongation fully compensate for the delay in principal repayment,
- the borrower is not or probably will not be capable of servicing their debts in a long term, however, in a short-term perspective (up to 1 year) they will not require additional financing that would have resulted from their financial liquidity deterioration, and
- neutral or negative assessment of the borrower's main markets prospects.

Furthermore, as far as the customers with risk class 17 are concerned for whom additional covenants have been defined, it may happen that the borrower has failed to meet one or more conditions.

Risk classes 8-10 for local models

Entities classified in this range are customers with sound economic status and usually are characterized with:

- exceptional financial standing and ability to meet financial obligations in long term,
- high safety margin for debt repayment in long time perspective,
- ability to differentiate products or services from those offered by competitors when faced with pressure from the market,
- well experienced management.

Risk classes 11-12 for local models

Entities classified in this range are customers with very good economic status and usually are characterized with:

- very good financial standing and ability to meet financial obligations in long term, which however can be negatively affected by macroeconomic factors,
- limited ability to differentiate products or services in comparison to competitors,
- experienced management able to implement riskier strategies or who may be judged as less stable than the management of a company with a higher rating.

Risk classes 13-14 for local models

Majority of entities classified in this range is characterized with good financial status, however weaker than entities with better ratings. These clients still have acceptable safety margin and are perceived as good borrowers. Entities classified to this group are usually characterized with:

- good financial standing and ability to meet financial obligations in long term, which however can be negatively affected by macroeconomic factors,
- limited or no ability to differentiate products or services in comparison to competitors,
- management with experience adequate to the business activity,
- for some entities long term debt service ability may be assessed as more risky due to past irregular cash flows or loss bared in past years.

Risk classes 15-16 for local models

Entities classified in this range are still acceptable borrowers. However some of them may be characterized with higher credit risk. Entities in this group may have:

- problems with maintaining their position in the market in the face of growing competition,
- little or no influence on prices of materials, goods or services they purchase,
- it is possible that their management is not of the highest quality or high turnover in the management,
- decrease in profitability, substantial weakening of the balance sheet structure, irregular cash flows with outflows predominating over inflows.

Risk class 17 for local models

The companies classified in this rating enter the endangered financial standing zone. They show material indications of the borrower's weakening economic and financial standing/creditworthiness. Actions aimed at improvement of the Bank's position as the creditor are required, or the limitation or complete cancellation of the Bank's involvement in a borrower or transaction financing. At present there are no predictions as to the occurrence of the situation referred to as 'default' but more intensive monitoring is necessary.

Material symptoms of risk profile deterioration, which results in increasing threat that all financial obligations will not be met on time in the future, which may include one or more of following:

- the borrower has applied for a change (extension) of the employed capital repayment term, or there is high probability that he may submit such an application where the change (extension) of the employed capital repayment term does not (will not) result in the Bank's loss because the terms of such prolongation fully compensate for the delay in repayment of the capital,
- despite servicing of all obligations by the borrower on an ongoing basis there are strong premises that the borrower's financial standing or creditworthiness may diminish,
- the borrower is not or probably will not be capable of servicing his debts in a long term, however, in a short term perspective (up to 1 year) will not require additional financing that would have resulted from the impairment of his financial liquidity,
- neutral or negative assessment of the borrower's main markets prospects.

The entities classified in this rating often:

- operate in a sector that is in a downward phase,
- have to face the increasing pressure from their competitors,
- have very limited or no influence on prices of materials they purchase and their relations with suppliers,
- may have a weak management characterized by e.g. lack of experience, no stability or poor commitment.

Risk class 18 - Under observation/Restructuring

The borrower continues their business and meets their obligations towards the Bank (i.e. there are no delays in the principal or interest repayments or any delay is shorter than 31 days), and at least one of the circumstances mentioned below has already occurred:

- the borrower has applied for a change (extension) of the principal repayment term, however the change (extension) of the principal repayment term does not result in the Bank's loss because the terms of such prolongation fully compensate for the delay in the principal repayment,
- in a short-term perspective (up to 1 year) the borrower will need additional financing resulting from their financial liquidity deterioration, but the Bank assesses that in the short period there will be no problems with obtaining such financing (outside the Bank),
- the customer is not sufficiently capable of servicing their debt, and
- negative assessment of the borrower's main markets prospects.

Furthermore, as far as the customers with risk class 18 are concerned for whom additional covenants have been defined, it may happen that the borrower has failed to meet one or more conditions.

Risk class 19 - Below standard/Restructuring

The borrower continues their business and meets their obligations towards the Bank (if there are delays in the repayment, they are shorter than 90 days), and at least one of the circumstances mentioned below has already occurred:

- the borrower has applied for a change (extension) of the principal repayment term, however the change (extension) of the principal repayment term does not result in the Bank's loss because the terms of such prolongation fully compensate for the delay in the principal repayment,
- in a short-term perspective (up to 1 year) the borrower will need additional financing resulting from their financial liquidity deterioration and, in the short period, such financing will be probably available (outside the Bank),
- the customer is not sufficiently capable of servicing its debt, and
- negative assessment of the borrower's main markets prospects.

Furthermore, as far as the customers with risk grade 19 are concerned for whom additional covenants have been defined, it may happen that the borrower has failed to meet one or more conditions.

Risk class 20 - Doubtful/Default and impairment occurred and recoveries and actions before forced collateral liquidation

The Bank assesses that the customer will not repay their obligations towards the Bank in full, but the Bank has not initiated (yet) the compulsory liquidation of collateral. However, the Bank may have already undertaken actions aimed at voluntary sale of items constituting collateral by the customer himself (or the owner of the items) to designate the proceeds from the sale for repayment of the debt to the Bank. The inability to repay in full the obligations towards the Bank results from one or more of the following circumstances:

- the Bank has assessed that the impairment of exposure has occurred, or
- the Bank has decided to dispose of credit claims at a discount higher than 10%, and such a disposal does not result from management of concentration risk, or
- on the exposure with the forbearance status the default in repayment exceeded 30 calendar days or the Bank granted the consecutive forbearance facility to client.

Risk class 21 Lost/Default occurred and forced recoveries and actions for collateral liquidation without losses

In the case of borrowers classified to risk grade 21, the following circumstances have occurred:

- the Bank initiated the liquidation of collateral,
- there are no prospects for rebuilding the borrower's creditworthiness and commencement of debt servicing,
- all potential opportunities for the exposure restructuring have been exhausted and no desired effects have been obtained, and
- no impairment loss is expected, because the current value of the liquidated collateral fully covers (is expected to cover) the debt to the Bank.

Risk class 22 - Lost/Default and impairment occurred and forced recoveries and actions for collateral liquidation with losses

In the case of customers classified to risk grade 22, the following circumstances have occurred:

- the Bank initiated the liquidation of collateral,
- there are no prospects for rebuilding the borrower's creditworthiness and re-commencement of debt servicing,
- all potential opportunities for the exposure restructuring have been exhausted and no desired effects have been obtained, and
- due to the absence of collateral or its insufficient value, the exposure has been (or will be) remitted in part or in full.

In case of exposures to companies and institutions, the default definition determines the client's reclassification to risk classes 20-22.

The table below presents the structure of correlations between internal and external rating systems:

ING Rating Risk class	S&P/Fitch IBCA Rating	Moody's Rating
1	AAA	Aaa
2	AA+	Aa1
3	AA	Aa2
4	AA-	Aa3
5	A+	A1
6	A	A2
7	A-	A3
8	BBB+	Baa1
9	BBB	Baa2
10	BBB-	Baa3
11	BB+	Ba1
12	BB	Ba2
13	BB-	Ba3
14	B+	B1
15	B	B2
16	B-	B3
17	CCC	Caa1
18	CC	Ca
19	C	C
20	D	C
21	D	C
22	D	C

Equity exposures

As far as equity exposures are concerned, the Bank applies simple risk weight approach according to Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013. Due to the specific nature of their business, subsidiaries do not identify equity exposures.

Transactions concluded on financial markets have the following default definition:

- failure to perform obligations under the agreement and made transactions, in particular failure to make in a timely manner any payment due,
- occurrence of any factual or legal event exposing the client to bankruptcy or liquidation,
- occurrence of any factual or legal events increasing the risk that the client shall fail to perform their obligations under transactions, in particular:
 - any material, permanent deterioration of the client's financial standing, including appointment of compulsory administration or another receiver towards the client's enterprise,
 - seizure of client's bank accounts by the enforcement authority,
 - initiation against the client of one or more court, arbitrary, administrative or enforcement proceedings, or proceeding to secure claims, aimed to satisfy the creditors' claims towards the client,
 - discontinuation to pay obligations, admitting in written form the inability to repay obligations in a timely manner or commencement of negotiations with one or several creditors with the intention of altering the amount, legal basis or date of liability payment,
 - the client's failure to satisfy or improper satisfaction of due liabilities under any agreement to which the client is a party, made with the Bank or any other financial institution, or
 - the Bank ascertaining from the business intelligence bureau that the client is in arrears in satisfying its payment obligations,
- actions have been undertaken to question the rights of the Bank under the agreement, transactions or any granted security, or such rights are questioned through any other means, in particular with the client's statements about non-recognition of the Bank's claims or by the client demanding that the competent authority declare the invalidity of the agreement or any transaction,
- circumstances occur, which in the opinion of the Bank could have a material negative impact on the client's business or standing (financial or other), in particular on the Bank's possibility to exercise any of its rights under the agreement or any granted security,
- issuance of any false or misleading statements, and
- the client has failed to establish a security for the performance of the client's obligations under the transactions as agreed with the Bank or any factual or legal event has occurred causing partial or complete invalidity, loss, reduction or deterioration of the legal conditions of the security established by the client or the security provider.

Models for basic risk parameters

Following the requirement of the continuous compliance with the advanced internal-ratings based approach (AIRB) for the purpose of regulatory capital calculation, the Bank developed, implemented, monitored and validated local and global models for the following basic risk parameters:

- PD (probability of default),
- LGD (loss given default), and

- EAD (exposure at default)
for classes of assets in line with AIRB.

As far as corporate exposures are concerned, the following models, among others, are applied by the Group:

- for the strategic clients segment covering businesses with annual sales proceeds above EUR 100 million:
 - global ING Group PD (expert and statistical) rating model developed at the ING Group level which accounts for and is monitored regularly with the local data,
 - global LGD and EAD (hybrid, expert and statistical models) models also developed at ING Group level which account for and monitored regularly with the local data.
- for the local mid-sized and mid-corporate segments (SME assets class) covering clients with annual income from EUR 0.8 to 100 million:
 - local PD (expert and statistical) rating model developed under the supervision of the ING Group based on the Bank's internal data, applied at ING also as a regional model for Central and Eastern European states,
 - local LGD and EAD models (hybrid, expert and statistical models) developed under the supervision of ING based on the Bank's internal data and applied at ING as regional models for the Central and Eastern European states.

Besides the above, the Group also uses global (central) models for exposures to banks and other financial institutions, to sovereign and local governments as well as for specialised lending exposures.

6.3.2 Use of internal estimates for the purposes other than calculation of risk-weighted exposure amounts

ING Bank Śląski S.A. Group uses PD, LGD and EAD models developed in line with the requirements of Part III, Title II, Chapter 3 of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 for the purposes of regulatory capital calculation and in the key risk management processes - in measurement and management of credit exposure, the process of planning and formulation of strategy and reporting.

Credit exposure - measurement and management

ING Bank Śląski S.A. Group uses PD, LGD and EAD risk parameters models in key areas associated with credit risk management, in particular:

- the calculation of the regulatory and economic capital otherwise known as internal capital,
- the calculation of provisions, and
- lending process, credit price calculation, reference limits definition and risk appetite.

Each of the above-mentioned areas uses a certain alignment of parameters to the purposes to be accomplished by a given area.

Process of planning and formulation of strategy

Supervisory requirement to maintain the sufficient level of regulatory capital in Group results in the maintenance of the safe level of economic capital. Planning and management of economic capital in Group is conducted within defined market strategies, whose parameters comprise AIRB approach parameters estimated by the particular credit risk models. Planning and management of economic

capital in Group aims to maximize the return on economic capital in acceptable risk frame. These parameters, allocated on business lines, are regularly reported on the Bank's Management Board by Capital Management Department. The planning methodology includes projected Group development and expected changes in external environment. Calculated values are the basis for capital adequacy assessment, capital limits setting and credit risk management strategy in the risk appetite statement (RAS). Capital plan is ratified by the Bank Management Board and Supervisory Board.

Reporting

Centre of Expertise – Policy, Models and Systems prepares monthly reports on corporate and retail credit risks. In addition, the Accounting Department generates obligatory quarterly reports on risk weighted assets and the minimum regulatory capital/capital adequacy ratio. The basic reporting tool, both in the ING Bank Śląski S.A. Group and in the whole ING Group, is Vortex as a part of Vantage - integrated IT environment for credit risk management - is a global, centralised database on credit risk that provides a wide spectrum of information on various aspects of credit exposures, both on a transaction level and various aggregation levels. Vortex generates the reports in various dimensions using data on: PD, LGD, EAD, economic capital, risk weighted assets, the minimum regulatory capital, balance, and collateral. The data are available to all authorised users, at all levels of management, (as per specified access rights) from the Risk Management, Front-Office and Finance areas.

6.3.3 Credit risk mitigation management and recognition

Bank

Collateral is an essential tool for limiting credit risk, however it may not replace a financed entity's creditworthiness which is the determinant of credit exposure award.

The collateral in place has the following functions:

- financial:
 - it should limit the credit exposure losses when credit risk materialises i.e. when the debtor has discontinued to satisfy the contractual obligations, and
 - if it meets the conditions set out in the Bank's regulations on collateral it may be taken into account when assessing capital requirements for credit risk and collective provisions for impairment of assets in a credit portfolio. The recovery rates assigned to individual categories of collateral have been determined on the basis appropriate of the LGD model,
- non-financial:
 - it strengthens the control authority of the Bank as the creditor by limiting the collateral provider's ability to dispose of the assets pledged to the Bank, and
 - it strengthens the Bank's position in negotiations with the debtor (client), the debtor's other creditors and the collateral provider.

The Bank applies the following credit risk mitigation techniques:

- funded credit protection linked to tangible collateral, and
- unfunded credit protection linked to personal collateral items.

Reduction of the Bank's credit risk under credit exposure if the debtor defaults on the obligations, is insolvent, goes bankrupt or in the situation of another breach of the loan agreement, general terms and conditions and/or collateral agreement, in the case of:

- funded credit protection - stems from the Bank's right to liquidate, transfer, acquire or retain particular assets, or
- unfunded credit protection - stems from a third party's obligation to pay a specified amount of money.

The Bank's regulations on collateral include (inter alia):

- the criteria for recognising collateral in the process of calculation of capital requirements for credit risk,
- the general rules for selecting collateral applied by the Bank taking into account acceptable credit risk level,
- the detailed rules for specific types of tangible and personal collateral considered in the recovery ratio estimation (including inter alia the rules on collateral valuation, tangible collateral insurance coverage requirements, preferred legal forms of collateral, requirements for providers of personal collateral and other requirements concerning personal and tangible collateral).

Furthermore, the Bank's regulations on collateral specifically take into account the aspects of Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 which refer to the application of the LGD models, legal certainty of collateral and its monitoring.

The Bank's regulations define also the way in which collateral is presented and approved in the process of granting credit exposures and the rules of collateral monitoring presentation and approval.

The Bank has verified the legal certainty and the scope of jurisdiction assigned to the applied risk mitigation instruments with an external, reputable law firm.

In 2015, the requirement under Article 1 section 1 of the Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 concerning obtainment of written legal opinion to the collateral-related documents confirming that the latter are legally effective and enforceable in all relevant jurisdictions (for the collateral in question).

In the collateral selection process, the Bank seeks to optimise the catalogue of collateral for a given exposure by means of:

- first choosing the collateral with the highest recovery rate and less costly monitoring,
- diversifying the types of collateral for a specific credit exposure,
- avoiding securing the same credit exposure with collateral items which are correlated in such a way that deterioration in the quality of one collateral item results in deterioration in the quality of another collateral item.

ING Lease (Polska) Sp. z o.o. (ING LP)

The main security of lease transactions is the lessor's ownership of the assets item financed under the lease contract. Such security pays both financial and non-financial roles.

Sale of leased assets in case of termination of the lease contract reduces or completely eliminates the loss on the credit exposure. In addition, re-marketability of the financed assets affects the level of LGD (recovery rate is assigned to individual types of leased assets) and in consequence the level of both collective and specific provisions. Re-marketability of the leased assets is assessed using the expert method at the stage of a lease facility application assessment and is one of the main parameters to be taken into account when assessing the proposed lease transactions and affecting the final credit decision (often the re-marketability is more important than the financial situation of the client).

As the owner of the financed assets item, after termination of the lease contract, ING LP can take physical control over the assets item (by repossession) and as an owner can sell it to a third party. The threat of the loss of the leased assets item by the lessee causes customers to often pay back the overdue lease debt in the first place comparing to other entities (especially if the market value of the leased assets item exceeds the credit exposure or the assets item is crucial for the customer's operations).

ING Commercial Finance S.A. (ING CF)

The basic collateral of the financing granted under the factoring agreement is the assignment of trade receivables purchased by ING CF. Said financing should be repaid by debtors from the receivables transferred to factoring by the client. In the case of non-recourse factoring transaction additional source of repayment is the insurer who covers debtor's insolvency risk. All the above means that the credit risk is divided and potential losses on factoring exposure in case of the client's financial problems are limited.

Collateral is taken into account in the calculation of capital requirements for credit risk and provisions.

ING CF regulations include the rules for determining the collateral value and collateral monitoring and the criteria for collateral recognition when calculating the capital requirement. Each collateral item is assigned adequate recovery rate in the LGD model.

6.3.4 Control mechanisms for rating systems

Credit risk rating and review

Commercial functions who grant credit facilities are separated from the process of transaction- and client risk rating ("four-eye control" principle). Credit risk is rated (by the Risk Manager) based on the principle of separation from the commercial functions (Relationship Manager). The following parties are involved in the risk rating process: Rating Owner (Relationship Manager) and Risk Manager.

The Rating Owner inputs the financial data of the client and has sole responsibility for the correctness of the initial risk rating, including rating review and update. There is only one owner of a borrower's risk rating. The risk management unit responsible for restructuring and debt collection (i.e. the Corporate Credit Restructuring Department) becomes the rating owner for the borrowers rated 18 to 22. The Rating Owner rates the exposure using the rating model dedicated to a given group of clients. The final rating is determined by the Risk Manager, or by the Appeal Judge if an appeal has been made

The Risk Manager is responsible for:

- verifying that the appropriate rating model has been used for the borrower,
- verifying that financial and non-financial data entered are correct,
- challenging unaudited financial data,

- taking into account additional available information that could affect the borrower's rating including: quality of cooperation with the bank and its external ratings (if applicable), and
- finalizing the rating.

The outcomes of specific models may undergo arbitrary adjustments in that the ultimate rating grades are determined as part of the appeal process. At least one notch difference (positive or negative) between the rating calculated by the rating model and the view of the appellant (the person initiating an appeal) is sufficient to start a rating appeal. Reasons for a rating appeal are circumstances that has not (yet) have been captured by the rating model but which are likely to have a (usually negative) effect on the borrower's PD, especially if:

- borrower has defaulted or is expected to default on any financial obligation to any party,
- a major disruption of activities occurred, or
- a change in legislation has occurred that will seriously impact the financial performance.

The IT system at the Group, used also in the whole ING Group, supports the credit risk assessment process and enables, as well, centralized gathering data on risk rating grades of clients.

Frequency of risk rating reviews and updates (if any)

Only the Rating Owner can initiate review of the risk rating. The following rules apply to rating reviews:

- a risk rating must be reviewed at least annually; a risk rating is considered overdue after at most 12 months from the last approval date of the risk rating,
- the Rating Owner should take appropriate action to review the risk rating for a borrower; the Rating Owner should perform an interim re-rating when the value of one or more risk drivers has materially changed. Events that could entail a re-rating procedure are for example a change of risk rating of the parent or a change of any of the qualitative risk drivers, and
- without a review until the expiry of 15 months from the last approval date of the risk rating, the risk rating will automatically downgrade and after additional 6 months - it will expire (automatic downgrade and expiration is not applicable to irregular borrowers' ratings).

6.3.5 Description of the factors that impacted on the loss experience in the preceding period

Within the process of credit risk models management ING Bank Śląski S.A. verifies levels and sources of losses by monitoring, among others:

- non-performance rate (referred as "default" rate"),
- level of losses according to the LGD parameter, including its components (no loss rate/recovery rate, recovery rate on collateral, unsecured debt recovery rate, etc.), and
- conversion factor CCF (for various EAD models and types of products).

Tables below show the values of the following parameters: PD, LGD, exposure value (READ), risk weighted assets (RWA) and RWA density (RWA/READ) per class of exposures in AIRB approach for performing and impaired (defaulted) portfolios as of end of years (2012-2019) and their annual change presented in percentage terms.

	End of year	Average PD (READ weighted)	Average PD (READ weighted)	READ (in PLN million)	RWA (in PLN million)	RWA density (RWA/READ)
Institutions	2019	0.19%	30.17%	10 400.7	1 640.7	15.78%
	2018	0.22%	30.55%	7 237.5	1 499.5	20.72%
	2017	0.14%	20.92%	6 146.1	1 319.9	21.47%
	2016	0.17%	26.32%	5 357.4	1 084.8	20.25%
	2015	0.15%	10.18%	5 300.6	1 314.2	24.79%
	2014	0.19%	16.52%	6 905.0	1 957.9	28.35%
	2013	0.14%	34.06%	4 884.9	1 464.9	29.99%
Corporate	2012	0.20%	34.72%	4 187.1	1 022.0	24.41%
	2019	5.49%	28.30%	62 214.0	30 457.2	48.96%
	2018	5.35%	28.61%	58 931.4	30 725.5	52.14%
	2017	5.10%	28.36%	52 005.5	25 709.0	49.44%
	2016	4.84%	27.95%	46 872.4	22 360.4	47.70%
	2015	5.73%	29.88%	42 165.0	22 464.8	53.28%
	2014	6.32%	29.50%	36 027.0	17 971.2	49.88%
Total AIRB	2013	7.67%	29.69%	29 319.7	17 344.6	59.16%
	2012	7.39%	28.42%	29 061.8	17 754.9	61.09%
	2019	4.72%	28.51%	72 614.8	32 098.0	42.20%
	2018	4.78%	28.78%	66 168.9	32 224.9	48.70%
	2017	4.58%	27.58%	58 151.6	27 028.9	46.48%
	2016	4.36%	27.78%	52 229.8	23 445.3	44.89%
	2015	5.10%	27.68%	47 465.6	23 779.0	50.10%

Results on the total level of portfolio covered by AIRB approach reflect the features of corporates exposure class due to its relatively high share in total READ.

Change (y/y in %)	Year	Average PD (READ weighted)	Average LGD (READ weighted)	READ (in PLN million)	RWA (in PLN million)	RWA density (RWA/READ)
Institutions	2019	-15.68%	-1.23%	43.71%	9.43%	-23.85%
	2018	58.56%	46.01%	17.76%	13.60%	-3.50%
	2017	-17.65%	-20.52%	14.72%	21.67%	6.03%
	2016	6.25%	158.55%	1.07%	-17.45%	-18.33%
	2015	-15.79%	-38.38%	-23.23%	-32.88%	-12.56%
	2014	37.96%	-51.50%	41.35%	33.66%	-5.45%
	2013	-32.48%	-1.89%	16.66%	43.33%	22.86%
Corporate	2019	2.49%	-1.09%	5.57%	-0.87%	-6.10%
	2018	4.94%	0.89%	13.32%	19.51%	5.46%
	2017	5.35%	1.46%	10.95%	14.98%	3.64%
	2016	-15.48%	-6.44%	11.16%	-0.46%	-10.46%
	2015	-9.42%	1.27%	17.04%	25.00%	6.81%
Total AIRB	2014	-17.58%	-0.65%	22.88%	3.61%	-15.68%
	2013	3.81%	4.48%	0.89%	-2.31%	-3.17%
	2019	-1.33%	-0.93%	9.74%	-0.39%	-9.24%
	2018	4.37%	4.33%	13.79%	19.22%	4.78%
	2017	5.05%	-0.72%	11.34%	15.29%	3.55%
	2016	-14.68%	0.36%	10.04%	-1.40%	-10.40%

The tables below provide a historical verification (backtesting) of PD and LGD risk parameters. Their average model estimates per exposures class covered by AIRB approach were compared to realized values in the defined timeframe.

See below the comparison between average one-year PD as of 31.12.2018 for performing portfolio and actual default rate observed during model monitoring in 2019 for those clients.

Exposures to corporates

Indicators	Average PD (READ weighted) as of 31.12.2018	Actual default rate observed during model monitoring in 2019
CL Model (about 25% of performing portfolio)	0.76%	1.42%
SME PD Model (about 56 % of performing portfolio)	2.20%	2.57%
Other models (about 19% of performing portfolio)	1.54%	n/a*

*) No possibility to perform reliable statistical backtesting due to limited number of defaults.

Exposures to institutions

Indicators	Average PD (READ weighted) as of 31.12.2018	Actual default rate observed during model monitoring in 2019
Average PD (READ weighted) (performing portfolio)	0.22%	n/a*

*) No possibility to perform reliable statistical backtesting due to limited number of defaults.

Longer performance - corporates

Indicators	Average PD (READ weighted)*				Actual default rate observed during model monitoring				
	Monitoring year	2015	2016	2017	2018	2015	2016	2017	2018
Model CL		0.72%	0.71%	0.72%	0.75%	1.40%	1.02%	1.49%	1.33%
Model SME PD		2.52%	2.31%	2.06%	2.03%	2.50%	2.51%	2.50%	2.55%
Other models		2.05%	2.17%	1.73%	1.66%	n/a**	n/a**	n/a**	n/a**

*) PD calculated as of the end of year before monitoring year.

**) No possibility to perform reliable statistical backtesting due to limited number of defaults.

Next tables show average LGD for performing portfolio estimated on long time-series and observed (actual) loss ratio for those clients.

Exposures to corporates

Indicators	Average LGD (READ weighted) as of 31.12.2018	Observed loss indicator (READ weighted)
Model ML-CORP (about 25% of performing portfolio)	33.94%	33.3%
Model SME CEE (about 47% of performing portfolio)	32.50%	48.70%*
Model ML-LEASE (about 11% of performing portfolio)	11.90%	18.98%*
Other models (about 17% of performing portfolio)	17.58%	n/a**

*) At the moment of preparing this report, presented results have not been yet approved by Bank.

**) At the moment of preparing this report, this analyses is being prepared.

***) No possibility to perform reliable statistical backtesting due to limited number of defaults.

Exposures to institutions

Indicators	Average LGD (READ weighted) as of 31.12.2018	Observed loss indicator
Average LGD (READ weighted) (performing portfolio)	30.55%	n/a*

*) No possibility to perform reliable statistical backtesting due to limited number of defaults.

Longer performance - corporates

Indicators	Average LGD (READ weighted)*				Observed loss indicator				
	Monitoring year	2015	2016	2017	2018	2015	2016	2017	2018
Model ML-CORP		37.93%	34.82%	33.37%	33.21%	24.99%	23.08%	25.68%	32.23%
Model SME CEE		31.58%	35.52%	32.79%	33.17%	29.24%	41%	49%	48.79%
Model ML-Lease		9.88%	10.93%	11.59%	11.50%	n/a***	12.9%**	13.18%***	18.98%***
Other models		16.72%	15.05%	13.96%	13.25%	n/a**	n/a**	n/a**	n/a**

*) LGD calculated as of the end of year before monitoring year.

**) No possibility to perform reliable statistical backtesting due to limited number of defaults.

***) In 2015 for ML-Lease model there was not conducted backtest of LGD parameters.

****) Observed loss indicator without outlier, for all clients observed loss indicator is equal 27.8%.

Below there are results of backtest of CCF parameter for SME CEE model. Backtest was conducted only for cards and overdrafts, because only for these products the number of default observations is sufficient to conduct reliable analysis. Backtest was conducted only for SME EAD model (about 50% of total corporate portfolio). The other part of corporate portfolio and exposures to institutions, belong to low default portfolio for which there is no possibility to conduct reliable statistical backtest analysis.

Product	Observation moment	Number of observations	Observed CCF	Model CCF
Cards	2012-06-30	20	-168%	0%
Cards	2013-06-30	27	-149%	0%
Cards	2014-06-30	36	-2882%	0%
Cards	2015-06-30	35	-550%	0%
Cards	2016-06-30	26	-1925%	0%
Cards	2017-06-30	32	-55%	0%
Cards	2018-06-30	37	-50%	0%
Cards (total)		213	-864%*	0%
Overdrafts	2012-06-30	30	-4686%	0%
Overdrafts	2013-06-30	59	-743%	0%
Overdrafts	2014-06-30	72	-1522%	0%
Overdrafts	2015-06-30	70	-705%	0%
Overdrafts	2016-06-30	104	-25%	0%
Overdrafts	2017-06-30	158	-377%	0%
Overdrafts	2018-06-30	188	-561%	0%
Overdrafts (total)		680	-749%*	0%

*) Weighted average CCF.

The reason for very low results of observed CCF is decrease of outstanding before default event.

In the below table there are values of model CCF for SME EAD model. Parameters are constant over time.

Product type	Model CCF
Cards	0%
Overdrafts	0%
Term loans	100%
Revolvers	20%
Guarantees	74%
Letters of Credit	74%

6.4 Quantitative information on credit risk

Credit risk adjustments

The tables below present detailed quantitative information on credit risk adjustments, as required by Art. 442 Regulations 575/2013 and Guidelines EBA/GL/2016/11:

- EU CRB-B: Total and average net amount of exposures,
- EU CRB-C: Geographical breakdown of exposures,
- EU CRB-D: Concentration of exposures by industry or counterparty types,
- EU CRB-E: Maturity of exposures,
- EU CR1-A: Credit quality of exposures by exposure classes and instruments,
- EU CR1-B: Credit quality of exposures by industry or counterparty types,
- EU CR1-C: Credit quality of exposures by geography,
- EU CR2-A: Changes in stock of general and specific credit risk adjustment,
- EU CR2-B: Changes in the stock of defaulted and impaired loans and debt securities.

EU CRB-B: Total and average net amount of exposures			
	Net carrying value of exposures at the end of 2019	Average net exposures over the period	Net carrying value of exposures at the end of 2018
AIRB approach			
Institutions	11 896.7	11 667.3	8 852.0
Corporates Specialised lending	8 519.3	8 541.1	8 166.8
Corporates SME	18 974.4	19 654.3	19 800.3
Corporates Other	46 829.5	45 381.1	43 002.3
Equities	225.3	193.1	108.5
Total AIRB approach	86 445.2	85 436.9	79 929.9
SA approach			
Central governments or central banks	31 252.7	29 868.9	29 108.1
Regional governments or local authorities	3 465.4	3 792.1	3 777.1
MDBs	3 628.9	3 359.7	3 253.1
Corporates	9 009.5	8 906.8	8 507.7
of which: SMEs	7 158.4	6 728.6	478.3
Retail	29 860.2	27 160.7	23 158.3
of which: SMEs	6 779.6	6 018.3	4 983.2
Secured by mortgages on immovable property	29 070.7	27 140.7	24 451.1
of which: SMEs	437.0	363.1	283.7
Exposures in default	389.1	499.4	419.4
Other	2 774.2	2 898.6	2 469.6
Total SA approach	109 450.7	103 626.9	95 144.4
Total	195 895.9	189 063.8	175 074.3

EU CRB-C: Geographical breakdown of exposures

	Net value								
	Poland	United Kingdom	Luxembourg	Austria	Ireland	Turkey	France	Other	Total
Institutions	5 797.2	4 132.9	29.4	590.1	0.3	2.2	454.2	890.4	11 896.7
Corporates Specialised lending	8 085.4	0.0	253.1	0.0	0.0	0.0	0.0	180.8	8 519.3
Corporates SME	18 954.5	0.0	0.0	0.0	0.0	0.0	0.0	19.9	18 974.4
Corporates other	44 771.1	149.0	265.4	8.0	765.5	116.9	0.4	753.2	46 829.5
Equities	225.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	225.3
Total AIRB approach	77 833.5	4 281.9	547.9	598.1	765.8	119.1	454.6	1 844.3	86 445.2
Central governments or central banks	30 463.5	0.0	0.0	789.2	0.0	0.0	0.0	0.0	31 252.7
Regional governments or local authorities and PSE	3 465.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 465.4
MDBs	0.0	0.0	3 628.9	0.0	0.0	0.0	0.0	0.0	3 628.9
Institutions	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Corporates	8 390.3	0.2	0.0	0.0	0.0	471.8	0.0	147.2	9 009.5
Retail	29 839.5	4.5	0.1	0.3	0.5	0.0	0.5	14.8	29 860.2
Secured by mortgages on immovable property	29 050.3	3.2	0.3	0.7	0.1	0.0	0.7	15.4	29 070.7
Exposures in default	388.4	0.2	0.0	0.0	0.0	0.0	0.0	0.5	389.1
Other	2 774.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 774.2
Total SA approach	104 371.7	8.1	3 629.3	790.2	0.6	471.8	1.2	177.9	109 450.8
Total*	182 205.2	4 290.0	4 177.2	1 388.3	766.4	590.9	455.8	2 022.2	195 896.0

*) Excludes CVA, CCP DF

EU CRB-D: Concentration of exposures by industry or counterparty types

	Net value																			
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication	Financial and insurance activities	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defence, compulsory social security	Education	Human health services and social work activities	Arts, entertainment and recreation	Other services	Total
Institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11 860.3	0.0	36.5	0.0	-0.1	0.0	0.0	0.0	0.0	11 896.7
Corporates Specialised lending	0.0	0.0	26.1	320.6	0.0	0.0	0.4	0.0	0.0	380.3	43.4	7 745.3	3.0	0.0	0.0	0.0	0.1	0.1	0.0	8 519.3
Corporates SME	785.0	107.0	7 657.8	11.2	35.8	1 448.4	5 359.7	1 179.5	427.6	55.5	3.0	218.1	817.4	222.5	0.0	26.9	211.2	401.8	6.0	18 974.4
Corporates other	1 035.7	957.9	15 049.1	1 732.5	237.0	3 066.2	9 777.7	2 679.8	579.5	1 617.3	2 541.1	1 347.7	3 058.0	1 220.6	0.0	20.7	188.1	634.0	1 086.6	46 829.5
Equities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	0.0	47.1	0.1	101.7	0.0	0.0	0.0	0.0	0.0	59.9	225.3
Total AIRB approach	1 820.7	1 064.9	22 733.0	2 064.3	272.8	4 514.6	15 137.8	3 859.3	1 023.6	2 053.1	14 494.9	9 311.2	4 016.6	1 443.1	-0.1	47.6	399.4	1 035.9	1 152.5	86 445.2
Central governments or central banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1 182.7	0.0	0.0	0.0	29 654.7	0.0	0.0	0.0	415.3	31 252.7
Regional governments or local authorities and PSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 465.4	0.0	0.0	0.0	0.0	3 465.4
MDBs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 628.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 628.9
Institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Corporates	31.9	34.0	2 870.1	0.9	5.8	74.6	3 435.3	432.5	6.9	9.3	52.4	1 000.5	202.0	29.4	0.5	5.5	6.3	48.1	763.5	9 009.5
Retail	69.3	12.9	825.2	4.1	1.3	986.5	1 832.8	858.4	169.5	39.3	148.8	121.2	1 074.9	56.1	0.0	78.1	396.3	192.7	22 992.8	29 860.2
Secured by mortgages on immovable property	7.6	0.2	93.4	0.0	0.0	31.7	101.5	11.8	22.8	2.1	4.2	29.5	26.0	1.3	0.0	2.4	10.0	4.6	28 721.6	29 070.7
Exposures in default	4.9	0.8	20.8	0.1	0.1	26.6	61.5	42.3	5.9	2.3	3.5	1.5	34.0	3.0	0.0	1.0	11.1	5.5	164.2	389.1
Other	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 760.8	2 774.2
Total SA approach	113.7	47.9	3 822.9	5.1	7.2	1 119.4	5 431.1	1 345.0	205.1	53.0	5 020.6	1 152.7	1 336.9	89.8	33 120.6	87.0	423.7	250.9	55 818.2	109 450.8
Total	1 934.4	1 112.8	26 555.9	2 069.4	280.0	5 634.0	20 568.9	5 204.3	1 228.7	2 106.1	19 515.5	10 463.9	5 353.5	1 532.9	33 120.5	134.6	823.1	1 286.8	56 970.7	195 896.0

EU CRB-E: Maturity of exposures

	Net exposure value				Total
	No stated maturity or on demand	<= 1 year	> 1 year <= 5 years	> 5 years	
AIRB approach					
Exposures to institutions	1 616.4	2 319.8	5 252.4	2 708.1	11 896.7
Exposures to corporates - specialized lending	0.0	1 099.1	5 003.3	2 416.9	8 519.3
Exposures to corporates - SME	0.0	8 177.0	5 646.3	5 151.1	18 974.4
Exposures to corporates - other	0.0	19 496.2	16 348.2	10 985.1	46 829.5
Equity exposures	59.9	0.0	0.0	165.4	225.3
SA approach					
Exposures to central governments or central banks	-7.8	4 553.4	13 877.1	12 830.0	31 252.7
Exposures to regional governments or local authorities	0.0	211.8	1 203.0	2 050.6	3 465.4
Exposures to multilateral development banks	0.0	0.0	1 188.9	2 440.0	3 628.9
Exposures to corporates	84.8	7 064.4	686.9	1 173.4	9 009.5
Retail exposures	0.6	2 176.0	2 693.4	24 990.2	29 860.2
Exposures secured by mortgages on immovable property	0.0	78.9	58.3	28 933.5	29 070.7
Exposures in default	-12.2	90.3	86.7	224.3	389.1
Other items	37.6	0.0	13.4	2 723.2	2 774.2

EU CR1-A: Credit quality of exposures by exposure classes and instruments

	a)	b)	c)	d)	e)	f)	g)
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
1 Central governments or central banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Institutions	5.1	11 897.8	6.2	0.0	0.0	0.0	11 896.7
3 Corporates	2 598.1	73 021.5	1 296.4	0.0	0.0	0.0	74 323.2
4 <i>Of which: Specialised lending</i>	468.5	8 189.9	139.1	0.0	0.0	0.0	8 519.3
5 <i>Of which: SMEs</i>	515.6	18 714.6	255.8	0.0	0.0	0.0	18 974.4
6 Retail	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Secured by real estate property	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 SMEs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 Non-SMEs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 <i>Qualifying revolving</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 <i>Other retail</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 SMEs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 Non-SMEs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 Equity	0.0	225.3	0.0	0.0	0.0	0.0	225.3
15 Total IRB approach	2 603.2	85 144.6	1 302.6	0.0	0.0	0.0	86 445.2
16 Central governments or central banks	0.0	31 252.8	0.1	0.0	0.0	0.0	31 252.7

EU CR1-A: Credit quality of exposures by exposure classes and instruments

	Gross carrying values of		c) Specific credit risk adjustment	d) General credit risk adjustment	e) Accumulated write- offs	f) Credit risk adjustment charges of the period	g) Net values (a+b-c-d)
	a) Defaulted exposures	b) Non-defaulted exposures					
17 Regional governments or local authorities	0.0	3 465.6	0.2	0.0	0.0	0.0	3 465.4
18 Public sector entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19 Multilateral development banks	0.0	3 629.0	0.1	0.0	0.0	0.0	3 628.9
20 International organisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 Institutions	0.0	0.1	0.0	0.0	0.0	0.0	0.1
22 Przedsiębiorstwa	0.0	9 015.0	5.5	0.0	0.0	0.0	9 009.5
23 <i>Of which: SMEs</i>	0.0	7 162.3	3.9	0.0	0.0	0.0	7 158.4
24 Retail	0.0	30 101.9	241.7	0.0	0.0	0.0	29 860.2
25 <i>Of which: SMEs</i>	0.0	6 868.3	88.7	0.0	0.0	0.0	6 779.6
26 Secured by mortgages on immovable property	0.0	29 173.9	103.2	0.0	0.0	0.0	29 070.7
27 <i>Of which: SMEs</i>	0.0	439.3	2.3	0.0	0.0	0.0	437.0
28 Exposures in default	1 050.3	0.0	661.2	0.0	0.0	0.0	389.1
29 Items associated with particularly high risk	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 Covered bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31 Claims on institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 Collective investments undertakings	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 Equity exposures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 Other exposures	0.0	2 774.2	0.0	0.0	0.0	0.0	2 774.2
35 Total standardised approach	1 050.3	109 412.5	1 012.0	0.0	0.0	0.0	109 450.8
36 Total	3 653.5	194 557.1	2 314.6	0.0	0.0	0.0	195 896.0
37 Of which: Loans	3 466.7	119 364.1	2 201.4	0.0	0.0	0.0	120 629.4
38 Of which: Debt securities	0.0	36 396.2	0.9	0.0	0.0	0.0	36 395.3
39 Of which: Off-balance-sheet exposures	186.7	35 471.5	112.0	0.0	0.0	0.0	35 546.2

*) Excludes CVA RWA

EU CR1-B: Credit quality of exposures by industry or counterparty types		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 (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	Agriculture, forestry and fishing	138.4	1 868.2	72.2	0.0	0.0	0.0	1 934.4
2	Mining and quarrying	13.1	1 104.5	4.8	0.0	0.0	0.0	1 112.8
3	Manufacturing	571.6	26 240.2	255.9	0.0	0.0	0.0	26 555.9
4	Electricity, gas, steam and air conditioning supply	116.3	1 992.3	39.2	0.0	0.0	0.0	2 069.4
5	Water supply	0.2	280.4	0.6	0.0	0.0	0.0	280.0
6	Construction	364.0	5 468.9	198.9	0.0	0.0	0.0	5 634.0
7	Wholesale and retail trade	824.0	20 234.5	489.6	0.0	0.0	0.0	20 568.9
8	Transport and storage	128.9	5 144.4	69.0	0.0	0.0	0.0	5 204.3
9	Accommodation and food service activities	15.0	1 228.2	14.5	0.0	0.0	0.0	1 228.7
10	Information and communication	12.7	2 107.7	14.3	0.0	0.0	0.0	2 106.1
11	Financial and insurance activities	13.1	19 515.9	13.5	0.0	0.0	0.0	19 515.5
12	Real estate activities	408.9	10 189.6	134.6	0.0	0.0	0.0	10 463.9
13	Professional, scientific and technical activities	205.6	5 293.6	145.7	0.0	0.0	0.0	5 353.5
14	Administrative and support service activities	9.6	1 531.6	8.3	0.0	0.0	0.0	1 532.9
15	Public administration and defence, compulsory social security	0.0	33 120.9	0.4	0.0	0.0	0.0	33 120.5
16	Education	4.8	133.3	3.5	0.0	0.0	0.0	134.6
17	Human health services and social work activities	39.1	808.7	24.7	0.0	0.0	0.0	823.1
18	Arts, entertainment and recreation	42.4	1 276.2	31.8	0.0	0.0	0.0	1 286.8
19	Other services	745.8	57 018.0	793.1	0.0	0.0	0.0	56 970.7
20	Total	3 653.5	194 557.1	2 314.6	0.0	0.0	0.0	195 896.0

EU CR1-C : Credit quality of exposures by geography

	a)	b)	c)	d)	e)	f)	g)
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
Poland	3 651.3	180 861.2	2 307.3	0.0	0.0	0.0	182 205.2
United Kingdom	0.7	4 289.9	0.6	0.0	0.0	0.0	4 290.0
Luxembourg	0.0	4 179.1	1.9	0.0	0.0	0.0	4 177.2
Austria	0.0	1 388.4	0.1	0.0	0.0	0.0	1 388.3
Ireland	0.0	766.4	0.0	0.0	0.0	0.0	766.4
Turkey	0.0	590.9	0.0	0.0	0.0	0.0	590.9
France	0.0	455.8	0.0	0.0	0.0	0.0	455.8
Other	1.5	2 025.4	4.7	0.0	0.0	0.0	2 022.2
Total	3 653.5	194 557.1	2 314.6	0.0	0.0	0.0	195 896.0

*) Excludes Counterparty Credit Risk exposures, CVA RWA

EU CR2-A : Changes in stock of general and specific credit risk adjustment

		a)	b)
		Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	Opening balance	2 376.3	
2	Increases due to amounts set aside for estimated loan losses during the period	836.0	
3	Decreases due to amounts reversed for estimated loan losses during the period	-230.0	
4	Decreases due to amounts taken against accumulated credit risk adjustments	-384.0	
5	Transfers between credit risk adjustments		
6	Impact of exchange rate differences	0.0	
7	Business combinations, including acquisitions and disposals of subsidiaries		
8	Other adjustments	8.9	
9	Closing balance	2 607.2	
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	1.0	
11	Specific credit risk adjustments directly recorded to the statement of profit or loss		

*) The difference with the balance presented at the end of 2017 results from regulatory changes in the scope of adjusting to the requirements of IFRS 9.

**) The balance at the end of 2018 includes changes in the balance of adjustments for 4 quarters of 2018. The calculation of RWA takes into account the state of provisions as at 30/09/2018.

EU CR2-B: Changes in the stock of defaulted and impaired loans and debt securities

	a)
	Gross carrying value defaulted exposures
Opening balance	3 771.5
Loans and debt securities that have defaulted or impaired since the last reporting period	810.5
Returned to non-defaulted status	-44.1
Amounts written off	0.0
Other changes	-884.4
Closing balance	3 653.5

Use of credit risk mitigation techniques

The tables below present detailed quantitative information regarding the use of credit risk mitigation techniques in accordance with the requirements of Art. 453 of Regulation 575/2013 and Guidelines EBA/GL/2016/11:

- EU CR3: Credit risk mitigation techniques - overview,
- EU CR4: Standardised approach - credit risk exposure and Credit Risk Mitigation (CRM) effects,
- EU CR7: IRB approach - Effect on the RWAs of credit derivatives used as CRM techniques.

EU CR3: Credit risk mitigation techniques - overview

	a)	b)	c)	d)	e)
	Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total loans	117 308.1	38 867.5	35 051.2	3 816.3	n/a
Total debt securities	36 249.8	145.5	0.0	145.5	n/a
Total exposures	153 557.9	39 013.0	35 051.2	3 961.8	n/a
<i>Of which defaulted</i>	1 836.9	856.3	740.4	115.9	n/a

EU CR4: Standardised approach - credit risk exposure and Credit Risk Mitigation (CRM) effects

	a)	b)	c)	d)	e)	f)
	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Exposure classes	On-Balance Sheet amount	Off-Balance Sheet amount	On-Balance Sheet amount	Off-Balance Sheet amount	RWA	RWA density
1 Central governments or central banks	30 909.8	343.0	30 956.5	11.8	1 421.7	5%
2 Regional government or local authorities	3 148.9	316.7	3 148.7	88.0	647.3	20%
3 Public sector entities	0.0	0.0	0.0	0.0	0.0	51%
4 Multilateral development banks	3 629.0	0.0	3 628.9	0.0	0.0	0%
5 International organisations	0.0	0.0	0.0	0.0	0.0	0%
6 Institutions	0.1	0.0	0.1	0.0	0.1	50%
7 Corporates	4 982.2	4 032.8	4 959.4	135.4	4 993.3	98%
8 Retail	24 777.4	5 324.5	24 511.4	2 301.7	19 028.7	71%
9 Secured by mortgages on immovable property	29 058.4	115.5	28 954.6	57.5	11 333.3	39%

EU CR4: Standardised approach - credit risk exposure and Credit Risk Mitigation (CRM) effects

Exposure classes	a)	b)	c)	d)	e)	f)
	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
	On-Balance Sheet amount	Off-Balance Sheet amount	On-Balance Sheet amount	Off-Balance Sheet amount	RWA	RWA density
10 Exposures in default	1 046.7	3.6	385.7	0.8	423.5	110%
11 Exposures associated with particularly high risk	0.0	0.0	0.0	0.0	0.0	0.0
12 Covered bonds	0.0	0.0	0.0	0.0	0.0	0.0
13 Institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0.0
14 Collective investment undertakings	0.0	0.0	0.0	0.0	0.0	0.0
15 Equity	0.0	0.0	0.0	0.0	0.0	0.0
16 Other items	2 774.2	0.0	2 774.2	0.0	4 796.4	173%
17 Total	100 326.7	10 136.1	99 319.5	2 595.2	42 644.3	42%

EU CR7: IRB approach - Effect on the RWAs of credit derivatives used as CRM techniques

	a)	b)
	Pre-credit derivatives RWAs	Actual RWAs
1 Exposures under FIRB	0.0	0.0
2 Central governments and central banks	0.0	0.0
3 Institutions	0.0	0.0
4 Corporates - SMEs	0.0	0.0
5 Corporates - Specialised lending	0.0	0.0
6 Corporates - Other	0.0	0.0
7 Exposures under AIRB	32 845.0	32 845.0
8 Central governments and central banks	0.0	0.0
9 Institutions	1 640.8	1 640.8
10 Corporates - SMEs	7 015.3	7 015.3
11 Corporates - Specialised lending	3 926.3	3 926.3
12 Corporates - Other	19 515.6	19 515.6
13 Retail - Secured by real estate SMEs	0.0	0.0
14 Retail - Secured by real estate non-SMEs	0.0	0.0
15 Retail - Qualifying revolving	0.0	0.0
16 Retail - Other SMEs	0.0	0.0
17 Retail - Other non-SMEs	0.0	0.0
18 Equity IRB	747.0	747.0
19 Other non-credit obligation assets	0.0	0.0
20 Total	32 845.0	32 845.0

Use of IRB approach to credit risk

The table below presents detailed quantitative information on the application of the IRB approach to credit risk, as required by Art. 452 of Regulation 575/2013 and Guidelines EBA/GL/2016/11:

- EU CR9: IRB approach - Backtesting of PD per exposure class.

EU CR9: IRB approach - Backtesting of PD per exposure class

Exposure class	PD range	External rating equivalent		Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
		S&P/Fitch IBCA	Moody's Rating			End of previous year	End of the year			
SME	0.00 - 0.01	AAA	Aaa							
	0.01 - 0.03	AA+	Aa1							
	0.03 - 0.04	AA	Aa2							
	0.04 - 0.05	AA-	Aa3							
	0.05 - 0.06	A+	A1							
	0.06 - 0.08	A	A2							
	0.08 - 0.11	A-	A3							
	0.11 - 0.17	BBB+	Baa1	0.19	0.51	513.0	397.0	3.0	0.0	0.70
	0.17 - 0.26	BBB	Baa2	0.24	0.24	1.0	2.0	0.0		0.17
	0.26 - 0.37	BBB-	Baa3	0.36	0.77	1 105.0	801.0	9.0	2.0	0.91
	0.37 - 0.58	BB+	Ba1	0.44	0.47	119.0	37.0	0.0	0.0	0.29
	0.58 - 1.00	BB	Ba2	0.62	1.31	1 445.0	1 227.0	16.0	2.0	1.55
	1.00 - 1.77	BB-	Ba3	1.21	1.83	1 766.0	1 246.0	26.0	3.0	1.98
	1.77 - 3.23	B+	B1	2.13	2.88	1 414.0	1 060.0	48.0	1.0	3.31
	3.23 - 6.05	B	B2	4.08	4.47	1 311.0	915.0	50.0	3.0	4.35
	6.05 - 11.67	B-	B3	8.31	8.58	515.0	304.0	35.0	1.0	6.87
	11.67 - 20.20	CCC	Caa1	14.42	15.58	346.0	203.0	47.0	4.0	8.89
	20.20 - 29.58	CC	Ca	26.13	27.31	57.0	32.0	11.0	0.0	16.94
	29.58 - 100.00	C	C	35.00	45.29	67.0	17.0	16.0	1.0	25.05
	100	D	C	100.00	100.00	353.0	228.0			
100	D	C	100.00	100.00	2.0	1.0				
100	D	C	100.00	100.00	222.0	165.0				
Specialized lending	0.00 - 0.01	AAA	Aaa							
	0.01 - 0.03	AA+	Aa1							
	0.03 - 0.04	AA	Aa2	0.00		0.0	0.0			
	0.04 - 0.05	AA-	Aa3	0.00		0.0	0.0			
	0.05 - 0.06	A+	A1	0.00		0.0	0.0			
	0.06 - 0.08	A	A2	0.00		0.0	0.0			
	0.08 - 0.11	A-	A3	0.00		2.0	0.0			
	0.11 - 0.17	BBB+	Baa1	0.14	0.14	7.0	15.0			0.00
	0.17 - 0.26	BBB	Baa2	0.21	0.21	21.0	24.0	1.0		0.95
	0.26 - 0.37	BBB-	Baa3	0.31	0.31	47.0	59.0			0.00
	0.37 - 0.58	BB+	Ba1	0.44	0.44	69.0	95.0			0.43
	0.58 - 1.00	BB	Ba2	0.76	0.98	65.0	71.0			0.00
	1.00 - 1.77	BB-	Ba3	1.32	1.32	20.0	22.0			0.32
	1.77 - 3.23	B+	B1	2.41	6.36	11.0	8.0	1.0		4.17
	3.23 - 6.05	B	B2	4.39	4.39	6.0	5.0	1.0		4.76

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	6.05 - 11.67	B-	B3	8.35	8.35	1.0	2.0			3.33
	11.67 - 20.20	CCC	Caa1	16.32	16.32	18.0	17.0	2.0	2.0	4.76
	20.20 - 29.58	CC	Ca	25.00	25.00	4.0	4.0			0.00
	29.58 - 100.00	C	C	0.00		0.0	0.0			
	100	D	C	100.00		9.0	10.0			
	100	D	C	0.00			0.0			
	100	D	C	100.00			2.0			
Other corporate	0.00 - 0.01	AAA	Aaa							
	0.01 - 0.03	AA+	Aa1							
	0.03 - 0.04	AA	Aa2	0.00		0.0	0.0			
	0.04 - 0.05	AA-	Aa3	0.00		0.0	0.0			
	0.05 - 0.06	A+	A1	0.05	0.05	5.0	2.0			
	0.06 - 0.08	A	A2	0.06	0.06	0.0	2.0			
	0.08 - 0.11	A-	A3	0.08	1.00	20.0	17.0	0.0		0.00
	0.11 - 0.17	BBB+	Baa1	0.15	0.48	211.0	241.0	1.0		0.01
	0.17 - 0.26	BBB	Baa2	0.21	0.22	84.0	77.0	1.0		0.00
	0.26 - 0.37	BBB-	Baa3	0.33	0.77	472.0	460.0	2.0	1.0	0.01
	0.37 - 0.58	BB+	Ba1	0.46	0.45	511.0	144.0	1.0	0.0	0.00
	0.58 - 1.00	BB	Ba2	0.67	1.26	605.0	698.0	7.0	2.0	0.01
	1.00 - 1.77	BB-	Ba3	1.31	2.69	1 472.0	845.0	13.0	2.0	0.01
	1.77 - 3.23	B+	B1	2.62	8.13	1 884.0	1 772.0	86.0	21.0	0.03
	3.23 - 6.05	B	B2	4.21	6.63	797.0	1 874.0	26.0	3.0	0.03
	6.05 - 11.67	B-	B3	8.74	10.86	1 991.0	425.0	64.0	9.0	0.05
	11.67 - 20.20	CCC	Caa1	14.62	15.00	3 475.0	2 524.0	184.0	68.0	0.03
	20.20 - 29.58	CC	Ca	25.84	32.88	846.0	446.0	52.0	4.0	0.12
	29.58 - 100.00	C	C	35.04	43.86	1 308.0	254.0	119.0	9.0	0.08
	100	D	C	100.00	99.89	602.0	426.0			
100	D	C	100.00	100.00	8.0	3.0				
100	D	C	100.00	100.00	518.0	474.0				
Institutions	0.00 - 0.01	AAA	Aaa							
	0.01 - 0.03	AA+	Aa1							
	0.03 - 0.04	AA	Aa2	0.03	0.03	2.0	3.0			0.00
	0.04 - 0.05	AA-	Aa3	0.04	0.04	11.0	9.0			0.00
	0.05 - 0.06	A+	A1	0.05	0.05	38.0	35.0			0.00
	0.06 - 0.08	A	A2	0.06	0.06	22.0	15.0			0.00
	0.08 - 0.11	A-	A3	0.09	0.10	19.0	22.0			0.00
	0.11 - 0.17	BBB+	Baa1	0.14	0.14	293.0	253.0			0.00
	0.17 - 0.26	BBB	Baa2	0.21	0.21	82.0	68.0			0.00
	0.26 - 0.37	BBB-	Baa3	0.29	0.31	16.0	14.0	1.0		1.33
	0.37 - 0.58	BB+	Ba1	0.44	0.44	26.0	20.0			0.00
	0.58 - 1.00	BB	Ba2	0.66	0.76	17.0	15.0			0.00
	1.00 - 1.77	BB-	Ba3	1.31	2.15	32.0	18.0			0.00
	1.77 - 3.23	B+	B1	1.45	4.58	13.0	19.0			0.00

	3.23 - 6.05	B	B2	4.57	5.48	9.0	11.0			0.00
	6.05 - 11.67	B-	B3	8.35	8.35	13.0	13.0			0.00
	11.67 - 20.20	CCC	Caa1	16.32	16.32	49.0	40.0	5.0	2.0	7.65
	20.20 - 29.58	CC	Ca	0.00		0.0	0.0			
	29.58 - 100.00	C	C	0.00		0.0	0.0			
	100	D	C	100.00	100.00	2.0	5.0			
	100	D	C	0.00		0.0	0.0			
	100	D	C	0.00		0.0	0.0			

Exposure to the counterparty credit risk

The tables below present detailed quantitative information on counterparty credit risk exposure in accordance with the requirements of Art. 439 and Art. 452 of Regulation 575/2013 and Guidelines EBA/GL/2016/11:

- EU CCR1: Analysis of the counterparty credit risk (CCR) exposure by approach,
- EU CCR2: Credit valuation adjustment (CVA) capital charge,
- EU CCR4: IRB approach - CCR exposures by portfolio and PD scale.

EU CCR1 – Analysis of the counterparty credit risk (CCR) exposure by approach

	a)	b)	c)	d)	e)	f)	g)
	Notional	Replacement cost / current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	1 710.1	867.7			947.7	80.2
2	Original exposure						
3	Standardised approach						
4	IMM (for derivatives and SFTs)						
5	Of which securities financing transactions						
6	Of which derivatives and long settlement transactions						
7	Of which from contractual cross-product netting						
8	Financial collateral simple method (for SFTs)						
9	Financial collateral comprehensive method (for SFTs)						
10	VaR for SFTs						
11	Total						80.2

EU CCR2 – CVA capital charge					
		a)	b)	c)	d)
		as of 31 Dec 2019		as of 30 Jun 2019	
		Exposure value	RWAs	Exposure value	RWAs
1	Total portfolios subject to the advanced method	-	-	-	-
2	(i) VaR component (including the 3× multiplier)		-		-
3	(ii) SVaR component (including the 3× multiplier)		-		-
4	All portfolios subject to the standardised method	156.1	31.0	218.4	53.5
EU4	Based on the original exposure method	-	-	-	-
5	Total subject to the CVA capital charge	156.1	31.0	218.4	53.5

EU CCR4: IRB approach – CCR exposures by portfolio and PD scale								
		a)	b)	c)	d)	e)	f)	g)
Exposure class	PD scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Institutions	0.00 to <0.15	171.60	0.07%	37	37.42%	2.17	34.4	20,05%
Institutions	0.15 to <0.25	3.30	0.21%	5	44.47%	2.80	2.3	69,70%
Institutions	0.25 to <0.50	13.50	0.44%	8	58.73%	2.67	16.6	122,96%
Institutions	0.50 to <0.75	-	-	-	-	-	0.0	-
Institutions	0.75 to <2.50	7.00	1.56%	35	39.02%	0.68	6.5	92,86%
Institutions	2.50 to <10.00	0.60	6.65%	15	38.39%	0.15	0.9	150,00%
Institutions	10.00 to <100.00	0.10	16.32%	2	38.13%	0.20	0.2	200,00%
Institutions	100.00 (Default)	-	-	-	-	-	0.0	-
Institutions	Subtotal	196.10	0.18%	102	39.07%	2.16	60.9	31,06%
Corporates Specialised lending	0.00 to <0.15	1.4	0.14%	3	91.37%	1.24	0.8	57,14%
Corporates Specialised lending	0.15 to <0.25	18.9	0.21%	6	91.37%	2.82	19.6	103,70%
Corporates Specialised lending	0.25 to <0.50	60.5	0.40%	42	85.54%	4.27	98.9	163,47%
Corporates Specialised lending	0.50 to <0.75	0.0	-	-	-	-	0.0	-
Corporates Specialised lending	0.75 to <2.50	2.0	0.99%	7	91.37%	3.01	4.2	210,00%
Corporates Specialised lending	2.50 to <10.00	0.9	4.39%	1	54.50%	3.40	1.8	200,00%
Corporates Specialised lending	10.00 to <100.00	0.0	-	-	-	-	0.0	-
Corporates Specialised lending	100.00 (Default)	0.0	-	-	-	-	0.0	-
Corporates Specialised lending	Subtotal	83.7	0.41%	59	86.75%	3.85	125.3	149,70%
Corporates SME	0.00 to <0.15	0.0	-	-	-	-	0.0	-
Corporates SME	0.15 to <0.25	0.0	-	-	-	-	0.0	-

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Corporates SME	0.25 to <0.50	0.1	0.35%	1	48.60%	1.00	0.1	100,00%
Corporates SME	0.50 to <0.75	0.0	0.59%	1	48.60%	1.00	0.0	-
Corporates SME	0.75 to <2.50	0.1	1.22%	3	48.60%	1.00	0.0	0,00%
Corporates SME	2.50 to <10.00	0.1	4.09%	2	48.60%	1.00	0.1	100,00%
Corporates SME	10.00 to <100.00	0.0	-	-	-	-	0.0	-
Corporates SME	100.00 (Default)	0.0	-	-	-	-	0.0	-
Corporates SME	Subtotal	0.3	1.42%	7	48.60%	1.00	0.2	66,67%
Corporates Other	0.00 to <0.15	77.2	0.11%	7	48.82%	1.49	21.4	27,72%
Corporates Other	0.15 to <0.25	8.8	0.19%	19	48.70%	1.11	3.0	34,09%
Corporates Other	0.25 to <0.50	35.3	0.39%	41	48.80%	1.16	19.0	53,82%
Corporates Other	0.50 to <0.75	3.9	0.59%	37	48.60%	1.91	2.8	71,79%
Corporates Other	0.75 to <2.50	29.2	1.14%	93	48.78%	1.90	28.4	97,26%
Corporates Other	2.50 to <10.00	4.6	4.91%	16	47.45%	1.30	6.6	143,48%
Corporates Other	10.00 to <100.00	0.2	19.31%	5	48.60%	1.38	0.5	250,00%
Corporates Other	100.00 (Default)	0.1	100.00%	2	49.37%	2.58	0.7	700,00%
Corporates Other	Subtotal	159.3	0.62%	220	48.76%	1.48	82.5	51,79%
Total (all portfolios)		439,4	0.38%	388	51.67%	2.23	268.9	61.20%

Non-performing and forborne exposures

The tables below present detailed quantitative information on non-performing and forborne exposures in accordance with the requirements of Guidelines EBA/GL/2018/10:

- Template 1: Credit quality of forborne exposures,
- Template 3: Credit quality of performing and non-performing exposures by past due days,
- Template 4: Performing and non-performing exposures and related provisions,
- Template 9: Collateral obtained by taking possession and execution processes.

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Template 1: Credit quality of forbore exposures

	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 risk and provisions		Collateral received and financial guarantees received on forbore exposures	
	Performing forbore		Non-performing forbore		On performing forbore exposures	On non-performing forbore exposures	Of which collateral and financial guarantees received on non-performing exposures with forbearance measures	
			Of which defaulted	Of which impaired				
1 Loans and advances	496.5	942.4	935.9	935.9	29.7	505.5	695.2	125.0
2 <i>Central banks</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 <i>General governments</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 <i>Credit institutions</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 <i>Other financial corporations</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 <i>Non-financial corporations</i>	267.0	755.3	754.9	754.9	12.2	385.4	532.7	107.9
7 <i>Households</i>	230.2	187.6	181.5	181.5	18.2	120.2	163.9	17.8
8 Debt securities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 Loan commitments given	30.4	5.4	5.4	5.4	0.3	0.5	0.3	0.0
10 Total	527.0	947.8	941.3	941.3	30.0	506.0	695.5	125.0



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Template 3: Credit quality of performing and non-performing exposures by past due days

		a)	b)	c)	d)	e)	f)	g)	h)	i)	j)	k)	l)
		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	Past due > 2 years 5 years	Past due > 5 years 7 years	Past due > 7 years	Of which defaulted		
1	Loans and advances	116 180.6	115 848.9	310.1	3 543.8	1 311.6	315.5	494.0	690.8	731.6	0.3	0.0	3 532.1
2	Central banks	669.0	669.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	General governments	1 590.0	1 588.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Credit institutions	3 421.1	3 416.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Other financial corporations	14 574.4	14 574.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Non-financial corporations	38 677.0	38 605.7	59.0	2 389.8	1 014.7	187.6	260.9	358.6	567.9	0.2	0.0	2 389.3
7	Of which SMEs	7 812.0	7 756.4	45.2	1 021.0	362.7	84.0	130.8	197.6	245.9	0.2	0.0	1 020.5
8	Households	57 249.1	56 994.1	249.8	1 154.0	296.9	127.9	233.2	332.3	163.7	0.0	0.0	1 142.8
9	Debt securities	36 224.0	36 224.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Central banks	230.0	230.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	General governments	30 854.1	30 854.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Credit institutions	508.6	508.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Other financial corporations	4 508.2	4 508.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Non-financial corporations	123.2	123.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Off-balance-sheet exposures	37 427.3		155.8									153.5
16	Central banks	0.0		0.0									0.0
17	General governments	222.2		0.0									0.0
18	Credit institutions	1 851.9		0.0									0.0



ING Bank Śląski S.A. Group

Qualitative and quantitative disclosures relating to capital adequacy and variable components of remuneration published for 2019

(PLN million)

Template 3: Credit quality of performing and non-performing exposures by past due days

	a)	b)	c)	d)	e)	f)	g)	h)	i)	j)	k)	l)
	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	Past due > 2 years 5 years	Past due > 5 years 7 years	Past due > 7 years	Of which defaulted		
19 Other financial corporations	3 112.0	0.0										0.0
20 Non-financial corporations	26 381.8	145.1										144.4
21 Households	5 859.4	10.7										9.0
22 Total	189 832.0	152 073.0	310.1	3 699.7	1 311.6	315.5	494.0	690.8	731.6	0.3	0.0	3 685.5



ING Bank Śląski S.A. Group

 Qualitative and quantitative disclosures relating to capital adequacy
and variable components of remuneration published for 2019

(PLN million)

Template 4: Performing and non-performing exposures and related provisions

	a)	b)	c)	d)	e)	f)	g)	h)	i)	j)	k)	l)	m)	n)	o)	
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Collateral and financial guarantees received			
	Performing exposures		Non-performing exposures				Performing exposures – accumulated impairment and provisions		Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				Accumulated partial write-off	On performing exposures	On non-performing exposures	
	Of which stage 1	Of which stage 2	Of which stage 2	Of which stage 3	Of which stage 1	Of which stage 2	Of which stage 2	Of which stage 3								
1	Loans and advances	116 180.6	104 258.8	7 140.9	3 543.9	13.5	2 869.1	568.9	116.0	439.1	1 907.1	2.2	1 738.1	0.0	15 302.0	594.3
2	Central banks	669.0	669.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	General governments	1 590.0	1 566.9	23.1	0.0	0.0	0.0	0.3	0.1	0.2	0.0	0.0	0.0	0.0	1.8	0.0
4	Credit institutions	3 421.1	3 421.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Other financial corporations	14 574.4	14 574.3	0.1	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0
6	Non-financial corporations	38 677.0	34 821.2	3 855.9	2 389.8	2.5	2 387.3	99.5	48.0	51.5	1 139.6	0.1	1 139.4	0.0	8 508.6	539.8
7	Of which SMEs	17 905.0	15 934.9	1 970.1	1 021.0	1.3	1 019.8	42.6	17.2	25.4	540.1	0.1	540.0	0.0	6 269.1	231.5
8	Households	57 249.1	52 136.7	5 112.4	1 154.1	11.0	1 143.1	468.6	72.6	396.1	767.5	2.1	765.4	0.0	6 791.6	54.6
9	Debt securities	36 224.1	35 959.3	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Central banks	230.0	230.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	General governments	30 854.1	30 854.1	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Credit institutions	508.6	508.6	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Other financial corporations	4 508.2	4 508.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Non-financial corporations	123.2	123.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Off-balance-sheet exposures	36 384.9	37 106.3	321.0	162.8	64.1	91.7	40.2	22.4	17.9	66.9	0.1	66.9		218.1	0.0
16	Central banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
17	General governments	222.7	222.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0



ING Bank Śląski S.A. Group

 Qualitative and quantitative disclosures relating to capital adequacy
 and variable components of remuneration published for 2019

(PLN million)

Template 4: Performing and non-performing exposures and related provisions

	a)	b)	c)	d)	e)	f)	g)	h)	i)	j)	k)	l)	m)	n)	o)
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Collateral and financial guarantees received		
	Performing exposures		Non-performing exposures				Performing exposures – accumulated impairment and provisions		Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				Accumulated partial write-off	On performing exposures	On non-performing exposures
	Of which stage 1	Of which stage 2	Of which stage 2	Of which stage 3	Of which stage 1	Of which stage 2	Of which stage 2	Of which stage 3							
18 Credit institutions	1 851.9	1 851.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
19 Other financial corporations	3 450.2	3 449.4	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0	0.0
20 Non-financial corporations	24 771.7	24 488.3	283.4	145.4	57.2	88.3	26.0	18.1	7.9	64.1	0.0	64.1		209.4	0.0
21 Households	6 088.4	5 902.3	186.1	17.4	7.0	10.4	14.2	4.2	9.9	2.8	0.0	2.8		8.7	0.0
22 Total	188 789.6	177 324.3	7 461.9	3 706.7	77.6	2 960.8	615.3	138.4	457.0	1 974.0	2.3	1 805.0	0.0	15 520.1	594.3

Template 9: Collateral obtained by taking possession and execution processes

		a)	b)
		Collateral obtained by taking possession	
		Value at initial recognition	Accumulated negative changes
1	Property, plant and equipment (PP&E)	0.0	0.0
2	Other than PP&E	0.0	0.0
3	<i>Residential immovable property</i>	0.0	0.0
4	<i>Commercial Immovable property</i>	0.0	0.0
5	<i>Movable property (auto, shipping, etc.)</i>	0.0	0.0
6	<i>Equity and debt instruments</i>	0.0	0.0
7	<i>Other</i>	0.0	0.0
8	Total	0.0	0.0

7 Operational risk

7.1 General description of the operational risk management process at the ING Bank Śląski S.A. Group

ING Bank Śląski S.A. Group manages operational risk pursuant to the laws, recommendations and resolutions of the Polish Financial Supervision Authority and of other regulators.

The operational risk management process is an integral element of the ING Bank Śląski S.A. Group's management process. The operational risk management process and business processes are interdependent which means that information obtained in the operational risk management process is taken into consideration in the decision-taking processes concerning business activity, while business decisions are taken into consideration in the operational risk management process.

The operational risk management system was developed in accordance with the rule of proportionality, i.e. taking into consideration the nature, scale and complexity of the business activity and the significance of processes and the Bank operational risk profile. The system covers all spheres of the Bank's activity and the Bank Group's activity, cooperation with outsourcers, clients and partners and is a consistent and permanent practice covering the following elements:

- risk identification and assessment,
- risk mitigation,
- execution of controls,
- quality assurance and monitoring.

The Supervisory Boards of the Bank and subsidiaries supervise the operational risk management and, based on periodic management information, assess at the activities in this area.

Having obtained the Supervisory Board's approval, the Bank Management Board and Management Boards of subsidiaries determine the strategy for operational risk management by implementing a coherent set of internal prescriptive documents governing the scope, principles and duties of Bank and subsidiaries employees in the area of operational risk management.

The particular role of the Non-Financial Risk Committees (Non-Financial Risk Committee at ING Bank Śląski and its task forces as well as Non-Financial Risk Committees in subsidiaries) covering the operational risk is particularly crucial for ensuring continuity and consistency of risk management.

The Bank maintains a complete, consistent and transparent structure of operational risk management and clearly stated scope of duties and responsibilities.

The structure of operational risk management takes account of the scope and specific nature of the Bank and subsidiaries operations, existing business lines, client segments, and product groups. The management structure is underpinned by the Three Lines of Defence Model.

1st line of defence

Business and Bank organisational units operationally supporting Business. First line of defence is responsible for developing, implementing and performing risk mitigation controls.

The scope of responsibilities includes in particular:

- carrying out risk assessments and taking mitigating actions in order to maintain the risk at the level set in risk appetite,
- implementing, using and testing of controls resulting from policies and other regulations,
- registering internal events and monitoring of losses,
- maintaining business continuity,
- ensuring identification of risks and control mechanisms for products and processes in accordance with the rules binding in the Bank,
- carrying out risk assessments and taking mitigating actions to maintain risk levels consistent with the designated risk appetite,
- implementation, application and testing of control mechanisms resulting from policies and other regulations, also for outsourced activities,
- supervision, monitoring of risks and controls for products and processes in its area of responsibility, including outsourced activities,
- recording internal events and monitoring losses,
- ensuring that actions are taken following audit and non-audit recommendations,
- Business continuity.

In making business decisions, the first line of defence must take into account the opinion of the second line of defence.

2nd line of defence

It is composed of:

- units from the following areas:
 - operational risk,
 - compliance risk,
 - legal risk,
 - model risk,
 - credit and market risk,
 - finance,
 - human resources management, and
- Credit Risk Inspection Department,

- Model Validation Department.

Second line of defence supports the first line of defence in managing risk. Responsible for:

- issuing regulations and providing risk management methods and tools, including defining and maintaining the risk management process and supporting the first line of defence during the process,
- verifying the application of risk regulations by the first line of defence,
- approval of business proposals affecting the bank's risk profile,
- preparation of management information on risk, taking into account risks affecting the implementation of the Bank's strategy and key risks,
- monitoring risk mitigation activities and changes in the risk profile,
- ensuring the employment of qualified staff in the area of risk management,
- providing independent analysis and expertise to support management,
- analysis and monitoring of threats and trends in phenomena affecting the risk profile,
- to perform tasks resulting from the second line of defence control function.

Within the scope of control activities, the second line of defence units make their own independent assessment of the effectiveness of the first line of defence through: inspections, tests, reviews and other forms of control.

3rd line of defence

It is the internal audit function which independently assesses the internal control system in relation to risks identified in processes and managing these risks by first and second line of defence.

7.2 Methods applied to quantify capital requirement for the operational risk

For the regulatory capital requirement for the operational risk, at present the ING Bank Śląski S.A. Group applies the Basic Indicator Approach.

To calculate the economic capital requirement, the ING Bank Śląski S.A. Group applies the Advanced Measurement Approach.

The model applied by the ING Bank Śląski S.A. Group is a hybrid model combining the actual loss data and the data collected on the basis of expert judgments. It is based on the Loss Distribution Approach which is applied to set capital requirements by combining the frequency distribution and severity distribution of the events in the operational risk area. Severity describes the potential value of loss, whereas frequency describes the number of potential events during the year. Following the PFSA's requirements and European Union regulations, the four sources of data are used in the ING Bank Śląski S.A. Capital Group's AMA framework:

- internal loss data,
- external loss data,
- scenario analyses, and
- business environment and internal control factors.

AMA model takes into account both the event and potential risks of a high frequency and low severity as well as events and potential risks with a low frequency but high severity thus ensures an adequate level of capital in case of unexpected events.

7.3 Gross losses due to the operational risk

In 2019, the ING Bank Śląski S.A. Capital Group reported operational risk losses at the level of PLN 13.7 million; of which including ING Bank Śląski S.A. PLN 13.7 million, while the remaining subsidiaries did not identified losses.

The operational risk losses also include resulting from compliance and legal risk.

Established provisions are included in total losses. Released provisions increase Bank's income for given year.

Actual losses distribution of the ING Bank Śląski S.A. Group as per type and category of events with losses ≥ PLN 0.1 million

Actual losses distribution of the ING Bank Śląski S.A. Group as per type and category of events with losses ≥ PLN 0.1 million

No.	Event type	Event category	Gross losses in PLN million
1.	Clients, Products and Business Practices	Product Flaws	9.7
2.	Internal Fraud	Theft and Fraud	0.8
3.	External Fraud	Theft and Fraud	1.1
4.	Damage to Physical Assets	Disasters and Other Events	1.2
5.	Execution, Delivery and Process Management	Transaction Capture, Execution and Maintenance	0.9
Total			14.7

*) released provision

In the years 2016-2019, the Bank established PLN 26.9 million of provisions for legal claims related to mortgage loans indexed in Swiss francs (CHF). Due to the CJEU judgment and market practices, the Bank decided to change its approach from individual to portfolio-based to these cases. On 30.12.2019 provisions, so far reported on the operational risk side in the amount of PLN 26.9 million were reclassified:

PLN 17.2 million - portfolio provision for outstanding exposures (CHF) - as credit risk

PLN 9.7 million - portfolio provision for repaid exposures (CHF) - as operational risk.

The Bank did not exceed the actual losses limit set by the Bank Management Board and Supervisory Board in the "Non-Financial Risk Appetite Statement of ING Bank Śląski S.A. for 2019".

At the same time, as a result of direct recoveries and compensation from insurance, the Bank recovered the amount of PLN 1,385 thousand, which is 10.14% of the total amount of gross losses.

The highest losses were caused by:

- Legal claims concern clients' objection to the clauses included in agreements of mortgage credit indexed to foreign currency (CHF),
- Property damages: ATM damages,
- External Fraud Risk: external electronic frauds (skimming, internet payments, phishing),
- Wrong bailiff seizure,
- Unintentional errors of employees, while performing current operational activities.

The actions to mitigate negative financial consequences of operational risk events concentrated mainly on:

- The current monitor risk and trends in the field products, services and processes,
- Effective management of transaction limits and anti-fraud rules,
- Further improving the safety level of online banking services used by retail and corporate customers,
- Developing of early warning system against cyber-attack on Bank's applications and IT systems,
- Preparing the Scenario Analysis of possible huge internal fraud and strengthening the processes safeness,
- Implementation of Education Policy to raise customer awareness,
- Cyclical training of employees, among others, in terms of product procedures, ethics, the protection of banking secrecy,
- Improvement of security mechanisms external equipment and facilities of the Bank and the central management system to improve physical security. The risk of financial loss in the event category is also limited by the transfer of risk to the insurance market,
- Analysis of statistical anomalies in the retail loan portfolio.

8 Internal capital adequacy assessment

ING Bank Śląski S.A. Group defines economic capital (internal capital) as capital needed to cover all material risks identified by the Group in its activities and macroeconomic environment. The capital covers potential unexpected losses to which the Group could be exposed in the future with confidence interval corresponding with desired A- rating (99.9%) and one year horizon.

Material risk types identification

In the ING Bank Śląski S.A. Group The Capital Management Policy at ING Bank Śląski S.A. details the process of material risk types identification, the basic elements for their quantification and capital adequacy management rules.

On the basis of above-mentioned document, the Group identifies the following types of risk :

- permanently material risk - the risk which, in view of the nature of the Group's business, is currently material and will be material in the future. The nature of the Group's business shall be understood as deposit and credit services along with related: liquidity, interest rate and FX risk management and risk management connected with inappropriate and unreliable internal processes, people and technical systems or external events,
- material risk - the risk that may cause potential losses with the frequency of occurrence value qualifying it as material in line with the table below :

Risk materiality classification				
Potential loss (PLN)	up to 0,2% of own funds	from 0,2% to 1% of own funds	from 1% to 5% of own funds	above 5% of own funds
At least once a year	Non-material	Material	Material	Material
At least once in 5 years	Non-material	Non-material	Material	Material
Less than once in 5 years	Non-material	Non-material	Non-material	Material

Within ICAAP in the first quarter of 2019 the Risk Materiality Assessment Workshops have taken place in the Group. As a result monitoring units were changed for risk categories which so-far were assigned to the Capital Management Department (CMD) and a financial result risk was assessed as non-material.

The Group identifies 9 permanently material risks (including residual value risk for Leasing) and 6 material risks .

	Risk type	Permanently material	Material	Non-material
Credit risk				
	Default risk and counterparty risk*	✓		
	Residual risk**	✓		
	Concentration risk	✓		
	Residual value risk	✓		
	Transfer risk			✓
	Other non-credit obligation assets risk		✓	
	„Default” definition risk			✓
Market risk				
	Exchange rate risk	✓		
	Interest rate general and specific risk in trading book	✓		
	Interest rate risk in banking book: total mismatch	✓		
Trading risk	Interest rate risk in banking book: residual convexity risk		✓	
	Interest rate risk in banking book: base risk			✓
	Interest rate risk in banking book: option risk			✓
	Commercial property investment and property in own use risk			✓
Equity investment risk	Capital securities investment risk in banking book			✓
	Capital securities investment general and specific risk in trading book			✓
	Client behaviour risk		✓	
Business risk				
	Financial result risk			✓
	Macroeconomic risk		✓	
	Portfolio of currency mortgages risk		✓	
	Excessive of financial leverage risk			✓
	Liquidity and funding risk	✓		
	Operational risk***	✓		
	Model risk		✓	

*) Risk definition includes settlement risk.

**) Capital requirement assessed under the default and counterparty risk methodology.

***) Includes inter alia model risk (separately treated for the management purposes), compliance risk and legal risk as well as IT risk, which is managed under this risk.

Economic capital assessment methodology

At present, ING Bank Śląski S.A. Group calculates capital for the following risks :

- Default and counterparty risk and residual risk - the risk of potential losses due to counterparty/debtor's failure to fulfill their obligations towards the Group (including transaction settlement and delivery of financial instrument at agreed date) and the risk of value decline for credit exposure due to deterioration of client's creditability. Economic capital requirement is calculated using modified AIRB method (INCAP) and completed with central counterparty credit risk capital and the capital for the credit valuation adjustment (CVA) risk as well as the requirement due to settlement/delivery risk which are calculated in

compliance with Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013. Since June 2014 recession LGD parameter has been also used to calculate capital (residual risk).

- Other non-credit obligation assets risk - the risk of not recovering the value of balance non-credit obligation assets by the Group (DTA, capital exposures and other). The economic capital is calculated in compliance with Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013.
- Concentration risk - the risk resulting from an excessive exposure towards one entity, affiliated entities or groups of entities with similar characteristics, which are therefore exposed to increased credit risk (e.g. sector concentration). The capital requirement is calculated based on the following rules:
 - for individual borrowers or groups of borrowers with capital or organizational ties - according to the rules for determining regulatory capital requirements defined in Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013,
 - for borrowers from the same economy sector/geographic sector, running the same business or trading in similar goods - as the excess of the set concentration limit for this exposures group, net of write-offs.
- Residual value risk - the risk arising from the residual value of the leased asset, which is the difference between the value of the asset and the sum of the lease payments. The contractor has the right to purchase the leased asset, but it is not absolutely obliged to do this. Capital requirement is calculated according to Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013
- Exchange rate risk – risk of losses due to currency rate fluctuations. Economic capital is calculated by VaR methodology .
- General and specific interest rate risk in trading book – the risk of loss on positions in trading books due to interest rate changes. Economic capital is calculated by VaR methodology .
- Interest rate risk in banking book: residual convexity risk – risk of loss due to unexpected non-linear shift of the interest rate curve. Economic capital is calculated based on the IR movement simulation.
- Interest rate risk in banking book: total mismatch - the risk of loss in banking book positions due to interest rate changes. Economic capital is calculated by VaR methodology .
- Customer behaviour risk - the risk of potential losses caused by the uncertainty as to the clients' behaviour towards products with embedded options. Economic capital is calculated by CBR model, as a result of two elements: Monte Carlo simulation and portfolio market value.
- Macroeconomic risk - the risk arising from macroeconomic changes and their impact on the minimum capital requirements. The capital requirement determination methodology uses in-house stress tests for mild recession and required capital adequacy metrics.
- FX mortgage portfolio risk - the risk of losses connected with FX mortgage loans conversion into PLN mortgage loans. The capital is calculated on the basis of estimation of costs for the Bank and probability of their implementation.
- Liquidity and funding risk - the risk involving the inability to meet, at a reasonable price, financial obligations resulting from the balance sheet and off-balance sheet. The Bank maintains liquidity in such a way that the monetary liabilities of the Bank may have always done with the available funds, proceeds from maturing transactions, available funding sources at market prices and/or the liquidation of transferable assets. Economic capital is

reflecting costs of additional funding acquirement allowing to recover internal levels of regulatory liquidity limits.

- Model risk - a potential loss that the Bank may incur as a result of decisions which may substantially be based on data obtained using models in internal processes, due to errors in the development, implementation or application of such. Capital requirement is calculated for significant and medium significant models with increased or high model risk using expert judgement.
- Operational risk - the risk of direct or indirect material loss resulting from inadequate or unreliable internal processes, bank employees and systems or from external events. Operational risk includes also consequences of losing reputation, , conduct risk and concentration risk (within the area of operation risk). To calculate the economic capital requirement, the Group applies the Advanced Measurement Approach (AMA). The model applied is a hybrid model, allowing the Group to measure risk with the use of internal and external data on operational risk events, scenario analysis as well as business environment and internal control factors.

ICAAP review process

Every month, the Group prepares standalone and consolidated reports on realised and planned capital requirements for all types of material risks. These reports are received by the Assets and Liabilities Committee (ALCO) and the Management Board. The Supervisory Board is informed about the Bank's and Group's capital adequacy, including internal capital, on the regular basis.

Once a year, a review of internal capital adequacy assessment process (ICAAP) is performed. The review report is sent to the Management Board and Supervisory Board of ING Bank Śląski S.A. Additionally, on a regular basis, an independent ICAAP audit is carried out by the Internal Audit Department.

9 Impact of the implementation of IFRS 9 on capital adequacy

The table below presents detailed quantitative information on transitional arrangements for mitigating the impact of the introduction of IFRS 9 on own funds in accordance with the requirements of Art. 473a of Regulation CRR and Guidelines EBA/GL/2018/01:

IFRS 9-FL: Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs		
Available capital (amounts)		
1	Common Equity Tier 1 (CET1) capital	12 462.4
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	12 242.1
3	Tier 1 capital	12 462.4
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	12 242.1
5	Total capital	14 591.7
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	14 371.3
Risk-weighted assets (amounts)		
7	Total risk-weighted assets	86 477.3
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	86 363.7
Capital ratios		
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	14.41%
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	14.18%
11	Tier 1 (as a percentage of risk exposure amount)	14.41%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	14.18%
13	Total capital (as a percentage of risk exposure amount)	16.87%
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	16.64%
Leverage ratio		
15	Leverage ratio total exposure measure	172 479.4
16	Leverage ratio	7.23%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	7.11%

II. Variable remuneration policy

Intruduction

Pursuant to the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 and the Banking Law Act of 29 August 1997 (Journal of Laws of 2015, item 128 as amended), hereinafter referred to as the "Banking Law Act", ING Bank Śląski S.A., hereinafter referred to as the Bank, is obliged to make qualitative and quantitative disclosures relating to the "Variable Remuneration Policy".

Pursuant to the Policy of disclosing qualitative and quantitative information on capital adequacy and variable components of remuneration of ING Bank Śląski S.A." disclosures relating to the Variable Remuneration Policy of ING Bank Śląski S.A. are published.

1. Qualitative information

1.1 Information concerning the process of determination of the variable remuneration policy, number of meetings organized in the financial year by the remuneration supervisory authority, including composition and scope of tasks of the Remuneration and Nomination Committee, external consultant who assisted when developing remuneration policy, and role of the relevant participants

The ING Bank Śląski S.A. Group Remuneration Policy applies from 1 January 2017. It sets forth the key assumptions for shaping the principles of remuneration so as to attract and retain employees, by ensuring the remuneration that is competitive versus the market. The Policy also defines remuneration components.

As far as the Policy is concerned, the Bank Supervisory Board Remuneration and Nomination Committee has the following responsibilities :

- they present the Supervisory Board with opinions about and recommendations on the Policy,
- they present the Supervisory Board with recommendations on Policy observance, following the report developed by the Internal Audit Department, and
- they advise upon and monitor variable remuneration of persons holding managerial positions.

The other competences of the Committee which may be applicable when pursuing the Policy are specified in the Bylaw of the Remuneration and Nomination Committee of ING Bank Śląski S.A.

In 2019, the Remuneration and Nomination Committee of ING Bank Śląski S.A. held 8 regular meetings and 3 by way of circulation. In the period from 01.01.2019 to 31.12.2019 the Remuneration and Nomination Committee's composition was following:

- Aleksander Kutela - Chairman (independent Member),
- Aleksander Galos - Member (independent Member),
- Małgorzata Kołakowska - Member.

1.2 Key facts about performance-based remuneration

ING Bank Śląski S.A. develops their remuneration policy based on market data.

The total remuneration is divided into the fixed and variable remuneration. The maximum relation of the fixed remuneration to the variable remuneration was established.

Fixed remuneration is as large a part of the total remuneration as needed to ensure that a fully flexible variable remuneration policy is pursued, including but not limited to allowing to apply reduction or not to award the variable remuneration at all.

ING Bank Śląski S.A. does not provide for any form of remuneration that could provide incentives for employees to favour their own interests or Bank's interest to the detriment of its customers. The remuneration principles for the persons representing the Bank do not incentivize them to take excessive risk or miss sell products.

Variable remuneration consists of the annual bonus, which is set for every employee on the basis of an assessment of sustainable and risk-adjusted results, taking account of quantitative and qualitative criteria.

As part of variable remuneration, employees may also receive: additionally financial award in cash, the aim of which is to recognize and appreciate employees' achievements above-average performance at work and have a special potential.

In keeping with the Capital Management Procedure at ING Bank Śląski S.A., the Bank tests capital to ensure that the total variable remuneration pool of all employees does not limit the ING Bank Śląski S.A.'s ability to maintain the adequate capital base. Should such a limitation apply, a decision not to activate the variable remuneration pool can be taken.

1.3 Key facts about the remuneration system characteristics, including performance measurement criteria and performance adjustment with risk as well as payment deferral policy and vesting criteria

The Bank employs advanced measurement approach to estimate the capital base and the stress-testing policy, whereby adequate risk management and adequate assessment of present and future capital requirements are ensured.

At the time defined, the direct superior determines the performance-related annual goals which ensure coherence with the long-term strategy of the Bank. The goals support creating long-term value of the Bank and account for the risk cost of the Bank and liquidity risk. The goals have the following nature:

- financial, inclusive of Bank performance-related tasks and a given employee area of responsibility (e.g. Bank net profit, financial risk costs),
- non-financial, inclusive of quality indicators relating to implementation of the Bank's strategy and/or to performance of a given control function, non-financial risk.

When assessing individual performance both the financial and non-financial criteria shall be taken into consideration as well as the risk-adjusted criteria; non-financial criteria account for 50% of all

their goals at minimum, except for the persons responsible for control functions to whom financial criteria do not apply at all. When determining the financial tasks, they are not related to the results achieved in areas controlled by the given person.

Assessment and its verification are performed by the immediate superior and are approved by the ING Bank Śląski S.A. Management Board, following the advice of the Supervisory Board Remuneration and Nomination Committee; for ING Bank Śląski S.A. Management Board Members - by the Supervisory Board, based on the recommendation of the Supervisory Board Remuneration and Nomination Committee. Assessment and verification take place by 15 March of the subsequent calendar year at the latest; for ING Bank Śląski S.A. Management Board Members - by 30 April.

In keeping with the Policy, the Executive Compensation Bylaw for Members of the Management Board and the General Conditions of ING Bank Śląski S.A. Identified Staff Appraisal, both financial and non-financial criteria as well as risk-adjusted criteria are employed to assess individual performance.

In 2019 additional risk requirements were implemented that determine the final level of variable remuneration for the Identified Staff, each time indicated by the Member of the Management Board responsible for the risk area. They are included in:

- *Procedure regarding risk requirements for key function holders, excluding persons performing control functions* which was implemented as Enclosure 1 to the General Conditions of ING Bank Śląski S.A. Identified Staff Appraisal by Resolution No. 86/16/19 of the Management Board of 21 May 2019
- *Procedure regarding risk requirements for Management Board Members, excluding persons performing control functions*, which was implemented as Enclosure 2 to the Executive Remuneration Bylaw for Members of the Management Board of ING Bank Śląski S.A. by Resolution No. 58/VIII/2019 of the Supervisory Board of 6 June 2019.

The process of determining and assessing risk requirements is carried out independently by a Member of the Management Board responsible for the risk area in relation to the assessment of individual employee effects.

Bank's policy provides for adjustment for remuneration cost. It is made under the Policy, whereunder based on the ex post risk adjustment, the Bank has the right to reduce or not to disburse the variable remuneration when it could potentially have the negative impact on the Bank's results.

The Bank specifically regulated the terms and conditions of bonus award in case of employment relationship termination or expiry.

In accordance with the Policy, the Bank does not award additional remuneration as may be due because of termination of the employment contract understood as a part of the variable remuneration package.

2. Quantitative information

The analysis covers all Identified Staff - in line with list of qualitative and quantitative criteria and the additional criteria qualifying staff members to be included in the list of Identified Staff constituting Enclosure No. 1 with the Variable Remuneration Policy for Identified Staff of ING Bank Śląski S.A.

As at the disclosure date hereof, the variable remuneration of Identified Staff, was not granted yet. The disclosure presents the variable remuneration based on the assessment scores as at the analysis date. The variable remuneration will be subject to the opinion of the Remuneration and Nomination Committee and approval of the Management Board and the Supervisory Board of ING Bank Śląski S.A.

In addition, an adjustment indicator may be used in accordance with the above procedures regarding risk requirements.

Below, the quantitative information is presented as required by the "Policy of disclosing information as regards the variable remuneration":

- Aggregate quantitative information about remuneration by business line used in Bank management:

No.	Business line	Total remuneration (fixed + variable)
1	Management Board Members supervising business lines used in Bank management	8.06
2	Management Board Members - other	12.64
3	Retail banking segment	23.22
4	Corporate banking segment	50.41
Total		94.33

- Aggregate quantitative information about remuneration of Identified Staff, in split into:
 - Management Board Members and persons reporting directly to the Management Board member irrespective of their employment basis, Branch Directors and Branch Deputy Directors and the Chief Accountant when considered the Identified Staff, and
 - other persons holding managerial positions at the Bank when considered the Identified Staff,

comprising the following data:

- aggregate remuneration for a given accounting year in split into fixed and variable remuneration and number of beneficiaries:

	Group	Number of persons	Remuneration fixed	Variable remuneration	Total remuneration (fixed and variable)
A	Management Board Members	8	12.72	7.99	20.70
B	Persons reporting directly to the Management Board member irrespective of their employment basis, Branch Directors and Branch Deputy Directors and the Chief Accountant when considered the Identified Staff	60	24.94	11.43	36.37
C	Other persons holding managerial positions at the Bank when considered the Identified Staff	77	25.77	11.48	37.25
Total		145	63.42	30.90	94.32

- aggregate amount and form of variable remuneration in split into cash and share-linked instruments, adopted at the Bank:

	Group	Variable remuneration - paid in cash	Variable remuneration - paid in phantom stock	Variable remuneration total
A	Management Board Members	3.99	4.00	7.99
B	Persons reporting directly to the Management Board member irrespective of their employment basis, Branch Directors and Branch Deputy Directors and the Chief Accountant when considered the Identified Staff	5.71	5.72	11.43
C	Other persons holding managerial positions at the Bank when considered the Identified Staff	5.72	5.76	11.48
Total		15.42	15.48	30.90

- aggregate deferred remuneration in split into the awarded and still not awarded parts:

	Group	Deferred variable remuneration - awarded part	Deferred variable remuneration - not-awarded part	Deferred Variable remuneration
A	Management Board Members	2.18	3.63	5.81
B	Persons reporting directly to the Management Board member irrespective of their employment basis, Branch Directors and Branch Deputy Directors and the Chief Accountant when considered the Identified Staff	3.45	4.54	7.99
C	Other persons holding managerial positions at the Bank when considered the Identified Staff	3.51	4.49	8.00
Total		9.14	12.66	21.80

- aggregate remuneration with deferred payment, granted in the accounting year, paid and reduced under the results-driven adjustment:

	Group	Deferred part of variable remuneration for 2015 and 2016 - granted in 2019	Deferred part of variable remuneration for 2014, 2015 and 2016 - paid in 2019
A	Management Board Members	2.6	3.4
B	Persons reporting directly to the Management Board member irrespective of their employment basis, Branch Directors and Branch Deputy Directors and the Chief Accountant when considered the Identified Staff	3.7	4.8
C	Other persons holding managerial positions at the Bank when considered the Identified Staff	1.5	1.7
Total		7.8	9.9

The remuneration with deferred payment was not reduced under the results-driven adjustment.

- aggregate amount of payments relating to employment commencement and termination in a given accounting year, number of beneficiaries as well as the top payment per person:

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Qualitative and quantitative disclosures relating to capital adequacy
and variable components of remuneration published for 2019

(PLN million)

	Group	Amount of payments relating to employment commencement and termination	Number of beneficiaries	Top payment per person
A	Management Board Members	-	-	-
B	Persons reporting directly to the Management Board member irrespective of their employment basis, Branch Directors and Branch Deputy Directors and the Chief Accountant when considered the Identified Staff	0.35	6	0.34
C	Other persons holding managerial positions at the Bank when considered the Identified Staff	0.09	4	0.09
Total		0.44	10	

With reference to art. 9ca ust. 5 of The Banking Law, in 2019, total remuneration of none of the people employed at ING Bank Śląski S.A. Group did not exceed the amount of EUR 1 million.

With reference to Regulation (EU) No 575/2013 of The European Parliament and of The Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, for 2019, total remuneration of none of the people employed at ING Bank Śląski S.A. Group did not exceed the amount of EUR 1 million.