2019

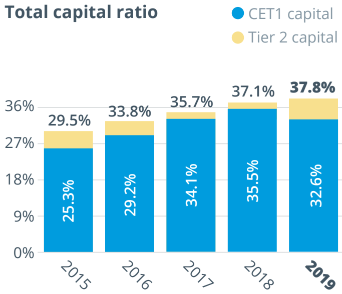
Pillar 3 report

1 Key figures

Shareholders' equity and leverage

Based on the balance sheet position at year-end 2019, we estimate that we will still amply meet our external requirements and internal standards if Basel IV were to be implemented in its entirety and fully phased into European legislation.

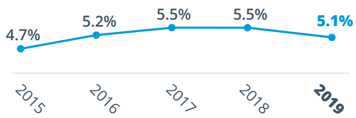
Total capital ratio



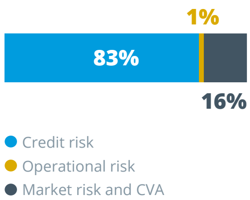
Common Equity Tier 1 ratio year-end 2019

32.6%

Leverage ratio



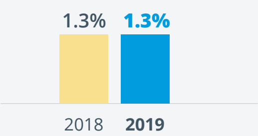
Risk-weighted assets



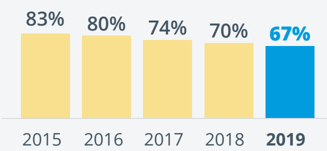
Credit risk

Credit risk decreased again in 2019. The positive economic development in the Netherlands has resulted in fewer customers getting into financial difficulties and rising house prices. The tax regime also promotes a repayment component for new mortgages.

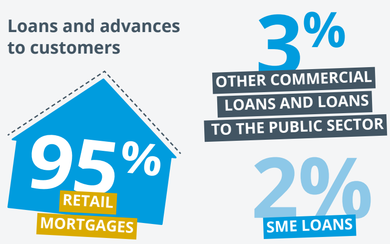
Stage 3 loans expressed as a percentage of total loans remained unchanged in 2019



Average Loan-to-Value retail mortgages



Loans and advances to customers



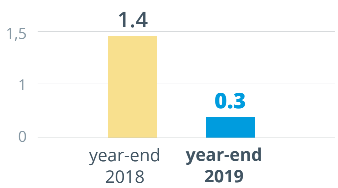
Market risk

Due to the further decline in market rates and the expectation that these will remain low for longer, we have a low interest rate sensitivity for equity.

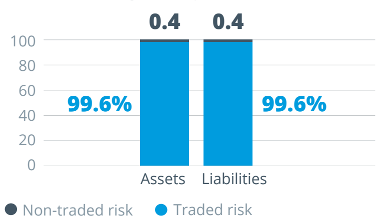
Volume of Earnings at Risk year-end 2019

€61 MILLION

Duration of equity



Market risk exposure year-end 2019



Liquidity risk

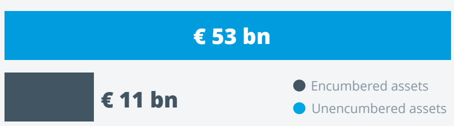
The bank has a strong liquidity position to continuously meet its financial obligations. Savings are our main source of funding.

Volume of liquidity buffer

€16.9 BILLION

12 month average LCR

155%



2 Introduction

2.1 Introduction to Pillar 3

De Volksbank's Pillar 3 report deals with capital adequacy and risk management, and has been approved by the Board of Directors. It contains the bank's main financial ratios and provides insight into aspects such as our capital position, the size and composition of capital and how the capital is related to risks, as expressed in risk-weighted assets. These ratios can also be found in the 2019 annual report.

The Pillar 3 report is published separately to de Volksbank's annual report, which also contains a detailed explanation of capital and risk management. The information included in the annual report and the information in this report are consistent and partially overlap.

The Pillar 3 report allows us to be transparent and comply with the reporting requirements from the European Capital Requirements Regulation (CRR). It provides information on all the topics mentioned in the Regulation to the extent that they apply to de Volksbank. Where disclosures have been enhanced, we do not restate prior year comparatives, unless stated otherwise.

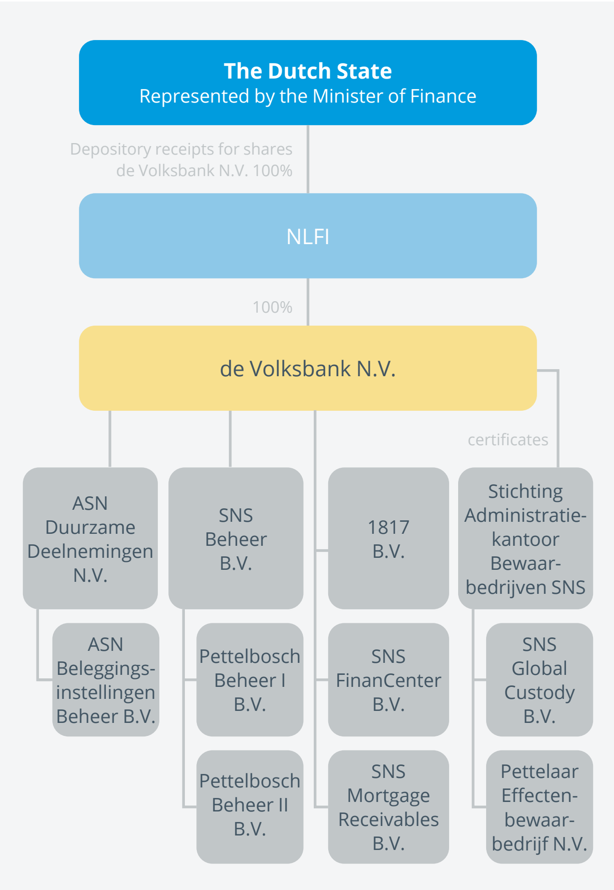
To make this report more readable, line items and columns in the tables have been abbreviated where possible. The tables are presented in their entirety on our website www.devolksbank.nl.

The mandatory Pillar 3 information of de Volksbank is disclosed every six months. Interim updates on key issues are provided in de Volksbank's press releases or on its website.

The Pillar 3 disclosures have been subject to de Volksbank's internal controls and validation mechanisms, to provide assurance over the information disclosed in this report as well as with regards to compliance with laws and regulations. The information in the Pillar 3 report has not been audited by de Volksbank's external auditor.

2.2 Development in legal structure

Legal structure of de Volksbank as at 31 December 2019:



On 30 March 2019 with the completion of the legal merger between de Volksbank N.V. and the Volksholding B.V., de Volksholding ceased to exist.

NL Financial Investments (NLFI) has a direct 100% participating interest in de Volksbank N.V. and issued depository receipts for shares to the Dutch State.

For more information see the website www.devolksbank.nl.

Internal solvency and liquidity supervision is exercised at the level of de Volksbank N.V.
The four brands ASN Bank, BLG Wonen, RegioBank and SNS operate under the banking license of de Volksbank N.V.

2.3 Consolidation scope

De Volksbank N.V. (de Volksbank) is subject to compulsory reporting at an individual level and at a prudential consolidated level. The individual reporting obligation is based on the IFRS scope of consolidation of the licensed institution, i.e. de Volksbank (Article 9 of the European Capital Requirements Regulation, CRR).

As the result of the legal merger between de Volksbank and de Volksholding, the table with a comparison between the capitalisation on a prudential consolidated and individual level is no longer included in the Pillar 3 report.

2.4 Scope of application

The regulatory scope of consolidation of de Volksbank is based on the IFRS scope of consolidation in the annual accounts. For more information about the consolidation principles, please refer to the accounting principles for the consolidated financial statements in the 2019 annual report of de Volksbank.

EU LI1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories 2019

	a/b	c	d	e	f	g
	Carrying values of items:					
in € millions	Carrying values	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
ASSETS						
Cash and cash equivalents	2,026	2,026	--	--	--	--
Derivatives	718	--	718	--	--	--
Investments	5,350	5,243	--	97	10	--
Loans and advances to banks	3,791	3,791	--	--	--	--
Loans and advances to customers	50,461	50,461	--	--	--	--
Tangible and intangible assets	128	126				2
Tax assets	99	84				15
Other assets	268	268				
Total assets	**62,841**	**61,999**	**718**	**97**	**10**	**17**
Liabilities						
Savings	38,404	--	--	--	--	38,404
Other amounts due to customers	10,641	--	--	--	--	10,641
Amounts due to customers	**49,045**	**--**	**--**	**--**	**--**	**49,045**
Amounts due to banks	541	--	--	--	--	541
Debt certificates	6,906	--	--	--	--	6,906
Derivatives	1,841	--	1,841	--	--	--
Tax liabilities	15	--	--	--	--	15
Other liabilities	492	--	--	--	--	492
Provisions	64	--	--	--	--	64
Subordinated debts	502	--	--	--	--	502
Total other liabilities	**10,361**	**--**	**1,841**	**--**	**--**	**8,520**
Share capital	381	--	--	--	--	381
Other reserves	2,779	--	--	--	--	2,779
Retained earnings	275	--	--	--	--	275
Shareholders' equity	**3,435**	**--**	**--**	**--**	**--**	**3,435**
Minority interests	--	--	--	--	--	--
Total equity	**3,435**	**--**	**--**	**--**	**--**	**3,435**
Total equity and liabilities	**62,841**	**--**	**1,841**	**--**	**--**	**61,000**

Counterparty credit risk increased by € 237 million to € 1.841 million (2018: € 1.604 million). As per 31 December 2019 there were no repurchase agreements (classified as amounts due to banks). The decrease in repurchase agreements was more than compensated by an increase in the market value of derivative positions.

The increase in the securitisation framework of € 12 million to € 97 million in 2019 (2018: € 85 million) is caused by additional investments in structured entities.

De Volksbank currently has a limited trading portfolio and consequently a small position subject to market risk.

EU LI1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories 2018

	a/b	c	d	e	f	g
		Carrying values of items:				
in € millions	Carrying values	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
ASSETS						
Cash and cash equivalents	815	815	--	--	--	--
Derivatives	732	--	732	--	--	--
Investments	4,782	4,697	--	85	--	--
Loans and advances to banks	3,589	3,589	--	--	--	--
Loans and advances to customers	50,536	50,461	--	--	--	75
Tangible and intangible assets	68	62	--	--	--	7
Tax assets	133	119	--	--	--	15
Other assets	292	292	--	--	--	--
Total assets	**60,948**	**60,034**	**732**	**85**	**--**	**97**
Liabilities						
Savings	37,376	--	--	--	--	37,376
Other amounts due to customers	10,841	--	--	--	--	10,841
Amounts due to customers	**48,217**	**--**	**--**	**--**	**--**	**48,217**
Amounts due to banks	1,116	--	484	--	--	632
Debt certificates	5,822	--	--	--	--	5,822
Derivatives	1,120	--	1,120	--	--	--
Tax liabilities	15	--	--	--	--	15
Other liabilities	487	--	--	--	--	487
Provisions	98	--	--	--	--	98
Subordinated debts	502	--	--	--	--	502
Total other liabilities	**9,160**	**--**	**1,604**	**--**	**--**	**7,556**
Share capital	--	--	--	--	--	--
Other reserves	3,303	--	--	--	--	3,303
Retained earnings	268	--	--	--	--	268
Shareholders' equity	**3,571**	**--**	**--**	**--**	**--**	**3,571**
Minority interests	--	--	--	--	--	--
Total equity	**3,571**	**--**	**--**	**--**	**--**	**3,571**
Total equity and liabilities	**60,948**	**--**	**1,604**	**--**	**--**	**59,344**

EU LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements 2019

		a	b	c	d	e
			Items subject to:			
	in € millions	Total	Credit risk framework	Counterparty credit risk framework[1]	Securitisation framework	Market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	62,824	61,999	718	97	10
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	1,841	--	1,841	--	--
3	**Total net amount under regulatory scope of consolidation**	**62,824**	**61,999**	**718**	**97**	**10**
4	Off-balance sheet amounts	2,706	1,170[2]	--	--	--
5	Differences in valuations	-2,947	-2,947	--	--	--
6	Differences due to consideration of provisions	67	67	--	0	--
7	Differences due to counterparty credit risk	-303	--	-303	--	--
8	**Exposure amounts considered for regulatory purposes**	**62,348**	**60,290**	**415**	**97**	**10**

1 This concerns derivatives, which are mainly part of an ISDA or GMRA master netting agreement.
2 After credit conversion factor.

De Volksbank does not apply on-balance sheet netting between assets and liabilities.

EU LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements 2018

		a	b	c	d	e
			Items subject to:			
	in € millions	Total	Credit risk framework	Counterparty credit risk framework[1]	Securitisation framework	Market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	60,851	60,034	732	85	--
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	1,604	--	1,604	--	--
3	**Total net amount under regulatory scope of consolidation**	**60,851**	**60,034**	**732**	**85**	**--**
4	Off-balance sheet amounts	2,750	1,145[2]	--	--	--
5	Differences in valuations	-2,256	-2,256	--	--	--
6	Differences due to consideration of provisions	59	59	--	0	--
7	Differences due to counterparty credit risk	72	--	72	--	--
8	**Exposure amounts considered for regulatory purposes**	**61,476**	**58,981**	**804**	**85**	**--**

1 This concerns derivatives, which are mainly part of an ISDA or GMRA master netting agreement.
2 After credit conversion factor.

2.5 Detailed index of Pillar 3 references

The Pillar 3 disclosure requirements are described in Part Eight of the CRR. The table below provides insight into these requirements and states where the reader can find this information in the Pillar 3 report and/or the annual report.

CRR §	Pillar 3 disclosure requirements	Location in Pillar 3 report	Notes
435	Risk management objectives and policies	Chapter 3 Objectives and guidelines regarding risk management Chapter 4 Own funds and leverage Section 5.1 General qualitative information regarding credit risk Section 8.1 Qualitative disclosure requirements regarding counterparty credit risk Section 11.2 Interest rate risk not included in the trading portfolio Chapter 13 Operational risk See also the annual report of de Volksbank	Section 4.9 of the annual report contains the management statement. Chapter 5 (Report Supervisory Board) addresses subjects of the risk committees and chapter 6 of the annual report discusses the governance provisions. Chapter 6 and section 3.4 (Genuine attention for our employees) of the annual report discusses topics including the diversity policy.
436	Scope of application	Section 2.4 Scope of application	
437	Own funds	Chapter 3 Own funds and leverage	Section 2.3 Consolidation scope discusses the capital structure and the full reconciliation of shareholders' equity.
438	Capital requirements	Section 4.3 Capital requirements	
439	Exposure to counterparty credit risk	Chapter 8 Counterparty risk	
440	Capital buffers	Section 4.4 Macroprudential supervisory measures	
441	Indicators of global systemic importance	Not included	De Volksbank is not considered an institution of global systemic importance.
442	Credit risk adjustments	Section 5.2 General quantitative information regarding credit risk	
443	Unencumbered assets	Section 10.3 Encumbered and unencumbered assets	
444	Use of ECAIs	Section 6.1 Qualitative information regarding the use of the Standardized Approach	
445	Exposure to market risk	Section 11.1 Capital requirements for market risk using the Standardized Approach	
446	Operational risk	Chapter 13 Operational risk	
447	Exposures in equities not included in the trading book	Chapter 9 Shares outside the trading portfolio	
448	Exposure to interest rate risk on positions not included in the trading book	Section 11.2 Interest rate risk not included in the trading portfolio	
449	Exposure to securitisation positions	Chapter 12 Securitisation	
450	Remuneration policy	For the Pillar 3 remuneration report we refer to www.devolksbank.nl	Section 6.6 of the annual report of de Volksbank also contains information about the remuneration report.
451	Leverage	Section 4.5 Leverage ratio	
452	Use of the AIRB Approach to credit risk	Chapter 7 Credit risk and credit risk mitigation under the AIRB-approach	

453	Use of credit risk mitigation techniques	Section 5.3 General qualitative information regarding credit risk mitigation	
454	Use of the Advanced Measurement Approaches to operational risk	Not included	De Volksbank does not use internal models to calculate capital requirements for operational risk.
455	Use of Internal Market Risk Models	Not included	De Volksbank does not use internal models to calculate capital requirements for market risk.

2.6 Flows of risk management information to directors

Table of reports and frequencies

	Report	Board of Directors	Supervisory Board
1st line	Quarterly Business Review/Management reports	quarterly	quarterly
	Monthly Business Review	monthly	n.a.
	In Control Statement	semi annually	semi annually
2nd line	Non-Financial Risk Rapport	quarterly	quarterly
	Financial Risk Rapport	quarterly	quarterly
	Risk Appetite Statement	annually	annually
	Recovery Plan	annually	annually
	Strategic Risk Assessment	annually	annually
	Self-assessment risk committees	annually	n.a.
	Review self-assessment Integrated Control Framework	annually	annually
	ICAAP/ILAAP reports	annually	annually
	List of decisions risk committees	afterwards	n.a.
3rd line	Audit report external accountant	annually	annually
	Internal audit reports	quarterly	quarterly
	Management Letter external accountant	annually	annually

The Board of Directors and Supervisory Board of de Volksbank are regularly informed about risks and risk management.

The table above mentions important reports that the directors receive, as well as their frequency.

The Board of Directors bears ultimate responsibility for risk management. In this process, it is supported by risk committees. Each risk committee is chaired by a member of the Board of Directors, which keeps them informed about developments in the relevant focus area. A risk committee's list of decisions is sent to the Board of Directors after the meeting of that particular committee has ended (see also Section 3.2 Risk management approach of the institution).

We also refer to the report of the Supervisory Board included in the annual report, which includes a detailed list of the subjects and reports discussed by the supervisory board members in 2019. The reports received by the supervisory board members were also discussed by the Board of Directors.

2.7 Information about governance guidelines

APPOINTMENT OF THE MEMBERS OF THE BOARD OF DIRECTORS

Members of the Board are appointed by NLFI on nomination by the Supervisory Board upon approval by the supervisory authorities. NLFI suspends and dismisses members of the Board.

In connection with the departure of Annemiek van Melick, the Supervisory Board has decided to nominate Pieter Veuger for appointment as a member of the Board in the role of Chief Financial Officer. NLFI has indicated to appoint Pieter Veuger subject to approval from the supervisory authorities. At the time of publication of this annual report, this approval had not yet been received.

The proposed appointment is subject to approval by the supervisory authorities. As of the date of publication of this annual report, this approval has not yet been received.

FUNCTIONING OF THE BOARD OF DIRECTORS

The Articles of Association of de Volksbank (the Articles) contain a list of the duties of the Board and the rules governing its functioning. In addition, both the Regulations for the Board of Directors (the Regulations) and the MoU agreed by NLFI and de Volksbank, contain additional practical agreements on the way in which the Board should exercise its duties and powers.

The MoU was amended in 2019 in connection with the merger between de Volksholding and de Volksbank, as a result of which de Volksholding ceased to exist. The Regulations for the Board were last amended on 12 December 2019 following changes to the compliance function of de Volksbank and changes to Dutch corporate governance regulations. These amended regulations came into effect on 1 January 2020.

The Board meets every week and takes decisions by a majority of votes. In order to fulfil the mission and ambition of de Volksbank, the Board continuously and explicitly weighs up the interests of all four stakeholders.

Please refer to chapter 6 of the 2019 annual report of de Volksbank for information about the governance arrangements.

2.8 Management statement on the adequacy of risk management

The Board of Directors of de Volksbank N.V. confirms that the risk management systems of de Volksbank are adequate with regard to the risk profile and strategy.

For further in-depth information see chapter 3 Objectives and guidelines regarding risk management.

3 Objectives and guidelines regarding risk management

3.1 General information on risk management, objectives and policies

RISK MANAGEMENT OBJECTIVE

De Volksbank wants to make safe and reliable banking available to everyone. Our risk management is the link between our mission and the risks associated with this mission. We distinguish between risks that provide opportunities and risks that should be avoided, and determine our risk appetite on this basis. In doing so, we consider all elements of our shared value principle, in which all four stakeholders are treated equally.

RISK MANAGEMENT AND SHARED VALUE

BENEFITS FOR CUSTOMERS

Working on a sound and long-term relationship with the customer that is based on mutual trust, we are better equipped to support our customers in controlling their own financial position. We aim for clear and transparent risk management.

RESPONSIBILITY FOR SOCIETY

We are involved in the development of products and services that increase the financial resilience of customers. This includes careful risk considerations and close monitoring of laws and regulations.

GENUINE ATTENTION FOR OUR EMPLOYEES

We need motivated and competent people to live up to our mission. We encourage employees' commitment and the development of their expertise by giving them genuine attention.

RETURN FOR THE SHAREHOLDER

We aim for a solid capital position, an adequate liquidity position and a simple and transparent balance sheet. This is how we contribute to a financially sound and stable bank with activities that yield stable returns in the long term.

RISK PROFILE

De Volksbank is a bank that focuses primarily on Dutch retail customers with three clear and transparent products and services: mortgages, payments and savings. We accept the risk profile that matches a business model of low-risk activities and limited product and geographical diversification. We form adequate provisions for any credit losses we may reasonably expect. We also maintain an ample capital position to absorb unexpected losses.

Three-quarters of de Volksbank's assets comprise Dutch residential mortgages. This focus entails concentration risks. We accept that this makes the bank sensitive to economic, political and social developments in the Netherlands. In addition, we are facing substantial competition. We are aware of this. We mitigate the risk of our strategic choice by explicitly opting for Banking with a human touch and our shared value ambition, which reflects this identity. We absorb the adverse effects of this concentration by adhering to three strategic pillars.

When managing our mortgage portfolio, we focus on:
- the responsible funding of new customers;
- retention of a healthy, existing portfolio;
- support for customers with financial concerns.

A considerable part of de Volksbank's income consists of (net) interest income, which is affected by the level of and fluctuations in interest rates and credit spreads. We manage this interest rate sensitivity with due care but cannot rule out the possibility that interest rate changes will impact the result.

Customer savings are the main source of funds entrusted to us. The amount of these savings is sensitive to the savings rates we pay. We also raise funds in the money and capital markets to diversify our funding sources. The level of our credit rating is a major factor, as it partly determines the price of funds we raise externally. By means of liquidity management, we see to it that an ample supply of funds is available.

In our operating activities, we may run risks on all sorts of fronts that harm the bank and its reputation. We have identified these risks and continuously seek to take timely and adequate control measures.

RISK APPETITE AND RISK INDICATORS

We carry out the annual SRA to identify and assess the risk in relation to the top risks and our strategy. The main risks are ultimately included in the risk classification. If necessary, we make adjustments to the classification to factor in, for example, new regulations, internal and external developments, or a change of strategy or risk capacity. We added new types of risk to the risk classification in 2019.

Every year, we determine the risk appetite for each type of risk in conjunction with the bank's general risk appetite and strategic objectives. This is done in what we call the Risk Appetite Statements (RAS). We then use the risk appetite as a basis for determining for each type of risk the level above which we feel comfortable. We do so using specific risk indicators. In addition, we set a risk indicator specific intervention ladder with ranges to be used when follow-up action is required. The ranges are determined based on internal stress tests, economic capital and the recovery plan.

We distinguish the following types of risk indicator:
- warning indicators giving early warning signs of conditions with potentially adverse effects;
- risk appetite indicators monitoring our status in relation to the risk appetite;
- recovery indicators automatically activating the recovery plan.

The table below presents the bank's risk appetite and shows how we score with our current risk profile in relation to the risk appetite. Every quarter, the indicators are reported to the risk committee that controls the relevant risk.

'Relative score' legend

As of this annual report, the color coding of the risks has been changed to the color coding used internally. The principles have remained the same.

- Current risk profile corresponds to risk appetite
- Current risk profile slightly above risk appetite
- Current risk profile above risk appetite

Strategic Risks

Risk Appetite Statement	Relative score	Note to the score
BUSINESS RISK • Stable profit for the shareholder(s); • Timely adaptation to (market) developments.		• The pressure on our net interest income exerted by the low interest rate environment, combined with increased pressure from competition, remains unchanged.
ORGANISATIONAL RISK • Proactively adapting to changing conditions and transforming into a financial services provider with a sustainable earnings model that contributes to the shared values.		• There are a large number of change programmes, which require a lot of resources and knowledge. That is why further improvements were implemented in 2019 in terms of managing the change programmes.
REPUTATION RISK • Preventing the reputation of the bank and its brands from being adversely affected by internal or external events.		• De Volksbank and its brands boast a strong reputation; • No events have occurred that have adversely affected the reputation.
SUSTAINABILITY RISK • Banking in a socially responsible way; • Promoting sustainable developments; • Maintaining a strong social identity.		• De Volksbank is on track to achieve its target of a fully climate-neutral balance sheet by 2030; • Men and women in the same positions receive equal remuneration.

Financial risks

Risk Appetite Statement	Relative score	Note to the score
CREDIT RISK • Control is such that it does not threaten our financial position (capital and liquidity).		• The credit risk on our portfolios has again decreased. This is the result of an improved risk profile for the total portfolio following on from such factors as low unemployment rates and rising house prices.
MARKET RISK • Monitoring risks in the trading book caused by movements of market variables.		• We have a limited market risk appetite in the trading book. The indicators are within our limits.
INTEREST RATE RISK IN THE BANKING BOOK • Protecting and stabilising net interest income, economic values and capital due to interest rate movements and credit spreads.		• The bank's current exposure to interest rate risk is within the limits, with the high demand for long-term mortgages and prepayments posing a risk. That is why the fine-tuning of behavioural models remains a focus area.
LIQUIDITY RISK • Preventing the reputation of the bank and its brands from being adversely affected by internal or external events.		• We have a strong liquidity and funding position. Our funding is mainly made up of stable customers' savings and long-term wholesale funding.

Non-financial risks

Risk Appetite Statement	Relative score	Note to the score
OPERATIONAL RISK • Effective, high-quality processes, acceptance of low error rates, low tolerance for a lack of risk control; • Sufficient and competent employees and a pleasant working environment; • Efficient and stable IT environment; • Low tolerance for disruptions of integrity and continuity of systems.		• Improvements in process control are being implemented, although at a slower pace than desired. Knowledge in the area of operational risk management is enhanced by means of training. Dynamics in the organisation result in high work pressure. IT control is high. The threat of cybercrime is persistent, significant and continues to evolve. Insight into processes and internal control are being improved.
REPORTING RISK AND DATA MANAGEMENT • Zero tolerance for errors in external reporting; • Reliability, confidentiality and integrity of data.		• Data management is not at the desired level and is a consistent focus area. Control in the supply chain is being strengthened to prevent errors in external reporting.
LEGAL RISK • Excellent business processes in place to help prevent claims; • Settlement of any claims with due care.		• The situation with regard to procedures, contracts and legal awareness is stable.
COMPLIANCE RISK • No tolerance of violations of company standards and values or laws and regulations.		• Changes in laws and regulations result in continuous adjustments of our processes and systems. • Compliance rules are continuously being refined and the refinements are followed up.
MODEL RISK • Controlled model development and strong model governance; • Limited model risk by avoiding products with complex features.		• Model adjustments are continuously implemented to comply with new regulations.

Capital adequacy

Risk Appetite Statement	Relative score	Note to the score
CAPITAL ADEQUACY • Monitoring a sound and well-diversified capital position in line with the bank's low-risk activities.		• We have a strong level of capitalisation in the short and medium terms. Regulations in the distant future may impact the capitalisation.

3.2 Risk management approach of the institution

RISK MANAGEMENT FRAMEWORK

De Volksbank applies the Integrated Control Framework (ICF) to manage risks. In line with COSO Enterprise Risk Management, the ICF creates well-defined frameworks that ensure streamlined control processes with clear risk governance and provide direction to the right culture and risk awareness.

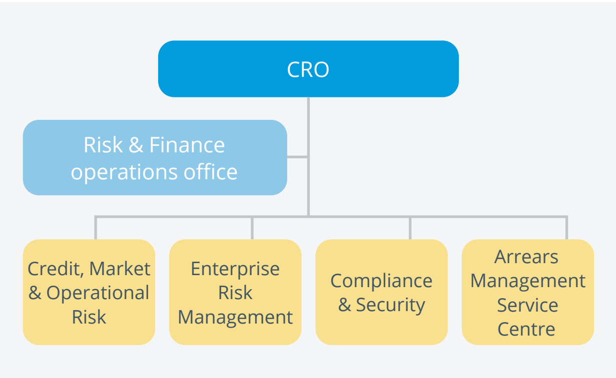
The risk management process consists of four annual cycles: the performance of the strategic risk analysis (SRA), the tactical risk analysis (TRA), the determination of the risk appetite and the risk strategy.
Together, these components form a solid foundation that enable the bank to actively manage the risks that affect the achievement of the strategic objectives.

The Board of Directors performs the annual SRA, identifying all risk factors resulting from both internal and external developments. Where necessary, measures are defined to bring the consequences of these risk factors within the risk appetite. The Board of Directors forms an opinion on the achievement of the strategic objectives and risk management on the basis of documents such as monthly and quarterly business reports, second-line risk reports and internal audit reports.

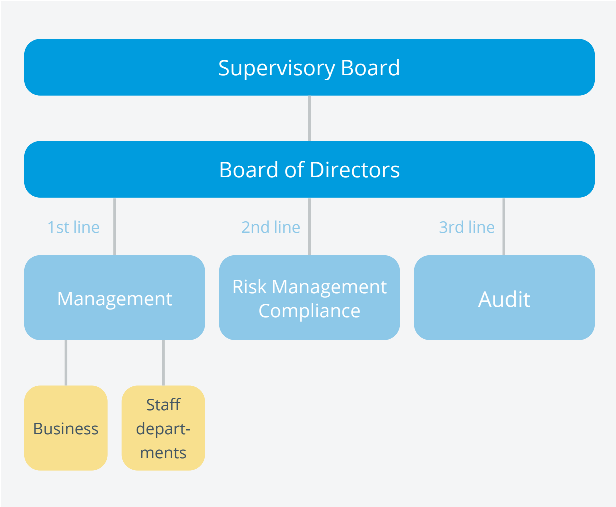
De Volksbank's mission, ambition and strategic objectives are translated into a risk strategy that describes risk management objectives with due regard to the SRA results.

RISK GOVERNANCE

The Risk & Finance operations office was transferred to the CRO's area of responsibility in 2019. The risk management organisation is as follows:



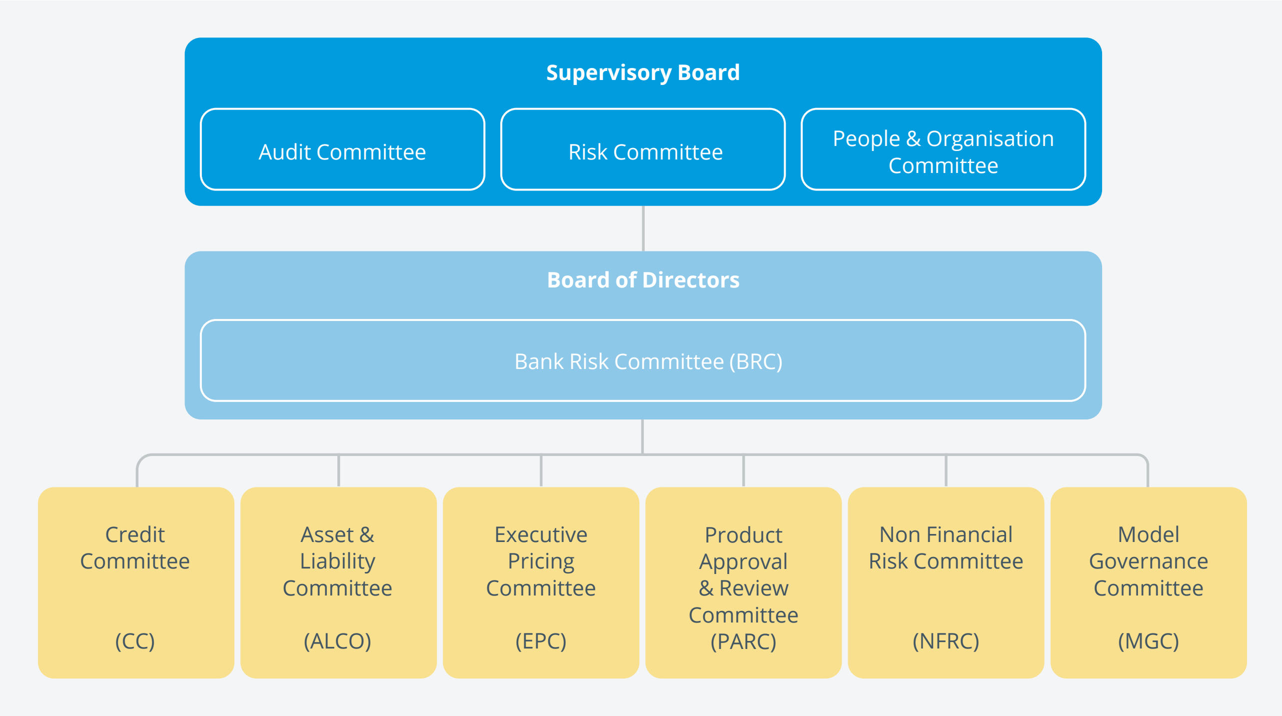
We are currently working to improve the structure of the Compliance organisation. De Volksbank's risk governance is based on the three lines of defence model.



In this model, the first line of defence (the business) is responsible for setting up and executing its own processes. It identifies the risks, assesses and reports on these risks and measures them against the risk appetite that has been determined. The second line support the business, sets the frameworks, gives advice and monitors whether the business actually takes its responsibility. The second line also monitors whether de Volksbank complies with laws and regulations as well as its internal policies on integrity. The third line (the audit function) independently assesses the first and second lines' performance.

The Board of Directors bears ultimate responsibility for risk management. Within the risk management organisation, the Board of Directors acts as the umbrella Bank Riks Committee (BRC). In this process, it is supported by risk committees (refer to Definitions for a description), with representatives from the first and second lines in each committee.

The Supervisory Board is charged with the supervision of the Board of Directors and is advised by the Audit Committee, the Risk Committee and the People & Organisation Committee.



Each risk committee is chaired by a member of the Board of Directors. The third line does not have permanent representation in the risk committees, but may attend meetings if they wish.

In the committees, discussions are held between the business, which controls the risks, and the risk management organisation, which monitors the risks and related control. Decision-making on risks follows the lines of risk governance and is assessed against the risk guidelines. If and when risk limits are exceeded or the risk appetite is not adhered to, we discuss this in the risk committees.

A risk committee may presents a point of discussion to the Board of Directors where necessary.

In addition to the risk committee structure, there are two regulatory boards. They identify developments in relevant laws and regulations and ensure their correct and timely implementation within de Volksbank. There is also an information board, which adopts data management and data definition policies and monitors their implementation. The regulatory boards and the information board come under the responsibility of a member of the Board of Directors.

Every year, we perform a complete self-assessment for all risk committees. Points for improvement are defined where necessary.

CULTURE AND RISK AWARENESS

Risk culture propagation

Culture is a decisive factor in risk management and risk awareness and, as such, is part of the ICF. We want the risk culture to be propagated by the entire organisation. The Board of Directors and employees are aware of their role, of their serving as an example and of their responsibilities. The Board of Directors approves the risk policy. The presence of members of the Board of Directors in all risk committees testifies to their commitment to risk management.

Risk guidelines

De Volksbank has extensive risk guidelines in place, describing, for example, its risk appetite, duties and responsibilities, and reporting and communication lines. Our risk guidelines dovetail with our position as a social bank with low-risk activities. We continuously fine-tune our guidelines and have incorporated the shared value approach into these guidelines. We encourage a critical consideration of the risk-return ratio by focusing on customers, society, employees and the shareholder. In addition to financial returns, other important aspects are benefits for customers, genuine attention for our employees and responsibility for society.

Development of risk awareness

Managers ensure that the risk guidelines are sufficiently clear and known to employees. Training courses, workshops and e-learning programmes are provided within the organisation to further develop risk awareness and help employees respond to risks in a better and more conscious way. In addition, success stories and lessons learned in the area of risk awareness are shared with staff.

Internal code of conduct

We expect our employees to act with integrity. In doing so, they are guided by our Common Sense, Clear Conscience code of conduct, which pays attention to moral dilemmas and how employees can deal with them. A well-spread network of confidants offers staff the opportunity to broach the subject of any malpractices.

Remuneration policy

De Volksbank pursues a remuneration policy that is based on our Manifesto, our ambition to create shared value and our profile of a social bank. De Volksbank does not grant any variable remuneration, since this prevents us from taking undesirable risks that might give priority to short-term individual interests over long-term collective objectives. Please refer to section 6.6 Remuneration report of the 2019 annual report of de Volksbank for more information about the remuneration policy.

3.3 Hedging and hedge accounting

MANAGING AND HEDGING RISK

Every year, we determine the risk appetite for each type of risk in conjunction with the bank's general risk appetite and strategic objectives (see also section 3.1 General information on risk management, objectives and policies).

Our strategy incorporates the objective of having a solid capital position at our disposal, combined with a proper Return on Equity (RoE) for our shareholders. The Risk Appetite Statement (RAS) describes de Volksbank's risk appetite in relation to its own capital position. We have also established intervention levels allowing us to identify any unforeseen weakening of our capital position in good time and to make adjustments.

In credit risk management, we take into account the individual customer and on a portfolio level we manage the risk based on inflow, outflow, size and status of the healthy loans versus the loans in arrears. Customers' interests are put first in the provision of new mortgage loans (inflow), which means that customers must be able to pay interest and make repayments now and in the future. We use the acceptance scorecard to predict long- term affordability by and for customers and see to it that the mortgages provided meet our internal standards regarding the customer's income and the collateral value. De Volksbank does not use credit derivatives as a form of security or as an instrument to hedge credit risk.

De Volksbank enters into money and capital market transactions with various financial institutions. This also includes derivative transactions for the hedging of interest rate and currency risks. Here, the bank runs a counterparty risk: the risk that the counterparty to a transaction defaults before the final settlement of the cashflows associated with the transaction has taken place.

Interest rate risk management in the banking book aims to protect and optimise the economic value of current and future interest cashflows and to achieve a stable net interest income. We take an optimal interest rate position, taking account of projected portfolio changes, economic conditions and the risk profile that the bank is aiming for.

De Volksbank has a strong liquidity position, enabling it to meet its financial obligations at all times. The bank manages its liquidity position in such a way that it can absorb the consequences of bank-specific and market-wide stress factors, such as tensions in the money and/or capital markets.

When financing its liquidity needs, the bank aims for diversification of its funding sources, in accordance with its strategy.

ACCOUNTING POLICY

De Volksbank applies hedge accounting to ensure that its interest rate and currency risk hedge activities are appropriately reflected in the financial statements. See also note 4 Hedge and hedge accounting of the annual report.

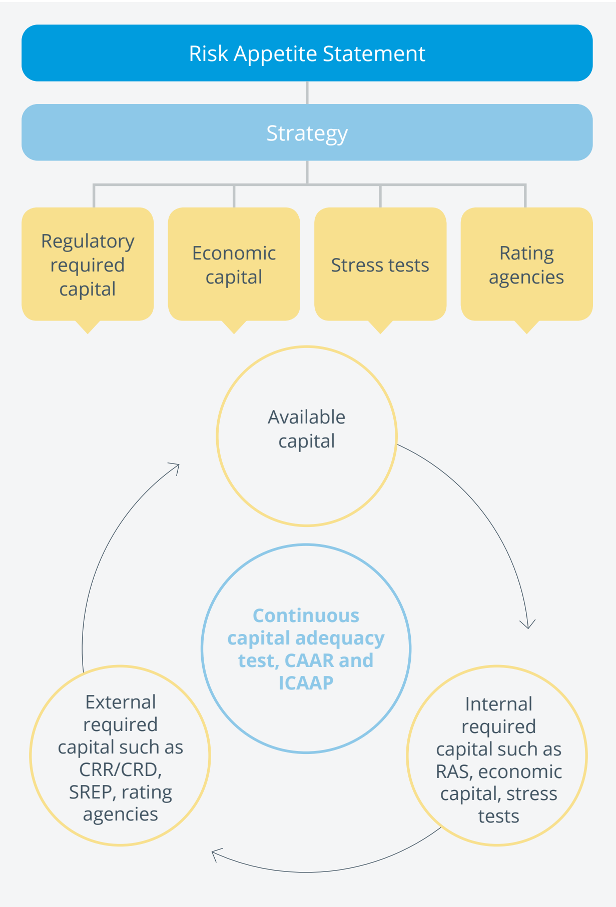
4 Own funds and leverage

4.1 Management and control

MANAGEMENT AND CONTROL

Our strategy incorporates the objective of having a solid capital position at our disposal, combined with an adequate Return on Equity (RoE). In respect of the RoE, de Volksbank applies a target of 8.0% for 2020. The basic principle for the amount of capital is that the bank maintains internal buffers, in addition to the minimum amount of capital required by the supervisory authority, to guarantee sufficient capitalisation in the event of a severe yet plausible stress scenario.

Our capital management process is presented in the figure below.



REGULATORY CAPITAL AND MREL

The minimum amount of capital required by law (regulatory capital) is based on the risk-weighted capital ratios (CET1 capital, Tier 1 capital, total capital) and the non-risk-weighted capital ratio that we expect will be required (leverage ratio). As described in section 4.4 Macroprudential supervisory measures, the minimum risk-weighted capital ratios follow from the SREP. In addition to the capital ratios required by law, de Volksbank calculates and reports the Minimum Requirements for Own Funds and Eligible Liabilities (MREL) in both a risk-weighted and a non-risk-weighted manner. See annual report chapter 4.8 Capital Management.

ECONOMIC CAPITAL

De Volksbank also makes its own internal (economic) estimate of the amount of capital required. It deviates from regulatory capital on two main points:

1. Our calculations of economic capital include all risks from which material losses may ensue according to internal insight. This means that we consider more types of risk in these calculations than in the calculations for regulatory capital.
2. Using our own insight to guide us, we translate our risk appetite into internal capital requirements, partly on the basis of the desired credit rating.

We share the economic capital requirements with the supervisory authority. This is part of the Internal Capital Adequacy Assessment Process (ICAAP). We also use them to determine our internal capital targets and our limits for specific types of risk, as applied in the Risk Appetite Statement (RAS).

STRESS TESTING

De Volksbank performs several stress tests every year to test the robustness of capital adequacy and examine other financial aspects, for example in the areas of liquidity and profitability. Stress tests may be prescribed internally, may be requested by supervisory authorities or may be part of the ICAAP.

The scenarios to be calculated are drafted on the basis of a detailed risk identification, which considers both systemic risks (i.e., risks related to the financial system) and idiosyncratic risks (i.e., risks specific to de Volksbank). In addition to scenario analyses, which are used to calculate the impact of, for example, a macroeconomic scenario on de Volksbank's capital position, sensitivity analyses and reverse stress tests are also performed. A reverse stress test starts from a pre-determined outcome, such as a situation in which the bank is unable to meet its minimum capital requirements, and then looks at the events that could lead to such a situation.

For the scenarios whose impact is calculated in a stress test, the development of unemployment, economic growth, interest rates and other factors is estimated. In the stress test, these macroeconomic variables adversely impact, for example, the net interest margin, the creditworthiness of the outstanding loan portfolio and the fair value of the interest-bearing investment portfolio.

This subsequently results in a deterioration of the bank's capital position.

The stress test results are used to analyse the bank's sensitivity to various types of stress, revealing the effects of any management action. The results are also used as input for setting limits as part of the risk appetite and for determining the management buffers that we use to set the internal minimum levels of the capital ratios. Finally, they are used as input for de Volksbank's recovery plan.

RATING AGENCIES

The bank's creditworthiness is also assessed by rating agencies, i.e. by S&P, Moody's and Fitch. When determining a rating, rating agencies look at aspects such as our capital position. To ensure that our capital ratios are in line with our rating ambition, we include the corresponding capital requirements in our capital planning.

CONTINUOUS CAPITAL ADEQUACY ASSESSMENT

Capital Adequacy Assessment Report

We continuously assess our capital adequacy in order to introduce timely adjustments. Capital planning forms the basis. It is established annually, simultaneously with the operational plan, and contains a projection of our capital position and requirements over a multi-year horizon, including the anticipated effects of future regulations. We review this capital planning every month on the basis of the most recent figures and qualitative knowledge in the Capital Adequacy Assessment Report (CAAR).

If necessary, we use this review to steer the capital to the desired level, for example by raising new capital.

Internal Capital Adequacy Assessment Process

The Internal Capital Adequacy Assessment Process (ICAAP) comprises the entire continuous capital management process and focuses on the capital adequacy requirements set by supervisory authorities. We draft an ICAAP report on an annual basis to inform the supervisory authority of the process organisation and results of the ICAAP. On this basis, the supervisory authority assesses the capital adequacy as part of the SREP.

Recovery plan and contingency planning

The planning for unforeseen events (contingency planning) is part of the bank's recovery plan. Its key objective is to prepare de Volksbank for a crisis in a way that enables us to recover independently and safeguard continuity.

Contingency planning encompasses the drafting and implementation of an action plan that allows us to take prompt measures as soon as our capital position deteriorates (as anticipated or unexpectedly), for example as a result of financial market conditions. In addition to capital aspects, we also monitor the situation for any liquidity problems. Potential capital or liquidity problems are identified by frequent monitoring of 'early warning' indicators. Changes in the indicators may be the first sign of stress.

We activate the recovery plan if and when the indicators signal that this is necessary. Applying the measures available from the recovery plan helps us to reinforce the ratios and recover independently. The measures have a wide scope and relate to capital and liquidity as well as to operations and communications. The choice of the measures to be applied depends on the nature and severity of the deteriorating conditions. Such measures include raising capital, lowering the risk-weighted assets, raising funding and setting up the backup for critical systems or applications.

In addition to a description of the available measures and the conditions to be satisfied before they can be implemented, the recovery plan also contains an analysis of the expected recovery. The analysis is supported by a number of (severe) stress scenarios in which the effectiveness of these measures has been assessed ('recoverability assessment').

The recovery plan is updated and discussed with the ECB's Joint Supervisory Team (JST) every year.

4.2 Own funds

Under the CRD IV rules, de Volksbank's own funds comprise a number of components that must comply to certain conditions. De Volksbank's capital base consists of Common Equity Tier 1 capital (CET1) and Tier 2 capital. These capital components in relation to the capital structure are explained below. We also address the ability of capital items to absorb losses and the restrictions applicable.

The legal merger between de Volksbank N.V. and de Volksholding B.V. was completed on 30 March 2019. The merger completely mitigates the consequences of the EBA interpretation of CRR Article 82 regulations for financial holding companies, which means that de Volksbank's Tier 2 capital is fully effective again as from 30 March 2019.

The table below lists the main features and conditions of the equity components of de Volksbank.

Main features of capital instruments

		de Volksbank N.V.	
	In € millions (unless stated otherwise)	**CET1 Capital**	**Tier 2 Capital**
1	Issuer	de Volksbank N.V.	de Volksbank N.V.
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)		XS1315151388
3	Governing law(s) of the instrument	Dutch law	Dutch law
	Regulatory treatment		
4	Transitional CRR rules	Common Equity Tier 1	Tier 2
5	Post-transitional CRR rules	Common Equity Tier 1	Tier 2
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Consolidated and solo	Consolidated and solo
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares	Subordinated loans
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	3,918	500
9	Nominal amount of instrument (originally issued capital)	381	500
9a	Issue price	381	497
9b	Redemption price	N/A	500
10	Accounting classification	Shareholders' equity	Liability-amortised cost
11	Original date of issuance	N/A	5 November 2015
12	Perpetual or dated	Perpetual	Dated
13	Original maturity date	No maturity	5 November 2025
14	Issuer call subject to prior supervisory approval	No	Yes
15	Optional call date, contingent call dates and redemption amount	N/A	5 November 2020
16	Subsequent call dates, if applicable	N/A	N/A
	Coupons / dividends		
17	Fixed or floating dividend/coupon	Floating	Fixed
18	Coupon rate and any related index	N/A	3.75%
19	Existence of a dividend stopper	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Mandatory
21	Existence of step up or other incentive to redeem	N/A	No
22	Noncumulative or cumulative	Noncumulative	Noncumulative
23	Convertible or non-convertible	Nonconvertible	Nonconvertible
24	If convertible, conversion trigger(s)	N/A	N/A
25	If convertible, fully or partially	N/A	N/A
26	If convertible, conversion rate	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A
30	Write-down features	N/A	N/A
31	If write-down, write-down trigger(s)	N/A	N/A
32	If write-down, full or partial	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Most subordinated position	Subordinated to senior unsecured funding.
36	Non-compliant transitioned features	No	No

Pillar 3 own funds

	Common Equity Tier 1 (CET1) capital: instruments and reserves in millions	**Amount at disclosure date**
1	Capital instruments and the related share premium accounts	3,918
	of which: ordinary shares	381
	of which: share premium	3,537
	of which: instrument type 3	--
2	Retained earnings	--
3	Accumulated other comprehensive income (and other reserves)	-758
3a	Funds for general banking risk	--
4	Amount of qualifying items referred to in art. 484 (3) and the related share premium accounts subject to phase out from CET1	--
5	Minority interests (amount allowed in consolidated CET1)	--
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	61
6	**Common Equity Tier 1 (CET 1) capital before regulatory adjustments**	*3,221*
	Common equity Tier 1 (CET1) capital: regulatory adjustments	
7	Additional value adjustments (negative amount)	-3[1]
8	Intangible assets (net of related tax liability) (negative amount)	-2
9	Empty set in the EU	--
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	--
11	Fair value reserves related to gains or losses on cash flow hedges	-26
12	Negative amounts resulting from the calculation of expected loss amounts	-35[2]
13	Any increase in equity that results from securitised assets (negative amount)	--
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-0
15	Defined-benefit pension fund assets (negative amount)	--
16	Direct and indirect holding by an institution of own CET1 instruments (negative amount)	--
17	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	--
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions)(negative amount)	--
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions)(negative amount)	--
20	Empty set in the EU	--
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	--
20b	*of which: qualifying holdings outside the financial sector (negative amount)*	--
20c	*of which: securitisation positions (negative amount)*	--
20d	*of which: free deliveries (negative amount)*	--
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related eligible tax liability where the conditions in Article 38 (3) are met) (negative amount)	--
22	Amount exceeding the 15% threshold (negative amount)	--
23	*Of which: direct and indirect holding by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities*	--
24	Empty set in the EU	--
25	*of which: deferred tax assets arising from temporary differences*	--
25a	Losses for the current financial year (negative amount)	--
25b	Foreseeable tax charges relating to CET1 items (negative amount)	--
	Of Which: ...	--
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	--
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	*-65*
29	**Common Equity Tier 1 (CET1) capital**	*3,156*
	Additional Tier 1 (AT1) capital: instruments	
30	Capital instruments and the related share premium accounts	--
31	*of which: classified as equity under applicable accounting standards*	--
32	*of which: classified as liabilities under applicable accounting standards*	--
33	Amount of qualifying items referred to in art. 484 (4) and the related share premium accounts subject to phase out from AT1	--
34	Qualifying Tier 1 capital included in consolidated AT1 capital issued by subsidiaries and held by third parties	--

	Common Equity Tier 1 (CET1) capital: instruments and reserves in millions	**Amount at disclosure date**
35	*of which: instruments issued by subsidiaries subject to phase out*	--
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	--
	AT1 capital: regulatory adjustments	
37	Direct and indirect holding by an institution of own AT1 instruments (negative amount)	--
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	--
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (negative amount)	--
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	--
41	Empty set in the EU	--
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	--
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	*0*
44	**Additional Tier (AT1) capital**	*0*
45	**Tier 1 capital (T1= CET1 + AT1)**	*3,156*
	Tier 2 (T2) capital: instruments and provisions	
46	Capital instruments and the related share premium accounts	500
47	Amount of qualifying items referred to in art. 484 (5) and the related share premium accounts subject to phase out from T2	--
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	--
49	*of which: instruments issued by subsidiaries subject to phase out*	--
50	Credit risk adjustments	--
51	**Tier 2 (T2) capital before regulatory adjustments**	*500*
	Tier 2 (T2) capital: regulatory adjustments	
52	Direct and indirect holding by an institution of own T2 instruments and subordinated loans (negative amount)	--
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	--
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions)(negative amount)	--
55	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)(negative)	--
56	Empty set in the EU	--
57	**Total regulatory adjustments to Tier 2 (T2) capital**	*0*
58	**Tier 2 (T2) capital**	*500*
59	**Total capital (TC = T1 + T2)**	*3,656*
60	**Total risk weighted assets**	*9,680*
	Capital ratios and buffers	
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	32.60%
62	Tier 1 (as a percentage of total risk exposure amount)	32.60%
63	Total Capital (as a percentage of total risk exposure amount)	37.77%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer expressed as a percentage of risk exposure amount)	3.50%
65	*of which: capital conservation buffer requirement*	2.50%
66	*of which: countercyclical buffer requirement*	0.00%
67	*of which: systemic buffer requirement*	0.00%
67a	*of which: Global Systemically important Institution (G-SII) or Other Systemically important institution (O-SII) buffer*	1.00%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	24.60%
69	[non relevant EU regulation]	
70	[non relevant EU regulation]	
71	[non relevant EU regulation]	
	Amounts below the thresholds for deduction (before risk weighting)	
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	--

	Common Equity Tier 1 (CET1) capital: instruments and reserves in millions	Amount at disclosure date
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	--
74	Empty set in the EU	--
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)	--
	Applicable caps on the inclusion of provisions in Tier 2	
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach	--
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	27
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach	--
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	36
	Capital instruments subject to phase-out arrangements (1 Jan 2014 - 1 Jan 2022)	
80	Current cap on CET1 instruments subject to phase out arrangements	--
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	--
82	Current cap on AT1 instruments subject to phase out arrangements	--
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	--
84	Current cap on T2 instruments subject to phase out arrangements	--
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities	--

1 De Volksbank is subject to requirements on prudential valuation on financial instruments that are measured at fair value. To this end, de Volksbank uses the simplified approach. This method implies that an additional valuation adjustment (AVA) is taken into account and calculated by multiplying the total absolute fair value of the financial positions in scope by 0.1%. The calculated AVA is deducted from CET1 capital and does not have an impact on the exposure amounts considered for regulatory purposes.

2 Including a prudential backstop amounting to € 3.2 million.

Pillar 3 own funds reconciliation with IFRS balance sheet

Equity	IFRS balance sheet	Page/note[1]	Row in own funds template
Total Equity	3,435[2]		
- of which share capital	381		1
- of which share premium reserve	3,537		1
- of which accumulated other comprehensive income	25		3
- of which fair value reserves related to gains on cash flow hedges	26		3.11
- of which other reserves	-810		3
- of which retained earnings	--		2
- of which profit/loss of the current financial year	275		5a
Assets			
Loans and advances to customers	50,461	n7	7,11,12,13
Investments	5,348	n5	7
Tangible and intangible assets	128	n8	
- of which Intangible assets	2		8
Tax assets	99	n9	
- of which deferred tax assets	43		10
Derivatives	718	n3	7
Liabilities			
Subordinated debt	502	n18	46
Derivatives	1,841	n3	7
Tax liabilities	31	n9	
- of which deferred tax liabilities	15		10

1 2019 annual report of de Volksbank N.V.

2 Reference is made to the Consolidated statement of changes in equity in the annual report of de Volksbank N.V.

4.3 Capital requirements

EU OV1 – Overview of RWAs 2019

	in € millions	RWA 2019	RWA 2018	Minimum capital requirements 2019
1	**Credit risk (excluding counterparty credit risk) (CCR)**	**7,875**	**7,348**	**630**
2	*Of which the standardised approach*	1,944	1,861	155
3	*Of which the foundation IRB (FIRB) approach*	--	--	--
4	*Of which the advanced IRB (AIRB) approach*	5,932	5,487	475
5	*Of which equity IRB under the simple risk-weighted approach or the IMA*	--	--	--
6	**CCR**	**219**	**306**	**18**
7	*Of which mark to market*	115	157	9
7a	*Of which SFTs*	--	2	--
8	*Of which original exposure*	--	--	--
9	*Of which the standardised approach*	--	--	--
10	*Of which internal model method (IMM)*	--	--	--
11	*Of which risk exposure amount for contributions to the default fund of a CCP*	--	--	--
12	*Of which CVA*	104	147	--
13	**Settlement risk**	**--**	**--**	**--**
14	**Securitisation exposures in banking book (after the cap)**	**8**	**6**	**1**
15	*Of which IRB approach*	5	6	--
16	*Of which IRB supervisory formula approach (SFA)*	--	--	--
17	*Of which internal assessment approach (IAA)*	--	--	--
18	*Of which standardised approach*	3	--	--
19	**Market risk**	**5**	**--**	**--**
20	*Of which standardised approach*	5	--	--
21	*Of which IMA*	--	--	--
22	**Large exposures**	**--**	**--**	**--**
23	**Operational risk**	**1,503**	**1,544**	**120**
24	Of which basic indicator approach	--	--	--
25	*Of which standardised approach*	1,503	1,544	120
26	*Of which advanced measurement approach*	--	--	--
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**70**	**137**	**6**
28	**Floor adjustment**	**--**	**--**	**--**
29	**Total**	**9,680**	**9,341**	**774**

Total RWA increased by € 339 million to € 9.7 billion. Credit risk RWA (not including Counterparty Credit Risk, CCR) subject to the Standardised Approach increased by € 83 million to € 1.9 billion, primarily caused by exposure class Secured by mortgages on immovable property.

Credit risk RWA (not including CCR) calculated according to the Internal Ratings-Based approach increased by € 445 million to € 5.9 billion. Additional obligations, imposed by TRIM resulted in an RWA increase of € 792 million. Because of the impact of the TRIM, the average risk weighting (RWA density) of retail mortgages rose to 12.9%, from 12.0% at year-end 2018. In contrast, the portfolio's credit quality improved further, particularly as a result of improved economic conditions. This improvement was reflected in lower Probabilities of Default (PD's) and Loss Given Defaults (LGDs).

Market risk RWA increased to € 5 million from nil, caused by a small trading position.

RWA for CCR, operational risk and securitisation positions in the investment portfolio fell by € 126 million in total (2018: € 177 million).

At year-end 2019 de Volksbank has no transactions in which the agreed delivery dates have not been settled yet. Therefore per year-end 2019 there is no RWA for settlement risk.

The bank does not hold commodities and therefore no capital is required for commodity risk.

At year-end 2019, the total net position in foreign currency is lower than the CRR threshold of 2% of total capital. Therefore no capital is required for this item.

4.4 Macroprudential supervisory measures

CAPITAL REQUIREMENTS
CRR/CRD IV -REQUIREMENTS

CRR/CRD IV requirements 1 January 2020

	Total capital	of which Tier 1 capital	of which CET1 capital
Pillar 1 requirement	8.0%	6.0%	4.5%
Pillar 2 requirement (CET1)	2.5%	2.5%	2.5%
Total SREP capital requirement	**10.5%**	**8.5%**	**7.0%**
Capital conservation buffer	2.5%	2.5%	2.5%
O-SII buffer	1.0%	1.0%	1.0%
Countercyclical capital buffer	0.0%	0.0%	0.0%
Combined buffer requirement	**3.5%**	**3.5%**	**3.5%**
Overall capital requirement	**14.0%**	**12.0%**	**10.5%**

With effect from 1 January 2020, de Volksbank is required to meet a minimum total capital ratio of 14.0% (Overall Capital Requirement, OCR), of which at least 10.5% consists of CET1 capital. This requirement ensues from the Supervisory Review and Evaluation Process (SREP) performed by the European Central Bank (ECB) in 2019 and follows from the SREP decision.

The OCR is defined as the level at which the maximum distributable amount of dividend (Maximum Distributable Amount, MDA) is curtailed by regulations. The OCR includes the Pillar 1 capital requirement of 8.0%, the Pillar 2 CET1 requirement of 2.5% – together the Total SREP Capital Requirement, TSCR – and the Combined Buffer.

The CBR, to be held in the form of CET1 capital, consists of a capital conservation buffer, a capital buffer for Other Systemically Important Institutions (O-SII buffer) and a 'countercyclical capital buffer'. The capital conservation buffer equalled 2.50% as from 1 January 2020 and the O-SII buffer for de Volksbank equalled 1.0% on 1 January 2020. Both buffers will remain at this level based on the SREP decision that took effect on 1 January 2020. The countercyclical capital buffer for exposures to Dutch counterparties is currently 0%. This buffer is intended to protect banks against risks arising when credit growth is excessive. Each quarter DNB sets the level of the buffer for the Netherlands, which, in principle, varies from 0% to 2.5%[1].

De Volksbank is not classified as G-SII (global systemically important institutions).

1 DNB has the discretion to set the countercyclical capital buffer above 2.5%.

INTERNAL MINIMUM LEVEL

De Volksbank has adjusted its capital targets for 2020 to a leverage ratio of at least 4.75% (previously: at least 4.25%) and a CET1 capital ratio of at least 19.0% (previously: at least 15%) based on the fully phased-in Basel IV rules. Our leverage ratio target of at least 4.75% is in line with the expected leverage ratio of comparable European banks and includes an ample management buffer to withstand severe stress situations involving unfavourable conditions that may greatly impact the net interest margin and credit losses. The management buffer also factors in other uncertainties, such as fluctuations in the macroeconomic environment and the impact that the elaboration and implementation of Basel IV may have on non-risk-weighted targets.

After full phase-in of Basel IV rules, the minimum target of the leverage ratio of 4.75% is expected to be in keeping with a CET1 capital ratio of at least 19.0%. The composition of our minimum risk-weighted target is in line with the composition of our minimum leverage ratio target. As a result, on top of the SREP requirement of 10.5% and the Pillar 2 Guidance, we also have an ample management buffer to withstand severe stress situations. The management buffer also factors in other uncertainties, such as the impact of future regulatory requirements, including Basel IV.

In time, the management buffers – and thus the capital targets – may be revised, for example as soon as the final impact of Basel IV has become clear. Capital expected to sustainably exceed our minimum targets is available for distribution, subject to regulatory approval.

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer 2019

In € millions	General credit exposures		Trading book exposures		Securitisation exposures		Own funds requirements					
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book	Value of trading book exposures for internal models	Exposure value for SA	Exposure value for IRB	Of which: general credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total	Own funds requirements weights	Effective Countercyclical capital buffer rate
BREAKDOWN BY COUNTRY:												
The Netherlands	1,630	46,033	--	--	25	72	571	--	1	572	93.25%	0.00%
France	68	3	--	--	--	--	1	--	--	1	0.16%	0.25%
Germany	53	9	--	--	--	--	3	--	--	3	0.53%	0.00%
Belgium	272	53	--	--	--	--	22	--	--	22	3.64%	0.00%
Austria	0	0	--	--	--	--	0	--	--	0	0.00%	0.00%
Luxembourg	140	1	--	--	--	--	11	--	--	11	1.83%	0.00%
Great Britain	42	8	--	--	--	--	2	--	--	2	0.31%	1.00%
Switzerland	66	3	--	--	--	--	1	--	--	1	0.18%	0.00%
Cyprus	1	0	--	--	--	--	0	--	--	0	0.02%	0.00%
Spain	0	2	--	--	--	--	0	--	--	0	0.01%	0.00%
Portugal	0	0	--	--	--	--	0	--	--	0	0.00%	0.00%
United States	0	3	--	--	--	--	0	--	--	0	0.01%	0.00%
Other	8	15	--	--	--	--	0	--	--	0	0.06%	0.00%
Total	**2,281**	**46,131**	**--**	**--**	**25**	**72**	**613**	**--**	**1**	**614**	**100%**	

in € millions	2019
Total risk exposure amount	9,680
Institution specific countercyclical buffer rate	--
Institution specific countercyclical buffer requirement	--

4.5 Leverage ratio

The leverage ratio is the ratio between a bank's amount of Tier 1 capital and total risk exposure. A minimum level for the leverage ratio is to prevent banks from building up excessive debts. The coalition agreement of the Rutte III government as published states that the minimum requirement will be aligned with the European minimum requirement as soon as Basel IV becomes effective. It is expected to be at least 3%, with a possible surcharge for Systemically Important Institutions.

To manage the risk of excessive leverage, leverage ratio control is part of our capital planning. The Risk Appetite Statement (RAS) describes de Volksbank's risk appetite in relation to the leverage ratio and other aspects. The accompanying Early Warning Indicator (EWI) framework lays down intervention levels to identify a falling leverage ratio in good time.

Capital planning is a continuous process. The capital plan provides a projection of our capital position and requirements over a multi-year horizon including the expected impact of changes in regulations. The capital planning is reviewed every month on the basis of the most recent figures and qualitative knowledge in the Capital Adequacy Assessment Report (CAAR). We evaluate the leverage ratio against the expected future minimum of 3% plus possible add-on for systemically important banks and our internal target of at least 4.75%. This assessment is used to steer the capital to the desired level if necessary, for example by raising new capital.

The following table presents the leverage ratio for de Volksbank according to the composition of risk exposure and equity prescribed in the CRR.

Leverage ratio

in € millions	2019	2018
EXPOSURE VALUES		
Derogation for Securities Financing Transactions (SFTs)	--	10
Derivatives: market value	121	147
Derivatives: add-on mark-to-market method	276	381
Off-balance: undrawn credit facilities	113	133
Off-balance: medium/low risk	710	410
Other assets	60,850	59,623
CAPITAL AND REGULATORY ADJUSTMENTS		
Tier 1 capital	3,155	3,313
Regulatory adjustments (Tier 1)	-65	-80
Exposure measure as defined by the CRR	62,006	60,625
Leverage ratio	5.1%	5.5%

The leverage ratio dropped from 5.5% at year-end 2018 to 5.1%, caused by both a decrease in CET1 capital by € 158 million and an increase in the leverage ratio denominator by € 1.4 billion. The denominator is the risk exposure amount as defined by the Capital Requirements Regulation (CRR). The increase in this risk exposure was in line with the growth in the balance sheet total (€ 1.9 billion), with the lower growth in the risk exposure mainly resulting from an increase in collateral placed for derivatives, which is deducted from the risk exposure.

The 5.1% leverage ratio is well above the regulatory requirement and our new target of at least 4.75%.

Under current regulations, the amount of capital necessary to meet the leverage ratio requirement is higher than the amount necessary to meet risk-weighted capital requirements. This is the consequence of the focus on retail mortgages, a low-risk activity with a correspondingly low risk weighting.

The risk exposure that is used in calculating the leverage ratio differs from the value of the assets as included in the financial statements. The table below presents the reconciliation of accounting assets and the leverage ratio exposure.

Reconciliation of accounting assets and the leverage ratio exposure

	in € millions	2019	2018
1	Total assets as per published financial statements	62,841	60,948
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	--	--
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	--	--
4	Adjustments for derivative financial instruments	-321	-203
5	Adjustments for securities financing transactions "SFTs"	--	10
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	824	543
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)		
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)		
	Regulatory adjustments	-65	-80
7	Other adjustments	-1,273	-593
8	**Total leverage ratio exposure (CRR)**	**62,006**	**60,625**

Leverage ratio common disclosure

		CRR leverage ratio exposures	
	in € millions	**2019**	**2018**
	ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES AND SFTS)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	60,850	59,623
2	(Asset amounts deducted in determining Tier 1 capital)	-65	-80
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	60,785	59,543
	Derivative exposures		
4	Replacement cost associated with *all* derivatives transactions (ie net of eligible cash variation margin)	246	281
5	Add-on amounts for PFE associated with *all* derivatives transactions (mark-to-market method)	276	381
EU-5a	Exposure determined under Original Exposure Method	--	--
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	--	--
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-125	-133
8	(Exempted CCP leg of client-cleared trade exposures)	--	--
9	Adjusted effective notional amount of written credit derivatives	--	--
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	--	--
11	**Total derivative exposures (sum of lines 4 to 10)**	397	529
	Securities financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	--	--
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	--	--
14	Counterparty credit risk exposure for SFT assets	--	--
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	--	10
15	Agent transaction exposures	--	--
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	--	--
16	**Total securities financing transaction exposures (sum of lines 12 to 15a)**	--	10
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	2,553	2,698
18	(Adjustments for conversion to credit equivalent amounts)	-1,730	-2,155
19	**Other off-balance sheet exposures (sum of lines 17 to 18)**	824	543
	Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)		
EU-19a	(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	--	--
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	--	--
	Capital and total exposures		
20	**Tier 1 capital**	3,156	3,313
21	**Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)**	62,006	60,625
	Leverage ratio		
22	**Leverage ratio**	5.1%	5.5%
	Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	fully phased-in	fully phased-in
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	n.a.	n.a.

Split-up of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

		CRR leverage ratio exposures	
	in € millions	2019	2018[1]
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**60,850**	**59,623**
EU-2	Trading book exposures	10	--
EU-3	Banking book exposures, of which:	60,840	59,623
EU-4	Covered bonds	102	51
EU-5	Exposures treated as sovereigns	7,216	5,850
EU-6	Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	38	--
EU-7	Institutions	2,594	3,056
EU-8	Secured by mortgages of immovable properties	45,577	45,410
EU-9	Retail exposures	98	268
EU-10	Corporate	1,563	2,209
EU-11	Exposures in default	278	294
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	3,374	2,484

1 Due to a change in classification between the line items secured by mortgages and other exposures the comparative figures 2018 are adjusted.

The increase on the line items Exposures treated as sovereigns is caused by a large position at the Dutch Central Bank year end 2019. The increase on line Other exposure is mainly the result of € 0.7 billion higher IFRS value adjustments.

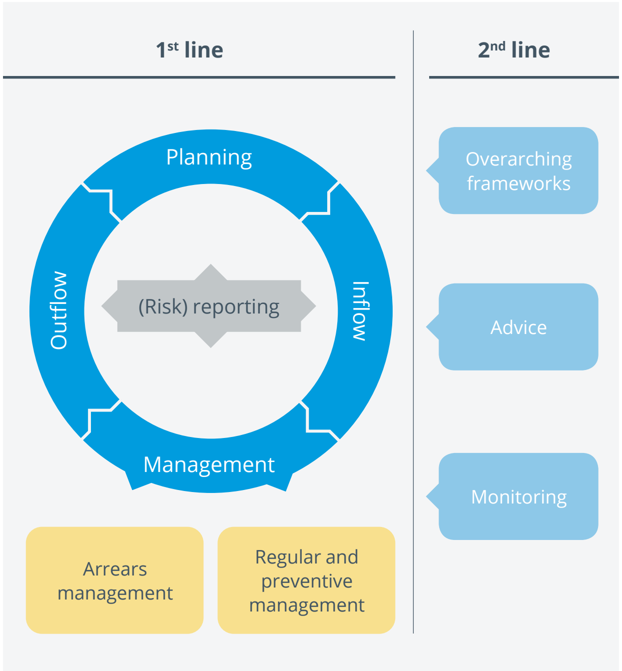
5 Credit risk and general information on CRM

De Volksbank has divided its credit risk portfolio into several exposure classes. We use the Advanced Internal Ratings-Based approach to calculate the capital requirements for the retail mortgage portfolios and securitisations with underlying mortgages. We use the Standardised Approach for all other portfolios. The credit risk portfolio is presented in the Pillar 3 report in accordance with regulations: Standardised Approach (SA) versus Advanced Internal Ratings-Based (AIRB) approach and then further specified within the exposure classes.

5.1 General qualitative information regarding credit risk

MANAGEMENT AND CONTROL

In credit risk management, we take into account the individual customer. On a portfolio level we also steer the risk based on inflow, outflow, size and status of the healthy loans versus the loans in arrears. De Volksbank's credit management process is represented visually below.



RETAIL MORTGAGES

In the provision of new mortgage loans (inflow) we put customers' interests first and use internal standards, which are in line with the legal frameworks. Customers must be able to pay interest and make repayments now and in the future. We use the acceptance scorecard to predict whether customers are able to comply with their obligations in the long term and ensure that the originated loans meet our internal standards regarding the customer's income and the collateral value. See also Section 5.3 General qualitative information regarding credit risk mitigation.

The approval mandates for retail mortgage loans were changed at the end of 2018. The new structure allows acceptors themselves to decide in more instances whether to accept or reject applications. Applications scoring a higher risk on the acceptance scorecard and/or departing from the acceptance policy are submitted to second-line credit risk management for a decision. As a result, the Credit Committee's authority to approve retail mortgage loans has been delegated to second-line credit risk management. This transfer of powers shortens the processing period and ensures that decisions are taken by the people with the most in-depth knowledge.

We monitor the development of the loan portfolio in terms of credit quality, collateral values, the percentage covered by NHG and the average expected credit loss. For this purpose, monthly reports are drafted and presented to senior management and second-line credit risk management. The latter defines frameworks, monitors portfolio quality and the execution and effectiveness of the management process, and advises on opportunities for improvement.

For the outflow, we examine the customer's reasons for making repayments.

Interest-only and 'aflossingsblij'

A number of customers with interest-only mortgages believe they will never be required to redeem (repay) the loan. We proactively contact customers whom we consider to fall into a high-risk category. This may be, for instance, because their mortgage is nearing maturity and given their age it is likely that they will retire, which may cause a drop in income. In the conversations we have with the customers, we attempt to find out to what extent it is likely that these customers can be refinanced based on their retirement income and whether they have accumulated any capital to repay their loan in full or in part at the end of the term. De Volksbank is also one of the participants in the *Aflossingsblij* campaign of the Dutch Banking Association (NVB), which seeks to create nationwide awareness of the characteristics of this type of mortgage. The AFM monitors our activities in the context of interest-only mortgages.

Preventive management and Arrears management for retail customers

De Volksbank regards a bond of trust with the customer as the basis for a long-term customer relationship. We manage the credit risk through an active and specific policy on customers who are in arrears or are expected to fall into arrears. Preventive management contacts the customer as soon as possible when the management processes show that there is a reason to do so. Contact will be initiated, for instance, when the customer's mortgage is nearing maturity and full repayment under the product terms and conditions is not expected. Preventive Management assesses whether a solution needs to be found for the customer and whether such a solution is within the adviser's mandate. If it is not, this customer is transferred to the Arrears Management department.

When a customer experiences financial difficulties, they also come under the responsibility of the Arrears management department. If the arrears exceed 30 days, the customer is assigned their own case handler. If necessary, we pay the customer a visit to look together for solutions serving the customer's interests as well as the bank's interests. Starting point is that customers are able to stay in their home and continue making their mortgage payments.

If customers are truly unable to meet the obligations, we may consult with them and agree a payment measure or restructuring.

If no solution can be found to resolve the financial difficulties, we support customers in selling their home. De Volksbank itself keeps in touch with the customer, thus securing an optimum relationship. We do not engage debt collection agencies and only engage a bailiff if we do not succeed in arriving at a long-term solution together with the customer even though the customer has the financial resources needed. This is because the use of external parties creates more costs for the customer and exacerbates the customer's financial problems.

Forbearance

We may apply a forbearance measure in situations where a customer has financial difficulties and is expected to be unable to meet his future financial obligations or to do so in time. This measure is a non-commercial concession: an arrangement with the customer entailing a temporary or permanent modification of the loan, the terms and conditions of the loan and/or payment conditions. We may apply this measure to prevent payment problems from accumulating or situations in which the loan has to be called in early.

OTHER RETAIL LOANS

We hold a modest portfolio of personal loans, revolving credit and overdraft facilities, i.e. credit limits on current accounts. We no longer provide new personal loans or revolving credit on our own balance sheet.

SME LOANS

In mid-2018, we started providing new loans to SME customers again. We provide not only small working capital loans of up to € 50,000, but also mortgage loans for the purchase or renovation of commercial buildings. We record our SME customers' payment behaviour and use this information in risk models to monitor whether our customers are able to meet their obligations in the long term. The models calculate the probability of default – i.e. the failure to make contractually agreed payments, such as interest and any repayments – and the resulting loss expected for the bank. As from 2017, we use the model outcomes to prioritise customers who are to be assisted in recovering from arrears or default. The model outcomes largely determine which customers we will proactively contact first.

Preventive and Arrears management for SME customers

We take action as soon as a SME costumer falls into arrears or states that it anticipates payment problems, and we do so based on the key principles of continuity of the company (the customer) concerned and the potential for recovery. Together with the customer, we explore the options for making the company financially resilient again, focusing on a healthy liquidity and profitability position. We may take forbearance measures for these customers, too. If and when a customer has recovered and a stable situation has arisen, Arrears management supervision ceases and the customer is transferred back to regular management. If recovery turns out to be impossible, we may support the customer in selling the collateral. In such a situation, the aim is to limit losses for the customer as well as for the bank.

OTHER COMMERCIAL LOANS AND LOANS TO THE PUBLIC SECTOR

This portfolio consists of several sub-portfolios. ASN Bank manages sustainable and private loans, for example. Furthermore, through the 'Financial Markets' portfolio we provide various loans to other financial institutions and have lent funds to authorities.

INVESTMENTS

Investments predominantly consist of a bond portfolio used for liquidity management purposes. Counterparties must meet stringent requirements and have good ratings to qualify for inclusion in this portfolio.

Reporting

Developments in the various loan portfolios are monitored and reports on this are periodically submitted to the Credit Committee, the Board of Directors and the Risk Committee of the Supervisory Board.

Every month, we prepare a report on the mortgage portfolio and discuss it within the mortgage distribution chain. Every quarter, we provide a detailed report on the loan loss provisions, which gives insight into internal and external developments affecting the loan loss provisions. Second-line credit risk management also issues quarterly reports on the bank-wide credit risk in relation to the risk appetite determined. These reports consist of a quantitative analysis, a qualitative assessment and an estimate of short-term forecasts regarding the development of credit risk in the various portfolios.

Loan loss provisions (IFRS 9)

As from 1 January 2018, we have adopted IFRS 9 and form loan loss provisions in accordance with these requirements. Based on our risk models, we make monthly calculations for all our customers to estimate their risk of running into financial difficulties. See also Section 4.3.3 Implementation of IFRS 9 in the annual report.

Stress testing and sensitivity analyses

De Volksbank conducted several stress tests in 2019, both internal stress tests and stress tests imposed by the supervisory authority.

Those stress tests shed light on the possible consequences for the credit risk using specific models. We examine how sensitive the loan portfolios are to fluctuations of macroeconomic parameters. Just like other banks, we are sensitive to these fluctuations. However, thanks to its strong capital and liquidity position, de Volksbank has proven capable of withstanding the extreme scenarios applied.

5.2 General quantitative information regarding credit risk

The table below shows a breakdown of exposures to customers by exposure classes (CRD asset classes) and reporting approach (AIRB or SA).

EU CRB-B – Total and average net amount of exposures 2019

		a	b
	in € millions	**Net value of exposures at the end of the period**	**Average net exposures over the period**
6	Retail	49,822	47,872
7	*Secured by real estate property*	*49,822*	*47,872*
8	*SMEs*	--	--
9	*Non-SMEs*	*49,822*	*47,872*
15	**Total AIRB approach**	***49,822***	**47,872**
16	Central governments or central banks	5,977	5,138
17	Regional governments or local authorities	327	519
18	Public sector entities	520	472
19	Multilateral development banks	383	386
20	International organisations	47	37
21	Institutions	3,867	3,758
22	Corporates	2,005	2,316
23	*Of which: SMEs*	*19*	*32*
24	Retail	588	682
25	*Of which: SMEs*	*57*	*136*
26	Secured by mortgages on immovable property	581	502
27	*Of which: SMEs*	*573*	*499*
28	Exposures in default	92	75
29	Items associated with particularly high risk	--	--
30	Covered bonds	102	77
33	Equity exposures	9	8
34	Other exposures	385	359
35	**Total standardised approach**	**14,883**	**14,329**
36	**Total**	**64,705**	**62,201**

Both the total and average exposures showed an increase in 2019. The increase in the average exposures in the retail mortgage portfolio is mainly due to € 0.7 billion IFRS value adjustments.

The increase in the total exposures at the end of the period is mainly the result of the IFRS value adjustments in the retail mortgage portfolio as well as the large position at Central banks (DNB) at the end of the year.

EU CRB-B – Total and average net amount of exposures 2018

		a	b
	in € millions	Net value of exposures at the end of the period	Average net exposures over the period
6	Retail	48,996	47,224
7	*Secured by real estate property*	*48,996*	*47,224*
8	*SMEs*	*--*	*--*
9	*Non-SMEs*	*48,996*	*47,224*
15	**Total AIRB approach**	***48,996***	**47,224**
16	Central governments or central banks	4,299	5,058
17	Regional governments or local authorities	711	824
18	Public sector entities	423	245
19	Multilateral development banks	389	339
20	International organisations	27	24
21	Institutions	3,649	2,997
22	Corporates	2,627	2,818
23	*Of which: SMEs*	*46*	*229*
24	Retail	776	876
25	*Of which: SMEs*	*214*	*248*
26	Secured by mortgages on immovable property	424	407
27	*Of which: SMEs*	*424*	*407*
28	Exposures in default	59	64
29	Items associated with particularly high risk	0	1
30	Covered bonds	51	46
33	Equity exposures	7	12
34	Other exposures	347	311
35	**Total standardised approach**	**13,789**	**14,020**
36	**Total**	**62,785**	**61,244**

EU CRB-C – Geographical breakdown of exposures 2019

		a	b	c	d	e	f	g	h	i	j	k	m	n	o
		Net value													
	in € millions	The Netherlands	EMU	Germany	Belgium	France	Austria	Other countries	Outside EMU	Switzerland	Japan	United Kingdom	Other countries	Other geographical areas	Total
4	Retail	49,725	69	9	53	3	--	4	28	3	--	8	17		49,822
6	**Total AIRB approach**	**49,725**	**69**	**9**	**53**	**3**	**--**	**4**	**28**	**3**	**--**	**8**	**17**		**49,822**
7	Central governments or central banks	3,051	2,479	1,171	491	285	193	340	449	--	407	--	42	--	5,977
8	Regional governments or local authorities	249	78	36	--	42	--	--	--	--	--	--	--	--	327
9	Public sector entities	38	482	300	--	181	--	--	--	--	--	--	--	--	520
10	Multilateral development banks	--	--	--	--	--	--	--	--	--	--	--	--	383	383
11	International organisations	--	--	--	--	--	--	--	--	--	--	--	--	47	47
12	Institutions	1,054	666	358	--	36	58	215	2,147	1,712	--	231	203	--	3,867
13	Corporates	1,309	587	37	295	50	63	141	109	66	--	43	--	--	2,005
14	Retail	578	8	3	5	--	--	1	1	--	--	--	1	--	588
15	Secured by mortgages on immovable property	576	5	--	3	1	--	1	--	--	--	--	--	--	581
16	Exposures in default	91	--	--	--	--	--	--	--	--	--	--	--	--	92
17	Items associated with particularly high risk	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Covered bonds	62	33	15	--	17	--	--	7	--	--	--	7	--	102
21	Equity exposures	9	--	--	--	--	--	--	--	--	--	--	--	--	9
22	Other exposures	385	--	--	--	--	--	--	--	--	--	--	--	--	385
23	**Total standardised approach**	**7,402**	**4,338**	**1,920**	**794**	**612**	**314**	**698**	**2,713**	**1,778**	**407**	**274**	**253**	**430**	**14,883**
24	**Total**	**57,127**	**4,407**	**1,929**	**847**	**615**	**314**	**702**	**2,741**	**1,781**	**407**	**282**	**270**	**430**	**64,705**

The exposures in Central governments or central banks in Japan and Czech Republic (included in Other countries) consists of short-term investments in T-bills.

EU CRB-C – Geographical breakdown of exposures 2018

		a	b	c	d	e	f	g	h	i	j	k	m	n	o
		Net value													
	in € millions	The Nether-lands	EMU	Ger-many	Belgium	France	Austria	Other countries	Outside EMU	Switzer-land	Japan	United Kingdom	Other countries	Other geo-graphical areas	Total
4	Retail	48,881	76	10	58	3	--	5	39	4	--	13	22	--	48,996
6	**Total AIRB approach**	**48,881**	**76**	**10**	**58**	**3**	**--**	**5**	**39**	**4**	**--**	**13**	**22**	**--**	**48,996**
7	Central governments or central banks	1,891	2,371	1,169	530	161	258	253	37	--	--	--	37	--	4,299
8	Regional governments or local authorities	425	286	65	180	41	--	--	--	--	--	--	--	--	711
9	Public sector entities	42	381	202	--	180	--	--	--	--	--	--	--	--	423
10	Multilateral development banks	--	389	--	--	79	--	310	--	--	--	--	--	--	389
11	International organisations	--	27	--	7	--	--	20	--	--	--	--	--	--	27
12	Institutions	835	402	259	--	35	97	11	2,412	1,827	--	330	255	--	3,649
13	Corporates	1,824	735	41	325	142	104	123	68	68	--	--	--	--	2,627
14	Retail	764	11	3	6	1	--	1	1	--	--	--	1	--	776
15	Secured by mortgages on immovable property	421	3	--	2	--	--	1	--	--	--	--	--	--	424
16	Exposures in default	58	1	--	1	--	--	--	--	--	--	--	--	--	59
17	Items associated with particularly high risk	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Covered bonds	51	--	--	--	--	--	--	--	--	--	--	--	--	51
21	Equity exposures	7	--	--	--	--	--	--	--	--	--	--	--	--	7
22	Other exposures	347	--	--	--	--	--	--	--	--	--	--	--	--	347
23	**Total standardised approach**	**6,665**	**4,606**	**1,739**	**1,051**	**639**	**459**	**719**	**2,518**	**1,895**	**--**	**330**	**293**	**--**	**13,789**
24	**Total**	**55,546**	**4,682**	**1,749**	**1,109**	**642**	**459**	**724**	**2,557**	**1,899**	**--**	**343**	**315**	**--**	**62,785**

EU CRB-D – Concentration of exposures by industry or counterparty types 2019

		a	c	d	f	g	h	i	j	k	l	m	o	p	q	r	s	t	u
	in € millions	**Agriculture, forestry and fishing**	**Manufacturing**	**Electricity, gas, steam and air conditioning 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**	**Public administration and defence, compulsory social security**	**Education**	**Human health services and social work activities**	**Arts, entertainment and recreation**	**Retail Non SME**	**Other services**	**Total**
4	Retail	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	49,822	--	49,822
6	**Total AIRB approach**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**49,822**	**--**	**49,822**
7	Central governments or central banks	--	--	--	--	--	--	--	--	2,334	--	--	3,643	--	--	--	--	--	5,977
8	Regional governments or local authorities	--	--	--	--	--	--	--	--	--	--	--	327	--	--	--	--	--	327
9	Public sector entities	--	--	--	--	--	--	--	--	301	--	--	98	--	38	--	--	83	520
10	Multilateral development banks	--	--	--	--	--	--	--	--	383	--	--	--	--	--	--	--	--	383
11	International organisations	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	47	47
12	Institutions	--	--	--	--	--	--	--	--	3,867	--	--	--	--	--	--	--	--	3,867
13	Corporates	--	6	472	16	3	34	--	--	489	333	14	380	--	170	17	--	71	2,005
14	Retail	1	5	--	5	15	1	1	1	4	7	4	--	1	3	3	--	537	588
15	Secured by mortgages on immovable property	5	32	--	31	105	6	4	5	124	142	45	--	4	18	14	--	46	581
16	Exposures in default	--	4	--	2	4	--	--	--	49	18	3	--	--	5	1	--	6	92
17	Items associated with particularly high risk	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Covered bonds	--	--	--	--	--	--	--	--	102	--	--	--	--	--	--	--	--	102
21	Equity exposures	--	--	--	--	--	--	--	--	9	--	--	--	--	--	--	--	--	9
22	Other exposures	--	--	--	--	--	--	--	--	44	--	--	--	--	--	--	--	341	385
23	**Total standardised approach**	**6**	**47**	**472**	**54**	**127**	**41**	**5**	**6**	**7,706**	**500**	**66**	**4,448**	**5**	**234**	**35**	**--**	**1,131**	**14,883**
24	**Total**	**6**	**47**	**472**	**54**	**127**	**41**	**5**	**6**	**7,706**	**500**	**66**	**4,448**	**5**	**234**	**35**	**49,822**	**1,131**	**64,705**

The € 1.4 billion growth in deposits and the issue of € 1.3 billion in covered and unsecured bonds resulted in the increase of the cash position in Central governments or central banks.

The decrease in Corporates of € 454 million is caused by the loan to VIVAT. At year-end 2019, the loan amounted to € 254 million (2018: € 708 million). This drop is the result of the termination of one residential mortgages transaction with VIVAT in December 2019.

EU CRB-D – Concentration of exposures by industry or counterparty types 2018

	in € millions	a	c	d	f	g	h	i	j	k	l	m	o	p	q	r	s	t	u
		Agriculture, forestry and fishing	**Manufacturing**	**Electricity, gas, steam and air conditioning 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**	**Public administration and defence, compulsory social security**	**Education**	**Human health services and social work activities**	**Arts, entertainment and recreation**	**Retail Non SME**	**Other services**	**Total**
4	Retail	--	--	--	--	--	--	--	--		--	--	--	--	--	--	48,996	--	48,996
6	**Total AIRB approach**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**		**--**	**--**	**--**	**--**	**--**	**--**	**48,996**	**--**	**48,996**
7	Central governments or central banks	--	--	--	--	--	--	--	--	1,100	--	--	3,199	--	--	--	--	--	4,299
8	Regional governments or local authorities	--	--	--	--	--	--	--	--	--	--	--	711	--	--	--	--	--	711
9	Public sector entities	--	--	--	--	--	--	--	--	201	--	--	98	--	42	--	--	82	423
10	Multilateral development banks	--	--	--	--	--	--	--	--	389	--	--	--	--	--	--	--	--	389
11	International organisations	--	--	--	--	--	--	--	--	7	--	--	20	--	--	--	--	--	27
12	Institutions	--	--	--	--	--	--	--	--	3,649	--	--	--	--	--	--	--	--	3,649
13	Corporates	--	9	497	12	5	84	--	--	942	375	6	420	--	196	5	--	76	2,627
14	Retail	6	15	--	15	45	3	1	2	28	49	16	--	2	12	6	--	576	776
15	Secured by mortgages on immovable property	2	20	--	20	73	6	4	4	93	104	34	--	2	12	11	--	39	424
16	Exposures in default	1	4	--	1	6	--	--	--	10	24	4	--	--	1	1	--	7	59
17	Items associated with particularly high risk	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	Covered bonds	--	--	--	--	--	--	--	--	51	--	--	--	--	--	--	--	--	51
21	Equity exposures	--	--	--	--	--	--	--	--	7	--	--	--	--	--	--	--	--	7
22	Other exposures	--	--	--	--	--	--	--	--	49	--	--	--	--	--	--	--	298	347
23	**Total standardised approach**	**9**	**48**	**497**	**48**	**129**	**93**	**5**	**6**	**6,526**	**552**	**60**	**4,448**	**4**	**263**	**23**	**--**	**1,078**	**13,789**
24	**Total**	**9**	**48**	**497**	**48**	**129**	**93**	**5**	**6**	**6,526**	**552**	**60**	**4,448**	**4**	**263**	**23**	**48,996**	**1,078**	**62,785**

EU CRB-E – Maturity of exposures 2019

		a	b	c	d	e	f
		Net value					
	in € millions	On demand	< = 1 year	> 1 year < = 5 years	> 5 years	No stated maturity	Total
4	Retail	1,020	188	431	48,183	--	49,822
6	**Total AIRB approach**	**1,020**	**188**	**431**	**48,183**	**-**	**49,822**
7	Central governments or central banks	2,808	149	1,531	1,489	--	5,977
8	Regional governments or local authorities	13	-	97	217	--	327
9	Public sector entities	--	20	134	366	--	520
10	Multilateral development banks	--	-	141	242	--	383
11	International organisations	--	--	--	47	--	47
12	Institutions	3,414	184	168	101	--	3,867
13	Corporates	382	41	763	819	--	2,005
14	Retail	583	-	1	4	--	588
15	Secured by mortgages on immovable property	2	4	33	542	--	581
16	Exposures in default	10	1	5	76	--	92
17	Items associated with particularly high risk	--	--	-	--	--	-
18	Covered bonds	-1	--	44	59	--	102
21	Equity exposures	--	--	--	--	9	9
22	Other exposures	96	--	--	--	289	385
23	**Total standardised approach**	**7,307**	**399**	**2,917**	**3,962**	**298**	**14,883**
24	**Total**	**8,327**	**587**	**3,348**	**52,145**	**298**	**64,705**

EU CRB-E – Maturity of exposures 2018

		a	b	c	d	e	f
		Net value					
	in € millions	On demand	< = 1 year	> 1 year < = 5 years	> 5 years	No stated maturity	Total
4	Retail	1,095	172	408	47,321	--	48,996
6	**Total AIRB approach**	**1,095**	**172**	**408**	**47,321**	**-**	**48,996**
7	Central governments or central banks	1,169	143	1,421	1,566	--	4,299
8	Regional governments or local authorities	236	136	97	242	--	711
9	Public sector entities	--	-	97	326	--	423
10	Multilateral development banks	--	65	68	256	--	389
11	International organisations	--	--	--	27	--	27
12	Institutions	3,389	-	172	88	--	3,649
13	Corporates	889	77	442	1,219	--	2,627
14	Retail	621	1	9	145	--	776
15	Secured by mortgages on immovable property	2	2	20	400	--	424
16	Exposures in default	12	--	2	45	--	59
17	Items associated with particularly high risk	--	--	-	--	--	-
18	Covered bonds	--	--	--	51	--	51
21	Equity exposures	--	--	--	--	7	7
22	Other exposures	73	--	--	--	274	347
23	**Total standardised approach**	**6,391**	**424**	**2,328**	**4,365**	**281**	**13,789**
24	**Total**	**7,486**	**596**	**2,736**	**51,686**	**281**	**62,785**

The main lending activity of the bank is the granting of long term loans for their core customer groups. The domestic mortgage loans portfolio is the most important portfolio. The exposures with a short term maturity are mainly related to the liquidity management activities of the bank.

EU CR1-A – Credit quality of exposures by exposure class and instrument 2019

		a	b	c	d	e	f	g
		Gross carrying values of						
	in € millions	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)
6	Retail	214	49,675	68	--	--	9	49,822
7	*Secured by real estate property*	*214*	*49,675*	*68*	--	--	*9*	49,822
8	*SMEs*	-	-	-	--	--	--	-
9	*Non-SMEs*	*214*	*49,675*	*68*	--	--	*9*	49,822
15	**Total AIRB approach**	**214**	**49,675**	**68**	**--**	**--**	**9**	**49,822**
16	Central governments or central banks	-	5,978	1	--	--	-1	5,977
17	Regional governments or local authorities	-	327	0	--	--	-0	327
18	Public sector entities	-	520	0	--	--	-1	520
19	Multilateral development banks	-	383	0	--	--	-0	383
20	International organisations	-	48	0	--	--	0	47
21	Institutions	-	3,867	0	--	--	-0	3,867
22	Corporates	-	2,007	3	--	--	-3	2,005
23	*Of which: SMEs*	-	*20*	*1*	--	--	*-2*	*19*
24	Retail	-	591	3	--	--	-1	588
25	*Of which: SMEs*	-	*57*	*0*	--	--	*-1*	*57*
26	Secured by mortgages on immovable property	-	586	5	--	--	0	581
27	*Of which: SMEs*	-	*578*	*5*	--	--	*0*	*573*
28	Exposures in default	139	-	47	--	--	-11	92
29	Items associated with particularly high risk	-	0	0	--	--	0	-0
30	Covered bonds	-	102	0	--	--	-0	102
33	Equity exposures	-	9	-	--	--	-0	9
34	Other exposures	-	385	-	--	--	--	385
35	**Total standardised approach**	**139**	**14,803**	**59**	**--**	**--**	**-16**	**14,883**
36	**Total**	**353**	**64,480**	**127**	**--**	**--**	**-8**	**64,705**
37	*Of which: Loans*	*322*	*54,854*	*119*	--	--	*-8*	*55,058*
38	*Of which: Debt securities*	--	*5,342*	*2*	--	--	*-1*	*5,340*
39	*Of which: Off-balance-sheet exposures*	*29*	*2,519*	*6*	--	--	*1*	*2,542*

The risk profile of the loan portfolio continued to improve thanks to favourable macroeconomic conditions, in particular the strong housing market. Rising house prices resulted in a higher collateral value of mortgages, having a positive impact on the average Loan-to-Value (LtV).

In 2019, the gross carrying values of the retail mortgage portfolio (including off-balance exposures) increased by € 0.8 billion to € 49.9 billion. The growth was achieved in the first six months and mainly the result of IFRS value adjustments; a slight drop was seen in the second half of the year.

The exposure under the Standardised approach is characterised for a large part by secured loans with an low credit risk profile.

The total specific credit risk adjustments amounted to € 127 million as at 31 December 2019 (end of 2018: € 135 million).

Retail mortgage specific credit risk adjustments rose in connection with additional provisions for interest-only mortgages and adjustments to the provisioning model. Specific credit risk adjustments for Exposures in default under the standardised approach dropped by € 18 million, on the back of favourable macroeconomic conditions and continuous efforts to reduce the risk in the portfolio, especially of customers in default.

EU CR1-A – Credit quality of exposures by exposure class and instrument 2018

		a	b	c	d	e	f	g
		Gross carrying values of						
	in € millions	**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)**
6	Retail	231	48,823	58	--	--	-13	48,996
7	*Secured by real estate property*	*231*	*48,823*	*58*	--	--	*-13*	48,996
8	*SMEs*	-	-	-	--	--	--	-
9	*Non-SMEs*	*231*	*48,823*	*58*	--	--	*-13*	48,996
15	**Total AIRB approach**	**231**	**48,823**	**58**	**--**	**--**	**-13**	**48,996**
16	Central governments or central banks	-	4,300	1	--	--	1	4,299
17	Regional governments or local authorities	-	711	-	--	--	--	711
18	Public sector entities	-	424	1	--	--	1	423
19	Multilateral development banks	-	390	1	--	--	1	389
20	International organisations	-	27	-	--	--	--	27
21	Institutions	-	3,649	-	--	--	--	3,649
22	Corporates	-	2,633	6	--	--	4	2,627
23	*Of which: SMEs*	-	*49*	*3*	--	--	*1*	*46*
24	Retail	-	780	5	--	--	4	776
25	*Of which: SMEs*	-	*215*	*1*	--	--	*1*	*214*
26	Secured by mortgages on immovable property	-	429	5	--	--	5	424
27	*Of which: SMEs*	-	*429*	*5*	--	--	*5*	*424*
28	Exposures in default	117	-	59	--	--	-14	59
29	Items associated with particularly high risk	-	-	-	--	--	-1	-
30	Covered bonds	-	51	-	--	--	--	51
33	Equity exposures	-	7	-	--	--	-1	7
34	Other exposures	-	347	-	--	--	--	347
35	**Total standardised approach**	**117**	**13,749**	**77**	**--**	**--**	**-1**	**13,789**
36	**Total**	**348**	**62,572**	**135**	**--**	**--**	**-14**	**62,785**
37	*Of which: Loans*	*347*	*54,209*	*127*	--	--	*-21*	*54,428*
38	*Of which: Debt securities*	--	*4,778*	*3*	--	--	*3*	*4,775*
39	*Of which: Off-balance-sheet exposures*	*1*	*2,693*	*5*	--	--	*4*	*2,689*

EU CR1-B – Credit quality of exposures by industry or counterparty types 2019

		a	b	c	d	e	f	g
		Gross carrying values of					Credit risk adjustment charges of the period	Net values
	in € millions	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		(a+b-c-d)
1	Agriculture, forestry and fishing	0	6	0	--	--	0	6
3	Manufacturing	6	43	3	--	--	-1	47
4	Electricity, gas, steam and air conditioning supply	--	472	0	--	--	0	472
6	Construction	3	52	1	--	--	-0	54
7	Wholesale and retail trade	7	123	3	--	--	-2	127
8	Transport and storage	0	42	0	--	--	0	41
9	Accommodation and food service activities	1	5	0	--	--	0	5
10	Information and communication	0	6	0	--	--	0	6
11	Financial and insurance activities	57	7,660	11	--	--	-1	7,706
12	Real estate activities	29	484	13	--	--	-1	500
13	Professional, scientific and technical activities	5	63	3	--	--	-1	66
15	Public administration and defence, compulsory social security	--	4,449	1	--	--	-1	4,448
16	Education	0	5	0	--	--	0	5
17	Human health services and social work activities	5	230	0	--	--	-1	234
18	Arts, entertainment and recreation	1	35	0	--	--	0	35
19	Retail Non SME	214	49,676	67	--	--	8	49,822
20	Other services	25	1,128	23	--	--	-10	1,131
21	**Total**	**353**	**64,479**	**127**	**--**	**--**	**-8**	**64,705**

EU CR1-B – Credit quality of exposures by industry or counterparty types 2018

		a	b	c	d	e	f	g
		Gross carrying values of					Credit risk adjustment charges of the period	Net values
	in € millions	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		(a+b-c-d)
1	Agriculture, forestry and fishing	1	8	--	--	--	--	9
3	Manufacturing	8	44	4	--	--	4	48
4	Electricity, gas, steam and air conditioning supply	--	497	--	--	--	-2	497
6	Construction	2	47	1	--	--	1	48
7	Wholesale and retail trade	10	124	5	--	--	4	129
8	Transport and storage	--	93	--	--	--	--	93
9	Accommodation and food service activities	1	4	--	--	--	--	5
10	Information and communication	--	6	--	--	--	--	6
11	Financial and insurance activities	17	6,521	12	--	--	-30	6,526
12	Real estate activities	35	531	14	--	--	13	552
13	Professional, scientific and technical activities	7	57	4	--	--	4	60
15	Public administration and defence, compulsory social security	--	4,450	2	--	--	-22	4,448
16	Education	--	4	--	--	--	--	4
17	Human health services and social work activities	1	263	1	--	--	1	263
18	Arts, entertainment and recreation	1	22	--	--	--	--	23
19	Retail Non SME	231	48,824	59	--	--	-13	48,996
20	Other services	34	1,077	33	--	--	26	1,078
21	**Total**	**348**	**62,572**	**135**	**--**	**--**	**-14**	**62,785**

EU CR1-C – Credit quality of exposures by geography 2019

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
	in € millions	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	(a+b-c-d)
1	The Netherlands	350	56,900	122	--	--	-4	57,127
2	EMU	2	4,406	4	--	--	-3	4,407
3	Germany	1	1,930	1	--	--	-0	1,929
4	Belgium	2	847	2	--	--	-1	847
5	France	0	615	0	--	--	-1	615
6	Austria	--	314	0	--	--	0	314
7	Other countries	0	703	1	--	--	-1	702
8	Outside EMU	1	2,743	1	--	--	-1	2,741
9	Switzerland	0	1,781	0	--	--	0	1,781
10	Japan	--	407	--	--	--	-	407
11	United Kingdom	0	282	0	--	--	0	282
13	Other outside EMU	1	270	1	--	--	-1	270
14	Other geographical areas	--	430	--	--	--	-	430
15	**Total**	**353**	**64,479**	**127**	**--**	**--**	**-8**	**64,705**

De Volksbank is predominantly active in the Dutch market and especially the domestic mortgage market. The exposures outside the Netherlands are mostly caused by liquidity management activities (central government bonds, money market activities with financial institutions).

EU CR1-C – Credit quality of exposures by geography 2018

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
	in € millions	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	(a+b-c-d)
1	The Netherlands	342	55,330	126	--	--	-14	55,546
2	EMU	4	4,685	7	--	--	-	4,682
3	Germany	1	1,749	1	--	--	-	1,749
4	Belgium	3	1,109	3	--	--	-	1,109
5	France	--	643	1	--	--	-	642
6	Austria	--	459	--	--	--	-	459
7	Other countries	--	726	2	--	--	-	724
8	Outside EMU	2	2,557	2	--	--	-	2,557
9	Switzerland	--	1,899	--	--	--	-	1,899
10	Japan	--	--	--	--	--	-	--
11	United Kingdom	1	342	--	--	--	-	343
13	Other outside EMU	1	316	2	--	--	-	315
14	Other geographical areas	--	--	--	--	--	-	--
15	**Total**	**348**	**62,572**	**135**	**--**	**--**	**-14**	**62,785**

De Volksbank applies a specific definition of default to every portfolio for which loan loss provisions have to be determined. A customer goes into default once three monthly instalments have not been paid and the past-due amount exceeds a threshold value. A customer also goes into default if we consider it unlikely that the customer will be able to comply with their obligations in the future. These additional Unlikely-to-Pay (UtP) triggers are the following:

- suspension of payment
- bankruptcy
- fraud
- sale of the collateral by the Arrears Management department

- sale of the collateral with a residual debt

Customers only lose their default status once the arrears have been cleared in full or the UtP triggers have lapsed and a three-month probation period has expired.

The supervisory authority tightened the guidelines for determining the default status during the course of 2018. European banks have until 1 January 2021 to bring this definition in line with the guidelines. We are rewording a bank-wide default definition to ensure timely compliance with the guidelines.

Below, new templates are included as a result of new regulations referring to non-performing and forborne exposures. For templates 1 and 9 there are no comparative figures are available. Because of a threshold for the publication of the new templates, de Volksbank (NPL ratio 1.1%) discloses four new templates.

Template 3 - Credit quality of performing and non-performing exposures by past due days 2019

		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								
	in € millions	Performing exposures	Not past due or past due <= 30 days	Past due > 30 days <= 90 days	Non-performing exposures	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 years <= 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**	**54,500**	**54,463**	**37**	**677**	**565**	**38**	**46**	**15**	**10**	**1**	**2**	**321**
2	*Central banks*	2,220	2,220	--	--	--	--	--	--	--	--	--	--
3	*General governments*	287	287	--	--	--	--	--	--	--	--	--	--
4	*Credit institutions*	3,553	3,553	--	--	--	--	--	--	--	--	--	--
5	*Other financial corporations*	401	401	--	--	--	--	--	--	--	--	--	--
6	*Non-financial corporations*	1,549	1,549	--	93	82	3	5	2	2	--	--	90
7	*Of which SMEs*	617	617	--	72	60	3	5	2	2	--	--	69
8	*Households*	46,490	46,453	37	584	483	35	41	13	8	1	2	231
9	**Debt securities**	**5,342**	**5,342**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
10	*Central banks*	--	--	--	--	--	--	--	--	--	--	--	--
11	*General governments*	4,249	4,249	--	--	--	--	--	--	--	--	--	--
12	*Credit institutions*	784	784	--	--	--	--	--	--	--	--	--	--
13	*Other financial corporations*	163	163	--	--	--	--	--	--	--	--	--	--
14	*Non-financial corporations*	146	146	--	--	--	--	--	--	--	--	--	--
15	**Off-balance-sheet exposures**	**2,513**	**2,513**	**--**	**35**	**35**	**--**	**--**	**--**	**--**	**--**	**--**	**29**
16	*Central banks*	--	--	--	--	--	--	--	--	--	--	--	--
17	*General governments*	--	--	--	--	--	--	--	--	--	--	--	--
18	*Credit institutions*	--	--	--	--	--	--	--	--	--	--	--	--
19	*Other financial corporations*	6	6	--	--	--	--	--	--	--	--	--	--
20	*Non-financial corporations*	442	442	--	27	27	--	--	--	--	--	--	27
21	*Households*	2,065	2,065	--	8	8	--	--	--	--	--	--	2
22	**Total**	**62,355**	**62,318**	**37**	**712**	**600**	**38**	**46**	**15**	**10**	**1**	**2**	**350**

EU CR1-D – Ageing of past-due exposures 2018

		a	b	c	d	e	f
		Gross carrying values					
	in € millions[1]	No arrears	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
1	Loans	53,646	650	86	3	79	56	36
2	Debt securities	4,778	--	--	--	--	--	--
3	**Total exposures**	**58,424**	**650**	**86**	**3**	**79**	**56**	**36**

1 Due to differences in the definition of past due exposures, figures presented in the table deviate from the past due exposures as reported in the 2018 annual report. The deviation relates to thresholds in terms of exposures and past due days.

In line with the positive economic development in the Netherlands, which is the only significant geographical area for de Volksbank, the past due exposures with arrears has decreased further in 2019.

Template 4 - Performing and non-performing exposures and related provisions 2019

		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						Accumulated partial write-off	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				On performing exposures	On-non performing exposures
	in € millions		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**	**54,500**	**51,871**	**2,629**	**677**	**33**	**644**	**-36**	**-8**	**-28**	**-83**	**-1**	**-82**	**--**	**49,994**	**578**
2	*Central banks*	2,220	2,220	--	--	--	--	--	--	--	--	--	--	--	--	--
3	*General governments*	287	270	17	--	--	--	--	--	--	--	--	--	--	44	--
4	*Credit institutions*	3,553	3,553	--	--	--	--	--	--	--	--	--	--	--	2,621	--
5	*Other financial corporations*	401	325	76	--	--	--	--	--	--	--	--	--	--	1	--
6	*Non-financial corporations*	1,549	1,440	109	93	2	91	-7	-1	-6	-27	--	-27	--	1,011	51
7	*Of which SMEs*	617	556	61	72	3	69	-6	-1	-5	-25	--	-25	--	560	47
8	*Households*	46,490	44,063	2,427	584	31	553	-29	-7	-22	-56	-1	-55	--	46,317	527
9	**Debt securities**	**5,342**	**5,342**	**--**	**--**	**--**	**--**	**-2**	**-2**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
10	*Central banks*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	*General governments*	4,249	4,249	--	--	--	--	-2	-2	--	--	--	--	--	--	--
12	*Credit institutions*	784	784	--	--	--	--	--	--	--	--	--	--	--	--	--
13	*Other financial corporations*	163	163	--	--	--	--	--	--	--	--	--	--	--	--	--
14	*Non-financial corporations*	146	146	--	--	--	--	--	--	--	--	--	--	--	--	--
15	**Off-balance-sheet exposures**	**2,513**	**2,490**	**23**	**35**	**--**	**35**	**2**	**1**	**1**	**4**	**--**	**4**	**--**	**109**	**--**
16	*Central banks*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	*General governments*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	*Credit institutions*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	*Other financial corporations*	6	6	--	--	--	--	--	--	--	--	--	--	--	--	--
20	*Non-financial corporations*	442	439	3	27	--	27	--	--	--	2	--	2	--	4	--
21	*Households*	2,065	2,045	20	8	--	8	2	1	1	2	--	2	--	105	--
22	**Total**	**62,355**	**59,703**	**2,652**	**712**	**33**	**679**	**-36**	**-9**	**-27**	**-79**	**-1**	**-78**	**--**	**50,103**	**578**

EU CR1-E – Non-performing and forborne exposures 2018

		a	b	c	d	e	f	g	h	i	j	k	l	m
		Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
					Of which non-performing				On performing exposures		On non-performing exposures			
	in € millions	Gross carrying amount	Of which performing but past due > 30 days and <= 90 days	Of which performing forborne	Non-performing	Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne	On non-performing exposures	Of which forborne exposures
1	Loans	54,556	52	1,397	707	347	657	460	-25	-8	-102	-44	499	1,775
2	Debt securities	4,778	--	--	--	--	--	--	-3	--	--	--	--	--
3	Off-balance sheet exposures	2,694	--	6	7	1	--	--	2	--	--	--	--	--

The coverage ratio for non-performing loans and advances is 12.3% as per 31 December 2019 (2018: 14.4%). The coverage ratio for non-performing loans and advances is calculated by dividing the provisions and negative fair value adjustments due to credit risk for non-performing loans and advances by the total gross carrying value for non-performing loans and advances.

Template 1 - Credit quality of forborne exposures 2019

		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 forborne exposures	
			Non-performing forborne						
	in € millions	Performing forborne	Non-performing forborne	Of which defaulted	Of which impaired	On performing forborne exposures	On non-performing forborne exposures		Of which Collateral and financial guarantees received on non-performing exposures with forbearance measures
1	**Loans and advances**	**1,399**	**438**	**173**	**415**	**-9**	**-43**	**1,780**	**390**
2	*Central banks*	--	--	--	--	--	--	--	--
3	*General governments*	--	--	--	--	--	--	--	--
4	*Credit institutions*	--	--	--	--	--	--	--	--
5	*Other financial corporations*	--	--	--	--	--	--	--	--
6	*Non-financial corporations*	14	32	29	29	-1	-9	33	22
7	*Households*	1,385	406	144	386	-8	-34	1,747	368
8	**Debt securities**	--	--	--	--	--	--	--	--
9	**Loan commitments given**	**6**	**1**	**1**	**1**	--	**1**	--	--
10	**Total**	**1,405**	**439**	**174**	**416**	**-9**	**-42**	**1,780**	**390**

Template 9 - Collateral obtained by taking possession and execution processes 2019

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

SPECIFIC CREDIT RISK ADJUSTMENTS
The specific credit risk adjustments are almost entirely related to provisions for loans and advances.

Expected credit loss (ECL) provisions are recognised for credit exposures measured at amortised cost and loan commitments and financial guarantee contracts (off-balance sheet items). Under the ECL model, de Volksbank calculates the probability that a default occurs at different moments in time, this is multiplied by the difference between contractual cash flows due and the expected cash flows to be received (i.e. 'cash shortfall'). The provision is the sum of all cash shortfalls multiplied by the probability of default at the different moments in time. The ECL calculations contain information about the past, present and future. In order to calculate the ECL, the applicable PD, EAD and LGD are multiplied and discounted.

A three-stage model is used under IFRS 9. In stage 1, credit exposures are recognised that have shown no significant deterioration of credit risk since initial recognition and a 12-month expected loss is determined. Credit exposures that show a significant deterioration of credit risk relative to initial recognition but that are not credit impaired are recognised in stage 2. A lifetime expected loss is determined for credit exposures in stage 2. Credit exposures that are credit impaired are recognised in stage 3; a lifetime expected loss is determined for these credit exposures as well. De Volksbank applies a specific default definition for each portfolio for which loan loss provisions are determined under IFRS 9.

WRITE-OFF

When writing off a mortgage loan, a distinction is made between the write-off of a (part of the) mortgage loan and a possible write-off of a residual debt arising from the write-off of a mortgage loan. There are two triggers that can lead to a debit:

1. Waiver of amounts payable. Part of the mortgage loan is written off if the waiver of amounts payable leads to the client's recovery. The consequence of this is that the customer can meet his or her payment obligations again. Waivers of amounts payable are debited to the credit provision;
2. Write-off of residual debt collection. As a result of a recovery process, there may be a residual debt. This residual debt is fully provisioned. Collateral is realised during a period of 6 months after the execution process. After this period of 6 months, the debt still remaining is debited to the credit provision.

EU CR2-A – Changes in the stock of general and specific credit risk adjustments 2019

	in € millions	a Accumulated specific credit risk adjustment[1]	b Accumulated general credit risk adjustment
1	**Opening balance**	**135**	**--**
8a	Increases due to origination and acquisition	17	--
8b	Decreases due to derecognition	-15	--
8c	Changes due to change in credit risk (net)	6	--
8d	Changes due to modifications without derecognition (net)	--	--
8e	Changes due to update in the institution's methodology for estimation (net)	--	--
8f	Decrease in allowance account due to write-offs	-17	--
8	Other adjustments	1	--
9	**Closing balance**	**127**	**--**
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	--	--
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	--	--

1 Accumulated specific credit risk adjustment in the table relate to on-balance and off-balance sheet exposure.

EU CR2-A – Changes in the stock of general and specific credit risk adjustments 2018

	in € millions	a Accumulated specific credit risk adjustment[1]	b Accumulated general credit risk adjustment
1	**Opening balance**	**149**	**--**
8a	Increases due to origination and acquisition	7	
8b	Decreases due to derecognition	-15	
8c	Changes due to change in credit risk (net)	3	
8d	Changes due to modifications without derecognition (net)	--	
8e	Changes due to update in the institution's methodology for estimation (net)	--	
8f	Decrease in allowance account due to write-offs	-28	
8	Other adjustments	1	--
9	**Closing balance**	**135**	**--**
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	--	--
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	--	--

1 Accumulated specific credit risk adjustment in the table relate to on-balance and off-balance sheet exposure.

EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities 2019

	in € millions	a Gross carrying value defaulted exposures
1	**Opening balance**	**347**
2	Loans and debt securities that have defaulted or impaired since the last reporting period	194
3	Returned to non-defaulted status	-115
4	Amounts written off	-70
5	Other changes	-4
6	**Closing balance**	**350**

EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities 2018

	in € millions	a Gross carrying value defaulted exposures
1	**Opening balance**	**419**
2	Loans and debt securities that have defaulted or impaired since the last reporting period	144
3	Returned to non-defaulted status	-125
4	Amounts written off	-99
5	Other changes	8
6	**Closing balance**	**347**

5.3 General qualitative information regarding credit risk mitigation

COLLATERAL

Retail mortgages

For retail mortgages, we ensure that the inflow of loans meets adequate standards in respect of customer, income and collateral. We limit potential losses resulting from credit risk by setting conditions on collateral, such as the value of the collateral and possibly the issue of a National Mortgage Guarantee (NHG). Of the Internal Ratings-Based (IRB) exposure class Retail mortgages, € 12.9 billion (end of 2018: € 13.0 billion), i.e. 28%, of the exposure comes under the NHG guarantee scheme (see the table above).

Every month, collateral values are indexed based on house price developments. We do so using indices, by municipality and type of collateral, that we purchase from third parties. For our portfolio management, we adjust the collateral value both upwards and downwards. We adjust the LtV if the value of collateral has dropped, but we do not pass on the higher risk surcharge to the customer.

In the event of foreclosure, the bank instructs an appraiser of its choosing to (re)value the collateral.

Commercial portfolio

We verify the value of collateral in the commercial portfolio at least once a year on the basis of current market data. If the market conditions give cause to do so, we perform checks more frequently. The revaluation frequency for property depends on the amount of debt. If the debt (the exposure) exceeds € 1 million, the property must be revalued once every three years. No revaluation is required if the debt is lower.

A revaluation may also be initiated as part of the (arrears) management process. As soon as we commence the Arrears Management process for a credit facility that has been declared to be in default, we have a revaluation conducted as a standard procedure. A revaluation is also made if, upon a check, the information received indicates that the value of the property has dropped sharply in comparison to general market prices.

For every new mortgage or material change in a credit facility, a valuation report is required for all properties to which the loan pertains. For new developments, this is a valuation based on the specifications and underlying documents such as a building contract.

See also section 8.1 Qualitative disclosure requirements regarding counterparty credit risk for more information regarding on-balance sheet and off-balance sheet netting.

5.4 General quantitative information regarding credit risk mitigation

EU CR3 – CRM techniques – Overview 2019

	in € millions	a Exposures unsecured – Carrying amount	b Exposures to be secured	c Exposures secured by collateral	d Exposures secured by financial guarantees	e Exposures secured by credit derivatives
1	Total loans	6,613	48,563	46,757	1,806	--
2	Total debt securities	5,143	199	--	199	--
3	**Total**	**11,756**	**48,762**	**46,757**	**2,005**	**--**
4	Of which defaulted	138	213	213	--	--

EU CR3 – CRM techniques – Overview 2018

	in € millions	a Exposures unsecured – Carrying amount	b Exposures to be secured	c Exposures secured by collateral	d Exposures secured by financial guarantees	e Exposures secured by credit derivatives
1	Total loans	5,774	48,782	46,556	2,225	--
2	Total debt securities	4,289	489	--	489	--
3	**Total**	**10,063**	**49,270**	**46,556**	**2,714**	**--**
4	Of which defaulted	59	230	230	--	--

6 Credit risk and credit risk mitigation under the Standardized Approach

We distinguish the following exposure classes within the Standardised Approach (SA):

- **Central governments or central banks.** In addition to direct exposures to central governments and central banks, this also includes items covered by guarantees of these entities.
- **Regional governments or local authorities.** These are, for example, provinces, municipalities or water boards.
- **Public sector entities.** These include non-commercial administrative bodies, such as universities or university hospitals, that are accountable to central, regional or local governments.
- **Multilateral development banks.** Examples in this exposure class are the European Investment Bank and the Council of Europe.
- **International organisations.** Legal entities subject to international law, established by two or more member states and incorporated on the basis of a treaty or an agreement. An example is the European Stability Mechanism (ESM).
- **Institutions.** These are mainly credit institutions such as banks.
- **Corporates.** These include large SME's as well as large businesses. Large businesses are companies employing more than 250 people, with sales equal to or greater than € 50 million and a balance sheet total equal to or greater than € 43 million.
- **Retail.** In addition to natural persons, this category also contains small SMEs. These are companies employing fewer than 50 people, with sales or a balance sheet total of less than € 10 million and exposures of no more than € 1 million.
- **Secured by mortgages on immovable property.** This exposure includes exposures secured by mortgages on residential on commercial immovable property.
- **Exposures in Default.** All SA exposures that are either or both unlikely to pay or are more than 90 days in arrears on any material credit obligation are in default.
- **Items associated with particularly high risk.** This includes high risk mortgages and investments in venture capital funds.
- **Covered bonds.** These are bonds that offer additional security to the holders by means of a first right to specific assets upon bankruptcy.
- **Equity exposures.** This category includes exposures to equities of businesses.
- **Other items.** All other exposures that do not fall in any of the above categories are classified in this category.

De Volksbank does not have exposures in the exposure classes:

- Claims on institutions and corporates with a short-term credit assessment.
- Collective investments undertakings.

6.1 Qualitative information regarding the use of the Standardized Approach

Under the SA, credit risk is measured using prescribed risk weights that are applied to the exposure. The application of risk weights within the SA is subject to a set of fixed rules and is primarily determined by the risk classification of the underlying asset.

External ratings issued by recognised credit rating agencies serve as input to determine the risk classification and, as a result, the risk weight in the SA measurement of risk-weighted assets (RWA). De Volksbank uses the recognised external ratings issued by Standard & Poor's, Moody's and Fitch Ratings. The credit rating is related to the credit quality steps (from high to low: 1 through 6) defined in the rules. The CRR/CRD IV rules indicate for various exposure classes which risk weight corresponds with which credit quality step.

The table below indicates for each exposure class, if applicable, the rating agency whose ratings are applied.

Exposure classes	S&P	Moody's	Fitch	Regulatory Risk Weight
Central governments or central banks	x	x	x	
Regional governments or local authorities				x
Public sector entities				x
Multilateral development banks	x	x	x	
International organisations				x
Institutions	x	x	x	
Corporates				x
Retail				x
Secured by mortgages on immovable property				x
Exposures in Default				x
Covered Bonds	x	x	x	
Equity exposures				x
Other exposures				x

Following the guidelines (CRR), we use credit ratings to determine the risk weight for an exposure, which is a standard method used to link the rating to a credit quality step (in accordance with ITS 2016/1799). If a single credit rating is available, that credit rating is used to determine the risk weight; if two credit ratings are available and the associated risk weights differ, the highest risk weight is used; If three credit ratings are available the highest associated risk weight is removed, of the two remaining risk weights the highest is used.

If no issue rating is available, we first check whether a rating has been given for a similar issue of the same counterparty, which may be adopted. If no other issue rating is available, the issuer rating – the rating provided by the issuer – may be used. If neither an issue rating nor an issuer rating exists, the risk weight for unrated exposures is used.

6.2 Quantitative information regarding the use of the Standardized Approach

EU CR4 – Standardised approach – Credit risk exposure and CRM effects 2019

		a	b	c	d	e	f
	in € millions	**Exposures before CCF and CRM**		**Exposures post CCF and CRM**		**RWAs and RWA density**	
	Exposure classes	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWAs**	**RWA density**
1	Central governments and central banks	5,977	--	6,650	--	70	1.1%
2	Regional governments or local authorities	327	--	1,659	--	--	0.0%
3	Public sector entities	520	--	489	--	1	0.2%
4	Multilateral developments banks	383	--	383	--	--	0.0%
5	International organisations	47	--	47	--	--	0.0%
6	Institutions	3,867	--	1,110	--	223	20.1%
7	Corporates	1,563	442	799	220	887	87.0%
8	Retail	98	490	98	16	78	68.4%
9	Secured by mortgages on immovable property	581	--	580	--	362	62.4%
10	Exposures in default	64	28	64	14	97	124.4%
12	Covered bonds	102	--	102	--	10	9.8%
15	Equity exposures	9	--	9	--	9	100.0%
16	Other Items	385	--	385	--	276	71.7%
17	**Total**	**13,923**	**960**	**12,375**	**250**	**2,013**	**15.9%**

EU CR4 – Standardised approach – Credit risk exposure and CRM effects 2018

		a	b	c	d	e	f
	in € millions	**Exposures before CCF and CRM**		**Exposures post CCF and CRM**		**RWAs and RWA density**	
	Exposure classes	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWAs**	**RWA density**
1	Central governments and central banks	4,299	--	5,217	--	137	2.6%
2	Regional governments or local authorities	711	--	2,508	--	--	0.0%
3	Public sector entities	423	--	103	--	1	1.0%
4	Multilateral developments banks	389	--	389	--	--	0.0%
5	International organisations	27	--	27	--	--	0.0%
6	Institutions	3,649	--	1,052	--	211	20.1%
7	Corporates	2,209	418	843	207	937	89.2%
8	Retail	268	508	268	18	180	62.9%
9	Secured by mortgages on immovable property	424	--	424	--	197	46.5%
10	Exposures in default	58	1	58	--	62	106.9%
12	Covered bonds	51	--	51	--	5	9.8%
15	Equity exposures	7	--	7	--	7	100.0%
16	Other Items	347	--	347	--	261	75.2%
17	**Total**	**12,862**	**927**	**11,294**	**225**	**1,998**	**17.3%**

EU CR5 – Standardised approach 2019

	in € millions				Risk weight						
	Exposure classes	**0%**	**10%**	**20%**	**50%**	**75%**	**100%**	**150%**	**250%**	**Total**	**Of which unrated**
1	Central governments and central banks	6,623	--	--	--	--	--	--	28	6,650	--
2	Regional governments or local authorities	1,659	--	--	--	--	--	--	--	1,659	18
3	Public sector entities	482	--	7	--	--	--	--	--	489	7
4	Multilateral developments banks	383	--	--	--	--	--	--	--	383	--
5	International organisations	47	--	--	--	--	--	--	--	47	--
6	Institutions	--	--	1,107	3	--	--	--	--	1,110	--
7	Corporates	--	--	117	73	--	829	--	--	1,019	706
8	Retail	--	--	--	--	114	--	--	--	114	114
9	Secured by mortgages on immovable property	--	--	--	--	499	81	--	--	580	580
10	Exposures in default	--	--	--	--	--	40	38	--	78	78
12	Covered bonds	--	102	--	--	--	--	--	--	102	--
15	Equity exposures	--	--	--	--	--	9	--	--	9	9
16	Other Items	95	--	--	--	--	275	--	15	385	371
17	**Total**	**9,288**	**102**	**1,231**	**76**	**613**	**1,234**	**39**	**43**	**12,625**	**1,883**

EU CR5 – Standardised approach 2018

	in € millions				Risk weight						
	Exposure classes	**0%**	**10%**	**20%**	**50%**	**75%**	**100%**	**150%**	**250%**	**Total**	**Of which unrated**
1	Central governments and central banks	5,162	--	--	--	--	--	--	55	5,217	--
2	Regional governments or local authorities	2,508	--	--	--	--	--	--	--	2,508	20
3	Public sector entities	96	--	7	--	--	--	--	--	103	7
4	Multilateral developments banks	389	--	--	--	--	--	--	--	389	--
5	International organisations	27	--	--	--	--	--	--	--	27	--
6	Institutions	--	--	1,050	2	--	--	--	--	1,052	244
7	Corporates	--	--	118	32	--	900	--	--	1,050	751
8	Retail	--	--	--	--	286	--	--	--	286	286
9	Secured by mortgages on immovable property	--	--	--	284	122	18	--	--	424	424
10	Exposures in default	--	--	--	--	--	49	9	--	58	58
12	Covered bonds	--	51	--	--	--	--	--	--	51	--
15	Equity exposures	--	--	--	--	--	7	--	--	7	7
16	Other Items	73	--	--	--	--	259	--	15	347	332
17	**Total**	**8,255**	**51**	**1,175**	**318**	**408**	**1,233**	**9**	**70**	**11,519**	**2,129**

7 Credit risk and credit risk mitigation under the AIRB-Approach

De Volksbank uses the Advanced Internal Ratings-Based (AIRB) approach for the retail mortgages and securitization exposure classes. At the moment, de Volksbank has no intention of reporting other exposures classes under the AIRB approach.

RETAIL MORTGAGES
Exposures to individual retail mortgages – secured with collateral subject to a mortgage registration and possibly a National Mortgage Guarantee (NHG) – are classified as loans and advances to customers. At year-end 2019, the retail mortgages portfolio comprised 95% (2018: 93%) of de Volksbank's total loans and advances to customers.

SECURITISATION
The securitisation exposure class consists mainly of securitised mortgages of de Volksbank held for own account. These are securitised mortgages for which the securitisation entities issued bonds that have not been sold to investors or that have been repurchased.

Below, we will only discuss the retail mortgages. The securitisations are addressed in chapter 12 Securitisation of this Pillar 3 Report.

7.1 Qualitative information regarding the use of the AIRB-approach

The AIRB approach measures credit risk using by supervisory authority approved internal models for the calculation of Probability of Default (PD), (downturn) Loss Given Default (LGD), Exposure at Default (EAD) and Margin of Conservatism (MoC).

PROBABILITY OF DEFAULT
De Volksbank assesses debtors' credit quality by assigning them an internal risk rating. Based on historical data, a statistical rating model is developed. The rating reflects the probability of a customer running into payments problems within the next 12 months, which is defined as default.

The model leads to the classification of customers in 11 different PD exposure risk classes: non-default and default (class 11). As regards 'non-default', broadly speaking classes 5-8 correspond to customers 'recently recovered'[2] and classes 9-10 correspond to customers 'in arrears'. Class 6 refers to the part of the portfolio which is not graded directly by the rating model, but using a standard value comprising of the portfolio average. Class 6 represents 4.4% of the portfolio.

LOSS GIVEN DEFAULT
When a customer defaults, we are usually able to recover large parts of the amount outstanding on their loans. The actual loss is the remaining part of the outstanding amount of the loan increased by the recovery costs. Together with the economic costs associated with the (un)forced sale of the collateral, this is the total loss namely Loss Given Default. The LGD is measured as a percentage of the EAD. Using historical information, we can estimate the average loss incurred in the event of default.

In the rating model an individual LGD is calculated for each customer, with projections ranging from 0% to 100%.

DOWNTURN LGD
In addition to determining the LGD based on current information, we also determine a downturn LGD for calculating the RWA. The regulations specify that LGD estimates of internal models should be appropriate for an economic downturn, meaning that losses may be systematically higher under worse macroeconomic conditions than under 'normal' or average conditions. For the retail mortgages portfolio of the bank, downturn periods are determined as the lowest points in the Dutch house price cycle during the analysed historical period. Based on the determined downturn periods and expert input, a haircut is determined to correct the collateral values, which are used as input for the LGD model.

EXPOSURE AT DEFAULT
The EAD is an estimate of the outstanding amount of a customer at the moment he defaults. The EAD mainly consists of all mortgage related loans a customer has. For a small group of customers which have a mortgage related credit limit facility, the EAD also takes into account their limit under the assumption that the full limit is drawn at the moment of default.

MARGIN OF CONSERVATISM
Next to the PD, LGD and EAD models, a Margin of Conservatism (MoC) framework is required to take into account model risk. We have developed a MoC framework based on an extensive model risk scorecard, which includes model risks related to development data, model estimation and model performance. For each of the identified risks in the scorecard, rules are described which should be followed to assign a risk score. For the risks which are assigned a high risk score, relevant analyses are performed to obtain a model risk-specific MoC contribution. Finally, model risk-specific MoC contributions are aggregated to receive final MoC estimates for PD, LGD, downturn LGD and EAD.

INTERNAL RATING PROCEDURE
The internal rating procedure for retail mortgages is based on various data elements such as Loan-to-Value,

2 Relates to customers who were at least one month in arrears or in default at least once in the last 12 months but who have now recovered (i.e. who have paid the missed payments and now mortgage payments on time).

type of home and payment behaviour, ensuring that we measure the risk correctly. The ratings are automatically assigned in the rating procedure. We perform this rating procedure every month for the entire retail mortgages portfolio, including contractual obligations for future loans (signed offers). As regards the latter category, we have insufficient information on that specific reporting date to establish the regular PD, LGD and EAD; that is why we use average portfolio values, internally known as standard values.

CONTROL MECHANISM FOR THE INTERNAL RATING SYSTEM

Model documentation

An internal guideline of de Volksbank is that the documentation of AIRB models must be sufficiently detailed to allow an independent validation of the model based on the original data sources. It must include a description of the data used for model development, the methods used (and the rationale for choosing those methods), all assumptions used in the model and the known strengths and weaknesses of the model. Furthermore the documentation should include an assessment of compliance with relevant legislation and regulations.

Initial and periodic model validation

We internally subject all new or revised models to a thorough validation process before the external approval process commences. Model Validation (MV) examines the model's methodological development, the data used for model development, the model performance, the assumptions made during model development and whether the model can be applied (is fit for purpose) to the envisaged portfolio. The examination results in a validation report and accompanying advice.

MV also subjects the model to an annual review. Just like the model monitoring process (see below), this review is used to determine the extent to which the model is still performing in line with expectations, as well as whether the changes in model performance requires a model adjustment. We therefore regard the model review as an analysis of the model and its performance that is more in-depth than model monitoring.

Internal Model approval process

MV is an independent team that reports directly to the Model Governance Committee (MGC), which is chaired by the CRO. This prevents model owners and/or model co-owners from using their position in the hierarchy to influence the validation process or its results.

De Volksbank has adopted clear rules for the model approval process. The model owners submit the risk models to the MGC for approval, and the Credit Committee is also given the opportunity to examine the models' impact and decide on the timing of their implementation.

The MGC ensures that the model building and approval processes are followed and the various models are mutually consistent.

After MV has issued its advice and the MGC has given a positive decision, the model is assessed for materiality of model change. If the change is determined to be material, the model is submitted for supervisory (or external) approval. In the case of a material model change, the model can only be deployed after external approval.

Model monitoring

After the model has been approved and implemented, the second-line risk management department (CMO) performs a model monitoring process on a quarterly basis with the aim of assessing whether the model's predictive and explanatory power is still sufficient. The process includes an explicit review by the CMO of the model's projections as compared to actual performance. If CMO finds a significant difference between the projections and actual performance, we identify the cause and determine the need for a model adjustment. In this case, the model monitoring may lead to an early model review requested by MGC.

Audit

Audit has a standard invitation to MGC meetings and always receives the model validation reports, based on which it may commence an additional procedure.

Supervisory authority

Our AIRB models are also assessed by the supervisory authority: at the start of AIRB application, after a material change, and through Targeted Reviews Internal Model (TRIMs). We must act on the supervisory authority's findings, either immediately or in a subsequent model iteration. To address the findings of the supervisory authority as well as to implement the new regulations on PD and LGD estimation (issued by European Banking Authority), the AIRB model is redeveloped and submitted to the supervisory authority for their assessment.

In their assessment, the supervisory authority assesses the degree of compliance with laws and regulations, the modelling techniques used and the model's applicability to the portfolio concerned. Based on findings, if any, the supervisory authority may give instructions, demand adjustments or even impose sanctions.

In some instances, the supervisory authority may require that a Margin of Conservatism (MoC) be applied on account of flaws found in the model. This MoC is no longer required as soon as the bank demonstrates that it has resolved the finding and the supervisory authority accepts the solution.

OTHER USES

We use internal rating models to determine the LGD, the downturn LGD and the PD and calculate the RWA from these. Next to being used for regulatory capital calculations, the PD and LGD estimates play an essential role in the following processes:

- Collection processes, early and late collections;
- Input for determining Economic Capital;
- Pricing;
- Portfolio management.

To determine IFRS 9 provisions we developed a separate IFRS 9 ECL model, using methodology comparable to our AIRB models and compliant to IFRS 9 regulations.

7.2 Quantitative information regarding the use of the AIRB-approach

We use our internally developed AIRB model (PHIRM[3]) to calculate the likelihood of a customer running into payment problems within one year and the resulting losses expected for the bank. We use the results to determine the risk-weighted assets of the retail mortgages portfolio, but also serve as input for internal risk reports.

INDEXATION METHOD

Since 2016, de Volksbank has estimated the collateral value using indexation figures from an external party (Ortec Finance). Based on this detailed method, the collateral is indexed using monthly updated figures depending on the house type as well as the municipality.

3 Retail Mortgages Internal Rating Model (PHIRM).

EAD post CRM and post CCF

in € millions	2019	2018
Book value AIRB mortgages IFRS	48,090	47,262
Provisions	71	58
Gross amount AIRB mortgages IFRS	**48,161**	**47,320**
Differences in valuations[1]	-2,951	-2,334
Gross amount on-balance exposures	**45,210**	**44,986**
Off-balance sheet exposures post CCF	921	919
EAD post CRM and post CCF	**46,131**	**45,905**

1 Consisting mainly of savings deposits and fair value adjustments from hedge accounting and amortisations. Because of the high market value of hedge derivatives the correction for hedge accounting is also very large per 31 December 2019.

The following table presents the breakdown of the retail mortgages portfolio by PD scale.

EU CR6 – AIRB approach – Credit risk exposures by exposure class and PD range 2019[1]

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance sheet gross exposure	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 adjust-ments and pro-visions
EXPOSURE CLASS RETAIL MORTGAGES												
0.00 to <0.15	11,043	167	1.0	11,210	0.08%	106,860	8.79%	-	219	1.95%	0.8	
0.15 to <0.25	7,808	49	1.0	7,857	0.23%	46,397	10.19%	-	383	4.88%	1.9	
0.25 to <0.50	10,657	31	1.0	10,688	0.35%	52,766	12.66%	-	865	8.09%	4.7	
0.50 to <0.75	7,832	13	1.0	7,845	0.51%	31,609	17.43%	-	1,151	14.67%	7.0	
0.75 to <1.25	3,846	12	1.0	3,858	0.87%	17,483	19.17%	-	893	23.14%	6.4	
1.25 to <1.50	1,393	1,325	0.5	2,034	1.42%	14,189	16.95%	-	577	28.38%	4.9	
1.50 to <3.50	787	2	1.0	789	1.94%	3,575	21.96%	-	352	44.66%	3.4	
3.50 to <10.0	1,098	1	1.0	1,099	5.68%	5,460	16.64%	-	661	60.14%	10.3	
10.0 to <25.0	177	4	1.0	181	15.19%	833	17.36%	-	175	96.76%	4.8	
25.0 to <100	357	0	1.0	357	36.63%	1,765	15.03%	-	310	87.02%	20.1	
100.00 (Default)	213	1	0.2	213	100.00%	928	16.16%	-	345	162.01%	34.4	
Total (all portfolios)	**45,210**	**1,604**	**0.6**	**46,131**	**1.34%**	**281,865**	**13.15%**	**-**	**5,932**	**12.86%**	**98.7**	**-67**

1 Including the Margin of Conservatism and Trim obligations.

EU CR6 – AIRB approach – Credit risk exposures by exposure class and PD range 2018

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance sheet gross exposure	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 adjust-ments and pro-visions
EXPOSURE CLASS RETAIL MORTGAGES												
0.00 to <0.15	10,818	192	1.0	11,010	0.08%	106,978	8.79%	-	200	1.81%	0.7	
0.15 to <0.25	6,958	46	1.0	7,004	0.21%	41,514	9.66%	-	302	4.31%	1.4	
0.25 to <0.50	18,512	39	1.0	18,551	0.39%	87,535	13.64%	-	1,753	9.45%	10.0	
0.50 to <0.75	3,412	10	1.0	3,421	0.72%	15,590	18.13%	-	663	19.37%	4.5	
0.75 to <1.25	844	1	1.0	846	1.05%	3,991	18.88%	-	220	25.99%	1.7	
1.25 to <1.50	1,534	1,495	0.4	2,162	1.30%	15,645	15.41%	-	525	24.26%	4.3	
1.50 to <3.50	1,581	3	1.0	1,584	2.43%	7,580	19.01%	-	673	42.49%	7.0	
3.50 to <10.0	565	--	1.0	565	7.02%	2,738	14.80%	-	345	61.09%	5.9	
10.0 to <25.0	373	--	1.0	373	18.94%	1,917	15.49%	-	334	89.54%	10.9	
25.0 to <100	159	--	1.0	159	44.68%	679	16.57%	-	150	94.13%	11.8	
100.00 (Default)	230	1	-	230	100.00%	1,087	18.01%	-	324	140.95%	41.4	
Total (all portfolios)	**44,986**	**1,787**	**0.5**	**45,905**	**1.32%**	**285,254**	**12.63%**	**-**	**5,487**	**11.95%**	**99.6**	**-59**

As a result of the additional TRIM obligations (see Section 4.3 Capital requirements), RWA increased with € 792 million. As part of the obligations the average PD's and LGD's increased. For reporting and backtesting disclosures in this report (CR6 and CR9) we combined our fourteen internal rating classes to a PD scale with eleven exposure classes. The TRIM implementation is also a large reason of the changes in the number of obligors per class in 2019 compared to 2018.

The RWA density of retail mortgages increased from 12.0% at year-end 2018 to 12.9%.

De Volksbank avails itself of an Advanced Internal Ratings Based (Advanced IRB or AIRB) model, called PHIRM, to determine the credit risk in its retail mortgage portfolio. Please refer to Section 4.3.5 Retail mortgages in the annual report.

In December 2014, de Volksbank was given permission to use its AIRB model 2.0 to calculate the capital requirement of its retail mortgages portfolio. To comply to the new regulations on Definition of Default a new iteration of the AIRB model will be submitted to the supervisor for approval in 2020 was finalized and submitted to supervisor for approval. After supervisory approval this model version will be deployed in the end of 2019. This iteration was driven by new regulations regarding AIRB models. In this new iteration several supervisory obligations and recommendations as well as most internal model validation findings were will be addressed. Deployment of this new model iteration may result in different risk weight for the retail mortgages portfolio, conditional to the approval of the supervisor.

EXPECTED CREDIT LOSS ADJUSTMENT FOR THE AIRB APPROACH

We adjust the available capital for the difference between the loss expected under the CRR/CRD IV guidelines and the actual IFRS 9 provision for the related AIRB exposures. A negative difference arises when the loss expected according to the CRR/CRD IV guidelines exceeds the IFRS 9 provision, creating an AIRB shortfall. Based on the CRR/CRD IV rules, we deduct the shortfall from the Common Equity Tier 1 capital available. If the difference is positive (the provision is higher than the expected loss), we add this surplus to Tier 2 capital, taking into account certain regulatory restrictions.

Year-end 2019, a negative difference (shortfall) of € 31 million (2018: € 41 million) applies to de Volksbank. This difference follows from the fact that the AIRB model gives an estimate based on the expected 'through the cycle' loss for a period of one year and the IFRS 9 provisions are based on life time prediction of expected loss.

Because de Volksbank does not use credit derivatives as a form of security or as an instrument to hedge credit risk, template EU CR7 – AIRB approach – Effect on the RWAs of credit derivatives used as CRM techniques is not included in this report.

EU CR8 – RWA flow statements of credit risk exposures under the AIRB approach 2019

	in € millions	a RWA amounts	b Capital requirements
1	**RWAs as at the end of the previous reporting period**	**5,487**	**439**
3	Asset quality	-347	-28
4	Model updates	792	--
5	Methodology and policy	--	--
8	Other	--	63
9	**RWAs as at the end of the reporting period**	**5,932**	**474**

In 2019, RWA increased by € 339 million to € 9.7 billion. This increase was mainly caused by a € 445 million increase related to the credit risk of the retail mortgage portfolio, calculated according to the Internal Ratings Based (IRB) approach.

Additional obligations imposed by TRIM resulted in an RWA increase of € 792 million as reflected on line-item Model updates. Because of the impact of the TRIM, the average risk weighting (RWA density) of retail mortgages rose to 12.9%, from 12.0% at year-end 2018. In contrast, the portfolio's credit quality improved further, particularly as a result of improved economic conditions (for example lower unemployment and interest) and rising house prices.

EU CR8 – RWA flow statements of credit risk exposures under the AIRB approach 2018

	in € millions	a RWA amounts	b Capital requirements
1	**RWAs as at the end of the previous reporting period**	**6,071**	**486**
3	Asset quality	-584	-47
4	Model updates	--	--
5	Methodology and policy	--	--
8	Other	--	--
9	**RWAs as at the end of the reporting period**	**5,487**	**439**

As part of the quarterly monitoring process, we also carry out a back test to determine the extent to which the model's projections match actual performance within the portfolio. A major point of focus is that estimates in the model are based not only on recent developments but especially also on longer periods of observation. The PD model's back test shows that the model issues a stable projection for the various years that is in line with the model's purpose: to provide a 'Through the Cycle' probability of default.

The following table shows the predicted PD of 2019 which concerns the actuals of year-end 2019 and predicts the development in the portfolio during 2019. It is in line with our expectation that the observed default rate in 2019 is below the level of the 'Through the Cycle' model prediction at year-end 2019.

EU CR9 – AIRB approach – Backtesting of PD per exposure class 2019

a	b	c	d	e	f		g	h	i
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 defaulted obligors	Average historical annual default rate[1]
					End of previous year	End of the year			
Retail mortgages	0.00 to <0.15		0.074	0.074	106,978	106,860	72	--	0.07
	0.15 to <0.25		0.205	0.205	41,514	46,397	51	--	0.13
	0.25 to <0.50		0.369	0.369	87,535	52,766	193	--	0.23
	0.50 to <0.75		0.698	0.698	15,590	31,609	91	--	0.57
	0.75 to <1.25		1.017	1.017	3,991	17,483	32	--	0.75
	1.50 to <3.50		2.391	2.391	7,580	3,575	103	--	1.48
	3.50 to <10.0		6.767	6.767	2,738	5,460	80	--	3.39
	10.0 to <25.0		17.871	17.871	1,917	833	239	--	10.91
	25.0 to <100		43.082	43.082	679	1,765	212	4	32.03
	100.00 (Default)				1,087	928			

1 5 year average historical default rate.

EU CR9 – AIRB approach – Backtesting of PD per exposure class 2018[1]

a	b	c	d	e	f		g	h	i
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 defaulted obligors	Average historical annual default rate
					End of previous year	End of the year			
Retail mortgages	0.00 to <0.15		0.074	0.074	105,717	106,978	52	--	0.08
	0.15 to <0.25		0.205	0.205	36,763	41,514	38	--	0.17
	0.25 to <0.50		0.369	0.369	84,035	87,535	156	1	0.28
	0.50 to <0.75		0.698	0.698	18,046	15,590	101	--	0.62
	0.75 to <1.25		1.017	1.017	4,683	3,991	40	--	0.87
	1.50 to <3.50		2.391	2.391	8,826	7,580	124	--	1.81
	3.50 to <10.0		6.767	6.767	3,109	2,738	123	--	4.33
	10.0 to <25.0		17.871	17.871	2,433	1,917	243	--	12.34
	25.0 to <100		43.082	43.082	797	679	256	5	34.72
	100.00 (Default)				1,313	1,087			

1 To reflect the new PD ranges and a 5 year average historical annual default rate figures 2018 are adjusted for comparative purposes.

Since back testing is only performed on mortgages granted, there is a difference with the 'Qualitative disclosure requirements related to AIRB models' table at the beginning of the section. The mortgages that are part of the former DBV portfolio are not included in the back-testing results. The portfolio credit quality improved. This improvement was reflected in Loss Given Defaults (LGDs). At per year-end 2019, the realised LGDs and default rates, on average, are lower than the long term average of the LGDs and default rates. In the backtest of the PD's in our AIRB-model the Margin of Conservatism and the TRIM obligations are excluded.

The following table shows the improvement of predicted and observed default rate.

Results back test AIRB model retail mortgages

Period	Predicted PD[1]	Observed default rate[2]
2006	1.35%	1.18%
2007	1.31%	1.06%
2008	1.25%	1.20%
2009	1.20%	1.22%
2010	1.20%	1.35%
2011	1.25%	1.44%
2012	1.33%	1.59%
2013	1.27%	1.45%
2014	1.23%	0.97%
2015	1.04%	0.62%
2016	0.82%	0.49%
2017	0.70%	0.43%
2018	0.61%	0.40%

1 Calculated probability of default for the next 12 months; Customer weighted and Through the Cycle.

2 The observed percentage of the number of customers who went into default in the year after reporting.

8 Counterparty credit risk (CCR)

8.1 Qualitative disclosure requirements regarding counterparty credit risk

METHODOLOGY

Pillar 1 method for counterparty credit risk

We use the market value of the derivatives and an 'add-on' to establish the EAD of the counterparty credit risk on derivative positions. The 'add-on' is a charge to factor in potential future counterparty credit risks. We determine this add-on charge on the basis of the type of contract, the remaining maturity and the underlying value or principal of the contract.

NETTING AND COLLATERAL

Netting

The bank offsets financial assets and liabilities and reports the net amount on the balance sheet if there is a legally enforceable right to offset the recognised amounts, and there is an intention to settle the items on a net basis, or to settle the asset and the liability simultaneously. There is an enforceable right to offset provided it is not dependent on a future event and is legally enforceable under normal circumstances as well as bankruptcy. If these conditions are not met, amounts will not be offset.

Mitigation of counterparty credit risk exposure

De Volksbank enters into money and capital market transactions with various financial institutions and some corporates. This mainly comprises derivative transactions for the hedging of interest rate and currency risks. The bank assesses the quality of its counterparties on an annual basis. Internal limits are set based on the rating of the counterparty and an maximum exposure as a percentage of the eligible capital of the bank (once obligor limits are set).

To mitigate the counterparty risk, de Volksbank concluded International Swaps and Derivatives Association (ISDA) Master Agreements with these institutions entailing, among other things, that if the counterparty remains in default, all derivative transactions may be terminated and netted within the netting set defined in the ISDA, with only a net claim or commitment in respect of the counterparty remaining.

In this respect, we determine the collateral required on a regular, frequent basis (generally daily), i.e. the net market value of the outstanding derivative transactions, which we subsequently receive (or must pay) pursuant to the Credit Support Annex (CSA) following a notification (margin call) to or from the counterparty.

Both counterparty risk mitigating measures have the effect of reducing the EAD calculation according to the CRR/CRD IV rules.

In addition to CSAs, de Volksbank uses central clearing of OTC[4] derivative transactions to shift counterparty risk to the central counterparty (CCP) in order to mitigate this risk.

A CCP is a legal entity that positions itself between the counterparties to an OTC contract, thus becoming the buyer for the OTC seller and the seller for the OTC buyer[5]. Given the daily settlement by the CCP of the counterparties' market value commitments, as well as the initial and variation margin requirements, to be paid to the CCP by the counterparties, this central clearing has the effect of reducing the EAD calculation. The exposures are recognised under the categories Institutions and Corporates and have a RWA risk weight depending on how the CCP has separated the collateral from the exposures and collateral of other CCP clients and clearing members.

Other risk-mitigating measures taken by de Volksbank include the following:

- Daily checks to determine how the fair value development of derivative positions with collateral arrangements is proportionate to the collateral received or to be provided;
- Settlement of forward exchange transactions via the Continuous Linked Settlement system, a global system that limits settlement risk by means of the 'payment versus payment' method and payment netting;
- Continuous monitoring to assess whether the assets available still meet the requirements to serve as collateral;
- Assessment of the fair value of the collateral received to ensure that it provides adequate cover for the underlying derivative.

De Volksbank does not use counterparty credit derivatives as a form of security or as an instrument to hedge credit risk.

4 OTC: Over The Counter, i.e. a bilateral agreement/trade between two counterparties not effected via a formal stock exchange (such as NYSE or Euronext).

5 See also EU Regulation No 648/2012 of the European Parliament and of the Council of 4 July 2012 (Article 2(1)).

8.2 Information regarding supervisory measures

EU CCR1 – Analysis of CCR exposure by approach 2019

	in € millions	a Notional	b Replacement cost/ current market value	c Potential future credit exposure	f EAD post CRM	g RWAs
1	Mark to market		130	136	266	111
2	Original exposure	--	--	--	--	--
3	Standardised approach		--		--	--
4	IMM (for derivatives and SFTs)				--	--
8	Financial collateral simple method (for SFTs)				--	--
9	Financial collateral comprehensive method (for SFTs)					
10	VaR for SFTs				--	--
11	**Total**					**111**

EU CCR1 – Analysis of CCR exposure by approach 2018

	in € millions	a Notional	b Replacement cost/ current market value	c Potential future credit exposure	f EAD post CRM	g RWAs
1	Mark to market		160	142	302	144
2	Original exposure	--	--	--	--	--
3	Standardised approach		--		--	--
4	IMM (for derivatives and SFTs)				--	--
8	Financial collateral simple method (for SFTs)				--	--
9	Financial collateral comprehensive method (for SFTs)				10	2
10	VaR for SFTs				--	--
11	**Total**					**146**

The Credit Valuation Adjustment (CVA) is defined as the risk to losses as a result of a deterioration in credit worthiness of a derivative counterparty.

The market value of derivatives with counterparties is determined based on the underlying value-determining factors, such as interest rates for interest rate swaps. If the credit quality of a counterparty of an interest rate swap deteriorates, a higher interest rate (or credit spread) must be used in the valuation, due to which the valuation changes.

CRR/CRD IV requires that an RWA be determined for CVA, as a result of a deterioration in the credit quality of the derivative counterparties.

De Volksbank applies the standardised method for determining RWA for CVA in accordance with CRR, article 384.

EU CCR2 – CVA capital charge 2019

	in € millions	a Exposure value	b RWAs
1	Total portfolios subject to the advanced method	--	--
4	All portfolios subject to the standardised method	259	104
EU4	Based on the original exposure method	--	--
5	**Total subject to the CVA capital charge**	**259**	**104**

EU CCR2 – CVA capital charge 2018

	in € millions	a Exposure value	b RWAs
1	Total portfolios subject to the advanced method	--	--
4	All portfolios subject to the standardised method	299	147
EU4	Based on the original exposure method	--	--
5	**Total subject to the CVA capital charge**	**299**	**147**

EU CCR8 – Exposures to CCPs 2019

	in € millions	a EAD post CRM	b RWAs
1	**Exposures to QCCPs (total)**		4
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	663	4
3	(i) OTC derivatives	149	4
7	Segregated initial margin	513	
8	Non-segregated initial margin	--	--
11	**Exposures to non-QCCPs (total)**		--

EU CCR8 – Exposures to CCPs 2018

	in € millions	a EAD post CRM	b RWAs
1	**Exposures to QCCPs (total)**		13
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	753	13
3	(i) OTC derivatives	492	13
7	Segregated initial margin	261	
8	Non-segregated initial margin	--	--
11	**Exposures to non-QCCPs (total)**		--

8.3 Information regarding the statutory riskweight approach

EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk 2019

	in € millions				Risk weight							Of which
	Exposure classes	0%	2%	4%	10%	20%	50%	70%	100%	150%	Total	unrated
6	Institutions	--	106	44	--	86	172	--	--	--	408	--
7	Corporates	--	--	--	--	--	--	--	8	--	8	8
11	**Total**	**--**	**106**	**44**	**--**	**86**	**172**	**--**	**8**	**--**	**416**	**8**

EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk 2018

	in € millions				Risk weight							Of which
	Exposure classes	0%	2%	4%	10%	20%	50%	70%	100%	150%	Total	unrated
6	Institutions	--	353	139	--	40	268	--	--	--	800	30
7	Corporates	--	--	--	--	--	--	--	4	--	4	4
11	**Total**	**--**	**353**	**139**	**--**	**40**	**268**	**--**	**4**	**--**	**804**	**34**

8.4 Other information regarding CCR

Off-balance sheet items and derivatives are divided into two types of exposure in accordance with the calculation of credit risk RWA in CRD IV:
- Off-balance sheet items: the main categories of off-balance sheet items are guarantees, credit commitments, and the undrawn portion of contractually committed credit facilities.
- Derivatives: financial instruments that derive their value from underlying interest rates, currencies, equities, credit spreads or commodity prices. Derivatives do not only result in counterparty credit risk measured within the credit risk RWA but also affect the market risk.

For the different off-balance sheet types of exposure, different values are possible for the calculation base. For guarantees, the nominal value is adjusted using a Credit Conversion Factor (CCF) for calculating the EAD. The CCF is 50% or 100%, depending on the risk assessment. Credit commitments and unutilised limits are part of the external commitment that has not been utilised. This amount forms the calculation base for which a CCF is used for calculating the EAD. The CCF is multiplied by the calculation base and is 0, 20, 50, 75 or 100% depending on approach, product type and whether the unutilised amounts are unconditionally cancellable or not.

For derivatives the calculation base is a combination of the market value and the notional amount.

EU CCR5-A – Impact of netting and collateral held on exposure values 2019

	in € millions	a Gross positive fair value or net carrying amount	b Netting benefits	c Netted current credit exposure	d Collateral held	e Net credit exposure
1	Derivatives	718	472	246	125	121
2	SFTs	--	--	--	--	--
4	**Total**	**718**	**472**	**246**	**125**	**121**

EU CCR5-A – Impact of netting and collateral held on exposure values 2018

	in € millions	a Gross positive fair value or net carrying amount	b Netting benefits	c Netted current credit exposure	d Collateral held	e Net credit exposure
1	Derivatives	732	452	280	133	147
2	SFTs	--	--	--	--	--
4	**Total**	**732**	**452**	**280**	**133**	**147**

EU CCR5-B – Composition of collateral for exposures to CCR 2019

	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
in € millions	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Derivatives	--	154	1,228	63	--	--
Repurchase agreements	--	--	--	--	--	--
Total	**--**	**154**	**1,228**	**63**	**--**	**--**

Per year end 2019, de Volksbank did not enter into repurchase agreements.

EU CCR5-B – Composition of collateral for exposures to CCR 2018

	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
in € millions	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Derivatives	--	169	781	76	--	--
Repurchase agreements	--	--	--	--	--	484
Total	**--**	**169**	**781**	**76**	**--**	**484**

8.5 Wrong-way risk

Wrong-way risk pertains to the unfavourable relation between the creditworthiness of the counterparty and the exposure to the counterparty if the creditworthiness deteriorates and the exposure increases simultaneously. We distinguish between general wrong-way risk and specific wrong-way risk.

General wrong-way risk pertains to situations in which general market conditions or macroeconomic factors are the cause. Examples of this are decreasing interest rates and companies in distress, deteriorating economic conditions. If companies in distress had concluded interest rate swaps with a bank (had hedged the interest rate risk by paying a fixed interest rate and receiving a floating interest rate), the market value (i.e. the exposure) of the swap would rise for the bank in case of falling interest rates. After all, the bank received the fixed interest rate and paid an increasingly lower floating interest rate.

Specific wrong-way risk pertains to the situation in which the unfavourable relation is more direct and is actually inherent in (the execution of) the transaction itself. An example of this type of risk is a put option with a bank's stock being the underlying asset, in which the counterparty to the transaction is a subsidiary of the same bank.

De Volksbank primarily closes 'plain-vanilla' interest rate and currency derivative transactions, which are mostly settled centrally at a CCP or fall under ISDA/CSA conditions with daily collateral settlement. We thus minimise counterparty credit risk exposure and therefore also any possible wrong-way risk exposure.

9 Shares outside the trading portfolio

In the exposure class Equity, de Volksbank's equity holdings outside the trading book are included. Book value equals fair value for all the equities shown in the table. Published price quotations in an active market are the best evidence of fair value and, when they exist, they are used to measure financial assets and financial liabilities. We predominantly use published quotations to establish the fair value of shares.

Exposure of equity outside trading book 2019

in € millions	Book value	Fair value	Fair value of listed shares	Quoted share value	Unrealised gains/loss	Realised gains/ losses period YTD	Capital requirement
Associates	--	--	--	--	--	--	--
Joint ventures	--	--	--	--	--	--	--
Equities	7	7	--	--	1	--	--
Total	**7**	**7**	**--**	**--**	**1**	**--**	**--**

Exposure of equity outside trading book 2018

in € millions	Book value	Fair value	Fair value of listed shares	Quoted share value	Unrealised gains/loss	Realised gains/ losses period YTD	Capital requirement
Associates	--	--	--	--	--	--	--
Joint ventures	--	--	--	--	--	--	--
Equities	6	6	--	--	-10	--	--
Total	**6**	**6**	**--**	**--**	**-10**	**--**	**--**

10 Liquidity risk

As explained in Section 4.6.2 Management and control of the risk disclosures of the annual report, the Liquidity Coverage Ratio (LCR) is one of the instruments that we use to manage liquidity risk. The regular liquidity management process is extensively discussed in the risk disclosures of the annual report. A summary is given below, which serves as background to the LCR.

10.1 Liquidity management

Liquidity risk is the risk that de Volksbank has insufficient liquid assets available in the short or long term to meet its financial obligations without incurring unacceptable costs or losses. This applies both under normal circumstances and in times of stress. Liquidity risk also includes the situation in which the balance sheet structure could develop in such a way that the bank suffers excessive exposure to a disruption of its sources of funding.

Liquidity management supports the bank's strategy within our risk appetite.

RISK PROFILE

De Volksbank has a strong liquidity position, enabling it to meet its financial obligations at all times. The bank manages its liquidity position in such a way that it can absorb the consequences of bank-specific and market-wide stress factors, such as tensions in the money and/or capital markets.

When financing its liquidity needs, the bank aims for diversification of its funding sources in accordance with its strategy.

RISK GOVERNANCE

De Volksbank's risk governance is based on the three lines of defence model (see Section 3.2 Risk management approach of the institution).

In terms of liquidity risk management, de Volksbank Financial Markets (VFM) and Balance Sheet Management (BSM) departments make up the first line. Their main liquidity management responsibilities are to manage our liquidity profile with maximum efficiency within the risk appetite determined, and to raise funding in the money and capital markets.

The Credit Market & Operational Risk department constitutes the second line. It sets frameworks and monitors whether these are complied with, provides advice and determines the liquidity adequacy.

The third line (the audit function) independently assesses the first and second lines' performance.

The Board of Directors bears ultimate responsibility for risk management. In this process, it is supported by risk committees with representatives from the first and second lines in each risk committee. Each risk committee is chaired by a member of the Board of Directors. The third line is not a permanent representative in the risk committees, but it may attend meetings at all times. Within de Volksbank, liquidity risk management is supervised by the Asset & Liability Committee (ALCO).

The Supervisory Board is responsible for supervising the Board of Directors and is advised by the Audit Committee, the Risk Committee and the People & Organisation Committee.

MANAGEMENT AND CONTROL LIQUIDITY RISK

Liquidity risk management consists of seven elements. Combined, these elements form an integrated internal process that we use to continuously evaluate and manage our liquidity position, namely the:

1. Identification of liquidity risks. Every year, we determine the risk appetite for liquidity risk in conjunction with the bank's general risk appetite and strategic objectives.
2. Determination of the level above which we feel comfortable. We determine this on the basis of the risk appetite for liquidity risk, using specific risk indicators. We also establish an intervention ladder with specific ranges per risk indicator in case follow-up is required.
3. Annual recalibration of the liquidity strategy. We lay down guidelines for a balance sheet structure with maximum efficiency. In this process, we take account of the liquidity management objective: an adequate liquidity and funding profile.
4. Definition of actions in the capital and liquidity plan. We do this at least once per year, giving substance to the anticipated funding and liquidity needs ensuing from the operational plan. This plan has a multi-year horizon. To this end, we make forecasts of relevant risk indicators compared with the internal standards and work out various scenarios.
   We control the desired liquidity position based on business plans, risk limits and the requirements imposed by supervisory authorities, rating agencies and investors. We monitor the funding and liquidity need and the adjust the planning if necessary.
5. Drawing up of the recovery plan for adverse circumstances. This plan contains possible measures to strengthen the liquidity position. By updating the recovery plan annually, we contribute to the bank's continuity (also see Section 4.8.2 Management and control of the annual report).
6. Identification, measurement and management of the bank's liquidity position, i.e. liquidity management, is an ongoing operational process performed in line with its risk appetite, risk limits, policy and guidelines.
7. The determination of the adequacy of the liquidity position on a monthly basis (in the Liquidity Adequacy Assessment Report), on a quarterly basis (in the Financial Risk Report) and on an annual basis (in the Internal Liquidity Adequacy Assessment Process Report). We compare the current risk profile with the risk limits. We use our findings to make adjustments to the actual liquidity position, risk appetite, policy or guidelines

and to improve the risk management process. The continuous (internal) assessment of the adequacy of our liquidity position and liquidity risk management is part of the Internal Liquidity Adequacy Assessment Process (ILAAP), which constitutes input for the Supervisory Review & Evaluation Process (SREP) of the European Central Bank (ECB).

MANAGEMENT INSTRUMENTS

Cash position

Under normal circumstances, the cash position is the source of liquidity that we use to meet regular obligations. The cash position as defined by de Volksbank comprises:

- Central Bank reserves;
- account balances with correspondent banks;
- contractual cashflows of counterparties in money and capital markets taking place within ten days.

Liquidity buffer

De Volksbank maintains a liquidity buffer, including the cash position, to absorb unexpected increases in its liquidity need. In addition to the cash position, the liquidity buffer comprises (highly) liquid investments that are eligible as ECB collateral and can be sold in (highly) liquid markets or used in repo transactions. As a ten-day horizon is also used for the cash position, it is now also determined for the (highly) liquid assets which unencumbered ECB-eligible bonds can be registered in the DNB collateral pool in ten days.

The liquidity buffer mainly consists of government bonds and bonds of de Volksbank's own securitisations, known as Residential Mortgage Backed Securities (RMBS), with underlying mortgages of the bank. We determine the liquidity value of bonds in the liquidity buffer on the basis of the fair value of the bonds after application of the percentage haircuts determined by the ECB.

Liquidity stress testing

We test the robustness of the liquidity position by means of stress tests. We have defined various scenarios, of which the so-called combined severe stress test has the highest impact. In this scenario we take the following into account:

- a strong outflow of savings and current account balances;
- a lack of funding options in money and capital markets;
- a decline in the fair value of bonds in the liquidity buffer;
- additional collateral requirements in the event of a 3-notch downgrade in the bank's credit rating;
- a decline in the fair value of derivatives;
- a possible liquidity outflow in the event that committed credit lines are drawn.

The bank's liquidity management is aimed at surviving this severe stress scenario for a certain period of time. The impact of the stress scenario on the liquidity buffer therefore serves as input to determine and monitor the bank's risk capacity and risk appetite.

We perform the combined severe stress test every month and review the stress testing principles every year.

In 2019, the bank maintained a strong liquidity position that amply met both its internal targets and regulatory requirements.

The table below shows the composition of the liquidity buffer, with liquid assets included at market value after applying the percentage haircut determined by the ECB.

Liquidity buffer composition

in € millions	**2019**	**2018**
Cash position[1]	3,836	2,447
- of which central bank reserves & nostro accounts	*2,302*	*993*
- of which contractual wholesale cashflows maturing within ten days or less	*1,534*	*1,455*
Sovereigns	2,805	2,393
Regional/local governments and supranationals	1,091	975
Other liquid assets	263	437
Eligible retained RMBS	8,902	8,900
Liquidity buffer	**16,897**	**15,152**

1 The cash position comprises central bank reserves, current account balances held at correspondent banks and contractual cashflows of counterparties on money and capital markets maturing within ten days or less. As a result, the cash position differs from the cash and cash equivalents balance in the balance sheet.

The liquidity buffer remained high and rose to € 16.9 billion (year-end 2018: € 15.2 billion).

In 2019, the cash position increased by € 1.4 billion to € 3.8 billion. The funding need mainly resulted from a € 0.4 billion increase in collateral placed in respect of derivative transactions in the form of cash and the repayment of € 0.3 billion in wholesale funding. The funding need was more than met by a € 1.4 billion growth in deposits and the issue of € 1.3 billion in covered and unsecured bonds, increasing the cash position.

The liquidity value of other liquid assets in the liquidity buffer amounted to € 13.1 billion as at the end of 2019 (year-end 2018: € 12.7 billion):

- The value of unencumbered sovereign debts in the liquidity buffer rose by € 0.4 billion, predominantly because they were not used as collateral for (repo) transactions at the end of 2019, partly offset by a greater use as collateral related to derivative positions;
- The liquidity value of eligible retained RMBS remained virtually stable at € 8.9 billion.

As at year-end 2019, € 0.8 billion in assets with more than a 10-day horizon had been invested for cash management purposes (year-end 2018: € 0.4 billion). These loans are available as short- term liquid assets.

10.2 LCR

In 2019, the Liquidity Coverage Ratio (LCR) remained well above the regulatory minimum of 100%. In addition to holding Central Bank reserves and (highly) liquid investments, de Volksbank lends part of the available liquidity to several counterparties with short tenors. This translates into a relatively high average inflow within 30 days.

LCR disclosure template

	Consolidated	**Total unweighted value (average)**				**Total weighted value (average)**			
in € millions									
Quarter ending on (DD Month YYY)		31-3-2019	30-6-2019	30-9-2019	31-12-2019	31-3-2019	30-6-2019	30-9-2019	31-12-2019
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID ASSETS									
1	Total high-quality liquid assets (HQLA)					5,166	5,209	4,844	5,094
CASH – OUTFLOWS									
2	Retail deposits and deposits from small business customers, of which:	39,985	40,307	40,824	41,699	2,216	2,235	2,272	2,333
3	*Stable deposits*	36,603	36,863	37,204	37,749	1,830	1,843	1,860	1,887
4	*Less stable deposits*	3,382	3,444	3,621	3,950	386	392	412	445
5	Unsecured wholesale funding	4,275	4,260	4,125	3,610	1,875	1,875	1,819	1,632
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	-	-	-	-	-	-	-	-
7	Non-operational deposits (all counterparties)	4,174	4,186	4,058	3,532	1,774	1,802	1,752	1,554
8	Unsecured debt	101	73	67	78	101	73	67	78
9	Secured wholesale funding					1	1	1	1
10	Additional requirements	1,619	1,671	1,636	1,635	499	540	617	730
11	Outflows related to derivative exposures and other collateral requirements	416	451	532	647	416	451	532	647
12	Outflows related to loss of funding on debt products	6	8	8	8	6	8	8	8
13	Credit and liquidity facilities	1,196	1,212	1,097	980	76	81	77	74
14	Other contractual funding obligations	484	481	516	540	484	481	516	540
15	Other contingent funding obligations	92	127	248	354	92	104	165	215
16	**TOTAL CASH OUTFLOWS**					5,167	5,236	5,391	5,451
CASH – INFLOWS									
17	Secured lending (e.g. reverse repos)	-	-	-	2	-	-	-	0
18	Inflows from fully performing exposures	1,574	1,536	1,846	1,844	1,386	1,373	1,721	1,738
19	Other cash inflows	320	324	333	386	320	324	333	386
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)								
EU-19b	(Excess inflows from a related specialised credit institution)								
20	**TOTAL CASH INFLOWS**	1,894	1,859	2,179	2,232	1,706	1,697	2,053	2,123
EU-20a	Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b	Inflows subject to 90% cap	-	-	-	-	-	-	-	-
EU-20c	Inflows subject to 75% cap	1,894	1,859	2,179	2,232	1,706	1,697	2,053	2,123
						TOTAL ADJUSTED VALUE			
21	LIQUIDITY BUFFER					5,166	5,209	4,844	5,094
22	TOTAL NET CASH OUTFLOWS					3,461	3,539	3,337	3,327
23	LIQUIDITY COVERAGE RATIO (%)					151%	148%	148%	155%

In line with the EBA guidelines on LCR disclosure, information is provided below on:
- Concentration of funding and liquidity sources;
- Derivative exposures and potential collateral calls;
- Currency mismatch in the LCR;
- A description of the degree of centralisation of liquidity management.

CONCENTRATION OF FUNDING AND LIQUIDITY SOURCES

Funding strategy and liquidity sources

The funding strategy supports the bank's strategy. In this regard, we aim to optimise and ensure access to diversified funding sources in order to maintain the bank's long-term funding position and liquidity profile.

The bank uses retail savings as its primary funding source, which translates into a large share of stable deposits from retail and SME customers in the table above.

The bank also attracts funding from the capital market, aiming for diversification of funding sources. To this end, we use various funding instruments spread over terms, markets, regions and types of investors.

The liquidity buffer mainly consists of government bonds and bonds of de Volksbank's own securitisations, known as Residential Mortgage Backed Securities (RMBS), with underlying mortgages of the bank. De Volksbank maintains a liquidity buffer, including the cash position, to absorb unexpected increases in its liquidity need. In addition to the cash position, the liquidity buffer comprises (highly) liquid investments that are eligible as ECB collateral and can be sold in (highly) liquid markets or used in repo transactions.

Derivative exposures and potential collateral calls

De Volksbank enters into money and capital market transactions with various financial institutions. This also includes derivative transactions for the hedging of interest rate and currency risks. The LCR factors in additional collateral requirements in the event of a 3-notch downgrade in the bank's credit rating and a decline in the fair value of derivatives based on the historical look-back approach.

Currency mismatch in the LCR

The exchange rate risk is minimised by transferring that risk from the banking book to the trading portfolio on a daily basis, where this risk is also controlled on a daily basis. As a result, there is no currency mismatch in the LCR.

Degree of centralisation of liquidity management

De Volksbank supports the brands by means of centrally managed mid and back offices and staff departments and has a central liquidity management function.

Management statement

For the management statement on the adequacy of risk management see Section 2.8.

10.3 Encumbered and unencumbered assets

The extent of asset encumbrance provides insight into the collateral used and available for funding to be raised or for other reasons.

There is no difference between the regulatory consolidation scope used for the purpose of the disclosures on all asset encumbrance information and the accounting scope of consolidation. For more information reference is made to Section 2.3 Consolidation scope and 2.4 Scope of application.

Encumbered and unencumbered assets 2019

		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
	in € millions[1]	010	030	040	050	060	080	090	100
010	**Assets of the reporting institution**	**11,499**	**1,422**			**52,803**	**3,465**		
030	Equity instruments	--	--			7	--		
040	Debt securities	1,422	1,422	1,443	1,443	3,512	3,465	3,564	3,521
050	of which: covered bonds	--	--	--	--	80	80	80	80
060	of which: asset-backed securities	9	9	10	10	83	83	83	83
070	of which: issued by general governments	1,322	1,322	1,339	1,339	2,620	2,515	2,661	2,557
080	of which: issued by financial corporations	144	144	145	145	735	735	738	738
090	of which: issued by non-financial corporations	21	21	24	24	215	215	223	223
120	Other assets	9,965	--			48,924	--		
121	of which: mortgage loans	7,742	--			39,748	--		

1 The figures are based on the median value of the four quarters in the financial year. This is in contrast to the figures in the text which are year-end figures.

Encumbered and unencumbered assets 2018

		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
	in € millions[1]	010	030	040	050	060	080	090	100
010	**Assets of the reporting institution**	**9,973**	**2,529**			**51,604**	**4,740**		
030	Equity instruments	--	--			6	--		
040	Debt securities	2,145	2,125	2,178	2,156	3,202	2,403	3,252	2,428
050	of which: covered bonds	--	--	--	--	61	61	60	60
060	of which: asset-backed securities	22	22	22	22	59	59	59	59
070	of which: issued by general governments	1,928	1,928	1,965	1,965	2,331	1,536	2,370	1,569
080	of which: issued by financial corporations	149	149	138	138	737	737	739	739
090	of which: issued by non-financial corporations	20	0	24	-0	220	157	228	165
120	Other assets	8,310	403			48,196	2,337		
121	of which: mortgage loans	6,939	--			40,046	--		

1 The figures are based on the median value of the four quarters in the financial year. This is in contrast to the figures in the text which are year-end figures.

TOTAL ENCUMBERED ASSETS

Based on the median over the four quarters, € 11.5 billion of the assets were encumbered during 2019. This amount of encumbered assets was mainly higher than the amount at year-end 2019 because repurchase contracts were outstanding throughout the year, as opposed to year-end 2019.

At year-end 2019, € 10.3 billion (2018 € 9.7 billion) of the assets is encumbered on account of:

- outstanding covered bonds;
- collateral deposited related to outstanding derivative positions;
- an offset mortgage arrangement with VIVAT;
- a loan provided to VIVAT to finance (sub-)participations in the securitisation entities;
- outstanding securitisations;
- foreign exchange transactions;
- payment transactions.

The increase in 2019 is primarily the result of the issuance of covered bonds and a higher volume of collateral deposited in relation to derivative positions.

The total encumbered assets mainly consist of pledged mortgages related to covered bonds. The total amount of liabilities related to these encumbered assets is € 8.4 billion (2018: € 8.4 billion). They mainly consist of bonds issued within the covered bond programme. Covered bonds involve overcollateralisation, which means that the volume of encumbered mortgages exceeds the notional principal of the covered bond.

UNENCUMBERED ASSETS

The unencumbered part of the assets amounts to € 52.5 billion and may partly be converted into cash, for example by securitisations. Securitised mortgages of which the bank itself holds the bonds are not considered to be encumbered, except if these bonds are used as collateral for instance in a repurchase transaction.

POTENTIAL COLLATERAL DEPOSIT

In the event of a 3-notch downgrade of the bank's credit rating, we would have to deposit additional collateral totalling € 229 million with counterparties. We include this potential collateral deposit as outflow in the LCR and the combined severe liquidity stress test.

COLLATERAL RECEIVED

The bank received a total amount of € 156 million in collateral at year-end 2019 (2018: € 174 million). This collateral consists almost entirely of cash deposits that serve as collateral for the positive fair value of outstanding derivative positions.

Collateral received 2019

		Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
	in € millions[1]	010	030	040	060
130	**Collateral received by the reporting institution**				
140	Loans on demand	--	--	--	--
150	Equity instruments	--	--	--	--
160	Debt securities	--	--	--	--
200	of which: issued by financial corporations	--	--	--	--
220	Loans and advances other than loans on demand	--	--	--	--
230	Other collateral received	--	--	--	--
240	**Own debt securities issued other than own covered bonds or asset-backed securities**	--	--	50	--
241	**Own covered bonds and asset-backed securities issued and not yet pledged**			11,071	--
250	**Total assets, collateral received and own debt securities issued**	11,499	1,422		

1 The figures are based on the median value of the four quarters in the financial year. This is in contrast to the figures in the text which are year-end figures.

Collateral received 2018

		Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
	in € millions[1]	010	030	040	060
130	**Collateral received by the reporting institution**				
140	Loans on demand	--	--	--	--
150	Equity instruments	--	--	--	--
160	Debt securities	--	--	--	--
200	of which: issued by financial corporations	--	--	--	--
220	Loans and advances other than loans on demand	--	--	--	--
230	Other collateral received	--	--	--	--
240	**Own debt securities issued other than own covered bonds or asset-backed securities**	--	--	40	--
241	**Own covered bonds and asset-backed securities issued and not yet pledged**			10,388	--
250	**Total assets, collateral received and own debt securities issued**	9,973	2,529		

1 The figures are based on the median value of the four quarters in the financial year. This is in contrast to the figures in the text which are year-end figures.

Sources of encumbrance 2019

	in € millions[1]	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		010	030
010	**Carrying amount of selected financial liabilities**	**10,142**	**10,522**
011	of which: Derivatives	1,821	1,851
012	of which Deposits	3,479	2,996
013	of which: Debt securities issued	4,536	5,364

1 The figures are based on the median value of the four quarters in the financial year. This is in contrast to the figures in the text which are year-end figures.

Sources of encumbrance 2018

	in € millions[1]	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		010	030
010	**Carrying amount of selected financial liabilities**	**9,186**	**8,948**
011	of which: Derivatives	1,066	944
012	of which Deposits	4,414	3,679
013	of which: Debt securities issued	3,824	4,421

1 The figures are based on the median value of the four quarters in the financial year. This is in contrast to the figures in the text which are year-end figures.

11 Market risk

11.1 Capital requirements for market risk using the Standardized Approach

We use the standardised approach in CRD IV to calculate capital requirements for the trading book. At year-end 2019, there was a small capital requirement for the market risk of debt securities (EAD: € 10 million; RWA: € 5 million). The model covers interest rate risk and equity risk and is based on fixed risk weights.

MARKET RISK PROFILE IN THE TRADING BOOK

The trading book may contain exposure to interest rate risk, credit spread risk and currency risk. Credit spread risk is only permitted by means of trade in bonds. The bank does not trade in credit default swaps. Exposure to equities or equity risk instruments also falls outside the scope of our policy.

The market risk in the trading portfolio is measured on a daily basis using Value at Risk (VaR), Expected Shortfall (ES) and stress testing indicators. These are used for internal monitoring and for specifying limits. VaR, ES as well as the stress tests look ahead to the next day (one-day horizon), applying a confidence interval for VaR of 99% and for ES of 97.5%. Throughout the year, the total VaR limit for the trading book remained stable at € 2 million. This reflects the relatively low risk profile of these activities in terms of size.

The VaR methodology is based on Monte Carlo simulations, with underlying probability distributions being based on historical data. The VaR models take account of interest rate, credit spread and currency risk in the Monte Carlo simulations. Stress testing is based on 239 stress scenarios. The risk appetite for currency risk is also low. In addition to the Monte Carlo simulation, currency risk is managed by daily monitoring, which checks that currency positions remain within their limits.

11.2 Interest rate risk not included in the trading portfolio

MANAGEMENT AND CONTROL

Interest rate risk in the banking book

Interest rate risk management aims to protect and generate stable net interest income. We achieve this goal by optimising the value of our interest cashflows. In the assessment and management of interest rate risks we take the following into account:

- anticipated prepayments on mortgage loans;
- anticipated early adjustments of mortgage rates;
- behavioural aspects of demand deposits;
- customer options in the products;
- influences of the current and anticipated interest rate environment;
- influences of interest rate developments that deviate from our expectations.

The main factor by which we manage the banking book's interest rate risk is the interest income sensitivity to market rate movements. The short-term impact of market rate movements is measured using the Earnings-at-Risk (EaR) methodology, and to measure the long-term impact, we use the Economic Value of Equity (EVE) methodology.

Short-term interest rate risk: EaR

In determining the EaR, the change in income due to deviations from the expected interest rate development is measured over a horizon of one year. Deviating interest rate scenarios are calibrated using statistical analysis, taking into account a floor for the market interest rate. This means that it is assumed that market interest rates cannot fall below a certain level. For this floor, we assume a proportional movement of -1% for the overnight interest, up to 0% for interest rates of 20 years and longer.

Long-term interest rate risk: EVE

When applying the EVE methodology, we determine the economic value of all future incoming and outgoing cashflows based on current market rates. Duration of equity and key rate durations are the key control measures of EVE sensitivity. Duration of equity measures the decrease in the EVE in the event of a parallel interest rate increase of 1 basis point (0.01%). The key rate durations represent EVE sensitivity to an interest rate shift at specific points on the yield curve, enabling us to identify sensitivity to non-parallel shifts in the market yield curve.

Interest rate risk

Specification interest rate risk

	2019	2018
Duration of equity	0.3	1.4
Earnings-at-Risk (in € millions)	61	83
Credit spread risk liquidity portfolio (in € millions) HTC	72	57
Credit spread risk liquidity portfolio (in € millions) HTCS	103	86

Duration of equity

At year-end 2019, the duration of equity stood at 0.3 (2018: 1.4). The relatively low duration of equity arose from an interest rate forecast that was adjusted downwards to a significant degree, combined with changes to our customer behaviour models over the course of 2019. Given our expectation that interest rates will continue to be low for a longer period of time, a slightly higher duration of equity is desirable. We have opted for a gradual implementation through regular balance sheet development, rather than actively managing it.

Earnings-at-risk

At year-end 2019, the EaR amounted to € 61 million before tax (2018: € 83 million). Downward adjustments to the interest rate forecast and our corresponding interest rate risk position are the main reason for the decrease compared with year-end 2018.

Credit spread risk

At year-end 2019, the credit spread risk for Hold to Collect and Sell (HTCS) and Hold to Collect (HTC) liquidity portfolios, amounted to € 103 million and € 72 million respectively (2018: € 86 million and € 57 million). For the HTCS portfolio, the increase in credit risk spread was largely due to the changed composition and increased size of this portfolio. For the HTC portfolio, the increase is mainly explained by realised value increases compared to last year.

Market risk exposure trading and non-trading risk

The overview below shows the balance sheet broken down by the risks associated with the banking book and the trading portfolio.

Market Risk exposure trading and non-trading risk

in € millions	Carrying amount	Market risk measure		Carrying amount	Market risk measure		Primary risk sensitivity
		Non-trading	Trading		Non-trading	Trading	
	2019	2019	2019	2018	2018	2018	
ASSETS SUBJECT TO MARKET RISK							
Investments held for trading	15	--	15	3	--	3	interest rate, exchange rate, credit spread
Investments Fair Value OCI	2,027	2,027	--	1,911	1,911	--	interest rate, credit spread
Investments Amortised costs	3,308	3,308	--	2,868	2,868	--	interest rate, credit spread
Derivatives	718	495	223	732	553	179	interest rate, exchange rate
Loans and advances to customers	50,461	50,461	--	50,536	50,536	--	interest rate
Loans and advances to banks	3,791	3,791	--	3,589	3,589	--	interest rate
Cash and cash equivalents	2,026	2,026	--	815	815	--	interest rate
Other	495	495	--	494	494	--	
Total assets	**62,841**	**62,603**	**238**	**60,948**	**60,766**	**182**	
LIABILITIES SUBJECT TO MARKET RISK							
Subordinated debts	502	502	--	502	502	--	interest rate
Debt certificates	6,906	6,906	--	5,822	5,822	--	interest rate, exchange rate
Derivatives	1,841	1,614	227	1,120	923	197	interest rate, exchange rate
Savings	38,404	38,404	--	37,376	37,376	--	interest rate
Other amounts due to customers	10,641	10,641	--	10,841	10,841	--	interest rate
Amounts due to banks	541	541	--	1,116	1,116	--	interest rate
Other	4,006	4,006	--	4,171	4,171	--	
Total liabilities	**62,841**	**62,614**	**227**	**60,948**	**60,751**	**197**	

Sensitivity analyses illustrate the market interest rate risk. The table shows the impact of an immediate parallel shift of the market yield curve of +100 or -100 basis points (bps). We do this for three components: market value of equity, net interest income and IFRS equity. The impact on the interest result is shown on a one-year horizon. The reported outcomes are before taxation.

Sensitivity interest rates

	2019		2018	
in € millions	**Interest rate +1%**	**Interest rate -1%**	**Interest rate +1%**	**Interest rate -1%**
Market value equity[1]	289	1,227	190	488
Net interest income[2]	46	-63	53	-62
IFRS equity[3]	-68	49	-56	58

1 The market value of equity reflects the changes in all assets and liabilities values in the banking book, including embedded options for the capped rate and interest rate dampener, at a market rate shock of 1%.

2 Net interest income shows the sensitivity of the net interest income to interest rate fluctuations for the first 12 months.

3 IFRS equity expresses the sensitivity resulting from the fair value through OCI investment portfolio to a parallel 100 basis point interest rate increase or decrease.

Market value of equity

A parallel interest rate hike has a positive impact of € 293 million on the market value of equity. We derive the market value of equity from the market value of the assets and liabilities. Where possible, we base this on available market prices. When these are not available, we determine the expected market value on the basis of the net present value of the cash flows. On top of the interest rates, we also take into account any product-specific characteristics. We do this for the cash flows as well as for the discount rate. The change in the market value of equity is reflected by the difference in value that arises when 1% higher and lower interest rates are factored in.

The assets mainly consist of mortgages, the interest rate sensitivity of which is to a great extent hedged by means of derivatives, especially by means of interest rate swaps. Nevertheless, an interest rate hike will trigger a drop in value of assets including the corresponding derivatives that is less significant than the drop in the value of liabilities. The scenario of an interest rate decrease does, however, have a positive effect of € 1.225 million on the market value of equity. This is partly explained by the application of the floor to the interest rate, which considerably limits the drop in the value of the derivatives. In addition, we assume that customer rates will drop, but will not turn negative. Because savings interest rates in the market are close to zero, the fair value of demand deposits increases to a lesser extent than the assets, with a positive impact on the market value of equity as a result.

The deviation in the -100 basis points scenario compared with 2018 is largely explained by the aforementioned adjustment to the interest rate floor. This effect is mainly reflected in the derivatives that we use to mitigate the interest rate risk of longer term mortgage positions. Because these positions generate a substantial amount of outgoing cash flows beyond the five-year term, the assumed interest rate floor for these positions is higher than in 2018. Together with the further decline in interest rates in 2019, the part of the 100 basis points downward shock that actually takes place has decreased sharply. As a consequence, the resulting decline in value of these securities is also considerably smaller in this scenario.

A parallel interest rate shift of +100 basis points yielded a positive impact on net interest income of € 46 million at year-end 2019, predominantly triggered by the rate hike boosting income from derivatives. In addition, the pass-through of the market rate hike had a positive effect on income from floating-rate mortgages and the interest income from our liquidity position increased. A parallel interest rate shift -100 bps had a negative impact of € 63 million, primarily driven by the lower interest received from derivatives. Furthermore, the assumption that the above interest rate decrease will be passed through to a lesser extent to the savings rates than to the floating-rate mortgage loans and the liquidity position also played a role.

A parallel interest rate shift of +100 basis points will have a negative impact on the IFRS equity of € 68 million, whereas a parallel interest rate shift of -100 basis points will have a positive impact on the IFRS equity of € 49 million. The interest rate sensitivity of IFRS equity is reflected in the fair value reserve. This is a consequence of changes in the fair value of the HTCS liquidity portfolio, including related interest rate derivatives.

Market risk profile in the trading book

De Volksbank has a limited trading book. Market risk is managed on a daily basis using portfolio limits for a 1-day Value at Risk (VaR) with 99% confidence, as well as portfolio limits for a fixed set of stress scenarios. Throughout the year, the total VaR limit for the trading book remained stable at € 2 million. This limit thereby reflects the relatively low risk profile of these activities in terms of size.

12 Securitisation

12.1 Objectives

By the end of 2019, de Volksbank securitised residential mortgages in the amount of € 11.7 billion. We only securitise residential mortgages that we originated. In securitisation transactions, the beneficial and legal title of the residential mortgages is transferred to separate entities, which are referred to as Special Purpose Vehicles (SPVs).

There are three reasons for securitising residential mortgages:

- Funding: securitisation is a funding instrument that broadens and diversifies our funding base;
- Lower capital charges: securitisation of residential mortgages enables us to reduce the risk-weighted assets;
- Liquidity: by securitising residential mortgages we create new assets that may be used as collateral.

De Volksbank does not have any re-securitisation activities, nor does it perform securitisation programmes for third parties. We securitise residential mortgages under four different programmes: Hermes, Pearl, Holland Homes and Lowland.
Introduced in 1999, Hermes is the programme for de Volksbank's residential mortgages. At the moment the Hermes programme does not have any securitisation outstanding. The securitisation through the Pearl programme only pertains to residential mortgages based on a guarantee under the NHG, the National Mortgage Guarantee system.
The Holland Homes programme originates from the acquisition of DBV and now falls under de Volksbank. Since 2012 we have a fourth securitisation programme, which is Lowland. The securitisation programmes Hermes and Holland Homes are used for funding and to manage risk weighted assets. The purpose of the Pearl programme is funding. The Lowland transactions are set up for liquidity purposes.

No synthetic securitisations – transactions in which it is not the assets that are transferred but merely the associated credit risks – were outstanding for de Volksbank in 2019.

The table below presents the volume of de Volksbank's securitisation programmes and the treatment applied in calculating capital requirements.

Securitisation programmes de Volksbank

in € millions	2019	Capital treatment	2018	Capital treatment
Pearl 1	78	look-through	687	look-through
Holland Homes 1	--	securitisation	51	securitisation
Lowland 4	4,083	look-through	4,067	look-through
Lowland 5	5,012	look-through	5,007	look-through
Lowland 6	2,494	look-through	2,492	look-through
Total	**11,667**		**12,304**	

In 2019 we terminated one transaction: Holland Homes 1. In 2019 de Volksbank has not set up any new securitisation transactions.

For the purpose of calculating capital requirements, a 'look-through' approach is applied if the credit risk of the securitised exposures (i.e. residential mortgages) has not (largely) been transferred. This means that the risk weighted exposure amount for the securitised exposures is calculated as if the securitised exposures had not been securitised. In case of significant risk transfer, securitisation positions kept on own book are risk weighted.

12.2 Risks

In the context of the securitisation programmes de Volksbank recognises several types of risk, including credit risk, interest rate risk and liquidity risk.

The credit risk from the securitisation programmes pertains to the possible credit losses on the underlying residential mortgages. In the Pearl 1 and Lowland transactions, de Volksbank retains the credit risk of the underlying mortgages in full or in part. In these cases, the underlying mortgages are weighted based on the internal risk model (AIRB).

In addition, de Volksbank has credit risk because the balance sheet includes securitisation notes of third-party transactions.

There is also counterparty risk in respect of counterparties with which risks are hedged in swap transactions. See the explanation of the interest rate risk below, which includes a description of the background of the swap transactions. The credit and counterparty risks are managed in the regular control processes for mortgages, counterparty risk and balance sheet management.

De Volksbank holds the interest rate risk of the residential mortgages in the Pearl programme securitised by it on the balance sheet. The SPVs hedged the interest rate risk of the securitisation programme with interest rate swaps, which have been concluded with third parties. We concluded back-to-back swaps with these third parties. The interest rate risk of the other back-to-back swaps is included in the regular process of managing the balance sheet. The Lowland transactions are an exception. These transactions do not include any interest rate swaps, but we still bear the interest rate risk because these notes are on our balance sheet.

The liquidity risk of de Volksbank's own securitisation positions pertains to the possible cash outflows. This has to do with its role of liquidity provider and the possible deposit of cash collateral in swap transactions. The impact on the liquidity position is included in the regular process of liquidity management. (See the risk management section of the annual report for an explanation of the regular processes for credit, interest rate and liquidity risks: Sections 4.3, 4.4 and 4.6, respectively).

The risks of positions in securitisations of third parties mainly pertain to credit risk of default on the underlying mortgages. We are limiting this risk by purchasing tranches of the highest seniority, the so-called A notes, and we are also monitoring the investor reports of these transactions.

12.3 Roles

De Volksbank plays various roles in its own securitisation programmes. As 'originator' we granted the underlying residential mortgages. In addition, we are active as 'arranger': we structure the transaction and conduct negotiations with the rating agencies. We coordinate the documentation on the transaction together with our legal advisor. As 'manager' we are co-responsible for placing securities with institutional investors, for which purpose we work together with other financial institutions.

De Volksbank can also (indirectly) act as swap counterparty for the interest rate risk management of the SPV. The SPV concluded an interest rate swap with a third party that, in turn, concludes a fully offsetting transaction for the swap with us. Consequently, we do not play a role as swap counterparty in the swap transactions of the SPV itself. The Lowland securitisation programme does not comprise swaps.

As 'servicer' we are responsible for the daily operational management of the underlying residential mortgages. We set up a foundation that is in charge of collecting the principal and interest payments: 'Stichting Hypotheken Incasso'. The foundation is responsible for the collection of the various mortgage payments and transfers these amounts to the relevant SPVs.

Our support of the securitisation programmes does not extend beyond our contractual obligations, nor do we act as a programme sponsor.

Following table shows the roles that de Volksbank plays in the different securitisation programmes.

Roles in securitisation programmes

Programme name	Originator	Arranger	Manager	Servicer	Swap CP (indirect)
Hermes	x	x	x	x	x
Pearl	x	x	x	x	x
Lowland	x	x	x	x	

12.4 Policy & processes

Risk management is applied on the residential mortgages in the securitisation programmes. The interest rate and liquidity risks of these mortgages fall under the regular process for balance sheet management. See also Section 5.2 General quantitative information regarding credit risk of this report, where we explain the interest rate risk outside the trading book.

The credit risk is included in the regular process for monitoring mortgage loans. This process does not distinguish between securitisation positions issued or retained. That is why we do not pursue separate policies to hedge the risks relating to (retained) securitisation positions.

De Volksbank Financial Markets conducts the operational management of the retained (unsold) or purchased securitisation positions within the mandate set by the Board of Directors.

The interests in securitisation positions of third parties are part of the investments by de Volksbank. Within the powers delegated to it, de Volksbank Financial Markets is free to take positions and manage the risks of these investments.

12.5 Securitisation exposures

The securitised loans were sold to the SPV at nominal value plus a deferred purchase price, which entails that we have a claim against the SPV. This claim is payable partly during the term of the transaction and partly once the securitisation transaction has been fully settled.

The notes issued by the SPV include so-called junior notes (often the E notes), which are high-risk and high-yield notes. The junior notes form the second loss position after the net margin in the transactions. In the Pearl 1 transaction, the junior notes of the securitisation have not been placed with investors. De Volksbank holds the junior notes in its own book. Stress testing showed that de Volksbank runs a credit risk due to the deferred purchase price and the junior notes.

There is a hierarchy in which notes and the deferred purchase price are called upon in the event of credit losses. Losses are first charged to the net margin and then to the junior notes. If this is insufficient to cover the losses the notes will be called upon, beginning with the mezzanine notes (D to B notes) and ending with the senior notes (A notes).

In the set-up of the securitisation programmes, a certain expectation of pre-payment behaviour on mortgages is assumed. If the actual pre-payments turn out to be higher, the notes will pay off more quickly. A notes are redeemed first, followed by B, C and subsequent notes.

We have two subordinated notes in the books that were issued under the Pearl programme. As Pearl pertains to a funding transaction, we did not sell the subordinated debt notes. The Lowland transactions were set up for liquidity purposes and may be placed with investors if so desired.

The tables below show explanatory figures pertaining to the securitised residential mortgages. These are exposures in the banking book. De Volksbank does not hold any securitisation positions in the trading portfolio.

Outstanding amounts of exposures securitised 2019

	Traditional	Synthetic
in € millions	Originator	Originator
Exposure	--	--
Total	**--**	**--**

Outstanding amounts of exposures securitised 2018

	Traditional	Synthetic
in € millions	Originator[1]	Originator
Exposure	51	--
Total	**51**	**--**

1 The figures for 'Originator' exposures relate to the securitisation programme Holland Homes 1.

Both tables above present the outstanding nominal values of the Bank's own securitisation programmes plus the investment positions in third-party securitisations. The Bank's own securitisation programmes decreased as a result of regular redemptions in the programmes.

The tables below show the composition of the programmes by type of bond, and what portion is held on own book.

Composition of securitisation programmes

in € millions[1]	Size of programme 2019	Own book at year-end 2019[2]	Size of programme 2018	Own book at year-end 2018[2]
A notes	--	--	35	--
B notes	--	--	16	--
C notes	--	--	--	--
D notes	--	--	--	--
E notes	--	--	--	--
Total	**--**	**--**	**51**	**--**

1 The figures relate to the securitisation programme Holland Homes 1.

2 The own book consists of unissued and repurchased securities.

Exposure and capital charges of securitisation positions retained or purchased per risk weight band

	Exposure		Capital charges	
in € millions	**2019**	**2018**	**2019**	2018
<= 10%	82	85	--	--
> 10%	15	--	--	--
> 20% <= 50%	--	--	--	--
> 50% <= 100%	--	--	--	--
> 100% <= 650%	--	--	--	--
> 650% < 1.250%	--	--	--	--
1.250%	--	--	--	--
Total	**97**	**85**	**--**	**--**

The table above presents an overview of the securitised positions retained or purchased broken down by risk weight bands. As of 31 December 2018, de Volksbank only has purchased AAA-notes of third party transactions.

12.6 Calculation of risk-weighted exposure

For securitisations that are subject to a look-through approach because there is no significant transfer of credit risk, the risk-weighted exposure is calculated for the underlying securitised mortgage loans using the internally developed AIRB model PHIRM. There is no significant transfer of credit risk for the Pearl and Lowland transactions.

We do not hold any positions in the balance sheet for the Holland Homes 1 transaction, where there is a significant transfer of credit risk; that is why the risk-weighted exposure is nil.

We apply the Ratings-Based Approach (RBA) for investments in securitisation positions of third parties. Pursuant to the RBA, the risk-weighted assets are determined by multiplying the exposures in the securitisation positions by a regulatory risk weight. The risk weights depend on the external rating and seniority of the position.

12.7 Accounting policy for securitisation

We do not have a separate loan book containing loans that may still be securitised. For each securitisation transaction, loans to be securitised are selected from the total pool of eligible loans. Partly for that reason, we do not have a different accounting policy or classification for loans that may be eligible for future securitisation transactions.

In the securitisation transactions we initiated, we transferred the underlying loans to separate SPVs at nominal value. Our economic interest in the SPVs is expressed in several ways. First of all, in most SPVs we have a large or small direct position in the notes issued by the SPV. The size of these positions differs for each securitisation programme and may also differ in each SPV within the various programmes. Furthermore, the securitisations entitle us to a deferred selling price that is not obtained until the SPV generates positive results during the transaction. This economic connection in combination with the other IFRS criteria shows that de Volksbank must be considered the entity that controls the SPVs. That is why we fully consolidate the SPVs in our consolidated financial statements.

On de Volksbank's consolidated balance sheet, the securitisation positions of securitisations we initiated are limited to the SPVs' monetary balances and the derivative transactions that the SPVs concluded with third parties. These securitisation positions are measured on the balance sheet at amortised cost and fair value, respectively. The consolidated balance sheet also shows securitisation positions in which we are the investor. These are positions in notes issued by these SPVs. These notes are classified as 'other comprehensive income' as part of the investments and are measured at fair value, with gains and losses being recognised directly in equity.

12.8 Rating agencies

De Volksbank obtained credit ratings from the main credit rating agencies for its residential mortgages securitisations.

The table below shows which credit ratings the rating agencies issued for the securitisation programmes active at year-end 2019.

Credit ratings securitisation programmes

Programme name	Moody's	Fitch
Pearl 1	x	x
Holland Homes 1	x	x
Lowlands 4	x	x
Lowlands 5	x	x
Lowlands 6	x	x

13 Operational risk

13.1 Capital requirements

CAPITAL REQUIREMENTS
De Volksbank calculates the capital requirements for non-financial risks according to the standardised approach, in which all activities are divided into eight standardised business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management and retail brokerage. At year-end 2019, the Pillar 1 capital requirements were € 120 million for the operational risks (2018: € 124 million).

The total capital requirement for non-financial risks is calculated as the sum of the capital requirements for each of the business lines. The total capital is calculated as the 3-year average of the sum of the statutory capital costs for each of the divisions. The capital requirement for each business line equals the beta coefficient multiplied by gross income. The beta coefficients differ between business lines and are 12%, 15% or 18%. The capital requirement calculated on a yearly basis constitutes input for the Internal Capital Adequacy Assessment Process (ICAAP).

De Volksbank manages its non-financial risks by planning, implementing, monitoring and improving activities aimed at:
- realising predictable performance;
- protecting de Volksbank from unforeseen losses;
- offering sufficient certainty on the reliability of information in order to achieve (strategic) objectives.

Upon implementing the Corporate Governance Code, de Volksbank has chosen to realise as much synergy as possible between the risk management demands of this code and compliance with CRD IV requirements.

13.2 Risk profile

Management devotes a great deal of attention to managing and controlling non-financial risks. De Volksbank faces an environment that changes at an increasingly rapid pace, with society having ever higher expectations in the area of laws and regulations, for example. This compels de Volksbank to frequently increase the efficiency and effectiveness of its processes, systems, data management and products and services, while retaining adequate control. Efficiently meeting the growing information needs of supervisory authorities also demands our attention. De Volksbank is adapting its processes and systems to meet the stricter standards, but this improvement project has not been completed. The scope of the risks is continuously measured and assessed by the Non-Financial Risk Committee (NFRC).

13.3 Types of risk and areas of focus of non-financial risks

Non-financial risks cover those (potential) events in the operational execution of the banking strategy that have a negative impact on the achievement of de Volksbank's objectives. De Volksbank has categorised the non-financial risk into three risk types: operational risk, compliance risk and model risk. Operational risk comprises the subtypes of reporting and data management risk and legal risk. The term non-financial risk is thus fully in line with the term Operational Risk as defined in the Basel regulations.

TYPE OF RISK	DEVELOPMENTS IN 2019
Operational risk Operational risk is the risk of direct or indirect losses or reputational damage caused by inadequate or deficient internal processes and systems, by inadequate human behaviour or human error, or by external events. In our business operations, we seek to manage and control our risks in a responsible manner. This includes effective and efficient processes that guarantee high quality to our customers and that are easy to carry out by our employees. Our improvement cycle is primarily aimed at reducing error rates and being demonstrably in control.	• In 2019, we made progress in further strengthening the organisation that oversees non-financial risk control. We developed and rolled out the Integrated Risk Management (IRM) tool, a risk management application that simplifies the recording of information on our business operations and enables us to perform more in-depth analyses of the effectiveness of our risk management framework. As a result, all incidents are now recorded at a single central location, with additional attention being paid to the quality of incident data, incident follow-up and the tightening of requirements for root cause analysis in 2019. The resulting information will allow us to improve our processes even more. In 2019, we also carried out a study into the way in which our control measures are recorded and tested, thus helping process owners to further control their processes. By training and educating departments and management, we made the importance of operational risk management a constant point of focus in 2019, too. Disruption of our services due to cyberattacks and system failures in 2019 was limited and mostly within the limits set by us and the supervisory authorities. We have established that the continuity of our platforms was not consistently substandard. We periodically test the operation of the continuity facilities of our main bank systems. Despite a slight reduction in DDos attacks, we note an increasing number of cyber-attacks. This remains a point of focus. The use of software robots (Robotic Process Automation – RPA) in existing manual processes is currently being developed at de Volksbank. They automate processes involving a substantial amount of high-volume manual and repetitive work and enhance the efficiency as a result. De Volksbank avails itself of a uniform robotics platform for this purpose. Although the growth of RPA entails yet other types of risk, the uniform use of RPA mitigates these risks. We also pay attention to Brexit; we have made preparations to absorb the possible effects of Brexit and monitor further developments. The bilateral financial framework agreements that are most important to de Volksbank, entered into with counterparties based in the United Kingdom have for the most part been transferred to an entity in a European jurisdiction.
Compliance risk We define compliance risk as the risk that de Volksbank or any of its subsidiaries fail to comply with (the rationale of) legislation and additional rules, self-regulation rules and codes of conduct applicable to them, including the related internal policies, to a sufficient extent or at all, possibly resulting in criminal or regulatory action, sanctions, a material financial loss or loss of reputation.	• Guarding an ethical financial services sector, de Volksbank gives priority to ethical conduct and its social responsibility. The bank realises that the trust placed in it may be undermined by and/or on account of its customers or business partners. De Volksbank takes all reasonable measures to prevent de Volksbank or the financial system from being abused for money laundering and terrorist financing, so as to protect its integrity and the trust placed in it and in the financial markets. Changes related to the Money Laundering and Terrorist Financing (Prevention) Act (Wet ter voorkoming van witwassen en financieren van terrorisme; Wwft) and sanctions regulations have followed one another in rapid succession in the past few years. For instance, the fourth and fifth Anti-Money Laundering Directives both entered into force within a short period of time. The fourth Directive has already been implemented in national legislation. The implementation of the fifth Anti-Money Laundering Directive is expected in 2020. De Volksbank is still continuously working to translate laws and regulations into internal policies, processes and procedures to take the control of customer integrity to a higher maturity level. De Volksbank is still continuously working to take the control of customer integrity to a higher maturity level. The changes made to laws and regulations have considerable impact on our organisation. The day-to-day Wwft policymaker and other persons pay considerable attention to the implementation of these changes. The progress made on this issue is also regularly discussed at Board level.

We focused on the General Data Protection Regulation and PSD2 in 2019 as well. The transfer of the Data Protection Officer position to the Compliance department means that the privacy issue will be safeguarded within de Volksbank to a greater extent.

Furthermore, in 2019 de Volksbank launched a project to strengthen the compliance function and broaden its focus. The compliance function thus monitors all prudential and non-prudential legislation applicable to the bank. In particular, it has a wide range of integrity risks in scope, including customer integrity, privacy, financial crime risks (fraud and corruption), and the interpretation of social standards such as the (general) duty of care. The project will continue in 2020.

Legal risk

Legal risk arises from non-compliance with contracts or applicable laws and regulations, or an unexpected interpretation of these laws and regulations, and from non-contractual liability. Nowadays, legal risk is not just about the strict legal standard, compliance with (contractual) obligations or laws and regulations, but also – especially in the financial services sector – about social norms and unwritten rules.

- As was the case in 2018, the mortgages theme was prominently placed on the agendas of both the AFM and civil society organisations in 2019. The notes to the off-balance sheet commitments include an overview of legal proceedings in which de Volksbank is involved. We also pay attention to Brexit; we have made preparations to absorb the possible effects of Brexit and monitor further developments. The majority of bilateral financial framework contracts entered into with counterparties established in the United Kingdom that de Volksbank considers to be the most important, have been converted to an entity in a European jurisdiction.

Model risk

Model risk is the risk that models generate incorrect results or are applied or interpreted in the wrong way.

- The bank manages model risk based on three criteria. First of all, bottlenecks in resources must not result in the absence of periodic checks on the managed models. Furthermore, any points for improvement found must be followed up subject to the timelines agreed. And, finally, model risk must remain at a controllable level. This may be achieved by means of temporary risk-mitigating measures such as the application of conservative surcharges on model results. Based on these criteria, model risk management was improved in 2019.

  Improvement processes were carried out for a number of models to adapt them to new regulations. For the Internal Rating Model for Retail Mortgages (Particuliere Hypotheken Interne Rating Model; PHIRM) – the set of credit models for our mortgage portfolio – this resulted in new models for IFRS 9, which were first used in 2019. The models we use to manage and control interest rate risk are also subject to change. This is partly because of the effect that customer behaviour has on the models, in the event of repayments on mortgages and savings maturity, for example, and partly because of new requirements imposed by regulations.

Reporting and data management risk

Reporting and data management risk comprises the risk that de Volksbank's financial and/or non-financial reporting contains material inaccuracies or is materially incomplete or is not available to its internal and external stakeholders in time.

- We strive to provide reliable internal and external information, in which respect high-quality underlying data and adequate data management are important. In 2018, we drew up a new data management policy that is the basis for an integrated approach to quality improvement. In the first quarter of 2019, we launched a strategic programme with which we continue to work on improving and controlling the start-to-finish reporting processes, the associated data flows and the supporting application landscape. We made adjustments to various processes for the purpose of providing reliable information both internally and externally and to the process involving periodic and new reporting to supervisory authorities.

  The processes in question were further automated and improvements were carried out in data management for the reporting chain. To avoid data inaccuracies from being discovered and remedied at the very end of the reporting process, data quality monitoring will be more explicitly invested at the source and the Data Management Framework has been put into operation. Renewed processes will be implemented further in the next few years.