



Pillar 3 Report

Public Disclosures

Banca Popolare di Sondrio Group

Reporting date: 31 December 2019

Date of publication: 21 May 2020

Banca Popolare di Sondrio
Società cooperativa per azioni

Head office and general management:

piazza Garibaldi 16 - 23100 Sondrio (SO)

Tel. 0342/528.111 – Fax 0342/528.204

Website: www.popso.it - E-mail: info@popso.it - Certified e-mail address: postacertificata@pec.popso.it

Sondrio Companies Register code: 00053810149

Official List of Banks no. 842

Official List of Cooperative Banks no. A160536

Parent Company of the Banca Popolare di Sondrio Group - Official List of Banking Groups no. 5696.0.

Member of the Interbank Deposits Protection Fund

Fiscal code and VAT number: 00053810149

Share capital: € 1,360,157,331; Reserves: € 983,893,092

(Figures approved at the shareholders' meeting of 27 April 2019)

Stock listed on the Mercato Telematico Azionario (MTA or Screen-Traded Market)

Contents

Introduction	7
Overview of the document	11
Summary of information published in accordance with CRR requirements	14
Section 1 - General information requirement (art. 435 CRR)	16
Section 2 - Scope of application (art. 436 CRR)	83
Section 3 - Own funds (art. 437 CRR)	86
Section 4 - Capital requirements (art. 438 CRR)	102
Section 5 - Capital buffers (art. 440 CRR)	106
Section 6 - Leverage (art. 451 CRR)	109
Section 7 - Effects of the IFRS 9 transitional provisions on Own Funds and capital ratios (art. 473-bis CRR)	114
Section 8 - Credit risk: general information and adjustments (art. 442 CRR)	117
Section 9 - Credit risk: use of ECAIs (art. 444 CRR)	142
Section 10 - Credit risk: information on the portfolios subject to the IRB approach (art. 452 CRR) ..	146
Section 11 - Credit risk: use of risk mitigation techniques (art. 453 CRR)	164
Section 12 - Counterparty credit risk (art. 439 CRR)	169
Section 13 - Securitisation positions (art. 449 CRR)	175
Section 14 - Operational risk (art. 446 CRR)	181
Section 15 - Liquidity risk (art. 435 CRR)	182
Section 16 - Exposures in equities not included in the trading book (art. 447 CRR)	184
Section 17 - Exposure to interest rate risk on positions not included in the trading book (art. 448 CRR)	187
Section 18 - Compensation and incentive policies and practices (art. 450 CRR)	191
Section 19 - Encumbered and unencumbered assets (art. 443 CRR)	193
Certification of the Manager responsible for preparing the Company's accounting documents	198
Glossary	199

Index of the tables

Table 1 - List of periodic information flows on risk control addressed to the Board of the Parent Company Banca Popolare di Sondrio	80
Table 2 - Scope of consolidation for accounting and regulatory purposes and additional entities deducted from Own Funds.....	85
Table 3 - Composition of Own Funds	90
Table 4 - Model for the publication of information on own funds: detail of the constituent elements	92
Table 5 - Reconciliation of carrying amount of Equity with Own Funds.....	95
Table 6 - Reconciliation between balance sheet assets and liabilities and Own funds.....	96
Table 7 - Model on the main characteristics of equity instruments of Own funds	97
Table 8 - Composition of prudential requirements	103
Table 9 - Composition of the prudential requirement on credit and counterparty risk calculated with the Standardised Approach.....	104
Table 10 - Composition of the prudential requirement on credit and counterparty risk calculated with an advanced method based on internal ratings (Advanced IRB method)	104
Table 11 - Capital ratios	104
Table 12 - Calculation of the bank's specific countercyclical capital buffer	107
Table 13 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (Summary).....	108
Table 14 - Leverage ratio	110
Table 15 - LRCom Model - Leverage ratio common disclosure	111
Table 16 - LRSpl Model - Breakdown of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures).....	112
Table 17 - LRSum Model - Summary reconciliation of accounting assets and Leverage ratio exposures ..	113
Table 18 - IFRS 9-FL Model - Comparison of the Group's Own Funds and capital and leverage ratios, with and without the application of the transitional provisions for IFRS 9.....	115
Table 19 - Distribution of financial assets by portfolio and quality of lending (book values).....	127
Table 20 - Credit exposures by portfolio and quality of lending (book values)	127
Table 21 - Territorial distribution of cash and off-balance sheet exposures to customers (book value)	128
Table 22 - - Territorial distribution of cash and off-balance sheet exposures to banks (book value)	128
Table 23 - Distribution by sector of the cash and off-balance sheet exposures to customers (book value)	129
Table 24 - Cash credit exposures to customers: trend of gross impaired exposures (carrying amounts) ...	130
Table 25 - Impaired cash exposure to customers: trend in total write-downs (book values).....	131
Table 26 - Distribution by residual contractual maturity of financial assets and liabilities	132

Table 27 - Credit quality of forborne exposures (Template 1 - EBA/GL/2018/10).....	133
Table 28 - Quality of forbearance (Template 2 - EBA/GL/2018/10).....	134
Table 29 - Credit quality of performing and non-performing exposures by past due days (Template 3 - EBA/GL/2018/10).....	135
Table 30 - Performing and non-performing exposures and related provisions (Template 4 - EBA/GL/2018/10).....	136
Table 31 - Quality of non-performing exposures by geography (Template 5 - EBA/GL/2018/10).....	137
Table 32 - Credit quality of loans and advances by industry (Template 6 - EBA/GL/2018/10)	138
Table 33 - Collateral valuation - loans and advances (Template 7 - EBA/GL/2018/10).....	139
Table 34 - Changes in the stock of non-performing loans and advances (Template 8 - EBA/GL/2018/10). 140	
Table 35 - Collateral obtained by taking possession and execution processes (Template 9 - EBA/GL/2018/10).....	141
Table 36 - Collateral obtained by taking possession and execution processes – vintage breakdown (Template 10 - EBA/GL/2018/10).....	141
Table 37 - List of ECAs used for the weighting of credit risk exposures - Standardised approach.....	142
Table 38 - List of ECAs used for weighting positions towards securitisations	142
Table 39 -Credit and counterparty risks: distribution of exposures and EAD after credit risk mitigation by regulatory asset classes	143
Table 40 - Credit and counterparty risks: distribution of exposures by creditworthiness and regulatory asset class - EAD after credit risk mitigation.....	144
Table 41 - Credit and counterparty risks: distribution of exposures by creditworthiness and regulatory asset class - Exposure after credit risk mitigation	145
Table 42 - Amounts of Group's exposures by regulatory portfolio (Advanced IRB Approach).....	157
Table 43 - Distribution of exposures by regulatory portfolio and PD class (Advanced IRB Approach) - Exposures to or guaranteed by companies	158
Table 44 - Distribution of Group's exposures by regulatory portfolio and PD class (Advanced IRB Approach) – Retail exposures	159
Table 45 - Credit risk adjustments by regulatory portfolio (Advanced IRB Approach)	160
Table 46 - Comparison between calibration default rates of rating models (long-term) and default rates observed in the last year by calibration segment.....	161
Table 47 - Credit and counterparty risks: distribution of exposures covered by collaterals and personal guarantees by regulatory asset class - Standardised approach.....	167
Table 48 - Credit and counterparty risks: distribution of exposures covered by collaterals and personal guarantees by regulatory asset class - Advanced IRB Approach.....	168
Table 49 - Counterparty risk: EAD values and risk weighted assets (RWA)	172
Table 50 - Financial derivatives in the trading portfolio for supervisory purposes: notional values, gross positive and negative fair value - Contracts which are not part of settlement agreements	173
Table 51- Financial derivatives in the banking book: notional values, gross positive and negative fair value by counterparty - Contracts which are not part of settlement agreements	174

Table 52 - Exposure deriving from the main securitisation transactions of "third parties" broken down by type of securitised assets and type of exposure	179
Table 53 - Issue of covered bonds	180
Table 54 - Value and composition of the portfolio of eligible assets transferred as collateral for covered bond issues	180
Table 55 - Model EU-LIQ1 - Disclosure model containing quantitative information on the LCR, which integrates article 435, paragraph 1, letter f) of Regulation (EU) 575/2013	183
Table 56 - Type, carrying amount, market value and fair value of equity exposures; profits and losses from disposals and capital gains/losses	186
Table 57 - Interest rate risk exposure: change in net interest income (December 2018 - February 2019) ..	188
Table 58 - Interest rate risk exposure: change in net interest income (March 2019 - December 2019)	189
Table 59 - Interest rate risk exposure: change in net equity (December 2018 - February 2019)	190
Table 60 - Interest rate risk exposure: change in net equity (March 2019 - December 2019)	190
Table 61 - Compensation and incentive policies and practices: summary table	191
Table 62 - Model A - Encumbered and unencumbered assets	195
Table 63 - Model B - Guarantees received	196
Table 64 - Model C - Source of encumbrance	197

Introduction

New harmonised rules for banks and investment firms came into force on 1 January 2014 as implemented by:

- Regulation (EU) no. 575/2013 (*Capital Requirements Regulation*, known as "CRR") of the European Parliament and Council of 26 June 2013 governing the prudential requirements for credit institutions and investment firms ("Pillar 1" provisions) and the rules on public disclosures by institutions ("Pillar 3" provisions)¹;
- Directive 2013/36/EU (*Capital Requirements Directive*, known as "CRD IV") of the European Parliament and Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investments firms¹;
- Commission Implementing Regulation (EU) no. 1423/2013 of 20 December 2013, laying down implementing technical standards with regard to disclosure of own funds requirements for institutions pursuant to Regulation (EU) no. 575/2013 of the European Parliament and Council.

These regulations have transposed into the European Union law all the prudential reforms approved in recent years by the Basel Committee for Banking Supervision (known as the "Basel 3 Framework"). The CRR took effect directly in the Member States, whereas the rules contained in CRD IV had to be transposed into the various national systems.

The new regulatory framework of reference throughout the EU is completed with the execution measures contained in Regulatory or Implementing Technical Standards (RTS and ITS) adopted by the European Commission on the proposal of the European Supervisory Authorities (ESAs).

At a national level, the new harmonised rules were implemented by the Bank of Italy, mainly through the following measures:

- Circular no. 285 of 17 December 2013 *"Supervisory instructions for banks" and subsequent updates*;
- Circular no. 286 of 17 December 2013 *"Instructions for banks and securities firms on the preparation of supervisory reports" and subsequent updates*.

Circular no. 285 includes the prudential rules applicable to Italian banks and banking groups, revised and updated to adapt national law to the changes introduced into the EU, with particular regard to the new regulatory and institutional framework of European banking supervision,

¹ The following regulations were published in the Official Journal of the European Union on 7 June 2019:

- Regulation (EU) 2019/876 of the European Parliament and Council of 20 May 2019, which amends Regulation (EU) no. 575/2013 relating to prudential requirements for credit institutions and investment firms, with regard to the leverage ratio, the net stable funding ratio, the own funds requirements and eligible liabilities, counterparty risk, market risk, exposures to central counterparties, exposures to undertakings for the collective investment of transferable securities, large exposures, reporting and disclosure obligations and Regulation (EU) no. 648/2012 ("CRR II");
- Directive (EU) 2019/878 of the European Parliament and Council of 20 May 2019, which amends Directive 2013/36/EU on access to the banking business and on prudential supervision of credit institutions and investment firms, as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures ("CRD V").

Except as expressly provided for in the two regulations, "CRR II" will apply from 28 June 2021, while the "CRD V" must be implemented by the Member States of the European Union by 28 December 2020.

outlining in this a complete, organic, rational regulatory system integrated with directly applicable EU provisions, so as to facilitate their adoption by operators.

The regulatory measure groups together the applicable provisions according to the regulatory sources from which they derive, distinguishing between:

- EU regulation subject to national transposition ("CRD IV"), for which specific implementing provisions are established;
- EU direct adoption legislation ("CRR"), for which, for each topic, the applicable rules are referred to; furthermore, in the cases provided for in the European legislation, specific guidelines are defined that are useful for their full and easy application and areas where national discretionary powers are exercised by the Bank of Italy are identified as part of the process of transposition into national law;
- regulation of non-harmonised matters, for which specific provisions are laid down to align the Italian legal system with the supervisory standards defined by international bodies, notwithstanding the fact that they do not derive from EU legislation.

Circular no. 286 laid down the national rules governing the transmission of prudential supervisory reporting on an individual and consolidated basis required to financial institutions; this is largely based on the EU Commission's Implementing Regulation no. 680/2014 of 16 April 2014 and subsequent updates, which imposes binding technical standards on harmonised reporting for supervisory purposes in accordance with the CRR (so-called "COREP schemes", COmmon REPorting). These regulatory measures, together with the Bank of Italy's Circular no. 154 of 22 November 1991 (*"Supervisory reports by banks and financial institutions. Reporting formats and instructions for submitting information flows"*) and subsequent updates, translate the provisions envisaged in the European Union into the formats used to file prudential reports.

Circular no. 286 also provides indications for the transmission of non-harmonised reports required by the national supervisory regulations.

Even in the reformulated regulatory framework, the prudential regime applicable to financial institutions continues to be split into three "Pillars".

"Pillar 1" (*Minimum capital requirements*) imposes specific capital requirements to all supervised entities designed to cope with the typical risks of banking and finance, providing for alternative calculation methods, characterised by different levels of complexity. Following these revisions, the Pillar 1 regulation has been strengthened, *inter alia*, through a harmonised definition of available capital, the provision of more rigorous minimum capital standards, the introduction of a quantitative limit to excess leverage and new liquidity risk control mechanisms.

"Pillar 2" (*Supervisory review process*) requires banks to equip themselves with strategies and internal processes to verify in a current and future perspective the adequacy of both capital (ICAAP - *Internal Capital Adequacy Assessment Process*) and liquidity positions (ILAAP - *Internal Liquidity Adequacy Assessment Process*), as well as carrying out a clear and independent assessment of the risks to which they are exposed in relation to their operations and their reference markets, also considering risk profiles other than those recognised by the "Pillar 1" capital requirements. The task of verifying the reliability and consistency of the results of these two

processes and to adopt, where the situation requires it, appropriate corrective measures, is up to the Supervisory Authorities as part of its Supervisory Review and Evaluation Process ("SREP"). Increasing importance is also attributed to corporate governance structures and internal control frameworks of intermediaries as determining factors for the stability of the individual institutions as well as of the financial system as a whole.

"Pillar 3" (*Market discipline*) establishes public disclosure requirements to allow market participants to make a more accurate assessment of banks' capital strength and exposure to risks, as well as of their risk management and control systems. In this regard, the main developments have concerned the introduction of broader transparency requirements for supervised entities, given the market's need for more and more information on the qualitative composition of intermediaries' regulatory capital and the ways in which they quantify their own capital ratios.

On the subject of "Pillar 3", Public Disclosures by financial institutions are currently regulated by:

- the CRR, Part Eight "Disclosure by institutions" (articles 431 – 455) and Part Ten, Title I, Chapter 1 "*Own funds requirements, unrealised gains and losses measured at fair value and deductions*" (article 473-bis) and Chapter 3 "Transitional provisions for disclosure of own Funds"(article 492); ²
- the Bank of Italy Circular no. 285 of 17 December 2013, Part Two "*Application in Italy of the CRR*", Chapter 13 "*Public disclosures*";
- the regulatory or implementing technical standards issued by the European Commission to regulate:
 - the standard forms for the publication of information regarding the main characteristics of capital instruments;
 - the standard forms for the publication of information regarding Own Funds in the transitional period of application of the Basel 3 rules;
 - disclosure requirements on capital reserves;
 - standard forms for the publication of information on the indicators of systemic importance;
 - disclosures concerning unencumbered assets;
 - standard forms for the publication of information on leverage;
- the Guidelines issued by the European Banking Authority ("EBA") on specific aspects of the public disclosure requirements.

With regard to the latter, with its 22nd update to Circular no. 285 issued on 12 June 2018, the Bank of Italy transposed the following EBA Guidelines on Pillar 3 disclosures into national law:

- EBA/GL/2014/14 Guidelines on the relevance, exclusivity, confidentiality and frequency of disclosures in accordance with articles 432, paragraphs 1 and 2, and 433 of the CRR;
- EBA/GL/2016/11 Guidelines (version 2) on disclosure requirements pursuant to Part 8 of the CRR;

² The amendments to "Pillar 3" regulations introduced by Regulation (EU) 2019/876 of the European Parliament and Council of 20 May 2019 (known as "CRR II") will take effect on 28 June 2021.

- EBA/GL/2017/01 Guidelines on Liquidity Coverage Ratio (LCR) disclosure to complement the disclosure of liquidity risk management under article 435 of the CRR;
- EBA/GL/2018/01 Guidelines on uniform disclosures under article 473-bis of the CRR as regards the transitional provisions for mitigating the impact of the introduction of IFRS 9 on own funds.

Furthermore, with the 31st update of 24 March 2020 to Circular no. 285, the Bank of Italy has implemented the EBA/GL/2018/10 Guidelines on disclosure of non-performing and forborne exposures.

With these annual Public Disclosures, the Banca Popolare di Sondrio Group (also referred to as the "Group") intends to fulfil the disclosure requirements envisaged in the Pillar 3 legislation mentioned previously.

This document has been prepared by Banca Popolare di Sondrio, the Parent, on a consolidated basis with reference to the scope of consolidation used for supervisory purposes (prudential consolidation area). The English translation of the document is made available to the public, together with the consolidated interim financial report at 31 December 2019, on the English version of the Bank's website (www.popso.it) following this pattern: "*About us - Reports and papers*", as allowed by the reference regulations. The Italian version is available on the Bank's website (www.popso.it) in the "*Informativa Societaria*" section.

The document is accompanied by the certification pursuant to art. 154-bis, paragraph 2, of Legislative Decree 58/98 (Consolidated Finance Act, "CFA") by the Manager responsible for preparing the Company's accounting documents of the Parent Banca Popolare di Sondrio.

In compliance with article 434 of the CRR ("Means of disclosure"), in the presence of similar information already published in other equivalent documents, reference is made to the document in which such piece of information is disclosed.

* * *

NOTE: All figures indicated in the sections of this document are expressed in thousands of euro, unless stated otherwise. Any significant changes with respect to previous publication periods are mentioned in this document.

Overview of the document

Section 1 - General information

This section illustrates the risk management objectives and policies for each relevant risk category, as well as specific corporate governance arrangements.

Section 2 - Scope of application

This section illustrates the composition of the Banking Group to which the Pillar 3 disclosure requirements apply, explaining differences in the scope of consolidation for prudential and financial reporting purposes.

Section 3 - Own funds

This section provides information on the main characteristics of the items making up the Group's capital position, showing the various elements of regulatory Own Funds, as well as those of the prudential filters, adjustments and deductions. A reconciliation between the elements of Own Funds and the Group's balance sheet aggregates is also provided.

Section 4 - Capital requirements

This section briefly illustrates the approach adopted by the Group to assess the adequacy of its capital levels in support of current and future activities. It also shows the measurement of capital absorption to deal with credit and counterparty risk, market risk, operational risk and credit valuation adjustment (CVA) risk, as well as the calculation of Pillar 1 capital ratios.

Section 5 - Capital buffers

This section contains information on the methods used for determining the specific counter-cyclical capital buffer of the Group, its amount and the geographical distribution of credit exposures relevant for the calculation.

Section 6 - Leverage

This section explains the methods used by the Group in measuring the degree of its financial leverage, with regard to the determination of the Leverage Ratio provided by the supervisory regulations, the breakdown of its constitutive factors and a reconciliation with the relevant accounting aggregates.

Section 7 - Effects of the adoption of the IFRS 9 transitional provisions on Own Funds and capital ratios

This section illustrates the decisions adopted by the Group regarding compliance with the transitional arrangements for mitigating the impact of the introduction of IFRS 9 on Group's Own Funds and capital ratios, giving the amounts of Own Funds, Common Equity Tier 1 capital and

Tier 1 capital, as well as the figures for the Common Equity Tier 1 Ratio, Tier 1 Capital Ratio, Total Capital Ratio and Leverage Ratio with and without the application of the transitional regime.

Section 8 - Credit risk: general information and adjustments

This section provides information on the methods for classifying and evaluating credit positions (both performing and impaired loans) and on the approaches for determining impairment and fair value adjustments on loans. The following quantitative data are reported: the composition of total loan exposures by type of exposure and counterparty, by geographical areas and by economic sectors; the distribution of the credit portfolio by residual maturity; the dynamics and composition of non-performing and forborne exposures; on the dynamics and composition of impairment adjustments and loan loss provisions.

Section 9 - Credit risk: use of ECAs

The ECAs (External Credit Assessment Institutions) selected by the Group are listed in this section, together with the regulatory asset categories for which each of them is used for the purpose of credit risk weighting under Standardised Approach. For each regulatory portfolio, the exposures associated with the various risk categories are also provided.

Section 10 - Credit risk: information on the portfolios subject to the IRB Method

This section describes the general structure of the internal rating system whose use for regulatory purposes has been subject to the authorization from the European Central Bank; it provides information on the characteristics of the PD, LGD and EAD models developed internally, on the exposure portfolios falling under the Advanced IRB Method, on the operational uses of the rating and the related risk parameters for managerial purposes, as well as on the control mechanisms to which the rating system is regularly subjected.

Section 11 - Credit risk: use of credit risk mitigation techniques

This section describes the main types of collateral accepted by the Group, the policies and processes for evaluating and managing collateral and the main types of guarantors. For each regulatory asset portfolio, the exposures covered by financial collateral, personal guarantees and/or credit derivatives are also provided.

Section 12 - Counterparty credit risk

This section explains the policies relating to collateralisation and management of counterparty credit risk, as well as the methodology used to set limits on the risk exposures. Quantitative information is also provided, such as the gross fair value of derivative contracts in portfolio, the amounts of collateral held and the positive fair value after netting.

Section 13 - Securitisation positions

This section explains the objectives pursued in the securitisation activity, the nature of the risks underlying the securitised assets in portfolio, the roles played by the Group in securitisation transactions, the procedures adopted for monitoring the risks associated with them, the methods

used to calculate risk-weighted exposures and the related accounting treatment. It gives information on the amount of own securitisation transactions, the risks arising from securitisation exposures (both own and third-party securitisation positions, where relevant) and related capital requirements. In addition, a picture of collateralised sources of funding such as covered bonds and similar issuance programmes set up by the Group is also provided.

Section 14 - Operational risk

This section illustrates the method adopted by the Group for the calculation of the regulatory capital requirement for operational risk and reports its amount at the reference date.

Section 15 - Liquidity risk

This section represents the average quarterly pattern of the Group's Liquidity Coverage Ratio (LCR) and the corresponding numerator and denominator. It also gives information on the additional control processes adopted by the Group for the identification, mitigation and management of its liquidity risk profile.

Section 16 - Exposures in equities not included in the trading book

This section provides a description of equity exposures based on the objectives pursued, the related accounting techniques and the valuation methodologies used. It also shows the carrying amount and fair value of the equity instruments held for non-trading purposes, as well as the amounts for each exposure type.

Section 17 - Exposure to interest rate risk on positions not included in the trading book

This section illustrates the nature of the interest rate risk on the banking book, the methods for measuring and managing it and the underlying assumptions. It also provides estimations of the variation in earnings and economic value of equity of the Group under upward or downward shocks in market interest rates, according with the chosen measurement techniques.

Section 18 - Remuneration and incentive policies and practices

This section describes the decision-making process followed for the definition of the Group's remuneration policy, the role of the involved bodies and functions, the most important characteristics of the remuneration schemes, the key performance indicators taken as a reference for the variable component of remuneration, the rationale underlying the variable remuneration forms and amounts and any other non-cash benefits. Aggregate quantitative elements on the remuneration recognised in the reporting period, broken down by business areas and categories of "relevant personnel" (senior management and members of staff whose actions have a material impact on the risk profile of the Group), are also provided.

Section 19 - Encumbered and unencumbered assets

This section provides information on the composition of the Group's encumbered assets and reports the aggregate carrying amount and fair value of encumbered and unencumbered assets.

Summary of information published in accordance with CRR requirements

The following is a summary table that links the articles of Regulation (EU) no. 575/2013 ("CRR") indicating the relevant disclosure requirements for the Banca Popolare di Sondrio Group, accompanied by the respective disclosure frequency, with the sections of this document in which the qualitative or quantitative information required by the "Pillar 3" regulations are reported with regard to the Group's situation at 31 December 2019.

Reg. (EU) 575/2013 (CRR)	Article description	Frequency of publication	Section Public Disclosures at 31 December 2019
Art. 431	Scope of disclosure requirements	-	
Art. 432	Non-material, proprietary or confidential information	-	
Art. 433	Frequency of disclosure	-	
Art. 434	Means of disclosures	-	
Art. 435	Risk management objectives and policies	Annual	1 - General information
		Semi-annual <i>information on LCR</i>	15 - Liquidity risk
Art. 436	Scope of application	Semi-annual	2 - Scope of application
Art. 437	Own funds	Semi-annual	3 - Own funds
Art. 438	Capital requirements	Semi-annual	4 - Capital requirements
Art. 439	Exposures to counterparty credit risk	Annual	12 - Counterparty credit risk
Art. 440	Capital buffers	Annual	5 - Capital buffers
Art. 442	Credit risk adjustments	Semi-annual <i>full art. 442</i>	8 - Credit risk: general information and adjustments
		Annual <i>some of the tables referred to in EBA/GL/2018/10</i>	
Art. 443	Unencumbered assets	Annual	19 - Encumbered and unencumbered assets
Art. 444	Use of ECAIs	Annual	9 - Credit risk: use of ECAIs
Art. 445	Exposure to market risk	Annual	4 - Capital requirements
Art. 446	Operational risk	Annual	14 - Operational risk
Art. 447	Exposures in equities not included in the trading book	Annual	16 - Exposures in equities not included in the trading book
Art. 448	Exposure to interest rate risk on positions not included in the trading book	Annual	17 - Exposure to interest rate risk on positions not included in the trading book
Art. 449	Exposure to securitisation positions	Annual	13 - Securitisation positions
Art. 450	Remuneration policy	Annual	18 - Compensation and incentive policies and practices
Art. 451	Leverage	Semi-annual	6 - Leverage

Art. 452	Use of the IRB Approach to credit risk	Annual <i>full art. 452</i>	
		Semi-annual <i>information referred to in letters d), e) and f) of art. 452</i>	10 - Credit risk: information on the portfolios subject to the IRB Method
Art. 453	Use of credit risk mitigation techniques	Annual	11 - Credit risk: use of credit risk mitigation techniques
Art. 473-bis	Introduction of IFRS 9	Semi-annual	7 - Effects of the IFRS 9 transitional provisions on own funds and capital ratios

At the reference date of this document, Articles 441 (*Indicators of global systemic importance*), 454 (*Use of the Advanced Measurement Approaches to operational risk*) and 455 (*Use of Internal Market Risk Models*) of Regulation (EU) no. 575/2013 are not applicable to the Banca Popolare di Sondrio Group.

Section 1 - General information requirement (art. 435 CRR)

Risk control system

The purpose of risk management and control activities is to ensure the reliable and sustainable generation of value, safeguard the financial solidity and reputation of the Group, and provide transparent disclosure about the risks taken. In particular, the risk control system aims to:

- identify the criteria and methods for detecting, measuring/evaluating and managing all types of risk deemed relevant in consideration of the activity being performed, with a view to their sound and responsible governance;
- verify the respect of the limits to risk assumption, ensuring that the transactions carried out by the various business areas are consistent with the risk objectives assigned to them;
- monitor the adequacy of the capital position in relation to the risks to which the Group is or might be exposed.

Risk governance and control activities are part of the overall internal control system of the Group, as sketched by the internal regulation in compliance with the supervisory provisions in force (Bank of Italy Circular No. 285) and the indications provided from time to time by the regulatory and supervisory bodies, aimed at ensuring a sound and prudent management, based on effectiveness, efficiency, fairness and responsive to the Group's strategies and risk appetite.

The internal control system constitutes an organic set of rules, organisational controls, processes and procedures designed to ensure, through an adequate process of identification, measurement, management and monitoring of risks, the achievement of the following purposes:

- to verify the punctual implementation of the company's strategies and policies and ensure operational equilibrium;
- to contain risks within the limits set by the Risk Appetite Framework (RAF);
- to safeguard the value of assets and to protect them against losses;
- to ensure the efficiency and effectiveness of business processes and their operational correctness;
- to ensure that company information and support procedures are reliable and secure;
- to prevent the risk that the Group might suffer reputational damage by being involved, even involuntarily, in illegal activities (with particular reference to those connected with money laundering, usury and terrorist financing);
- to ensure that transactions comply with the law and supervisory regulations, as well as with internal policies, regulations and practices.

This system is an integral part of day-to-day operations; it involves all sectors and corporate structures, each called upon, to the extent of their own sphere of competence, to ensure constant

and continuous monitoring of risks. It is formalised in a specific internal regulatory framework aimed at defining, for each type of risk, the roles and responsibilities of the corporate bodies, of the managerial functions and of the organisational units.

The Group's internal control system, in accordance with the indications provided by current legislation, complies with the following guiding principles:

- clear attribution of tasks and responsibilities to each Group company;
- ensuring the necessary separation and independence of the control functions from the operating units;
- definition of control activities at each operating level, which means controls extended to all relevant business areas;
- dissemination of a risk culture and language shared at all levels of the organisation;
- full awareness of the risks assumed through the identification, measurement and monitoring of all types of risk, assumed or assumable, which are considered material;
- homogeneity in the definition and adoption of valuation methods and tools, avoiding inconsistent use of taxonomies, metrics and qualitative/quantitative methodologies;
- methods of interaction between the corporate entities consistent with an articulation of responsibilities at increasing levels, i.e. differentiated between the control bodies and functions in charge of the design and/or assessment of the internal control system;
- direct communication, without restrictions or intermediations, between the control functions and the corporate bodies in order to guarantee that any significant anomalies or deficiencies that are found are brought to the attention of the appropriate hierarchical levels and then handled as quickly as possible;
- development of reliable information systems, capable of providing prompt and adequately detailed data and information for recipients to carry out their activities.

According to the powers provided for by the regulatory provisions and the statements of the Supervisory Authorities, ultimate responsibility for the establishment of the Group's internal control system and the overseeing of its correct functioning lies with the corporate bodies of the Group companies, in accordance with the guidelines provided by the Parent Company. Specific control tasks are assigned to functions responsible for the scrutiny of certain risk areas and/or operations.

The Parent Company has the task of ensuring effective risk management through proper articulation of the roles and responsibilities of key decision-making departments, as well as the integrity and completeness of the entire Group's control system. This principle involves the centralisation of essential choices in terms of risk management, in order to ensure the harmonisation of all risk evaluation and control systems developed within the Group and to implement risk management policies in such a way that they can result as integrated and consistent as possible.

The Board of Directors, as a body with strategic overseeing responsibilities, has a role of stating the general guidelines for the management and control of the Group, which it carries out by

defining the Group's business model, strategic objectives and risk appetite and approving the key internal processes. Specifically, the Board of Directors:

- establishes the strategic guidelines and risk management policies, as well as the guidelines for their application, so as to ensure that the risks to which the Group is exposed are correctly identified, monitored and managed;
- approves: i) the constitution of any internal bodies and committees with control duties (Board Committees and the key Managerial Committees), providing for the appointment and dismissal of their members; ii) the constitution of the control functions and their duties and responsibilities, the coordination mechanisms and the information flows among these functions and between these and the corporate bodies, providing for the appointment and revocation of their heads;
- defines and approves: i) the Risk Appetite Framework (RAF), overseeing the Group's adherence to it, as well as the remedial actions to be activated where necessary to bring the risks back down to levels consistent with the RAF limits/objectives; ii) the general framework of the Group's Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP), ensuring their consistency with the RAF;
- approves: i) the draft of annual financial statements and interim reports, both for consolidated and individual balance sheets; ii) the results of the ICAAP and ILAAP processes and related reporting; iii) the key internal processes, the Recovery Plan, the capital and liquidity contingency plans; iv) the adoption of internal models to quantify regulatory capital requirements and related implementation projects; in relation to these matters, the Board oversees that the choices initially made about these models maintain their validity over time, approving any substantial changes;
- is constantly aware of the risk exposures and their dynamics over time, both on a consolidated basis and individually for each component of the Group, ensuring that the risk profiles are correctly identified and adequately measured, managed and monitored by the competent units;
- ensures that adequacy and functionality of the internal control system are regularly checked and, if deficiencies or anomalies emerge, promptly adopts appropriate corrective measures;
- ensures that the organisational framework is consistent with the risk policies and that roles and responsibilities are allocated in a clear and appropriate way;
- oversees the definition of a correct, complete and timely information system, consistent with the importance and complexity of the information needed;
- plays a lead role in promoting the establishment and diffusion at all levels of a "risk culture" able to enhance the importance of controls with a view to ensuring healthy and prudent management; in relation to this, the Board ascertains that the personnel are adequately involved and aware of the role assigned to them as part of the internal control system.

The Risk and Audit Committee, created and mandated by the full Board of Directors, supports the Management Body in shaping the guidelines of internal control and risk management systems,

regularly checking their adequacy with respect to the characteristics and risk profiles of the Group and the effective functioning of the control mechanisms. Specifically, the Committee:

- supports the Board of Directors in: i) defining the risk objectives (risk appetite) and risk prevention and governance strategies; ii) carrying out analyses supporting the decision-making process before entering new markets and launching new and complex activities or products/services; iii) defining the outsourcing policies; iv) appointing the heads of control functions of the Parent Company and similar; v) establishing the key elements of the internal control system and of the organisation and the requirements that must be met by the control functions; vi) examining the information provided by the control units;
- supports the Board of Directors in carrying out the following activities: i) periodic monitoring of the risk exposure and observance of the limits time for time applicable; ii) verification and certification of the adequacy of the Group's capital and liquidity conditions; iii) overseeing of the adequacy, functionality, completeness of the internal control system; iv) alignment of the control functions' activities with the guidelines established by the Board; v) evaluation of the correct application of accounting standards in drafting individual and consolidated financial statements, coordinating for this purpose with the Manager responsible for preparing the Company's accounting documents; vi) examination of the consistency between the incentive system and the RAF, coordinating for this purpose with the Remuneration Committee.

The Chief Executive Officer (CEO) and the members of the General Management, according to their respective powers, are responsible for setting up and maintaining an effective risk management and control system, in line with the strategic objectives stated by the Board of Directors. In particular, in performing the management function, they:

- oversee the implementation of the strategies and policies established by the Administrative Body, converting them in terms of risk limits, procedures and managerial actions which are likely to ensure a moderate risk assumption;
- define rules, activities, procedures and organisational structures inherent to the risk management process, taking care of their implementation, and verify that they remain appropriate over time, in terms of their adequacy and functionality;
- periodically inform the competent bodies and functions about the risks assumed;
- carry out the necessary remedial actions to eliminate any weaknesses and malfunctions that may be detected, by activating the business functions concerned.

In particular, the Chief Executive Officer:

- submits for the examination and approval of the Board of Directors the strategic guidelines, the multi-year strategic plans and related operating budgets, the updates to the RAF and the risk management policies;
- establishes, by submitting them to the Board of Directors for the final approval, the key aspects of the processes relevant for the purposes of the internal control system, overseeing their subsequent implementation;
- previously examines the transactions of major strategic, economic, equity-related and financial relevance, and then submits them to the Board of Directors for approval;

- implements: i) initiatives and interventions to continuously guarantee the completeness, adequacy, functionality and reliability of the internal control system; ii) the ICAAP and ILAAP processes, ensuring their compliance with the strategic guidelines and the RAF; iii) the Group's Recovery Plan and the capital and liquidity contingency plans in the event of their activation; iv) the necessary interventions for the set up and functioning of the chosen internal risk measurement systems, ensuring that they are integrated into the decision-making and operational processes; v) the establishment of rules, activities, procedures and organisational frameworks related to the risk management processes;
- puts in place the necessary initiatives to continuously ensure the completeness, adequacy, functionality and reliability of the internal control system;
- oversees the functionality of the single relevant processes and of the internal control system as a whole in terms of efficiency and effectiveness;
- ensures the necessary remedial actions to eliminate any weaknesses, anomalies or malfunctions found in the internal control system, activating the competent functions;
- ensures the proper, timely and safe management of information systems for accounting, management and reporting purposes.

The CEO is also responsible for overseeing the management, coordination and control of the Group companies, with specific regard to the establishment and maintenance of an effective internal control system in adherence with the guidelines set by the Parent Company.

Assisted by the other members of Top Management, the General Manager makes proposals regarding specific aspects of the business management and, to the extent of the sphere of competence, implements the decisions taken by the corporate bodies regarding the conduct of current affairs. The General Manager oversees the general functioning of the bank as a whole as well as of the various company structures, issuing specific directives to the managers and verifying their effective application in order to ensure the smooth running of operations and correct exercise of delegated powers. The General Manager is Head of Personnel; moreover, with the contribution of the Deputy General Managers and to the senior management responsible for corporate divisions, identifies the key budget objectives and verifies their achievement.

From 1 January 2020, following a partial restructuring of the high-level organisational scheme of Banca Popolare di Sondrio, a new «C-Level Suite» («Aree di Governo») was introduced in the organisational chart of the bank, with a reconfiguration of the previous Deputy General Managers' structures. Each new «Area di Governo» encompasses a group of corporate departments and units which carry out a series of interrelated tasks and activities. The Heads of the «Aree di Governo» are directly responsible of the organisational units they supervise; they report hierarchically and functionally to the CEO, which is required to oversee their activity. The sphere of competence of each «C-Level» also includes responsibilities for steering and coordinating the relevant activities of the subsidiary companies in a Group perspective.

The Board of Statutory Auditors ascertains the completeness, adequacy, functionality and reliability of the risk management and control systems and their compliance with the requirements established by law, acting with the contribution and cooperation of the internal control units. It is required to oversee the effectiveness of all the structures and functions involved in the control

system and their adequate coordination, promoting corrective actions for any deficiencies and irregularities that are found. With its supervisory action it contributes to ensuring the regularity and legitimacy of management and compliance with laws and rules governing the bank's activity.

The strategic guidelines for risk management and mitigation are established by the Board of Directors of the Parent Company, evaluating the overall business activity of the Group and the actual risks that it incurs, based on the specific type of operations carried out and the risk profiles of the companies belonging to it. The decisions are supported by monitoring and control mechanisms inherent to the evolution of the various risks assumed within the perimeter of the Group and their compatibility with respect to the pursuit of sound and prudent management.

The Parent Company provides the Group with a system of internal controls that is as homogeneous as possible, capable of allowing effective control both on the strategic choices of the Group as a whole and on the managerial equilibrium of its individual components, while also being able to oversee on an ongoing basis the typical risks associated with the business. Through the exercise of the powers of management, control and coordination over the Group, it ensures the overall consistency of the Group's governance frameworks, having regard the need of adequate connections among the bodies, structures and corporate functions of the components.

Each Group company adopts an internal control system consistent with the Group's strategy and policies regarding risk governance and controls, in accordance with the general principle of proportionality and in compliance with the regulations applicable for the single component at individual level, while ensuring that there are appropriate procedures in place and regular flows of information to the Parent Company about relevant risk profiles.

Depending on the organisational structure characterising the single business sectors, the application of the relevant risk strategies and policies is entrusted to the central Departments and Offices and/or to the Branches which operate in each territory.

The Group's organisational units, operating at the various levels of the corporate structures, are continuously involved so that they make their own and progressively consolidate a corporate culture that enhances controls in daily operations. In particular, each Unit is called upon, to the extent of its sphere of competence, to ensure the correct performance of the operations by carrying out so-called "first-line controls".

The internal control framework is periodically subject to recognition and adaptations according to the evolution of company operations and changes in the frame of reference. The assessment of the adequacy and effectiveness of the internal control system, as a whole and in its relevant components, is subject to internal auditing.

As part of the internal control system, risk management and compliance functions ("second-line controls") are aimed, among other things, at ensuring the correct implementation of the risk management processes, defining criteria and methodologies for risk measurements and evaluations; they are also intended to verify that risk limits assigned to the business functions are not breached and ascertain that the company processes and procedures are compliant with the rules of law and the provisions of the supervisory authorities.

From an organisational point of view, these controls are carried out by functions which are separate and independent from the risk-taker Units.

At the Parent Banca Popolare di Sondrio, the risk management function is identified in the Risk Control Department, which is composed by a series of specialist and support offices coordinated by a senior manager. The mission of the Risk Control Department is to assist the management bodies in defining the Risk Appetite Framework (RAF) and risk policies as well as to monitor the adequacy of the Group's capital and liquidity positions. It is responsible for the design, development, updating, internal validation and management of systems, methodologies, tools and procedures for the identification, measurement, evaluation and control of material risk profiles. It carries out second-level controls on the main types of risk, monitoring how their exposure evolves over time in a current and future perspective. It also supports the dialogue with the Supervisory Authorities for issues of its competence - in particular with the Authorities which form part of the Single Supervisory Mechanism (European Central Bank, Bank of Italy) and of the Single Resolution Mechanism (Single Resolution Board, National Resolution Authority) - by producing relevant data and information and, if necessary, assuming the role of direct contact point.

In more detail, the Department, which belongs to the «Chief Risk Officer (CRO) Area» since 1 January 2020, is mainly responsible for:

- developing the methodologies, tools and processes for identification, evaluation, measurement and control of the risks associated with the company's business, continuously checking their adequacy and producing the related risk reporting;
- measuring and evaluating the exposure to significant risks in a reliable, timely, systematic and complete manner, monitoring current and future exposure;
- overseeing the internal capital (ICAAP) and liquidity (ILAAP) adequacy assessment processes; coordinating the preparation/updating of the Group's Recovery Plan, also carrying out directly the relevant activities; ensuring the contribution to the Group's Resolution Plan;
- overseeing the drafting of documents aimed to fulfil the disclosure requirements envisaged in the Pillar 3 regulation;
- executing internal and supervisory systemic stress tests;
- supporting the corporate bodies in the design and development of credit portfolio optimisation policies in line with the Risk Appetite Framework (RAF);
- carrying out control activities on single credit transactions of greater importance and on the overall riskiness of the lending portfolio.

The structure of the Risk Control Department is characterised by:

- an articulated coverage of credit risk matters, which, given their significance, are spread out over four distinct Offices (*Ufficio Sviluppo modelli di credito*, *Ufficio Politiche creditizie*, *Ufficio Qualità del credito*, *Ufficio Grandi rischi e rating desk*), organisationally supported by a unit with coordination tasks and leading role in internal projects and other significant initiatives related to credit risk management (*Ufficio Organizzazione rischio di credito*);
- the presence of an organisational unit specifically responsible for monitoring the exposure to market, interest rate and liquidity risks, as well as for the development and updating of the related measurement systems (*Ufficio Rischi finanziari*);

- a unit specifically devoted to carry out activities that require an integrated perspective with respect to all significant risk exposures, such as the definition and monitoring of the risk objectives established by the RAF, the fulfilment of the Pillar 2 (ICAAP) and Pillar 3 (Public Disclosure) requirements, the updating of Recovery Plan and the Bank's contribution to the Resolution Plan, the execution of stress tests aimed at verifying the stability of the Group's capital and financial conditions under adverse scenarios, the monitoring of risk profiles not supervised by other specialist units (*Ufficio Rischi integrati*);
- a function, which operates autonomously and independently from other units in charge of internal models development, responsible for verifying, at the initial set-up stage as well as on an ongoing basis, the quality and reliability of the internal risk measurement systems, with specific regard to the correct calibration and use of rating systems (*Ufficio Convalida*);
- a unit supporting the fulfilment of external information and reporting requirements to supervisory authorities and other institutions and agencies (*Ufficio Sistemi di sintesi*).

The other control functions composing the “second line of defence” of the Bank are:

- the Compliance and Data Protection Officer (DPO) Function, placed under the hierarchical-functional dependencies of the CEO; this is dedicated, with regard to the whole corporate activity - except what is actually pertaining to other specialised units with control features - to oversee the risks of non-compliance with regulations, through advising and control activities aimed at detecting and preventing the risks of company processes and procedures to be not fully compliant with the “legislative regulation” (laws and regulations) and “self-regulation” (internal provisions) applicable from time to time; in addition, in the role of Data Protection Officer (DPO), the Function is an integral part of the Data Protection framework, adopted pursuant to Regulation (EU) 2016/679 of 27 April 2016 (General Regulation on the Protection of Personal Data, “GDPR”) on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (privacy);
- the Anti-Money Laundering Function, also placed hierarchically and functionally under the CEO, which is entrusted with the task of supervising the prevention and contrasting risks deriving from involvement in money laundering and terrorist financing operations;
- the Manager responsible for preparing the Company's accounting documents, placed under the General Manager, whose mission is to ensure the reliability of the accounting and financial information by preparing adequate administrative and accounting procedures and monitoring their adequacy and effective application;

while the “third line of defence” is represented by:

- the Internal Audit Department which, with a view to third-level controls and also with on-site inspections, is required to verify the regular performance of company operations and the evolution of risks and, on the other hand, to evaluate the adequacy and functionality of the organisational structures and the other components of the internal control system, bringing possible enhancements to the attention of upper-level corporate bodies; it directly supports the Board of Directors, hierarchically and functionally referring to its Chairman and acting as an independent vehicle of information and control instrument, both for the purpose of

adequate fulfilment of Supervisory requirements and also to satisfy specific needs for risks to be put under control and for the organisational efficiency/effectiveness to be scrutinised.

The Supervisory Body pursuant to Legislative Decree 231/2001 (“Organismo di Vigilanza 231/2001”) has the purpose of overseeing the proper functioning and observance of the Organisational Model and the Code of Ethics adopted in order to prevent the commission of crimes contemplated by the said Italian Legislative Decree. The following tasks are assigned to it:

- to define and implement the Organisational Model pursuant to Legislative Decree 231/2001, in the light of the map of crimes and relevant processes/risks;
- to inform the Board of Directors on the adequacy, functionality, observance and updating of the Organisational Model;
- to carry out verification tasks, overseeing the correct functioning, observance, adequacy and updating of the Organisational Model, with particular reference to the efficiency and effectiveness of the procedures put in place by the Bank to oversee the risky business areas/operations envisaged in the Model.

Additionally, special managerial committees (such as the “Risks Committee” and the “ALM and Investments Committee”) have been set up within the Parent Company, aimed at supporting the Management Body in examining the proposals for updating of the RAF, in monitoring the risks taken and in the analysis of breaches in limits or thresholds, through evaluations and formulations of proposals on possible corrective measures. The “Scenario Committee” is instead appointed to support the senior management and the high-level bodies in the plausibility check of the hypotheses of future evolution in the macro-economic scenarios acquired by external providers and used by the Bank in a series of key processes (e.g. financial and strategic planning, ICAAP/ILAAP) which presuppose the projection of future events for forecasting or simulation purposes; it also has the task of certifying the proper adoption of forward-looking scenario data in the processes for determining the provisions on loans and debt securities held in portfolio according to the accounting provisions introduced by IFRS 9 (i.e. through the scenario-based credit risk parameters used in the estimates).

The high level information required to monitor the evolution of risks, prepared by the internal control functions according to their respective responsibilities, is structured in such a way as to allow the Corporate Bodies and the top management a documented, complete and aware assessment of the risk exposures, favouring the related management, control and mitigation activities, as well as of the adequacy of the capital available to cover them. The major trends in the risk profiles are also communicated to the competent operational areas, by means of specific reporting designed to make personnel aware of the need to prevent and attenuate risks.

The Group internal regulation on risk governance relates, in particular, to the Risk Appetite Framework (RAF), the internal capital (ICAAP) and liquidity (ILAAP) adequacy assessment processes and the management process of the single types of risk considered material. Each regulation describes the roles and responsibilities pertaining to the bodies, committees and organisational units involved, making sure that the functions assigned to business activities are kept separate from those that carry out control activities. Furthermore, having regard to the Group's governance arrangements, the internal policies establish the tasks pertaining to the

Parent Company in the exercise of its management and coordination powers over the entire Group, as well as the roles and responsibilities of the subsidiaries for the implementation of the interaction mechanisms among the components of the Group.

Risk management strategies and processes

A) Risk Appetite Framework

The Risk Appetite Framework (RAF) represents the general reference system, in terms of methodologies, processes, policies, controls and systems, aimed at establishing, communicating and monitoring the risk appetite of the Group and its components. It provides for the *ex ante* configuration of risk objectives consistent with the Group's business model and strategies, taking into account the maximum levels of risk that can be assumed.

The formalisation through the RAF of the levels of risk that the Group is willing to take on in pursuing its strategic goals is an essential reference point for a coordinated framework of risk governance based on the principles of sound and safe management.

The activities aimed at determining the Group's attitude for risk and promoting its constant adaptation to the internal and external context act as a framework within which the risk-taking objectives are closely linked to strategies and business model, thus supporting the corporate bodies in planning and monitoring business activities and related risks properly.

Indeed, the overarching risk strategies, as well as the single policies and processes for the identification, evaluation and management of significant risk categories, are all based on RAF, both at Group level and for the individual companies; the framework also includes the set of instruments, methods and controls aimed at ensuring the correct measurement and adequate monitoring and reporting of risks actually taken in relation to the established risk targets.

Within this context, the Group has developed specific RAF governance arrangements where the roles and responsibilities of the corporate bodies and functions involved, both for the Parent Company and for the subsidiaries, are clearly defined together with coordination mechanisms aimed at allowing the integration of risk appetite into management processes.

The framework for determining risk objectives is a fundamental part of the Group's risk governance system, which includes:

- a regulation governing the processes for defining, monitoring and implementing the Risk Appetite Framework (RAF);
- the Risk Appetite Statement (RAS);
- the regulation on risk management policies and processes;
- the Capital and Liquidity Contingency Plans;
- the Group Recovery Plan.

The main elements of the RAF are ordinarily expressed with quantitative measures (indicators, objectives, limits and thresholds), which are re-calibrated annually in a proportionate way both for

the Group and its main components. Qualitative considerations are also included to address the way the risks should be assumed or avoided as well as the internal control systems and processes should be shaped to take risks under control appropriately.

With reference to quantitative elements, the risk appetite is articulated in coherent schemes of metrics and thresholds based on progressively increasing levels of severity and alert, aimed at promptly detecting any deviations from the risk objectives set from time to time. This system is functional for monitoring the current and prospective positioning of the Group in relation to the parameters deemed to be the most representative of risk appetite, in order to consistently run the company activities and, if necessary, to adjust its patterns through the adoption of initiatives intended to realign the capital, financial and liquidity situation of the Group.

The RAF metrics configure a "cascade system" which is articulated on three hierarchical levels; more general and aggregate measures for the desired appetite for risk are placed at the top, and then split into specific indicators for each material risk type, following a consistent approach. These are divided into:

- 1) *Primary indicators*: set of metrics representing the comprehensive risk appetite, pertaining to areas for which strategic objectives are pursued or there are regulatory requirements or additional constraints imposed by the Supervisory Authorities.
- 2) *Complementary indicators*: specific metrics for each type of risk, representative of the factors that cause material changes in the primary indicators, identified in accordance with the most important risk profiles for the Group; they can be supplemented by qualitative objectives, aimed at driving the assumption and control of risks to which they pertain.
- 3) *Operational indicators*: metrics characterised by a higher level of analyticity and granularity, which are part of the ordinary risk monitoring and management tools; through them, the risk appetite levels set on higher-ranking indicators is properly linked to current business operations; they can be intended to limit risk assumption by the business units or highlight to the control functions any potential deviations of the actual risks from the ones desired.

With reference to the primary indicators, the Group's appetite for risk is expressed through key metrics which may be classified into the following categories:

- Capital adequacy and liability structure
- Liquidity
- Profitability
- Asset quality.

The following types of thresholds are provided for each primary indicator, expressive of the comprehensive framework of risk objectives defined along the forecast horizon:

- risk appetite
- risk trigger
- risk tolerance
- risk capacity.

The figures representing the overall risk profile of the Group are then divided, for each risk category considered "material", into secondary quantitative metrics and/or qualitative objectives (complementary indicators).

All second-stage parameters adopted as notable measures of risk appetite refer to the set of techniques and methods ordinarily used by the Group to quantify risks and economic capital in order to comply with regulatory obligations, as well as for managerial and internal capital adequacy (ICAAP) purposes. These indicators cover the types of risk considered "material" following the specific internal identification process, which includes the cataloguing and the relevance analysis of risks.

A key threshold is set for each complementary metric ("risk trigger"), the violation of which involves the evaluation of suitable risk-containment actions. Depending on the type of indicator and the nature of the risk under control, the identification of one or more monitoring thresholds may also be envisaged, in order to draw attention to the fact that the risk profile is getting close to the limit: exceeding it would determine an increase in alert levels, which in turn means a strengthening of checks over the phenomenon considered.

More detailed metrics and limits are also connected to the set of primary and complementary indicators (operational indicators); they can be monitored through the systems and procedures adopted by the company for the various risk profiles, with the aim of reactively reporting any increase in exposures, placing restrictions on business operations where necessary and directing the remedial actions to be put into practice by the structures involved in risk-taking activities.

In this way, the risk appetite formulated at the higher hierarchical levels of RAF is articulated, based on the principle of proportionality, in more specific and granular limits to risk assumption (risk limits). These are split into sub-categories of material risks, business units and/or business lines, product types, customer segments, asset/liability portfolios, etc., which can be combined with the setting of as many monitoring thresholds acting as early warning signals.

The Risk Appetite Statement (RAS) is the written expression of the Group's risk appetite. This statement, made by the Board of Directors of the Parent Company, explains the following points:

- the risk profiles to which the Group is most exposed, based on materiality degree, and those whose assumption cannot be completely avoided due to the nature and type of the activity carried out;
- the setting of risk objectives and the related system of thresholds for the forecast horizon being considered, accompanied by any qualitative indications, with reference to the primary and complementary metrics of the RAF.

On the other hand, the system of risk limits, articulated in accordance with the RAS metrics, is defined in the context of the risk policies to which they apply.

In addition to the identification and setting the risk appetite parameters, the Bank establishes the organisational mechanisms which regulate the governance and processes for determining and implementing the RAF, in terms of updating, monitoring, reporting and escalation procedures towards the competent decision-makers (committees, functions and corporate bodies).

Specifically, the RAF management procedures envisages, at least once a year:

- the review/update of the qualitative and quantitative elements that globally express the Group's risk appetite levels;
- the calibration of thresholds in accordance with the evolution of company operations, which act as constraints on the formulation of the economic and financial forecasts outlined in the strategic planning;
- the formalisation and approval of the risk objectives assumed by the Board of Directors in the Risk Appetite Statement (RAS) document.

The RAF is continuously implemented by:

- monitoring the risk parameters and managing any breaches of "critical" targets/thresholds, with the consequent adoption of mitigating initiatives in case of deviation from them;
- the periodic reporting on the evolution of risk profiles with respect to the reference objectives/thresholds and on the implementation of any intervention plans.

B) Risk categories

The prudential regulation requires that banks conduct an accurate identification and materiality assessment of risks to which they are or could be exposed in carrying out their operations.

This activity, performed at least annually, is aimed at identifying the risks likely to jeopardize the business operations, the pursuit of the strategies and the achievement of the Group's management objectives. The analysis is carried out by assessing both current and potential conditions, in order to identify any risk profiles already present in the environment and yet not adequately captured by the risk categories mapped in the current inventory, or to anticipate types of risk that have never been material for the Group before but could become relevant in a forward-looking perspective, as they are connected to foreseeable changes in the economic, financial and regulatory context, as well as in the company's operations.

This is a recognition process of particular relevance for the entire risk governance system as it constitutes a sort of "connecting line" among the RAF, ICAAP, ILAAP and Recovery Plan: it is in fact functional to the identification of the most significant risk types for which it makes sense to define a specific risk appetite, as well as for the purposes of determining the risk categories that could have an impact on the adequacy of the Group's current and perspective capital and liquidity situations, also assessed under stressed conditions.

This process, which is coordinated by the Parent Company and formalised in specific internal regulations, is divided into the following sub-phases:

- identification of potentially assumable risks;
- identification, within the context of those assumable, of the risk profiles that are indeed applicable to the Group's business context and definition of the risk inventory;
- analysis of the degree of materiality of risks with respect to current and future operations.

From a taxonomic and definitory point of view, the framing process of the "Risk Map" (the comprehensive inventory of risks that are deemed to be material for the Group) consists of two successive levels of analysis, which can be qualified as follows:

- Level 1: the risks are grouped into categories as proposed in the regulatory provisions and guidelines issued by the Supervisory Authorities, taking into account the arrangements and methods used to monitor and control those risks applicable to the Group;
- Level 2: the risks are divided into sub-categories on the basis of the event that could potentially entail losses for the Group.

The list of risks potentially assumable by the Group is shown below.

Level 1	Level 2
Credit and counterparty risks	Default and recovery risks
	Migration risk
	Sovereign risk on banking book securities (Italy)
	Other (non-sovereign) banking book instruments risk
	Single-name concentration risk
	Geo-sectoral concentration risk
	Securitisation risk
	Country and transfer risks
	FX lending risk
	Residual risk
	Counterparty risk
	Credit valuation adjustment risk (CVA risk)
Market risk	Position risk on the trading book
	Concentration risk on the trading book
	Foreign exchange risk
	Commodity risk
	Basis risk on the trading book
Operational, reputational and compliance risks	Operational risk, including: <ul style="list-style-type: none"> • Legal risk • Conduct risk • ICT risk • Fraud risk • Model risk • Organisational risk
	Compliance risk
	Money laundering (ML) and terrorist financing (TF) risks
	Reputational risk
Interest rate risk	Repricing risk (gap risk)
	Basis risk
	Option risk
Liquidity risk	Funding liquidity risk
	Market liquidity risk
Strategic risk	«Pure» strategic risk

Level 1	Level 2
Other risks	Equity investment-related risk
	Business risk
	Real estate risk
	Risk of excessive leverage
	Risks related to Activity as Depository Bank for CIUs and Pension Funds
	Risks related to covered bond issuance
	Pension risk
	Insurance risk
	Regulatory risk
	Risk concentrations

With reference to the risk categories and sub-categories considered most significant (“material”) for the Group and, as such, placed at the cornerstone of the Group's Risk Appetite Statement, we provide elements to illustrate the risk management objectives and policies, as well as the set of control systems, tools and processes that the Group has adopted to assess and manage risks.

CREDIT AND COUNTERPARTY RISKS

Definition

The risk that a counterparty which has been granted credit is unable to meet its obligations on time and in full, or that a change in their creditworthiness generates a corresponding change in the economic or market value of the position.

Within this category, the following cases are considered relevant:

- *Credit risk*: the risk that a counterparty which has been granted credit is unable to meet its obligations on time and in full (default risk), or that the amount recovered after liquidating the assets of an insolvent counterparty is lower than the amount originally foreseen (recovery risk). It includes the credit risk deriving from exposures to central administrations and local authorities of the Italian State with reference to cash credit facilities and guarantees given;
- *Counterparty and credit valuation adjustment risks*; in particular:
 - *Counterparty risk*: the risk of suffering losses due to a counterparty's failure to fulfil obligations deriving from assets recorded on or off the balance sheet under contracts of financial nature; the risk can manifest itself both in the period between the date of signature of the financial contract and the settlement date of the transaction, as well as at the time of the final settlement of the cash flows relating to the transaction, if there is a time lag between the irrevocably performed contractual obligation and the related transaction consideration or, in the absence of a reciprocal exchange, if there is a delay in the fulfilment of the only obligation owed by the counterparty (*delivery and settlement risks*);
 - *Credit value adjustment (CVA) risk*: the risk of suffering losses due to changes in market prices as an effect of deterioration in the creditworthiness of counterparties of over-the-counter derivatives (excluding transactions with qualified central counterparties);

- *Sovereign risk on banking book securities (Italy)*: the risk related to the impossibility or unwillingness of the Italian State to honour its payment commitments in the time and manner originally foreseen, or deriving from the deterioration of the creditworthiness of the Italian State or from its failure to comply with its payment obligations to Group entities. This risk exists in connection with sovereign debt securities allocated in financial portfolios other than the trading book, with the exception of any cash credit facilities and guarantees given;
- *Other (non-sovereign) banking book instruments risk*: the risk of a reduction in the economic value of the securities not belonging to the trading portfolio due to an adverse change in financial markets or a deterioration in the creditworthiness of the issuers or of the issuances not already linked to events considered in credit risk and Italian sovereign risk;
- *Single name concentration risk*: the risk deriving from relevant credit exposures to individual counterparties - including central counterparties - and groups of related counterparties, as well as similar risks related to credit risk mitigation techniques (also associated with indirect credit exposures);
- *Geo-sectoral concentration risk*: the risk deriving from relevant credit exposures to counterparties belonging to the same economic sector or geographical region or which carry on the same business activity or deal in the same goods or services, as well as similar risks related to credit risk mitigation techniques (also associated with indirect credit exposures).

Credit risk

Strategy

By carrying out credit activities, the Group fulfils its function as a cooperative bank oriented primarily towards providing support for the local economy, by granting financial resources to those who pursue a deserving end and satisfy adequate criteria of reliability.

In this context, the lending activity is based on principles of healthy and prudent management, fair remuneration of the risk assumed and correct and efficient operational conduct, with a view to establishing a two-way relationship with borrowers based on reciprocal trust and transparency; this in order to enhance the Bank's particular attitude for building long-term customised relationships with local business owners.

The sizing and composition of the Group's credit portfolio reflects the financial needs of families, small and medium-sized enterprises and institutions - mainly located in the areas where the Bank has opened branches - which constitute the economic and social fabric of the local territory.

The Bank prefers to lend to SMEs since they do not move in broader financial circles and, consequently, need a point of reference that can understand their requirements and meet them with skill, efficiency and speed, following the evolution of the business over time. This does not mean that the Bank neglects the needs of larger counterparties, whether belonging to the "productive" sector or the "institutional" and "public" sectors, where creditworthiness, ascertained through a rigorous preliminary investigation, is expressive of particular solidity and reliability.

In consideration of the Group's strategic objectives and approach to operations, its lending strategy is based on a low propensity to risk and a full awareness of the same; this involves:

- measurement of the current and prospective risk of the credit portfolio, both as a whole and/or at various levels of disaggregation;
- monitoring the risks linked to an excessive concentration of the portfolio, also through the imposition of limits on exposure towards larger counterparties and economic sectors with a more pronounced risk profile;
- rejection of transactions that could jeopardise the Group's profitability and stability.

In particular, the medium-term strategy is characterised by the maintenance of a cautious attitude towards the assumption of the risks associated with lending and careful monitoring of them throughout the credit life cycle, to be implemented through:

- a rigorous examination of credit applications, aimed at understanding the effective risk of the counterparties by analysing their ability to generate wealth currently and in the future;
- an intensification of risk identification, monitoring and management to safeguard the quality of credit assets from deterioration, with the aim of progressively limiting the cost of risk and the level of non-performing loans (NPL);
- the search for an adequate remuneration for the risk assumed on the basis of the type of credit facility granted and the adoption of prudent provisioning policies;
- the systematic use of rating models in the credit management processes, favouring selective, efficient and predictive assessments of the probability of counterparties' default.

In the implementation of the strategic guidelines set and in compliance with the risk thresholds established, the credit policy defines objectives in terms of size and qualitative composition of the credit portfolio in order to guarantee an adequate combination between the risk profile assumed and the levels of return achieved. The guidelines are declined in the definition of products, segments, sectors and categories of counterparties that maximise the expected profitability while, at the same time, governing the quality of the portfolio and ensuring capital adequacy on a prospective basis.

For planning purposes, the guidelines establish objectives for the operational structures, covering the quality of the portfolio, as well as its growth and profitability. These objectives must be achieved in line with capital and risk constraints.

The procedures and organisational structure in place have been formalised clearly specifying activities, roles and responsibilities. In order to avoid potential conflicts of interest, it is ensured the separation between operating functions and control functions.

The system of decision-making powers approved by the Board of Directors which is based on the principle of "cascade delegation", provides the attribution to peripheral structures of limited powers, giving preference to control by specialist central units.

The monitoring and management of impaired loans comply with strategic guidelines aimed at limiting volumes and the impact of non-performing loans (NPL) on total lending as well as the cost of associated risk, also through targeted de-risking actions.

The Parent Company, in exercising its strategic and coordination function towards the subsidiaries, ensures that at group level are adopted uniform credit policies and that

homogeneous classification, valuation, management and monitoring criteria are set. The strategic lines promoted are generally aimed at supporting local economies and, in particular, small and medium-sized economic operators and private individuals, pursuing the maintenance of a low risk profile and level of concentration.

The guidelines are declined by the subsidiaries in compliance of the peculiarities that can derive from the nature of the counterparties served and the particular types of products offered, as well as the characteristics of the reference market, taking into account any differences in local laws in the countries where the foreign subsidiaries operate.

Measurement and control systems

Assumption of the risks associated with lending takes place through the use of methodologies, procedures, organisational structures and tools that are capable of guaranteeing knowledge of their size and evolution over time. In this sense and in compliance with current regulations and best practices, the Group develops a structured system for detecting and managing credit risk and promotes its use in the context of operational, management and control processes.

With reference to the measurement of credit risk, supervisory regulations offer intermediaries the option of choosing among three alternative approaches to determining the capital requirement. As regards to only the Parent Company's "Corporate" and "Retail" exposures, for the purpose of calculating the capital requirement, the Bank applies the Advanced Internal Rating-Based Approach (AIRB), which makes use of the risk parameters calculated with internally estimated rating models. For details on the methods for determining risk factors and on their pervasive use within the corporate credit management and control processes, please refer to Section 10 of this Document. As for the rest of the loan portfolio, the Group uses the traditional Standardised Approach (TSA) which involves the attribution of exposure weighting ratios on the basis, where available, of the rating assigned to each counterparty by specialised companies, called ECAI - External Credit Assessment Institutions (independent credit rating agencies recognised by the Supervisory Authorities, such as Standard & Poor's, Moody's, Fitch Ratings, Cerved Group); in the absence of a rating, the exposures included in the loan portfolio are divided into sub-aggregates and, for each of them, differentiated prudential treatments are applied, depending on the nature of the counterparty and the technical form of the credit granted.

The credit risk management process is based on the maximum involvement of the various levels in which the Group's organisation is structured, in order to balance the need for prompt fulfilment of requests from customers with an analytical assessment of the risk involved. In detail, the process is divided into various stages: credit policy planning, loan application, disbursement, periodic review, monitoring and management/recovery of impaired loans.

In implementing the strategic guidelines dictated by the corporate governance bodies, the credit policy defines the volumes and qualitative composition of the portfolio in terms of technical forms, customer segments and geo-sectoral distribution of loans, in line with the desired performance and risk profile. The guidelines thus established are implemented by the organisational units responsible for the assumption and management of risk and are consequently reflected in the operations that characterise each phase of the credit process.

This process involves a series of controls aimed at risk mitigation.

The loan application phase, which aims to establish whether applicants satisfy certain conditions for credit-worthiness, includes consideration of whether the characteristics of the loan are consistent with its purpose, a check on whether any guarantees being provided are suitable to cover the risk of non-repayment, and a review of the economic effectiveness of the loan. In this context, the opinion expressed by the internal rating system, if available, and the associated estimates of default are taken into maximum consideration as essential elements for an overall evaluation of the customer and of the transaction.

The use of indicators of risk-adjusted value creation (EVA Economic Value Added) meets the need to assess more selectively certain loan positions and to control more closely the quality of loans granted. Through a specific application integrated within the electronic credit line system, it is possible to determine a measure of profitability that is adjusted for credit risk (expected loss based on the customer's rating and LGD of the transaction) and for the opportunity cost of the regulatory capital absorbed. This is applied to the individual lending relationship, resulting in an estimate of the value added by current or potential exposures. This tool makes it possible to identify non-performing relationships more rapidly, thereby taking measures to restore a profitable situation and guide the criteria for setting the correct price of loans on the basis of requests for new finance or for a review of existing relationships.

The final decision whether to grant a loan or not is taken by the competent decision-making bodies prior to disbursement, carefully assessing all of the information that emerged during the loan application, as well as any other useful input that might be available. In order to ensure greater control over risk, the mechanism for establishing decision-making powers for the bodies at the lower end of the hierarchical ladder now operates alongside the nominal value of the operation with another system of powers that also takes into account an objective measure of the counterparty risk which is reflected in the internal rating.

The credit lines are only made operational and, therefore, available to the borrower once the provisions of the resolution approving the loan have been completed, having specific regard to the acquisition and verification of collaterals and personal guarantees and an assessment of their suitability to mitigate credit risk.

After disbursement, the credit positions are reviewed periodically to check whether all of the conditions established during the loan application and taken into consideration when granting the loan are still valid. Lines of credit can also be reviewed automatically in the case of positions with low levels of risk, ascertained through an examination of suitable indicators that are established in advance, where the internal rating takes on a great deal of importance.

Monitoring of the loan and of the supporting guarantees, which is carried out in order to detect as quickly as possible any negative symptoms that might arise and to implement promptly and effectively the action necessary to prevent further deterioration, is performed in compliance with formal organisational procedures, supported by automatic instruments and applications. These entail constant observation of the degree of reliability of the counterparties and periodic verification of the persistence of the general and specific requirements and the value of the protections acquired, with the aim of ensuring their full and effective enforcement in the event of the borrower's insolvency.

The entire monitoring system on the quality of the lending portfolio and on the phenomena that characterise its deterioration, further strengthened in the last financial year, is based on a complex set of rules, processes and control methods. In this regard, the organizational units holding the credit positions play an important role since, by maintaining direct customer relations, they are able to identify any signs of anomaly immediately. The structures are supported in these activities by a series of reports produced internally or by external contributors.

Specific central structures are dedicated to analysing the information that is available, in order to assess continuously the merit class of each exposure and identify those potentially subject to excessive risk. The depth of this analysis is linked to the needs expressed. These structures can elaborate presumptive synthetic indicators of an increase in the risk of the borrower by using methodologies and performance control processes that take into account internal and system data together with the rating assigned by the rating system, where available.

With regard to the monitoring of loans with signs of anomaly, formal processes have been established for the identification, resolution and monitoring of so-called "forborne" positions (i.e. credit exposures for which modifications of the contractual conditions or refinancing have been granted due to the financial difficulties of the debtor); forborne as an attribute is transversal to all loans, whatever their credit administrative status. It is also of importance the specific analysis of overruns in terms of both severity and duration, so that the Bank can intervene promptly on positions that are beginning to show critical issues concerning repayment.

The positions identified as being at significant risk are analysed appropriately and, where there are clear signs of difficulty, they are classified as "impaired", depending on their actual severity.

The management of non-performing loans is entrusted to specific central offices which, while making use of "corporate managers" and "retail managers" located throughout the territory, carry on their activities, aimed at regularising positions, where possible, or recovering the amount owed in the event of the borrowers' insolvency, operating in close collaboration with the domiciliary structures of the relationships. In order to streamline tasks of an operational nature, the involvement of these internal functions is combined with the intervention of selected specialised external companies which, under the supervision of the staff in charge, are used to send reminders to defaulting customers and/or recover the unpaid loans.

A specialist unit based in the Parent Company's risk management structures provides support to the Credit Department in identifying "performing" customers that are showing the first signs of difficulties and relationship anomalies, as well as counterparties who persistently go over their overdraft limits. This structure also operates through second-level controls to ensure correct performance monitoring of the positions, the consistency of their classification, the adequacy of the related provisions and the adequacy of the recovery process.

In-depth checks are performed during the loan application, pay-out, review and monitoring stages with regard to risks concentration for significant exposures to individual counterparties or groups of counterparties that are linked by legal and/or economic relationships. In addition, a process has been established to identify and manage separately the most significant credit transactions isolated on the basis of specific size and risk parameters, in order to evaluate whether they are in line with the Bank's risk appetite before completion of the procedure.

In order to support credit management activities and monitoring of the related risk exposure, periodic heterogeneous information are prepared, both at managerial and operational level, concerning the lending portfolio, assessed according to different axes of analysis (with particular regard to the trend and composition of non-performing loans), as well as the risk components produced by the rating system.

In the exercise of its strategic and coordination functions, the Parent Company ensures that uniform credit policies are adopted at Group level and homogenous criteria for assessment, classification, monitoring and risk management are set. The policies dictated by the Parent Company are also applied by the individual Group companies in ways that respect the peculiarities of their counterparties and the particular types of products being offered, as well as the characteristics of the reference market.

The subsidiaries, according to the specificities of the sector to which they belong, with the related organisational peculiarities and, as regards to Banca Popolare di Sondrio (SUISSE), with the constraints imposed by a different legal system, adopt substantially homogeneous procedures for managing and controlling credit risk.

In this regard, it should be noted that the Swiss subsidiary has its own rating system that is only applied to its loans to customers, based on the subjective-discretionary opinion expressed by the sector operators. This approach involves gathering various set indicators and information of a financial and qualitative nature, depending on the type of counterparty; the combined evaluation of these elements allows to reach a score, which is used by the person making the final evaluation to assign a rating to the counterparty on a scale of 11 risk classes. This methodology adopted by the subsidiary has been analysed by its independent auditors, who consider it appropriate given the size, complexity and risks involved in the activities performed.

Factorit does not have its own rating system. The company does however make reference to the ratings assigned by the Parent Company to common customers and, for these, can check their risk status and evolution over time.

In order to limit so-called "residual risk" (i.e. the risk that the credit risk mitigation techniques used are less effective than expected), the Group is equipped with an articulated system for the management of guarantees which makes it possible to oversee the entire process of acquiring, evaluating, verifying and realizing them. In particular, there are formal policies and procedures relating to their use, the existence of the eligibility requirements - general and specific - required by regulatory provisions and the constant monitoring to ensure that the amount is appropriate.

Guarantees are revalued on the basis of events connected to the status of the loan and/or the protection and also according to methods and periodicity consistent with the nature of the assets and financial instruments in place and in line with current regulatory standards. The information systems and operating procedures in fact allow the acquisition, storage and management of all data useful for the correct identification and revaluation of the guarantees received.

Suitable arrangements are made when obtaining, assessing and verifying guarantees to ensure that they will prevail over third parties, both at the time and in the future, and can be fully enforced in the event of default on the part of the borrower.

With regard to mortgage guarantees, Group companies adopt reliable principles and standards for the valuation of properties in order to obtain realistic and detailed estimates of the value of the assets being used as collateral. There are also processes that are able to ensure efficient management and timely assessment of properties that are subject to real encumbrances, by taking a census of the assets and filing the expert appraisals in specific IT applications.

At the Parent Company, the value of the properties is updated using external expert appraisers, equipped with the right professional skills and independent from the proposal, resolution and loan pay-out processes. In order to ensure timely alignment with developments in the real estate market, revaluation of the entire property portfolio used as collateral is also envisaged, based on statistical parameters that reflect market conditions. Periodically, the entire portfolio of loans backed by mortgage guarantees is subjected to a further level of monitoring, done centrally by the relevant departments, with the aim of highlighting the exposures and related property valuations that present risk characteristics. This could lead to specific checks and, depending on the outcome, corrective action may be required, updating the appraisal if necessary.

Within the Group, the elements of uncertainty ascribable to the political, macro-economic and institutional situation of the countries where it is intended to lend money (i.e. country risk) are carefully assessed in the formulation of the company guidelines.

As for managing this type of risk, the credit assessment process incorporates specific controls to be performed while screening the individual positions to monitor risk aspects attributable to the geographical area of the contracting parties.

The examination of the risk profiles related to the occurrence, in the country of origin or of the customer's main business, of socio-political, economic or other events likely to compromise their solvency, can be traced, at an operating level, to the broader and detailed analysis of the creditworthiness of the counterparties conducted at the time the risk is assumed.

Counterparty risk and credit valuation adjustment risk

Strategy

Counterparty risk represents the risk of suffering losses deriving from the failure of a counterparty to fulfil its contractual obligations, where the term "counterparty" identifies, primarily, a financial intermediary or other institutional operator (e.g. banks, SIMs, investment, SICAV, SICAF, OICR, SGR) with which financial transactions are carried out (repurchase agreements, transactions in derivative instruments, spot or forward exchange rates, interbank deposits). This risk does not emerge for contracts negotiated on regulated markets where guarantee mechanisms operate.

Another source of risk originates from trading in derivatives on a variety of underlying assets, such as debt and interest rate securities, equity securities, stock indexes, currencies, gold and metals, carried out with customers by the Group. Transactions in OTC derivatives are mainly aimed at hedging risks on currencies, interest rates or commodities on behalf of households and companies. The Group mainly offers plain vanilla derivatives to its customers. These deals are usually matched by similar back-to-back derivative transactions with bank counterparties.

In general, the assumption of risks stemming from the financial activities performed by the Group with market counterparties, public and corporate issuers of bonds and similar securities held by the Group in its proprietary portfolios or ordinary customers operating in derivatives, is preceded by the assignment of dedicated credit lines ("plafonds") according to procedures set in the internal regulations. Specific risk limits are also established at the level of the portfolio exposures with counterparties / issuers.

Measurement and control systems

For the purpose of determining the capital requirement relating to counterparty risk, the standardised approach envisaged by the supervisory regulations is used, which approximates the cost that the Group would have to bear in order to find another party willing to take over the contractual obligations of the original counterparty should they prove insolvent.

In this regard, the following categories of transactions are relevant:

- Over-The-Counter (OTC) derivative instruments;
- Securities Financing Transactions (SFT); typically, repurchase agreements on securities;
- Long Settlement Transactions (LST); typically, forward currency trading transactions.

The exposures subject to counterparty risk are quantified on the basis of the "Market value method", in accordance with prudential provisions.

Furthermore, limited to OTC derivative transactions - with the exception of any credit derivatives recognised for the purpose of mitigating weighted exposures for credit risk - an additional capital requirement is calculated to meet the specific risk of credit valuation adjustment (CVA), intended to hedge the risk associated with reductions in the market value of derivatives in the portfolio due to a deterioration in the creditworthiness of the counterparties. For this purpose, the standardised method envisaged by the prudential regulations in force is adopted.

From an operational point of view, each counterparty/issuer is authorised to operate with the Group only after the activation of specific credit lines ("plafond") and assignment to a set category of creditworthiness; the maximum credit lines granted are subject to periodic review by the competent corporate structures.

With regard to the exposures to Italian and foreign banks, Banca Popolare di Sondrio uses the ratings given by leading agencies, wherever available, for valuation purposes. Otherwise, an internal rating, based on the application of a simplified model, is used.

This model involves the examination of a series of quantitative and qualitative indicators and information, which produce values for the determination of a final score. This score is positioned on a scale of ten classes, the first of which represents a counterparty/issuer with minimal risk, while the ninth identifies the highest level of risk, beaten only by a state of insolvency, represented by the tenth class. In order to allow easier correlation with the assessments expressed by international agencies, the ten classes are in turn aggregated into four macro-classes of rating.

A specific analysis of each risk position taken towards the various counterparties/issuers is also carried out on a regular basis, conducted by the competent central structures by considering a

series of indicators, including trend in the rating (internal or external), data deriving from the accounting information of the counterparty/issuer and market data.

Monitoring is based on a system of limits articulated on two levels. The first one includes a "general limit", representative of the maximum exposure deemed admissible for the overall operations with counterparties/issuers. The exposure is based on aggregate measures³ of the "amount effectively granted" within the set credit limits, suitably weighted by means of risk ratios linked to the class of creditworthiness to which each counterparty/issuer is classified.

At the second level, more granular operating limits are set, parametrised to the dimensions of the said "general limit", to which they refer, namely: a) the exposure to the individual counterparty/issuer or the same group of counterparties/issuers, weighted according to the macro-class to which they belong ("Counterparty limit"); b) the cumulative exposure to the top 10 counterparties/issuers, individuals or groups, weighted according to the macro-class to which they belong ("Concentration limit"); c) the sum of the exposures to counterparties/issuers of the same Country (excluding Italy), weighted according to the country's macro-class ("Country risk limit").

The results of the checks carried out are periodically reported to the corporate bodies and functions concerned by the Risk Control Department.

The aforementioned counterparty and issuer risk monitoring and management processes apply to exposures to the types of subjects specified below:

- ordinary customers (natural and legal persons), if they intend to carry out transactions in OTC derivatives;
- banks and operators included in the list contained in Legislative Decree no. 58 of 24/2/98 (e.g. SIM, investment companies, SICAV, SICAF, CIUs, OEICs);
- other issuers of bonds and similar securities acquired in the portfolio (limited to issuer risk), excluding the Italian ones.

These risk exposure estimates refer to transactions involving the following financial assets: interbank deposits, repurchase agreements, transferable securities (bonds and similar securities), derivative transactions, spot or forward exchange rates.

With regard to the OTC derivatives offered to corporate and retail customers, exclusively for the purpose of hedging financial risks (exchange rate, interest rate or goods), each contract entered into is offset by an opposite-sign contract, signed with primary market counterparties (typically, financial institutions of proven reliability) to neutralise or minimize any losses that might arise on the hedged instruments.

For all exposures to financial counterparties, mainly banks, Credit Support Annex (CSA) agreements are entered into; these are bilateral contracts that assist operations in derivative instruments regulated by the "ISDA Master Agreement" in which the conditions for collateral mutual exchange are defined, i.e. a guarantee deposit (for BPS, cash deposits in euro) in order to

³ In operating terms, the "amount effectively granted" is the amount, measured at a specific point in time, obtained by multiplying the credit limit granted to counterparties/issuers by a corrective factor corresponding to the higher of the individual credit lines and the amount historically observed, in relation to all the credit lines granted, at a high level of statistical significance.

mitigate the credit risk associated with a positive mark-to-market. The amount of these collateral assets is recalculated periodically based on the fair value of the underlying derivative.

Additional forms of risk mitigation are the use of "Qualified Central Counterparties" (as defined by EU regulations), as well as the participation in central clearing and guarantee systems or mechanisms for guaranteeing the settlement of foreign exchange transactions (e.g., the interbank circuit CLS, Continuous Linked Settlement).

Sovereign risk on banking book (Italy)

Strategy

According to usual management guidelines, direct investments in Italian government securities are mainly allocated to financial assets not held for trading purposes, in which available liquidity is invested to limit, at least to a certain extent, the impact of financial market volatility on the income statement.

The Group's assumption of long-term positions in domestic sovereign debt is strongly influenced by the monetary policy decisions taken by the European Central Bank, by the trend in the national economic situation and by any need to maintain adequate reserves of financial assets that can easily be turned into cash. In order to take account of the risk, the duration of the sovereign portfolio has been kept fairly short, standing at 2.6 years at the end of 2019 compared with an average of 3 the previous year.

The main drivers of risk exposure on the sovereign portfolio - expressed, on the one hand, by the risk of potential loss of value due to unexpected trends of market interest rates which are representative of risk free returns' activities and, on the other hand, by the so-called "credit spread risk", i.e. the risk of incurring losses following unexpected changes in the differential between the yield on securities and the current level of risk-free interest rates, by virtue of elements related to the issuer's situation and/or the characteristics of the instrument issued - is given, for the Parent Company, by the holdings of Italian debt securities classified as "financial assets measured at fair value through other comprehensive income" (HTCS - Held To Collect and Sell) and "financial assets valued at amortised cost" (HTC - Held To Collect). A minimal part of government bonds belonging to the "financial activities valued at the amortized cost" portfolio can be attributed to the BPS employee retirement scheme, which does not fall under monitoring of the Italian sovereign risk.

Of the subsidiaries, only Banca della Nuova Terra S.p.A. has exposures classifiable in this type of risk, having purchased, mainly for the purpose of holding reserves of liquidity, debt instruments issued by the Italian Republic which do fall within the risk perimeter.

Measurement and control systems

As regards the determination of the capital absorption associated with Italian sovereign debt securities, the portfolio in question is included in the calculation of the Pillar 1 requirement for credit risk in accordance with the applicable supervisory regulations. The Standardised Approach is therefore adopted, according to which a risk weight of 0% is assigned to exposures to Central

Administrations and Central Banks of the EU Member States - including Italy - denominated and financed in the national currency.

From an operational point of view, the Parent Company's Risk Control Department determines the risk exposure relating to investments in Italian public debt securities falling within the perimeter identified above - analysed separately as risk-free interest rate risk and credit spread risk - through an internal method of quantification of the Value at Risk (VaR) of a parametric type with variances and covariances, defined according to JP Morgan's Riskmetrics methodology. The figure resulting from the model is an estimate of the maximum potentially achievable loss on the portfolio, over a defined period of time and with a certain degree of probability, calculated on the basis of the volatility and correlation between the individual risk factors to which the assets are exposed. The aggregation of the VaR at the portfolio level occurs by taking into account the correlations between the various risk profiles elaborated by an external supplier, by virtue of which the overall VaR value is normally lower than the sum of the individual VaRs.

Backtesting is performed on the results of the forecasting model, comparing them with the results achieved on the sovereign portfolio in the past. This involves a comparison between the daily VaR figures and, on the one hand, the changes in market value the next day for the same positions on which the VaR measurements were calculated (theoretical losses) and, on the other, the changes in market value the next day on the portfolio including any movements in securities' holdings that took place (actual losses).

The VaR estimates on domestic government securities in the portfolio fall within a wider system of internal limits designed to ensure an organic and coherent control structure of the risk profiles originating from investments in financial portfolios. In this regard, the Board of Directors of the Parent Company quantifies on an annual basis, within the Risk Appetite Framework (RAF), the maximum level of losses that would be considered tolerable ("Maximum Acceptable Loss", MAL) on the overall positions in securities held for purposes other than trading, both on a consolidated basis and at the Parent Company level alone, in line with the investment policies and with the financial transactions expected to take place over a horizon of one year (first level limits). A monitoring threshold is also set to signal that the risk profile is approaching the set limit of "Maximum Acceptable Loss"; exceeding it leads to more intense controls over the risk exposure.

The general measure of "Maximum Acceptable Loss" compares with an aggregate equal to the sum of the "Effective Cumulative Loss" (ECL), which reflects any negative result of managing the portfolio, including both realised and unrealised losses, and an estimate of the "Maturity VaR" (VaRhp), representing the potential loss that the portfolio could still suffer over a one-month horizon, quantified using statistical techniques. A specific reference threshold is not established for the amount of ECL; nevertheless, this metric is considered in the dynamic determination of the VaRhp limits (second level limits): in fact, this is measured in a percentage of the MAL monitoring threshold reduced by the possible amount of ECL, to take into account - where present - the negative results already suffered on the portfolio. A monitoring threshold is also set to report the approach of the overall risk profile to the identified VaRhp limits.

The described second level limits are therefore declined in daily early warning thresholds which aim to promptly report any increase in the risk associated with portfolio positions (third level limits). These are specific VaR thresholds on a daily basis, provided for exposure to the individual risk

factors underlying the aggregates of assets in the portfolio. In particular, as regards to the instruments of the banking book exposed to "sovereign risk", these thresholds aim to contain the daily exposure to the risk-free interest rate risk and credit spread risk.

An early warning threshold is also set for the measurement of Maturity VaR estimated in stress conditions ("Stressed VaR"), which is determined monthly on the overall banking book, i.e. not only on the positions in Italian sovereign securities.

During the year, a maximum limit was also set on the proportion of domestic sovereign debt securities to the overall market value of the banking book, considered in the Risk Appetite Framework as a risk appetite limit.

If, based on the measurements made on the level reached from time to time by one of the indicators of exposure to the above risks, the existing limits are found to have been exceeded, differentiated escalation processes are activated according to the materiality of the limit/threshold exceeded, in order to take the most appropriate steps to mitigate the risk.

The control system then envisages additional risk metrics, both on a daily basis (so-called "sensitivities", synthetic parameters that measure the extent of potential changes in the value of assets in reaction to minimal changes in the risk factors) and on a monthly basis (so-called "Stressed Present Value", a measure of the impact of a hypothetical stress scenario on the value of the securities in portfolio), calculated by type of instrument and by portfolio.

In support of the monitoring processes, adequate internal information is prepared, in a timely and performance-oriented manner, to document the risk analyses carried out by the Risk Control Department upon request or with a predefined frequency.

The VaR calculated on the sovereign portfolio is also used for the purpose of quantifying, within the Group's capital adequacy assessment process (ICAAP), the internal capital intended to hedge the risk in question.

Other (non-sovereign) banking book instruments risk

Strategy

Equity securities and other investments different from "controlling interests", CIUs and other debt instruments not belonging to the trading portfolio are exposed to this risk; debt instruments issued by the Italian Republic (considered under "sovereign risk") and investments for the employee retirement benefits (considered under "pension risk") are therefore excluded. The overall exposure embraces interest rate risk, credit spread risk and price risk, depending on whether the key risk driver is a change in risk-free rates, credit spreads or else equity prices.

As regards interest rate and credit spread risk, the Group's exposure is represented by holdings of debt securities not issued by the Italian Government and classified under "other financial assets mandatorily measured at fair value", "financial assets measured at fair value through other comprehensive income" and "financial assets measured at amortised cost". The orientation towards prudent risk assumption and management translates into a bond portfolio made up of European fixed rate government bonds (from Spain and France, in particular) and mainly good

quality debt securities of corporate and financial issuers. The duration of the portfolio is quite short: three years at the end of the period.

The main source of exposure to "price risk", on the other hand, consists of equity securities and UCITs classified in the *Fair value other comprehensive income* and *Fair value through profit and loss* accounting portfolios.

The subsidiary Banca Popolare di Sondrio (SUISSE) is marginally exposed to this type of risk on its own financial securities. The other subsidiaries are not exposed to this type of risk.

Measurement and control systems

As for measuring this type of risk, The Standardised Approach adopted by the Group is applied for regulatory purposes to determine the capital requirement for credit risk. This involves weighting the exposures on the basis of the rating assigned to each issuer, where one is available.

From an operational point of view, the Parent Company's Risk Control Department determines the risk exposure at a consolidated and individual level on a daily basis - analysed separately in its component parts - "risk-free interest rate risk", "credit spread risk" and "price risk" - using the same method of quantifying VaR illustrated for "sovereign risk". The figure resulting from the model is an estimate of the maximum potentially achievable loss on financial instruments (other than Italian sovereign debt securities) not held for trading purposes, in a defined period of time and with a certain degree of probability, calculated on the basis of the volatilities and correlations between the individual risk factors to which these assets are exposed.

Also, for the debt securities, equities and UCITs included in the portfolio being analysed, the forecast results of the VaR model are backtested with those achieved historically on the entire portfolio of instruments in the same way as explained in the section on "sovereign risk".

The VaR estimates concerning the risk in question fall within the broader system of internal limits explained in the section on "sovereign risk", to which reference should be made; however, in the case of the banking sub-portfolio exposed to "other securities risk", the second level limits applied to "Maturity VaR" (VaR_{hp}) translate into more specific VaR thresholds on a daily basis (early warnings or third level limits), set separately to monitor not only "risk-free interest rate risk" and "credit spread risk", but also "price risk" on the instruments in portfolio.

If, based on the measurements made on the level reached from time to time by the indicators of exposure to the above risks, the existing limits are found to have been exceeded, differentiated escalation processes are activated according to the materiality of the limit/threshold exceeded, in order to take the most appropriate steps to mitigate the risk.

The control system then envisages additional risk metrics, both on a daily basis (so-called "sensitivities", synthetic parameters that measure the extent of potential changes in the value of assets in reaction to minimal changes in the risk factors) and on a monthly basis (so-called "Stressed Present Value", a measure of the impact of a hypothetical stress scenario on the value of the securities in portfolio), calculated by type of instrument and by portfolio.

In support of the monitoring processes, adequate internal information is prepared, in a timely and performance-oriented manner, to document the risk analyses carried out by the Risk Control Department upon request or with a predefined frequency.

The measurement of VaR on the instruments included in the banking book, other than securities issued by the Italian Government, is also used for the purpose of quantifying the internal capital intended to cover the risk in question as part of the Group's capital adequacy assessment process (ICAAP).

Single-name and geo-sectoral credit concentration risks

Strategy

The Group manages its activities by ensuring a strict control of the risk concentration levels, which is in turn an expression of its traditional vocation to sustain the local economic operators, especially SMEs and households.

This implies a managerial propensity to risk diversification and fragmentation (except for a number of exposures to large counterparties, which are however carefully monitored) in order to prevent an excessive credit risk concentration in the Group's asset portfolios, also by the imposition of maximum exposure limits to single counterparties/groups of connected clients, economic sectors and/or geographical areas with higher risk profiles.

The Group's exposure in the real estate sector proves to be significant due to the mortgage loans granted to households (mainly for buying, building or renovating their own property) and productive enterprises that actually do not belong to construction and real estate macro-segments, as well as through the direct financing of companies operating in the sectors above.

In geographical terms, loans to customers, broken down by residence of the counterparty, are mainly concentrated in Italy and especially in the Group's traditional "home ground" (regions of Lombardy and Lazio, where the Group's presence on the territory is particularly widespread).

The business activities could be therefore significantly influenced by changes in domestic macro-economic conditions, with specific regard to the dynamics of geographical areas with the most intensive industrial development in the Northern and Central Italy.

Measurement and control systems

For Pillar 1 purposes, the prudential rules do not prescribe the determination of specific capital requirements for the exposure to concentration risks (by individual borrowers and by geo-sectors), leaving intermediaries to assess whether or not to set aside specific amounts of capital to cover these risk profiles as part of Pillar 2 evaluations. Considering the importance of these types of risk, the Group chooses to allocate a certain amount of capital for each of them. This is communicated to the Supervisory Authority during the periodic ICAAP reporting.

The need to allocate a certain amount of capital to concentration risk derives from the need to cover the deficiencies inherent in the regulatory model for measuring credit risk; supervisory approaches to quantifying capital absorptions do not take into account the fact that a portfolio

concentrated on a few large borrowers and/or towards a limited number of geographical areas or production sectors incorporates a higher level of risk than a portfolio that is perfectly diversified.

The estimate of the capital requirement is carried out, with regard to the concentration by individual borrower, following the simplified model proposed by the Bank of Italy in its supervisory provisions. This provides for the application of an algorithm based on a statistical concentration index ("index of Herfindahl") which combines the amounts of exposures to individual counterparties with the related average probability of default, as an expression of the risk that is characteristic of the Group's loan portfolio.

Using the same statistical index, but applied to the breakdown by economic sectors, the level of geo-sectoral concentration of loans is quantified according to the approach proposed by the Italian Banking Association ("Methodology for estimating geo-sectoral concentration risk - Concentration Risk Laboratory").

From a managerial point of view, during the loan application, as well as in credit disbursement, review and monitoring processes, in-depth controls are carried out by the Group's components on the credit portfolio risk concentration related to major exposures to individual counterparties or groups of connected clients.

For loans applications qualified to be "of greater significance" according to the magnitude of the outstanding exposure and the request for new credit lines, specific procedures, in line with the regulatory framework, are followed by the Group. In particular, such applications originating from the main members of the Group, supplemented by the related report, are sent to a dedicated office operating at the Parent Company's Risk Control Department, which is requested to check that the transaction is consistent with the Risk Appetite Framework (RAF).

For positions that are classified as "Large exposures" for supervisory purposes, in addition to the ordinary preliminary loan application, an in-depth analysis by this unit is envisaged to support the assessments of the decision-making bodies.

In addition, the following activities are carried out at the Risk Control Department:

- monitoring the development of main credit exposures, whenever there are signals of risk increase, the punctual review of the positions and, if applicable, informing the deputy corporate bodies on the matter;
- periodic analyses of the credit portfolio composition by economic sectors and counterparties.

The Risk Appetite Framework (RAF) in turn puts limits on the concentration of the loan portfolio versus larger counterparties and "unattractive" sectors of the economy.

If the need arises or in order to hold down the level of concentration, specific mitigation measures can be taken as part of credit management and the related risk management. The levers for pursuing this objective include:

- preventive measures to limit particularly concentrated exposures, leading to an intensification of controls and risk analyses to be carried out before the execution of the transactions;

- action to correct the risk profile, to be implemented in the event of an increase in the levels of risk assumed, with the aim of bringing the amount of exposure back down below the limits of acceptability and restoring a situation in line with the Bank's risk appetite.

The concentration profile of the Group's loans, at the level of business portfolios and economic sectors, is periodically monitored by the competent central offices of the Parent Company, producing for the benefit of the Company's top management a specific report concerning, among others, the quality of the exposures at an aggregate level, the concentration of risks and the distribution of loans by rating classes. If necessary, an in-depth review of the degree of reliability is conducted for exposures of significant size, based on the economic sector, the internal/external rating of the counterparty, the technical form of credit lines, the guarantees given and received, and the duration of the credit lines granted.

With reference to financial operations, the concentration of risk is monitored through the periodic determination of the exposure to risk against the credit lines granted to financial counterparties or to issuers of debt securities in portfolio, calculated using the "amount effectively granted"⁴ by credit line, suitably weighted by means of risk ratios linked to the creditworthiness class in which each counterparty/issuer is classified.

Neither at the time of granting the credit lines nor later during the period of the loan, this exposure can exceed the quantitative limits explained in the section on "Counterparty and credit valuation adjustment risks", expressed in terms of:

- the maximum exposure to each counterparty/issuer ("Single counterparty limit");
- the maximum cumulative exposure to the top 10 counterparties/issuers ("Concentration limit");
- the maximum cumulative exposure to counterparties/issuers belonging to the same country, other than Italy ("Country risk limit").

MARKET RISK

Definition

Risk of economic losses due to decreases in value of activities and / or increases in value of liabilities induced by adverse trends in the financial markets, in connection with trading operations in securities and other financial instruments, currencies and commodities. It can be broken down into:

- *Position risk on financial instruments*: the risk of suffering impairment losses due to fluctuations in the economic or market value of transferable securities due to factors relating to the performance of markets and the situation of the issuer. It can in turn be divided into:
 - *General risk*: the risk of losses caused by an unfavourable trend in the economic or market value of almost all traded financial instruments (for fixed-yield securities and similar instruments, dependent on an adverse change in the level of market interest rates

⁴ In operating terms, the "amount effectively granted" is the amount, measured at a specific point in time, obtained by multiplying the credit limit granted to counterparties/issuers by a corrective factor corresponding to the higher of the individual credit lines and the amount historically observed, in relation to all the credit lines granted, at a high level of statistical significance.

representing yields on risk-free assets; for equities and similar instruments, linked to a generally unfavourable trend in market prices);

- *Specific risk*: the risk of losses originating from an unfavourable change in the economic or market value of the traded financial instruments, which is in turn due to factors or events connected with the situation of the issuer (e.g. insolvency or other circumstances that determine a change in the issuer's creditworthiness). Credit spread risk is attributable in this case, given by the risk of suffering impairment due to unexpected changes in the difference between the yield on a debt security or similar instrument held in portfolio and the risk-free interest rate, representing the risk premium related to the situation of the issuer and/or the characteristics of the financial instrument issued;
- *Concentration risk on the trading book*: the risk deriving from exposures to individual counterparties or issuers, of specific issuances, identified economic sectors and/or geographical areas. As regards exposure to market risks, concentration refers to the financial instruments held in the trading portfolio issued by customers or groups of connected customers pursuant to the supervisory provisions on "Large exposures";
- *Foreign exchange risk*: the risk of suffering losses due to adverse changes in the prices of foreign currencies and on the positions held by the Group, regardless of their allocation portfolio; it includes the structural exchange rate risk concerning the exposures deriving from the commercial operations and the strategic investment choices of the Group;
- *Commodity risk*: the risk of suffering losses due to adverse changes in commodity prices on the positions held by the Group, regardless of the portfolio they have been allocated to;
- *Basis risk on the trading book*: the risk of suffering losses caused by non-aligned variations in the values of opposite-sign positions that are similar but not identical, considered in the context of market risk. Particular attention is paid to the possibility, provided for by the standardised approach to the calculation of capital requirements on position risk, to offset the positions in one or more equity securities included in an equity index with one or more positions in futures or other derivatives related to this index or to offset opposite positions in futures in an equity index, which are not identical in terms of maturity, composition or both.

Strategy

For management purposes, the overall exposure to market risk is split between the sub-species of interest rate, exchange rate, price and credit spread risks, depending on whether the underlying risk factor consists, respectively, of a change in risk-free interest rates, exchange rates, prices of equity securities, UCITs, commodities or raw materials as well as risk premiums related to the situation of the issuer and/or the characteristics of the financial instrument issued.

The main source of exposure to risk-free interest rate risk and credit spread risk consists of fixed-yield securities classified under "financial assets held for trading" (FVTPLT - Fair Value Through Profit or Loss Trading).

The objectives and strategies underlying proprietary trading, designed to manage the portfolio of securities held for trading purposes, are aimed at maximizing its profitability, seizing any investment opportunities that may arise due to the market context, as part of an approach inspired

by the containment and rigorous assessment of the risk profile. The Parent Company's role in trading activities essentially consists of arbitrage in securities to benefit from short-term trading opportunities, rather than taking long-term risk positions.

With regard to the treatment of derivative instruments, the competent offices of the Bank carry out, on the customer's request, transactions in options on interest rates and interest rate swaps, which are then hedged with other financial counterparties, while business in other innovative or complex instruments is almost irrelevant.

The main source of "price risk" is represented by equity securities and UCITs classified in the portfolio of "financial assets held for trading" (FVTPLT - Fair Value Through Profit or Loss Trading), from which are excluded the Post-Employment Benefits Fund's investments (treated under "risk connected to pension funds") and UCITs units (treated under "real estate risk"). As for "interest rate risk", also for "price risk" the strategy pursued in the context of the overall assumption of market risks is oriented towards prudent management of the assets held.

Likewise, the composition within the equity securities favours those issued by primary large markets companies. Also, in this case, the trading activity carried out by Banca Popolare di Sondrio focuses on the exploitation of short-term trading opportunities; with regard to derivative instruments, equity option transactions are reported below.

The subsidiaries Factorit, Sinergia Seconda and Banca della Nuova Terra have no exposure to interest rate and price risks inherent to the trading book; Popso Covered Bond, consolidated on a summary basis with the Parent Company, contributes to the same exposures referred to with reference to Banca Popolare di Sondrio, albeit only minimally. The interest rate risk deriving from the trading portfolio of Banca Popolare di Sondrio (SUISSE) relates to investments in forward contracts on exchange rates; on the other hand, there is no exposure to price risk.

For the Parent Company, the main sources of exposure to "exchange rate risk", recognised on all financial statement items, lie in the equity shareholding in the subsidiary Banca Popolare di Sondrio (SUISSE) denominated in Swiss francs, in certain other equities and UCITs in foreign currency, as well as in foreign currency imbalances managed by the relevant operating structures, deriving from intermediation on spot and forward transactions with customers (households, companies, entities) and on the interbank market, as well as from the implications on foreign exchange positions deriving from the negotiation of other financial products (difference between premiums on currency options, interest on currency deposits, etc.).

Excluding securities, Banca Popolare di Sondrio's role in foreign currency transactions is largely commercial, i.e. to meet customers' needs.

Exchange risk exposure is marginal for Factorit, given the company's policy of systematic hedging of foreign currency amounts. It mainly exists, but for limited volumes, in commissions and interest income not offset by interest expense expressed in currencies other than the euro, as well as guarantees in foreign currency for transactions in euro. Sinergia Seconda, Popso Covered Bond and Banca della Nuova Terra do not have material exposure to exchange rate risk, since they do not have assets or liabilities denominated in foreign currencies. For the Swiss subsidiary Banca Popolare di Sondrio (SUISSE), excluding the positions in securities held, operations in foreign

currency are carried out to meet the needs of its customers, except for transitory treasury phases, which would still comply with the prudent limits set internally by the Company.

Measurement and control systems

The Group quantifies the capital requirement against market risk by aggregating the individual requirements of each component, as obtained on the basis of the respective national rules. In this respect, the Parent Company determines a capital requirement separately for each type of market risk, applying standardized measurement methods.

In particular, according to the supervisory regulations, the following types of risks are identified in the market risk category which, where relevant, bear the quantification of a Pillar 1 capital requirement:

- with reference to the financial assets included in the trading portfolio:
 - *position risk*
 - *concentration risk*
- with reference to the entire financial statements:
 - *settlement risk*
 - *foreign exchange risk*
 - *commodity risk*.

The basis risk on the trading book, on the other hand, is subject to assessment under Pillar 2 context (ICAAP), as no specific minimum capital requirement has been imposed to cover it. In consideration of this additional type of risk, particular attention is paid to the possibility provided by the standardised approach to calculation of the capital requirements for position risk to offset the positions in one or more equity securities included in an equity index with one or more positions in futures or other derivatives related to this index, or to offset opposite positions in futures on equity indices that are not identical in terms of maturity, composition or both.

From an operational point of view, the daily estimate of the exposure, at consolidated and individual company level, to market risk (position risks in trading, exchange rate and position in commodities), which is carried out by the Parent Company's Risk Control Department - investigated separately in its components of risk-free interest rate risk, credit spread risk, price risk and exchange rate risk - is based on an internal method of determining the Value at Risk (VaR) applied to financial instruments subject to measurement in relation to their sensitivity to fluctuations in market variables. The figure resulting from the model is an estimate of the maximum potentially achievable loss on a portfolio of financial instruments over a defined period of time and with a certain degree of probability.

Similarly to what is described in the paragraphs dedicated to the "sovereign risk" and the "other non-sovereign" of the banking book, the VaR model used for the measurement of market risk is parametric with variances and covariance, defined according to the Riskmetrics method of JP Morgan. The aggregation of the VaR at the portfolio level occurs by taking into account the

correlations between the various risk profiles elaborated by an external supplier, by virtue of which the overall VaR value is normally lower than the sum of the individual VaRs.

Backtesting is performed on the results of the forecasting model, comparing them with the results achieved on the sovereign portfolio in the past. This involves a comparison between the daily VaR figure and, on the one hand, the change in market value the next day for the same positions on which the VaR measurement was calculated (theoretical losses) and, on the other, the change in market value the next day on the portfolio including any movements that took place (actual losses)

The VaR estimates are part of a wider system of internal limits aimed at ensuring an organic and coherent control structure of market risk profiles. In this regard, the Board of Directors of the Parent Company quantifies on an annual basis, within the Risk Appetite Framework (RAF), the maximum level of losses that would be considered tolerable ("Maximum Acceptable Loss", MAL) on the positions in the trading portfolio and foreign currency transactions foreseen in the period, both on a consolidated and individual level, but only for the Parent Company, in line with the investment policies and with the financial transactions expected to take place over a set horizon (first level limits).

The general measure of "Maximum Acceptable Loss" compares with an aggregate equal to the sum of the "Effective Cumulative Loss" (ECL), which reflects any negative result of managing the portfolio, including both realised and unrealised losses, and an estimate of the "Maturity VaR" (VaRhp), representing the potential loss that the portfolio could still suffer over a 10-day horizon, quantified using statistical techniques. A specific maximum threshold is not established for the amount of ECL; nevertheless, this metric is considered in the dynamic determination of the VaRhp limits (second level limits): in fact, this is measured in a percentage of the MAL monitoring threshold reduced by the possible amount of ECL, to take into account - where present - the negative results already suffered on the portfolio. A monitoring threshold is also set to report the approach of the overall risk profile to the identified VaRhp limit.

This second level limit is then split into daily early warning thresholds which can promptly report any increase in the risk associated with portfolio positions (third level limits). These are specific VaR thresholds on a daily basis, provided for exposure to the individual risk factors underlying the aggregates of assets in the portfolio; these thresholds aim in particular to contain the daily exposure to "risk-free interest rate risk", "credit spread risk", "price risk" and "exchange rate risk".

An early warning threshold is also set for the measurement of Maturity VaR estimated under stress conditions ("Stressed VaR").

If, from the surveys on the level from time to time reached by the indicators of exposure to the aforementioned risks, the existing limits are found to be exceeded, differentiated escalation processes are activated based on the relevance of the violated limit/threshold, in order to achieve the management actions deemed most suitable for risk mitigation.

The control system then envisages additional risk metrics, both on a daily basis (so-called "sensitivities", synthetic parameters that measure the extent of potential changes in the value of assets in reaction to minimal changes in the risk factors) and on a monthly basis (so-called "Stressed Present Value", a measure of the impact of a hypothetical stress scenario on the value of the securities in portfolio), calculated by type of instrument and by portfolio.

In support of the monitoring processes, adequate internal information is prepared, in a timely and performance-oriented manner, to document the risk analyses carried out by the Risk Control Department upon request or with a predefined frequency.

The VaR calculated on the financial instruments of the trading portfolio is also used for the purpose of quantifying, within the Group's capital adequacy assessment process (ICAAP), the internal capital intended to hedge the risk in question.

OPERATIONAL, REPUTATIONAL AND COMPLIANCE RISKS

Definition

The risks of suffering loss or damage resulting from: a) the inadequacy or malfunction of procedures, human resources and internal systems, or from external events; b) failure to comply with rules and regulations; c) negative impacts on the Group's credibility and image. This category includes the following types of risk:

- *Operational risk*: the risk of suffering loss or damage resulting from the inadequacy or malfunction of procedures, human resources and internal systems, or from the occurrence of external events; this category also includes losses caused by fraud, human error, operational interruptions, system downtime, contractual non-performance and natural catastrophes. This definition includes:
 - *Legal risk*: the risk of incurring economic losses and/or procedural and legal costs due to violations of laws or regulations, procedures deriving from contractual or extra-contractual liability or other disputes, especially originating from inadequate or incorrect contracts or legal documents or containing clauses which prove particularly onerous; it also includes losses or damage resulting from risks of money laundering and terrorist financing and from risks of non-compliance with regulations;
 - *Conduct risk*: a particular kind of legal risk given by the current or prospective risk of incurring losses deriving from an inadequate provision of financial services, including cases of wilful misconduct or negligence, and/or from incurring associated legal and procedural costs;
 - *ICT risk*: the risk of suffering economic, reputation and market share losses in relation to the use of Information and Communication Technology (ICT), i.e. due to the inadequacy or failure of hardware and software of technical infrastructures likely to compromise the availability, integrity, accessibility and security of such infrastructures and data, as well as linked to interruptions of operations and system malfunctions; it includes ICT outsourcing risk, ICT availability and continuity risk, ICT security risk, ICT change risk and ICT data integrity risk. ICT availability, continuity and security risk are mainly attributed to cyber risk;
 - *Fraud risk*: the risk of suffering economic damage due to irregularities and unlawful acts (violation of laws and regulations, internal rules and guidelines, etc.) as a result of behaviours intentionally aimed at misleading, perpetrated by people inside or outside the organisation;

- *Model risk*: the risk of suffering losses, damage to reputation or negative consequences on strategic and business decisions related to the development, implementation or improper or incorrect use of models used internally to estimate risks or for other measurements of financial phenomena, also deriving from their inaccuracy or malfunctioning;
- *Organisational risk*: the risk related to the inadequacy, inefficiency, ineffectiveness of the organisational structures, processes and procedures;
- *Compliance risk*: the risk of incurring judicial or administrative sanctions, financial losses or damage to reputation deriving from failure to comply with laws, regulations, self-regulation codes, internal procedures and codes of conduct applicable to the Group's business; the risk of non-compliance with the rules is mainly attributable to the risk associated with operations with related parties, i.e. the risk of compromising the objectivity and impartiality of decisions regarding the granting of loans and the disbursement of other transactions with subjects who, by virtue of their proximity to the decision-making centres, can - directly or indirectly - exercise an influence on the management of the Group, as well as of persons connected to them ("connected subjects"), with possible distortions in the process of allocating resources, exposure to risks not adequately measured or monitored, resulting in potential damages for depositors and shareholders;
- *Money laundering and terrorist financing risks*: risks mainly of a legal, reputational and non-compliance nature with the rules deriving from the violation of legal, regulatory and self-regulation provisions functional to the prevention of the use of the financial system for the purpose of money laundering, terrorist financing or financing of programmes for the development of weapons of mass destruction, as well as the risk of being involved in episodes of money laundering and terrorist financing or financing of programmes for the development of weapons of mass destruction;
- *Reputational risk*: the current or prospective risk of a decline in profits or capital resulting from the negative perception of the Group's image by its shareholders, customers, suppliers, counterparties, investors or the Authorities.

Operational risk

Strategy

The operational risk management system is supported by a solid internal risk culture aimed to prevent and/or mitigate the sources of risk to which business operations are exposed.

The Group is aware that suffering operating losses could have a negative impact on its financial position and could also seriously affect its reputation. Accordingly, the Group has developed methods to detect, properly assess and measure operational risk and defines specific monitoring and controlling processes with the aim of adopting suitable technical and organizational solutions for preventing and limiting the frequency and the severity of risk occurrence, and thus contain their adverse consequences. Specifically, the control system aims, on a continuative basis, to a risk management that responds to the evolving company characteristics through the adoption of quantitative and qualitative procedures, processes and methodologies directed at identifying and monitoring operational risk both on a historical and on a forward-looking basis.

The task of monitoring operational risks tends to create consistent mitigation measures, involving the adaptation of business processes, organisational structures and company systems to the specific needs for mitigating the identified critical issues; if these measures do not allow the risk exposure to be brought back to levels deemed acceptable and/or are deemed to be expensive from an economic point of view, the Group assesses the opportunity to take out specific insurance coverage with the aim of transferring the risk to third parties (for example, against exposure to significant operating losses).

Adequate monitoring and containment of ICT risk, also by promoting suitable standards of security and disaster recovery, forms part of the Bank's operational risk management strategies.

The Group constantly modernises its technological instruments and infrastructures to support corporate operations, with particular attention to electronic services and internet banking, overseeing risks related to the implementation of measures fostering innovation and operational efficiency, which are indispensable in a context of increasing digitisation. Emphasis is put on the monitoring of cyber risk, understood as the risk of violations of ICT security systems perpetrated mainly through the theft of access credentials and aimed, in most cases, at executing fraudulent payment instructions. Against this, the Group implements targeted investments and is constantly involved in strengthening security systems, in order to face criminal cyber-attacks and protect customers and the Bank itself in an effective way.

Measurement and control systems

In compliance with the regulatory provisions laid down by current EU regulations, the Group determines the capital requirements against operational risk through the standardised measurement approach (TSA, Traditional Standardised Approach). In this, the capital requirement is determined as the three-year average of the sums - having zero or positive value (or equal to zero in case of a negative value) - of the last three year-end observations of the components making up the so-called "Relevant Indicator", suitably classified in the regulatory business lines applicable to company operations and weighted by specific coefficients⁵.

For management purposes, the Group adopts a monitoring model based on integrated use of quantitative and qualitative information, which makes it possible to detect operational risk in terms of the losses actually suffered, as well as assessing the potential risk, continuously monitoring the related exposure and finding the appropriate risk prevention and mitigation measures. Specifically, the operational risk management system is divided into the following components:

- a Loss Data Collection (LDC) process, designed for the accurate detection of internal or external economic events linked to operational risk; particular attention is given to the registration of accounting events related to legal risk, such as provisions set aside for legal disputes in which the Group incurred and possible revisions (Loss Adjustments), as well as any expenses incurred for external legal activities;
- a Risk Self-Assessment (RSA) process, aimed at estimating on a periodical basis the main operational criticality to which the Group is exposed and at gathering indications from

⁵ Regulation (EU) 575/2013, arts. 317-318

company experts about proposed, activated or implemented interventions for the prevention and mitigation of risk;

- an operational risk exposure measuring process for managerial purpose, through the implementation of an internal statistical model aimed at calculating quantitative risk metrics adopted for the determination of the quantification of internal capital (Operational Value at Risk - OpVaR).
- periodical activities for the monitoring of the actual and prospective risk exposure and its trend, also through the computation of management indicators (Key Risk Indicator, KRI), and of the correspondent parameters of risk appetite with the aim of identifying operational criticality, triggers and vulnerability areas to which it is possible to direct preventing, mitigating and/or risk transferring actions.
- periodic information flows on the evolution of the current and future exposure to operational risk and the progress being made on actions identified as priorities for risk containment, intended for the pertinent Corporate Bodies and Committees and the functions involved in the identification, evaluation and mitigation of operational risk.

By jointly examining the various components of the control framework, it is possible to identify the key areas on which to act as a priority in order to prevent loss events and/or mitigate the related risks, by resolving the weaknesses found.

With some adaptations dictated by the different operating context, the operational risk management system defined by the Parent Company is implemented and applied by the subsidiaries, which contribute with specific information flows to understanding the degree of risk exposure that the entire Group is subject to.

During the year, the Group continued to follow the line of evolutionary refinement of the processes, methods and procedural systems adopted to monitor operational risks, in order to enhance its management uses and to gradually align it with the best practices of the banking system promoted by the Supervisory Authority. Worth mentioning, in particular, is the establishment of a structured process for the detection, classification and reporting of the so-called "boundary events due to credit risk", the revision of the methods of treating and recording "pending losses" (operating losses temporarily suspended or recorded in transitional accounts) and the methodological refinement of the statistical approach of quantifying the operational risk exposure for internal purposes (Operational VaR, OpVaR).

The information sources deriving from the operational risk management system are integrated with the evidence deriving from the IT risk management processes. To this end, the structures entrusted with controlling operational risks collaborate with the functions responsible for the design and implementation of ICT risk management systems, with a view to identifying IT incidents with impacts (even potential impacts) in terms of operational risk and to integrate the results of the process of assessing the prospective exposure to ICT risk with the estimates collected as part of the Operational Risk Self-Assessment process.

Consistent with the general approach to the management of operational risk, the approach to the management of ICT risk involves, on the one hand, the collection and classification of ICT "incidents" (quantitative approach) - where an incident means the unplanned interruption of ICT

services, a deterioration in their quality or events arising due to system errors or faults - and, on the other, a process of assessing potential ICT risks - having regard for the controls in place - with a view to determining residual risk exposure (qualitative approach).

In particular, the process of managing ICT incidents envisages the initial receipt of reports from monitoring systems or the organisational contexts in which they occurred. Follow-up action includes an assessment of the impact/urgency and the definition of priorities, in order to identify the areas of action and the specialist groups to involve in the resolution of the anomaly. In addition, the incidents with a potential impact on operational risk are individually analysed in order to identify and report any losses arising from it.

To this has to be added a qualitative assessment of the ICT risks to which the Group is potentially exposed, which provides for the identification of the applications and technological infrastructures identified as "critical" for the company's operations, in order to reach an estimate, for each of them, of the related potential exposure to risk, according to the probability of occurrence of the threats that have been identified and the impact associated with different risk scenarios and dimensions. The process, which involves submitting questionnaires to technical representatives identified at company level, ends with an analysis of the countermeasures currently in place to mitigate these sources of risk, leading to an estimate of the residual risk.

By implementing these processes, the Group ensures the monitoring of the overall exposure to ICT risk, guaranteeing maximum control - particularly regarding essential services provided to customers and those that, if compromised, could significantly impact the entire financial system - by identifying the measures to be taken to maintain an adequate ICT risk profile.

The presence of safeguards for handling emergency situations to ensure suitable levels of business continuity also contributes to the prevention and containment of operational risks within the Group, in the case of events or circumstances that lead to an interruption of operations; in this regard, the definition of Business Continuity Plans is of particular importance, as is the provision of disaster recovery measures as part of these plans to allowing the timely recovery of systems and procedures in the event of a disastrous event.

Compliance risk

Strategy

The Banking Group's policies are traditionally oriented towards correct and timely respect for all regulations that it is subject to in carrying out its operations, in any capacity and in any form. This with the primary objective of ensuring that the conduct of the business maintains a proper balance, while maintaining over time the good reputation it enjoys with its stakeholders.

On these consolidated basis, the Group acts with the intention of forming and maintaining long-term relationships with its customer base, avoiding actions and behaviours which could be inconsistent with respect to the commercial and risk profiles of customers and/or aimed at achieving high profits in the short term. This contributes to full compliance with and timely fulfilment of the regulatory provisions applicable to the Parent Company and the other companies belonging to the Group, in both form and substance.

Compliance risk involves all levels of the organisation, especially operating lines; prevention and monitoring must therefore take place primarily in contexts where the risk is generated, making necessary adequate training and empowering all personnel, within the framework of a corporate culture based on compliance with the rules.

The various organisational aids aimed at managing and mitigating non-compliance risk help in carrying out an organic Compliance Risk Assessment process, aimed at identifying the actual level of compliance of the company processes and procedures with current regulations and an assessment of the adequacy of the controls in place.

Measurement and control systems

The process for managing compliance takes place, on the one hand, through constant monitoring of both external regulations (mandatory or self-regulation) and internal regulations; and, on the other, through the identification, measurement and control of the risks of compliance, according to the provisions of the Group's internal policies.

Management of the compliance risk is based on the principle of widespread individual responsibility, according to which the performance of activities in line with regulatory provisions should be the direct responsibility of each individual, regardless of their role: since the risk in question involves all levels of the corporate organisation, especially in operations, the first level of prevention has to take place where the risk is generated, which makes it all the more important that each member of staff is made suitably responsible for their actions.

Within the Banking Group, the risk of non-compliance with regulations is mainly overseen by specific organisation units operating on the basis of common principles and guidelines, with the aim of mitigating the related legal and reputational risks. This is done preventively, on an ongoing basis, by identifying applicable provisions and analysing their impact on company processes and procedures and, after the event, by verifying the effectiveness of any changes made to ensure compliance.

At the Parent Company, in line with the provisions of the supervisory regulations (Bank of Italy Circular No. 285/2013), the Compliance Function oversees non-compliance risk for the whole business, with the sole exclusion of certain areas of competence of other second level functions/control bodies (Risk Control Function, Anti-Money Laundering Function, Validation Function, Manager responsible for the preparation of corporate accounting documents and Supervisory Body pursuant to Legislative Decree No. 231/2001).

The Function operates through a "widespread compliance" model, structured as follows:

- with reference to the most important regulations for compliance risk purposes (known as "core legislation"), such as rules on financial intermediation, the handling of conflicts of interest (relations with related parties/associated persons, interlocking ban, compensation and incentive policies), transparency towards customers and, more generally, consumer protection regulations, the Compliance Function is directly responsible for monitoring compliance risk;
- specialised resources belonging to other organisational units (known as "Compliance Contacts") with specific skills and professionalism are entrusted with additional issues for

which the Function maintains direct responsibility, such as ICT compliance and the rules on mortgage loans;

- specific company structures ("Specialist Supervision") have a direct responsibility on issues on which, thanks to their skills, they are able to ensure effective management of compliance risk (e.g. areas such as tax legislation or disciplines relating to work and social security, health and safety in the workplace, business continuity).

As part of the compliance risk management process, the following macro-phases are identified, based on the operational and dimensional specificities of each Group company:

- Planning and organisation, mainly implemented through:
 - definition of the organisational and methodological components that permit appropriate management of compliance risk;
 - identification of the regulatory perimeters of reference;
 - definition of the necessary infrastructure (resources, tools, etc.);
 - definition and approval of business plans.

This last activity requires an assessment of the adequacy of the overall system for managing compliance risk and the planning of any interventions needed to ensure effective management of this type of risk.

- Analysis of the regulatory sources of reference, which involves continuous identification of the rules that are applicable to the Group: in this phase, newly issued regulations and amendments to those already in force are analysed with reference to the operating perimeter of the function/unit in charge of the compliance checks.
- Internal process analysis: internal processes, organisation and procedures are checked from time to time to ensure that they are consistent with the regulations.
- Identification of risks and mitigation actions: following the analyses carried out, specific risks and safeguards aimed at ensuring compliance with the regulations are identified and assessed; the interventions to be implemented in order to overcome the anomalies detected or, in any case, to improve compliance levels are therefore communicated to the structures concerned.
- Monitoring: mitigation measures are verified, and checks are carried out to ensure that any non-conformities have been resolved.
- Advice and assistance to corporate bodies and structures: the activity consists of: a) providing the competent corporate bodies with adequate information on compliance risk; b) issuing compliance checks and opinions to the units asking for advice on whether they comply with particular aspects of the law: the former as part of the process of issuing or changing internal regulations; the latter when interpreting topics where compliance with the regulations is particularly important. The activity also relates to the preliminary assessment of compliance with an applicable regulation on the part of potentially innovative projects (e.g. new products or services).

- Personnel training: for the prevention and adequate monitoring of compliance risk, specific support is provided to the structures responsible for managing human resources for the organisation of activities aimed at spreading a corporate culture based on the principles of honesty, fairness and respect for the rules.

To ensure adequate monitoring of the compliance risk within the Group, the Parent Company's Compliance Function provides the equivalent structures operating at the Subsidiaries with the basic guidelines for the controls they have to perform and gets from them periodic reports on the checks carried out, along with the planning of future activities, making sure that they are in line with the directives.

Money laundering and terrorist financing risks

Strategy

The Group fully collaborates with the authorities responsible for safeguarding public safety, so also in preventing and suppressing crimes related to money laundering and terrorist financing. It therefore ensures particular attention to the effectiveness of the internal monitoring and control of this type of risk, mitigation of which helps to maintain the Bank's good reputation, helping to keep operations immune from interference by interests unrelated to its own institutional purposes.

The Group is aware that the laundering of money from illegal activities and the financing of terrorism represent criminal phenomena. By virtue of their possible transnational dimension, they constitute a serious threat to the economy, also because they can have destabilising effects, above all for the banking and financial system, as they are likely to alter market mechanisms and affect the efficiency and correctness of the transactions that take place there.

The existence of incisive structures for the prevention and control of money laundering and terrorist financing risks constitutes an essential condition for the operators in the banking and financial sector to pursue objectives of sound and prudent management and, in particular, to consolidate a relationship of trust with customers and hence the reputation of the Group.

By virtue of this, the Group:

- avoids transactions deemed anomalous in origin, type, frequency and amount, avoiding the establishment and/or maintenance of ongoing relationships that present anomalies;
- in order to graduate the depth and extent of customer due diligence obligations, adopts suitable procedures aimed at classifying the subjects according to the risks of money laundering and terrorist financing to which they are exposed, applying the broader principle of proportionality referred to in the regulatory provisions, the aim of which is to maximize the effectiveness of company controls and rationalise the use of resources; in this context, it pays particular attention to geographical risk profiles;
- does not allow or enter into relationships or transactions with shell banks that do not have a physical presence in the country in which they are established and authorised to carry on the business, with branches of foreign banking institutions without a significant organic and

managerial structure in the jurisdictions where they are established, nor with their subsidiaries;

- requests information on the purpose and nature of the ongoing relationship with customers and carries out constant monitoring throughout the relationship;
- pays particular attention in evaluating transactions attributable to subjects who have received requests for information in the context of criminal investigations and/or for the application of preventive measures.

Measurement and control systems

The Group adopts a complex framework to prevent and fight against money laundering, terrorist financing and, more generally, the illegal, hidden economy according to a qualitatively structured and calibrated risk-based approach. To this end, the components are equipped with rules, processes, controls and ICT tools which aim to be reasonably homogeneous at Group level.

Within the Group, the specific tasks assigned to the anti-money laundering units are carried out on the basis of two distinct organisational models, so as to take into account the operational and territorial structure of the Group. In particular:

- for specifically identified subsidiaries, whose operations are highly integrated with those of the Parent Company, money laundering and terrorist financing risk management activities are outsourced to the Anti-Money Laundering Function at the Parent Company, at the same time appointing an internal reference person;
- the other subsidiaries that have a regulatory obligation and the foreign subsidiaries have established autonomous anti-money laundering units and appointed a manager in charge of each of them.

As regards the requirements of adequate verification, risk profiling and monitoring of customer operations, the Group has over time developed a system of safeguards and controls that affect various levels and sectors of the organisation, consisting mainly of:

- procedures for identifying and verifying the identity of customers, through the use of applications dedicated to the registry census, consultation of checklists of names and the acquisition, when filling in the anti-money laundering questionnaire, of any other information required by national legislation and supranational and internal provisions on the customer and/or the subjects related to it (beneficial owners, legal representatives, delegates, etc.);
- automatic controls that inhibit the opening of a relationship in the case of:
 - belonging to official lists of individuals, entities or organisations subject to restrictive or sanctioning measures by international bodies (e.g. UN, European Union, OFAC), to designation lists or to other black-lists;
 - a need for activation of specific authorisation cycles for the establishment of business relationships with subjects falling into particular categories (e.g. trust companies, correspondence relationships with banks located in extra-UE non-equivalent countries) or who become relevant after checking "external lists" (e.g. Politically Exposed Persons);

- systematic checks on transactions carried out by customers (such as, for example, those related to the abnormal use of cash; intense and recurrent movements with countries "at risk" as they are embargoed or characterised by anti-money laundering regimes that are not equivalent to those of EU countries, etc.);
- assignment of a money-laundering risk profile to customers, leading to periodic verification with frequency and intensity proportional to the degree of risk assigned;
- continuous monitoring of customers' operations, through the analysis of atypical or unusual operating situations, highlighted by specific IT procedures;
- diagnostic checks on the quality and reliability of the data feed and recording systems in the Single Computer Archive (SCA).

About additional checks on "embargoes", incoming and outgoing customer payment orders are subject to automated controls over the country of origin/destination of the funds, the names of the counterparties (originator, beneficiary) and the intermediary banks involved in each transaction to see if they are included on any black-lists. Wide-ranging controls are also carried out on subjects belonging to sectors considered "critical" as they are perceived to be vulnerable to money laundering and terrorist promotion activities.

In fulfilling the reporting obligations of suspected money laundering and terrorist financing operations envisaged by law, the Group adopts specific processes and procedures for detecting anomalous operations and the fulfilment of communication obligations to the competent Authorities, protecting the confidentiality of employees and collaborators taking part in it. The evaluation and transmission procedure as well as the main contents of suspicious activity reports are defined in specific internal regulations.

In these scenarios, the Anti-Money Laundering Function at the Parent Company periodically monitors the degree of exposure to the risks of money laundering and terrorist financing and the suitability of the safeguards in place within the Banking Group, which can be estimated:

- in qualitative terms, through a self-assessment of the perceived risks, taking into account the intensity and effectiveness of the controls introduced;
- in quantitative terms, based on the analysis of the results of risk indicators and of the efficiency of the control processes.

The self-assessment of the risk of money laundering and terrorist financing is conducted at Group level, in accordance with the criteria and methods established by law. The exercise is carried out by each Group company under the coordination of the Parent Company; its results are presented annually to the Parent Company's Board of Directors.

The joint examination of the aforementioned evidence allows to direct the interventions on the operating segments concerned with a view to mitigating risks.

The Parent Company's Anti-Money Laundering Function safeguards against the exposure to money laundering and terrorist financing risks for the entire Banking Group. To this end, it establishes guidelines, rules and methodological and operational standards that are as homogeneous as possible within the Group, liaising with the anti-money-laundering counterparts at Group companies with the aim of supervising and coordinating the respective control activities

and promoting adequately integrated and coherent approaches to prevention, assessment and management of money laundering and terrorist financing risks.

Reputational risk

Strategy

The Group implements a general reputational risk management strategy based on maintaining a low risk profile, as a natural expression of its traditional corporate culture inspired by principles such as:

- establishing and maintaining clear and fair relations based on mutual respect with customers, shareholders and the various stakeholders and external interlocutors, according to direct, comprehensive and transparent communications;
- marketing products and services with high quality standards and easy to understand - particularly in terms of assessing the associated risks - with a view to satisfying customer needs while remaining in line with the risk profile;
- the enhancement of human resources through effective selection, training and professional development and the sharing of rules of conduct and ethics (e.g. Code of Ethics, Code of Conduct) based on formal and substantial compliance with the rules and their timely application, with a view to legislative compliance and effective collaboration with the Supervisory Authorities;
- the implementation of initiatives aimed at promoting the naturalistic, historical, cultural and artistic heritage of local communities and territories of choice, including, at the Parent Company, the publication of the quarterly "Newsletter" and the annual series of conferences held by illustrious cultural and entrepreneurial personalities.

The Group's orientation is achieved through the implementation of policies aimed at preventing the occurrence of risk manifestations potentially detrimental to the reputation and, in the event that they did materialise, to limit their effects by proactive management of the Bank's image or containment of exposure to the primary risks from which reputational typically derives.

Measurement and control systems

The Group uses an eminently qualitative reputational risk management model which provides for the identification of risks that are potentially detrimental to the corporate image and the assessment of potential exposure in the future, according to a methodological approach based on self-assessment techniques applied to specific risk scenarios.

Attention is also paid to the indirect impacts on the Company's reputation that risk events could have by monitoring complaints or claims received from customers, on the one hand, and analysing the main news items published in the mass media or on the web, on the other, in order to gather useful information on the level of reputation enjoyed and ideas for constant improvement of the services offered.

The reputational risk scenarios identified are subjected to a self-assessment process (Reputational Risk Assessment) conducted with the involvement of business experts and specialist supervision functions responsible for preventing and/or managing those types of risk from which reputational effects can typically derive; this in order to investigate the potential negative impacts on the perception of the Group's image with reference to the various stakeholders, identify any appropriate interventions to prevent and/or mitigate the critical issues found and prepare regular information to the competent Bodies and structures.

During the last year, reporting was integrated with specific evidence on the dynamics and management of complaints raised by customers using investment services, with the aim, among others, of signalling the reputation enjoyed in terms of perceived level of professionalism and integrity in business conduct. A more structured system was also introduced in relation to the reputational implications connected to issues covered by the "Non-Financial Reporting" (NFR) drawn up pursuant to Legislative Decree 254/2016, including the economic, social sustainability and environmental profiles (so-called "ESG factors" - Environmental, Social, Governance).

Among the other measures in place to monitor this type of risk, the Group conducts customer satisfaction surveys on operating segments of particular interest (e.g. treasury and cash services) in order to draw important indications on the Bank's image as it is perceived externally and gathering ideas for the constant improvement of the services offered.

The conduct of business according to ethical principles of fairness, transparency, integrity and professionalism, as well as punctual compliance with codes of conduct, regulations and laws is a fundamental safeguard against the risks related to illegal behaviour by employees, as well as the consequent impacts on corporate reputation. Among them, specific attention is paid to overseeing the risks of fraudulent behaviour aimed at corruption and personal gain through a constant surveillance of operations, with the purpose of identifying illicit conduct and improper business practices on a timely basis. As already mentioned in the paragraph above, the Group is also committed to compliance with the regulations on money laundering and terrorist financing, with special attention to transactions with countries subject to restrictions or operating in controversial sectors, and to the negative impact these could have, especially on the corporate image.

The "Organisation, Management and Control Model", which is designed to prevent risks of committing the offences contemplated by Legislative Decree 231 of 8 July 2001, also contributes significantly to maintaining a solid reputation. Fundamental for concrete implementation of the Model is the monitoring carried out by the Supervisory Body, established both at Banca Popolare di Sondrio and at the national subsidiaries subject to this requirement, with the role of supervising the functioning and observance of the Model.

Again with a view to mitigating reputational risks, Banca Popolare di Sondrio has long adopted a Code of Ethics pursuant to Legislative Decree 231/2001, subject to updating during the year, which encompasses the set of principles, ethical rules, rights, duties and responsibilities on which the Bank's operations must be based. The Code is applied to the generality of the internal and external persons, with whom the Bank enters into a relationship for the achievement of its corporate purpose; interlocutors who determine and, at the same time, judge its reputation. The behavioural principles and standards set out in the Code have also been extended to the other Group companies and adopted by them in their system of internal rules.

INTEREST RATE RISK

Definition

The risk that the Group's economic value might decrease as a consequence of a decline in the value of assets and/or the increase in the value of liabilities not belonging to the trading portfolio for supervisory purposes following adverse changes in the level of interest rates (economic value perspective), as well as the risk that interest rate movements might have a negative impact on present and future profitability deriving from the assets and liabilities of the banking book that generates the Group's net interest income (earnings perspective). The following cases are included in this general category:

- *Gap risk*: the risk of incurring losses in income or decreases in economic value due to unexpected fluctuations in interest rates that occur uniformly along the yield curve ("parallel risk") or in a different way on the term structure ("non-parallel risk"), deriving from differences in maturities (for fixed rate items and, with regard to the spread component only, for variable rate items) and the time lag at the moment of the rate revision (only for the variable component that characterises floating rate items) between assets, liabilities and off-balance sheet items;
- *Basis risk*: the risk of incurring losses in income or decreases in economic value on banking book positions due to an imperfect correlation between the adjustments of the interest rate paid and charged on different items which may also have similar repricing characteristics. This risk can occur in the presence of: changes in interest rates with different durations (tenor basis risk); changes in rates with identical durations but referring to different currencies (currency basis risk); changes of identical duration and currency but with different recognition methods (indexation basis risk); changes in rates with identical duration, currency and method of recognition but different in their nature (related rate basis risk);
- *Option risk*: the risk of suffering losses in income or decreases in economic value deriving from the exercise of options implicitly (behavioural option risk) or explicitly (automatic option risk) applied to certain banking book items.

Strategy

In carrying on its core business, the Group assumes the risk that unexpected changes in interest rates will have negative effects on its financial situation. This type of risk affects all assets, liabilities and off-balance sheet positions deriving from commercial operations and strategic investment choices (banking book). In this regard, risk exposure can be based on:

- economic value perspective (sensitivity of equity): this identifies the risk generated by the different repricing methods and/or the misalignment of maturities between assets and liabilities in the banking book over a long-term time horizon (fair value interest rate risk);
- earnings perspective (sensitivity of net-interest income): the interest rate risk is assessed on the basis of the sensitivity of the net interest income generated by the assets and liabilities in the banking book to changes in market rates over a short-medium term horizon (cash flow interest rate risk).

To limit exposure and from the point of view of the financial structure, the Group promotes a balanced development of loans and deposits, especially through to the matching of asset and liability aggregates with homogeneous financial characteristics. This balance is pursued by minimizing the differences between the maturities and the time differences at the moment of the rate review among assets, liabilities and off-balance sheet instruments. In pursuing a balanced financial structure, the Group does not rely solely on the contractual characteristics of financial transactions, but also considers the impacts of exercising options implicitly or explicitly present in certain banking book items.

The Group also has adequate systems of identifying, assessing and managing the risks deriving from potential changes in the level of interest rates, so as to promote an integrated view of the on-balance sheet assets and liabilities and off-balance sheet instruments, prospectively, allowing the introduction of adequate development strategies, as well as promptly identifying the most appropriate mitigation measures in the event of a deviation from the risk appetite.

With reference to the Parent Company's banking book, the principal sources of fair value interest rate risk are funding transactions (especially demand deposits, treated with appropriate behavioural modelling of their maturities) and fixed-rate lending (principally long-term loans and fixed-rate securities); the cash flow interest rate risk is also originated by other sight or indexed rate assets and liabilities.

The main source of interest rate risk in the entire structure of the financial statements for Banca Popolare di Sondrio (SUISSE) consists of fixed-rate mortgage loans, fixed-yield securities attributable to "other financial assets mandatorily measured at fair value" and sight deposits, but with appropriate behavioural modelling of their maturities.

For Factorit, interest rate risk is originated by the different timing and methods used in repricing the interest rate on assets and liabilities. The presence of diversified fluctuations in interest rates leads to a variation in the expected interest margin, as well as a change in the present value of the assets and liabilities; this in turn alters the economic value of the items at risk. Note that the characteristics of the subsidiary's assets and liabilities make the impact of a change in market rates on the present value of its assets and liabilities quite marginal. The high turnover of loans and receivables and the fact that the funding is exclusively short-term, which ensure frequent repricing very close to each other, make it possible to maintain lending and funding terms broadly in line with current market conditions.

For Banca della Nuova Terra there are exposures to interest rate risk of a modest amount linked to the operations of lending to customers and, albeit limited, to investment in securities, partially offset by fixed-term funding.

Sinergia Seconda does not have any exposure to interest rate risk, while Popso Covered Bond, which is consolidated on a summary basis with the Parent Company, does contribute to the exposures of Banca Popolare di Sondrio, albeit only minimally.

Measurement and control systems

The control of exposure to interest rate risk takes place through an Asset & Liability Management (ALM) system. The system supports a "Sensitivity Analysis in Full Evaluation" model, for the

sensitivity analysis of shareholders' net equity, based on outstanding transactions only, and an "Interactive Simulation" model, for the sensitivity analysis of net interest income, with simulations carried out on the assumption of constant volumes.

The first methodology is used to determine the cash flows (both principal and interest) generated by each asset and liability held in the banking book. This method uses, where necessary, the coupon rate applied to each instrument or, if not predetermined, the market curve associated with the risk factor to which the rate is indexed; the present values of assets and liabilities are therefore calculated by summing their cash flows as discounted using the yield curves.

These curves are subjected to a parallel shock of +/- 200 basis points, in order to simulate other scenarios involving, respectively, an increase and a decrease in market rates; the impacts of six additional instantaneous rate movement scenarios are also simulated, in accordance with specific guidelines of the European Banking Authority (EBA). The flows of interest and principal, as redetermined on the basis of the assumed modified curves, are discounted with reference to the new rate curves to obtain the "stressed discounted value" of each asset and liability⁶. Then, for each operation, the change in present value is calculated as the difference between the "stressed present value" and the "non-stressed present value". In this way, the model makes it possible to estimate the sensitivity of the banking book in terms of changes in the economic value of shareholders' net equity against an increase or decrease in market rates; this measure is also adopted in the ICAAP process as an estimate of the internal capital needs due to interest rate risk exposure in the banking book (IRRBB risk).

In addition, sight deposits which are very stable in terms of their volumes and whose interest rates are not usually established by contract, are represented by "behavioural models" aimed at capturing the time persistence of the volumes and their financial elasticity with respect to changes in market rates. The parameters constituting these models are re-evaluated on an annual basis.

Another type of operations subject to "behavioural modelling" is represented by mortgages and unsecured financing: in these lending operations, the borrower has an early termination option with respect to the contractual maturity of the loan, which can be exercised at any time (option risk). The adoption of a specific model makes it easier to track this situation, which is in fact known as «pre-payment».

The exposures measured on a monthly basis with the "Sensitivity Analysis in Full Evaluation" method, determined in inertial conditions with simulation of parallel movements in the reference curves equal to +/- 200 basis points, are then expressed as ratios of the total own funds to give two separate risk indicators, to be compared with the related RAF thresholds and targets. An additional indicator is also quantified as a ratio between the worst outcome of further six simulated rate movement scenarios and the Tier 1 capital. Lastly, the so-called "Supervisory Outlier Test" metrics provided for by specific guidelines published by the European Banking Authority are calculated on a quarterly basis. The model is also used as part of the Group's internal capital

⁶ In the event of an increase in the rate curve, no non-negative constraint is imposed. In the event of a negative change in the levels of the market curves, a minimum value (floor) is applied to the shocked curve: it only applies if the rate recorded on the analysis date is higher than the floor rate; conversely, if the recorded value is lower, no further shock is applied.

adequacy assessment (ICAAP) process in order to quantify the amount of economic capital associated with IRRBB risk.

The previous analyses are supplemented by the results of the "Interactive Simulation" method, which assumes the occurrence of shocks to the market rate curves in order to measure the sensitivity of the net interest income generated by the banking book assets and liabilities, depending on the positioning of the capital flows on the date that the transactions begin to be sensitive to changes in market interest rates.

Ideally the banking book, composed of asset and liability items generating the net interest income, can be divided into areas of operations partially and totally sensitive to changes in interest rates. The first type, mostly comprising fixed-rate transactions, is neutral when it comes to determining the sensitivity of net interest income up to the natural expiry of the transaction, but is impacted at the time of renewal; the second type, represented by floating-rate transactions, is conditioned by changes in rates at the time of revision of the coupon rate. The difference between the net interest income generated by each banking book transaction following the application of shocked market curves, and that generated under current market conditions, determines the marginal contribution to overall sensitivity. By adding this differential for all transactions, separately for the asset and liability items, we arrive at the overall value of the sensitivity of net interest income to the risk of fluctuations in market rates.

The exposures measured on a monthly basis using the method described above, determined by simulating parallel movements of the reference curves of +/- 200 basis points, is then expressed as a ratio of the net interest income expected along the time horizon of one year, generated without the application of shock to the interest rate curves, thus giving two specific risk indicators. The value assumed by these indices is then compared with the related RAF thresholds and targets. An additional risk indicator based on the worst outcome of the further six simulated EBA scenarios of interest rate movements is also quantified.

As part of the stress test on the main balance sheet items, including key income and financial figures of the Group, the Parent Company carries out scenario simulations to determine the impacts of the shocks taken as reference for identifying the adverse scenario on:

- the net economic value of assets and liabilities in the banking book;
- the total net interest income generated by the banking book items and the trading portfolio securities.

In support of the risk monitoring and management processes, specific internal information is prepared in a timely and performance-oriented manner, which is capable of documenting the analyses and measurements carried out to the competent bodies and functions, upon request and/or with a predefined frequency. Monitoring is carried out on a monthly basis.

The subsidiaries control the interest rate risk on a company basis through the use of monitoring techniques that are commensurate with the operations carried out and, as far as possible, the same as those used by the Parent Company.

LIQUIDITY RISK

Definition

The risk of not being able to fulfil the payment commitments on maturity and/or to refinance the on-balance sheet commitments with the necessary timeliness and according to economic criteria, due to the inability to raise funding sources in the market or to dispose the Bank's own assets.

This category includes the following cases:

- *Funding liquidity risk*: risk deriving from the impossibility of obtaining funds or obtaining them at reasonable costs. It can in turn be divided into:
 - *Mismatch Liquidity risk*: risk generated by the misalignment between the amounts and/or the timing of the incoming and outgoing flows;
 - *Contingency Liquidity risk*: risk that unexpected future events may require a greater amount of liquidity than that envisaged on the basis of the operations known to date; the following cases are included: a) *Margin Calls Liquidity risk*, referring to situations in which the Group is contractually obliged to integrate guarantees and/or margins to cover risk positions in financial instruments; b) *Wholesale Funding risk*, which is the risk of a massive withdrawal of deposits by subjects other than households; c) *Retail Funding risk*, which is the risk of massive withdrawal of deposits by households; d) *Off Balance Sheet Liquidity risk*, which is the risk of massive drawing on credit lines not currently used; e) *Risk of non-repayment of the loans granted*;
 - *Intraday Liquidity risk*: risk of non-fulfilment of intraday payment commitments due to the inability or impossibility to have the necessary liquidity resources in the working day in which they are requested;
 - *Asset Encumbrance risk*: risk related to a shortage of assets that can easily be turned into cash through disposal, sale with a repurchase agreement, assignment as collateral or securitisation; depending on the nature of the encumbered assets, the risk may refer only to the financial instruments in the portfolio (Financial Asset Encumbrance risk) or to the complex of financial and non-financial assets (Total Asset Encumbrance risk);
 - *Funding Concentration risk*: risk related to a shortage of funding sources because of their low level of diversification, due to a greater probability that the source currently in use will become partially or totally unavailable;
 - *Funding Cost risk*: risk of incurring a cost of funding significantly higher than the corresponding market price by maturity and currency; in turn, it derives from the risk of misalignment of cash flows, as well as from the risk associated with the portion of encumbered assets and from the risk of deposit concentration;
 - *Intra-group Liquidity risk*: risk deriving from the existence of restrictions on the transfer of funds and liquid assets within the Group;
- *Market Liquidity risk*: the risk deriving from the fact that it is impossible to dispose of or reduce a risk position without significantly affecting its price, as the market is inefficient or malfunctioning; it increases in case of concentration of issuers of the assets in portfolio.

Strategy

The Group adopts a strategy for managing liquidity risk which is characterized by a moderate risk appetite, expressed through:

- the rejection of speculative or otherwise excessively risky operations that could affect the profitability and stability of the Group;
- the execution of prudent investments to enable the risk control framework to progressively evolve towards ever higher levels of reliability and efficiency.

In particular, the Group pursues a prudent liquidity profile by:

- promoting policies to foster lending and investments in financial assets commensurate with funding contributions and diversification of funding sources;
- holding high-quality reserves, mostly represented by sovereign debt securities, which can be promptly liquidated in order to ensure a high capability of refinancing through central counterparties in case of liquidity shortages;
- maintaining a strong structural liquidity support, underpinned by a wide and stable retail funding base, which by definition is well diversified.

In the context of the Group, the Parent Company acts as the preferential counterparty vis-à-vis the subsidiaries, both to obtain new funds and to invest any excess liquidity.

Measurement and control systems

With regard to liquidity risk management, the Group relies on internal systems for monitoring liquidity positions over various time horizons, as well as for controlling and mitigating related risks; overall, the process is aimed at verifying the Group's ability to manage inflows and outflows effectively, both in business-as-usual and in stressed scenarios, by estimating the liquidity needs at a consolidated level as well as for the single entities of the Group.

The risk management system is based on a number of checks carried out at different organisational levels. The first level control is performed by the business functions involved in liquidity management, in order to ascertain by themselves that they carry out their duties properly and provide summary reports on the business operations on a daily basis. This monitoring is accompanied by a systematic second-level oversight of the expected liquidity position carried out by the Risk Control Department of the Parent Company, based on gathering data on the activities of the headquarter and the subsidiaries. The governing bodies are duly informed and verify the Group's liquidity situation and, if necessary, intervene appropriately.

The monitoring activity concerns, in a different way, both the operational (or short-term) liquidity position and the structural (or medium-long term) liquidity profile. The Bank's intraday liquidity position is also monitored constantly.

The control of short-term liquidity needs is aimed at verifying the Group's ability to meet cash payment obligations, without compromising the performance of normal operations; its purpose is therefore to bring the Group's monetary dynamics back into balance, also in terms of cost-effectiveness, as quickly as possible.

Operational liquidity is monitored by means of the daily recognition of cash flows typical of treasury operations and that which can be assimilated to it, of the potential liquidity flows obtainable from the disposal of the financial assets held in portfolio or from their utilisation in refinancing operations and the cash available on the Group's accounts at the Central Banks.

This information is used to quantify daily total net liquidity over a 12-month time horizon, by preparing an operational maturity ladder of cash inflows, cash outflows and reserves of available liquidity. The recognition of liquidity imbalances is produced daily for the benefit of the operating units involved in treasury management; at the same time, statements representing the liquidity situation of the main Group components are regularly prepared. Standard reports that focus in particular on the first quarter of the forecast horizon are sent to the Supervisory Authority on a weekly basis, with details regarding the entire Group.

The monitoring of the operational liquidity profile also provides for the determination of predefined risk indicators ("contingency indicators"), assigned to promptly detect any signs of systemic or specific crisis, and a check on the respective surveillance thresholds. The impact of scenario assumptions on the liquidity position subject to recognition is also estimated by subjecting the results of the monitoring activity to stress tests. The Group is equipped with a specific liquidity risk emergency plan ("Contingency Funding Plan"), which is updated annually, with the aim of safeguarding the solvency, financial stability and business continuity of its components.

As for medium-long term liquidity, the main monitoring tool is the so-called structural "Maturity Ladder", a cash flow schedule that includes all funding and lending operations, as well as the securities in portfolio, due to mature from the date of the report and without any limit on time. A consolidated monthly version of this report is also produced, along with individual versions on the main components of the Banking Group.

The control is enriched by the calculation on a monthly basis of specific structural risk indicators, which aim to highlight potential warning signals relating to the situation of structural liquidity and the composition of the Group's deposits.

According to the guidelines of the Basel Committee on Banking Supervision, the monitoring of intraday liquidity is carried out through a system of real-time controls over how corporate liquidity is used, including the measurement of key indicators regarding the cash reserves available at the beginning of each working day as well as the amount and the time sequence of payments throughout a day. Specific summary end-month metrics relating to the intraday liquidity situation throughout each month are also quantified.

The results of this monitoring for managerial purposes are accompanied by specific coefficients calculated according to the supervisory requirements: in particular, these are LCR (*Liquidity Coverage Ratio*) and NSFR (*Net Stable Funding Ratio*). These indicators, which are subject to specific supervisory reports, are calculated on a monthly and quarterly basis respectively. With equal frequency, these metrics are also quantified under the same adverse hypotheses used for stress test simulations of the operational liquidity indicators.

At 31 December 2019, the Group's LCR indicator was still significantly above the minimum level envisaged by the prudential regulation (100%), supported by a wide range of high-quality

negotiable assets; the NSFR indicator was also higher than the 100% fully phased minimum requirement at the date.

The so-called “Additional Liquidity Monitoring Metrics” provided for by the EU regulations are also reported to the Supervisory Authority on a monthly basis, with the aim of monitoring the maturity imbalances between assets and liabilities, concentration of funding, cash reserves or readily marketable assets (so-called “Counterbalancing Capacity”), as well as the cost of funding and the Group's capacity for funding renewal.

As explained above, the results of liquidity risk monitoring are made available to the competent bodies and organisational units through appropriate reports; the ALM and Investment Committee is particularly important in this context, as, among others, it analyses the trend in exposure to financial risks at least quarterly. Its members are updated on a monthly basis on changes in the financial risk position through dedicated reporting, including all the main outcomes of the measurements carried out.

Specific reports concerning the Group's liquidity situation are also sent to the Supervisory Bodies to meet specific information requests.

On an annual basis, the Group reports to the Supervisory Authority the main results of the internal process performed to evaluate the adequacy of its liquidity position and the associated risk exposure (ILAAP, Internal Liquidity Adequacy Assessment Process). The figures transmitted with this reporting, formalised by 30 April of each year, together with all the other liquidity risk exposure data provided over time, constitute for the Supervisory Authority a fundamental assessment basis for the purposes of SREP (Supervisory Review and Evaluation Process).

As part of the ILAAP, the Parent Company's Board of Directors, in its strategic and supervisory functions, oversees the adequacy - under ordinary and stressed conditions - of the risk levels assumed on an actual basis and in the future, based on the Group's forecast business developments, checking the suitability of the monitoring framework and the liquidity risk management measures and their consistency with corporate strategies. This assessment was carried out in April 2020 with reference to the end of 2019.

Subsidiaries control liquidity risk exposure on an individual basis by using monitoring tools commensurate with their operations and, as far as possible, the same as those of the Parent Company; with regard to Banca Popolare di Sondrio (SUISSE), they also comply with the provisions of the Swiss Supervisory Authority.

STRATEGIC RISK

Definition

Current or prospective risk of suffering losses or declines in profits deriving from changes in the operating context or from incorrect strategic decisions, inadequate implementation or updating of the strategic plan, poor reactivity in the face of changes in the competitive scenario.

This category includes the following cases:

- *“Pure” strategic risk*: the risk that the Group's decisions regarding competitive/strategic positioning will not have the expected results, penalizing the achievement of medium/long-term economic and financial objectives;
- *Equity investment-related risk*: the risk of suffering losses in value compared with the portfolio of equity investments other than those held for trading purposes; it relates in particular to equity shareholdings characterised by stability and a long-term investment logic, in companies outside the perimeter of the Banking Group, not already considered in the context of Other (non-sovereign) banking book instruments risk; this can occur: a) if losses are suffered because of fluctuation in the market value of the shares held related to the economic prospects of the investee company, or in the event of its insolvency; b) if equity investments make the banking assets excessively fixed as too many financial resources are tied up in the investments; c) if a significant merger or acquisition causes changes in the Group's financial and capital structure; d) due to the emergence of potential conflicts of interest between the activity in equity investments and the Group's other activities, lending in particular;
- *Business risk*: the risk associated with the uncertainty of economic results not caused by other types of risk, mainly deriving from changes in the competitive context, in the economic conditions of the activity or in the behaviour of customers;
- *Real estate risk*: the risk of incurring in losses caused by unexpected changes in the value of the Group's property portfolio.

Strategy

The Group bases its strategic and business risk management model on mitigation policies and arrangements having both medium and short-term horizon. These are pursued by establishing clear principles and lines of conduct relating, in particular, to the regulation of processes and the activities through which the multi-year strategic plan and the associated commercial budgets are defined/updated and subsequently monitored during actual implementation.

In compliance with the regulatory provisions on equity interests held by banks and banking groups, the strategy for managing the risks associated with the acquisition of equity investments by BPS Group aims, in general, at:

- defining rules and deliberative procedures to ensure the substantial and procedural suitability of these transactions, in compliance with the reference standards;
- ensuring compliance with the quantitative limits on the holding of equity investments, especially to those in non-financial companies;
- defining organisational and governance structures capable of preventing conflicts of interest and which can guarantee, on the one hand, that shareholding decisions are not conditioned by existing lending relationships and, on the other, that business relationships with the investees are based on objective criteria and meet market conditions.

The equity investments held by the Group essentially relate to companies that supply goods and services which complete the commercial offer of the Group and, therefore, are necessary for the achievement and maintenance of an effective competitive position. These holdings are of a stable

nature and are strengthened by the BPS's traditional intention to give the investee companies a significant contribution in terms of volumes of activities, as well as to provide financial support in the context of balanced operating plans; they respond to the consolidated strategic line of concentrating the company's organisation on its core activity, making use of specialised entities for certain operating sectors (consumer credit, mutual funds, insurance, leasing, factoring, brokerage services, trust field, etc.).

The real estate risk management strategy relies on setting guidelines governing the direct assumption of positions in real estate properties, as well as indirect assumption by purchasing shares in real estate funds or similar, in order to:

- define internal rules and procedures that ensure careful evaluation of real estate investment initiatives, as required by applicable legislation;
- ensure compliance with the risk-taking objectives in the sector;
- define organisational and governance structures aimed at safeguarding that real estate investment decisions are primarily aimed at holding properties for functional use, having an instrumental or accessory nature, to be maintained permanently and used in the ordinary course of business; only secondarily aimed at investing in income-generating properties or, when necessary, for credit protection purposes.

Measurement and control systems

The Group adopts rigorous policies to control and mitigate strategic risk, which are mainly based on the existence of robust decision-making processes, which at the same time are efficient and streamlined, tending to reconcile the needs of the various stakeholders with the contextual constraints, in accordance with the principles of sound and prudent management.

Further mitigating measures, both at the Parent Company and the other entities of the Group, are represented by the constant observation of the reference markets, the diligent execution of strategic, capital and operational planning, and the careful monitoring of business trends.

These criteria are applied to all business contexts, especially for those relating to the fixing of strategic plan and budget objectives, the acquisition/disposal of equity investments, the introduction of new products or services and entry into new business or market segments, transaction of major significance, human resource management, changes in the organisational structure and other innovative initiatives (e.g. strategic projects).

In particular, the reactivity with which to cope with deviations from forecasted targets or unexpected changes in the business environment is ensured by a systematic comparison of the actual economic and financial results with the objectives set in the multi-year plans and annual budgets. At the Parent Company, this activity, which is carried out periodically by the top management with the support of the relevant offices, makes it possible to monitor the ability to translate strategic decisions into coherent interventions on the organisation and to implement corrective measures to remedy any critical issues or deviations from the path being pursued.

The general trend in operations and related outlook are normally analysed by top management and the Board of Directors at the time the quarterly reports are presented for approval, paying

particular attention to the level of efficiency and effectiveness achieved. In the presence of structural changes in the reference context and/or significant deviations from what was expected, a prompt recalibration of the objectives is carried out.

Suitable communication processes and an articulated and timely internal reporting support the Group's ability to perceive and respond appropriately to changes in the context. In this regard, the adequate circulation of information between the corporate bodies and within them, as well as between them and the business and control structures, is considered an essential prerequisite for the maintenance of decision-making processes based on adequate knowledge of the corporate facts, on the exercise of an effective management action consistent with the strategic guidelines and on a control activity able to identify, monitor and mitigate risks in an effective manner.

In the management of the Group, the existence of mechanisms for sharing offices between the Parent Company and Subsidiaries contributes to the adoption of uniform lines of strategy. This coordination system mitigates the risk that the Subsidiaries make decisions that could harm the Group's unity of intent, i.e. carrying on the business according to common guidelines.

With reference to its portfolio of equity investments, the Group holds interests in companies supplying products and services that effectively integrate the commercial offer, according to criteria of continuity and stability; according to the consolidated policy of concentrating the organisation on the core business, these holdings are functional and are preferably acquired as part of collaboration initiatives with other cooperative banks. In line with its vocation as a cooperative bank, BPS Group also provides financial support in the form of shareholding participation to selected companies, including non-financial enterprises, especially if they are located in geographic areas where BPS has traditionally had its roots. As these are companies well-known to the Parent Company, also thanks to the appointment of its representatives in their respective corporate bodies, the strategic risks associated with these holdings are carefully controlled and monitored.

The acquisition and sale of shareholdings, which are statutorily reserved to the upper level corporate bodies, are subject to in-depth assessment and are inspired by the principles of sound and prudent management. The main reasons for investing in financial and non-financial companies are to avoid an excessive immobilisation of the Group's assets, as well as to safeguard its structural balance and direct equity holdings along the lines of stability, economy and limited risk. These transactions, even if promoted by the subsidiaries, require the prior examination of the Board of Directors of the Parent Company, taking into account the rules and limits on equity investments established at Group level.

With regard to real estate risk, regular monitoring of the composition of the Group's property portfolio is carried out, consisting of half-yearly analyses that also include sensitivity tests to simulate the potential impact of alternative drops in the market value of real estate assets.

Adequacy of risk management framework and connection between the overall risk profile and the corporate strategy

With reference to the provisions of art. 435, paragraph 1, letters e) and f) of Regulation (EU) 575/2013 ("CRR"), the main evidence regarding the adequacy of the measures adopted for risk management and the connection between the overall risk profile and the Group's strategies are highlighted below.

Adequacy of risk management framework

Given that the Banca Popolare di Sondrio Group is on the list of significant European banks supervised directly by the ECB, in 2019 it again carried out project activities on its systems, processes and models for the governance and risk management aimed at continuous adaptation to the regulatory and supervisory context and normal day-to-day enhancement.

The internal control devices and the risk management tools are assessed and checked, for the areas of competence, by the corporate control and assimilated functions. In particular, the systems and methods for identifying, detecting and controlling risks are regularly subject to internal validation and review, according to their respective appurtenances. The results of the checks carried out are brought to the attention of the competent corporate bodies as part of the periodic reporting on the activities carried out by the control functions.

The corporate bodies are also called upon, with the support of the above mentioned functions, to examine the degree of overall compliance of the internal control and risk management system with the requirements established by the Bank of Italy Circular no. 285/2013, Part One, Title IV, Chapter 3 and the additional prerogatives required by community and supervisory regulations.

Once a year, as part of their respective Reports to the Shareholders' Meeting, the Statutory Auditors and Directors of Banca Popolare di Sondrio express their assessments regarding the adequacy of the organisational and internal control structures and, with them, the measurement systems, risk management and control of the Banking Group, certifying that the policies and methods of risk assumption adopted are consistent with the strategic guidelines, the risk appetite and the indications received from time to time from the Supervisory Authorities. The overall adequacy was confirmed for the year in question, albeit with some points for improvement.

Coherence between the overall risk profile and the Group's strategies

In compliance with the supervisory provisions, the Group has defined and formalized the procedures for the connection between the Risk Appetite Framework (RAF) and the strategic planning process.

The risk appetite, in the various forms adopted in the RAF, is a key element for the activities aimed at defining, implementing and possibly revising the Group's strategic planning and periodically monitoring the results achieved by the management.

In particular, the guidelines in terms of risk assumption and management help the Parent Company's Board of Directors to formulate the more general orientation and guidelines with which to conform the definition of strategic objectives and the overall programming of the business in the

medium term. These guidelines express the Group's strategic attitude towards risk and constitute the basis of decision-making processes regarding risk governance over the forecast horizon. They are connected to the company's operations by making explicit the risk assumption objectives established by the RAF and adopting coherent risk management policies.

The guidelines for risk management and their qualitative and quantitative definition in risk appetite parameters represent a condition to be respected when identifying strategic priorities and defining long-term objectives on the planning horizon.

The evolutionary assumptions taken as a point of reference for planning the business activity, elaborated on the basis of the guidelines formulated by the Strategic Supervisory Body, are submitted for a sustainability analysis with respect to maintaining the Group's financial and capital balance, so that to ensure consistency with the constraints of capital adequacy and financial structure of liabilities, leverage, asset quality, liquidity, profitability and risk assumption specified in the Risk Appetite Framework.

Taking into account the results of these analyses, the proposal to determine the Group's risk appetite is calibrated annually through a recurring process; the sustainability of the risk objectives is also tested under alternative, stressed scenarios. In this context, the Group foresees a synergistic interaction between the definition of the Group's strategic guidelines and the risk appetite or risk tolerance profile in the various areas envisaged by the RAF.

Verification of the degree of achievement of the objectives defined in the strategic plan is continuously coordinated with the equivalent monitoring of compliance with the risk objectives set in the RAF, providing for a harmonious approach to identifying corrective measures in the event of significant deviations in one part or the other.

In implementing its strategic objectives, the Banca Popolare di Sondrio Group pursues a policy based on balance and prudence, characterised by a limited and conscious assumption of risk, followed by lines of action aimed at directing operational activity towards lines of development that are considered less risky. The risk assumption and management strategies can be summarised in the following general guidelines:

- Confirmation, also in the event of a change in the corporate structure, of an entrepreneurial model oriented towards a conscious, prudent and balanced assumption of risk, such as to prevent the emergence of any risks that could threaten the stability, solvency and continuity of the Group or to damage its reputation.
- Promotion of a solid "risk culture" capable of enhancing the importance of sound and prudent management, of promoting a complete, integrated and coherent vision of the risks, while ensuring that the risk dimension is adequately integrated into strategic decisions and choices that have to be made by management.
- Pursuit of corporate policies aimed at the stable and recurring generation of profits and adequate remuneration of risk capital, creating reliable and sustainable value over time, in line with the business and service model.

- Compliance with the reasonable remuneration expectations of the shareholder base with the need to self-finance the dimensional growth of the business and the risks assumed, promoting a balanced and conservative level of pay-out in line with the past.
- Maintaining adequate safety margins in relation to the capital and liquidity constraints imposed by regulations or required by the Supervisory Bodies, also defined in relation to the positioning of competitors and the measurement metrics adopted, allowing the Group to face unexpected risk manifestations and mitigate their potential effects on its economic and financial situation.
- Conservative management of the balance sheet structure, by maintaining a dynamic equilibrium between assets and liabilities, with a view to limiting the amount of financial leverage required.
- Prudent liquidity profile to be pursued through:
 - policies for growth in loans and investment in financial assets commensurate with the actual funding inputs and the diversification of funding sources;
 - holding top quality reserves that can easily be turned into cash, represented to a large extent by sovereign securities, which guarantee a high capacity for refinancing with central counterparties to cope with any liquidity crises;
 - the maintenance of a structural liquidity position supported by a stable and diversified funding base.
- Cautious attitude towards the assumption of the risks associated with lending and confirmation that they are closely monitored throughout the credit life cycle, which is expressed through:
 - a rigorous preliminary investigation of loan requests, aimed at understanding the effective degree of risk of the counterparties by analysing their ability to generate wealth, not only now, but also in the future;
 - the inadmissibility of all lending transactions that involve taking risks that are not consistent with the Group's risk objectives and the rejection of those likely to compromise its profitability and stability;
 - a prudent assumption of risks associated with leveraged finance transactions, to be subjected to adequate supervision;
 - an adequate remuneration for the risk assumed on the basis of the type of credit facility granted and the adoption of prudent provisioning policies;
 - the systematic and shared use of rating models in credit management processes, favouring selective, efficient and predictive assessment of the customer's creditworthiness and probability of default;
 - an intensification of risk identification, monitoring and management to safeguard the quality of credit assets from deterioration, with the aim of progressively limiting the cost of risk and non-performing loans;

- carefully monitoring the risks related to an excessive concentration of the lending portfolio, also through the imposition of limits on exposure to larger counterparties and economic sectors with a more pronounced risk profile.
- Trading operations on the financial markets, aimed at seizing the investment opportunities that may arise due to the market context, based on a management model inspired by the containment and rigorous assessment of the risks assumed.
- Assumption of interest rate risks intimately connected to the Group's role as a "financial intermediary", and of risks related to the investment in equity securities, both kept within fully sustainable levels.
- Management of operational risks, including conduct risk, based on effective prevention and mitigation policies aimed at limiting the main sources of risk by limiting the frequency and/or severity of events that generate or could generate economic losses and damage to the Group's assets or reputation.
- Adequate monitoring and containment of ICT risk, mainly by: i) promoting suitable standards of security and disaster recovery, also to prevent and defend against the risks of cyber-attacks and fraud perpetrated through ICT systems (cyber risk); ii) maintaining the flexibility and agility of the company's information systems, in a context of "digital transformation" aimed at making the best use of available resources and opportunities for technological innovation, together with the rising centrality of digital channels as part of the multi-channel approach to customer service.
- Protection of the Group's distinctive reputation, considered to be the main critical success factor, through:
 - full formal and substantial observance, with a view to compliance, of the primary and secondary reference legislation, and timely compliance with the implementing regulations as well as with the self-regulation provisions;
 - safeguarding the trust placed in the Group by the shareholder base, customers and institutional counterparties, as well as by the staff, who have a particularly strong sense of belonging;
 - maintaining clear and correct relationships devoted to mutual respect with the various stakeholders and adopting accurate behavioural models;
 - a conduct of business based on the centrality of the customer and aimed at applying the principles of correctness, transparency, integrity and professionalism;
 - the marketing of products and services related to the risk profile and the needs of specific customer segments, not characterised by particularly complex structures or elements that are difficult to understand nor an uncertain assessment of the associated risk;
 - initiatives aimed at promoting cultural, civic and social growth in the community in which the Group is active.

Corporate governance arrangements

With regard to the information required by art. 435, para. 2, of Regulation (EU) 575/2013 ("CRR") on corporate governance arrangements, please refer to the specific documentation published on the Bank's website (www.popso.it). The required information is provided in greater detail below.

a) *Number of directorships held by members of the Board of Directors*

In this regard, please refer to the "Report on corporate governance and ownership structures 2019", prepared pursuant to art. 123 bis of Legislative Decree 58 of 24 February 1998 (Consolidated Finance Act) and available (only in Italian) on the company's website at <http://www.popso.it/informativa-societaria/relazione-sul-governo-societario-e-gli-assetti-proprietari>. The document contains the curricula vitae of the Bank's Directors, which indicate the directorships that they hold (paragraph 4).

b) *Policy for the selection of members of the Board of Directors and their effective knowledge, skills and experience*

In this regard, reference is made to the document "Optimal qualitative and quantitative composition of the Board of Directors of Banca Popolare di Sondrio scpa", approved by the Board of Directors in compliance with current supervisory provisions on corporate governance of banks (Bank of Italy Circular 285/2013 "Supervisory provisions for banks") and published (only in Italian) on the company's website at www.popso.it/assemblea2020.

c) *Diversity policy adopted in the selection of the members of the management body, the related objectives and any targets established in the framework of this policy, as well as the extent to which these objectives have been achieved*

The current "Supervisory provisions for banks" (Bank of Italy Circular 285/2013), Part One, Title IV, Chapter I, Section IV, provide that the identified gender target, the plan and its implementation is made public within the disclosure that banks must make pursuant to the "Pillar 3" discipline (art. 435 CRR).

In relation to gender diversity, art. 32, paragraphs 3 and 4, of the Articles of Association of Banca Popolare di Sondrio - document available (only in Italian) on the company's website at <https://www.popso.it/informativa-societaria/statuto> - establishes that: *"The composition of the Board of Directors must ensure gender balance in accordance with current regulations. In accordance with article 34 paragraph 2 of these articles of association, for the first three partial renewals of the Board of Directors occurring after one year from entrance into force of law 120 of 12 July 2011 gender balance is realized by guaranteeing to the less represented gender, at least one fifth of the directors elected for the three year mandate"*.

In accordance with the above-mentioned statutory regulations, 6 out of 15 Directors are an expression of the least represented gender, in particular the female gender. Therefore, the obligation of at least one third of the offices attributed to the less represented gender envisaged by the provisions of Law 120 of 12 July 2011 in terms of equal access to the administration and control bodies of companies listed on regulated markets is fully respected.

With regards to diversified skills and experience, age groups, respect for the principle of gender balance of the Directors, each year, before the partial renewal of the Board, Banca

Popolare di Sondrio publishes the document "Optimal qualitative-quantitative composition of the Board of Directors of Banca Popolare di Sondrio scpa" (www.popso.it/assemblea2020).

This document highlights the importance of the presence of members with diversified skills and experiences. This heterogeneity - together with a certain range of ages and respecting the principle of gender balance - is in fact likely to favour a plurality of approaches and perspectives in analysing the issues and taking decisions. Paragraph 8 of the document indicates, among other things, the overall qualitative composition that the Board deems appropriate; in particular, the Board of Directors must be able to count on a qualitative-quantitative composition which ensures adequate oversight of the following areas of competence:

- knowledge of banking;
- knowledge of the dynamics of the economic and financial system;
- knowledge of the regulations governing credit and finance;
- knowledge of the territories in which the Bank operates;
- knowledge of risk management, especially related to the banking business;
- knowledge of business management and corporate governance processes, also in order to evaluate the effectiveness of the supervisory, management and control system;
- knowledge of the issues involved in banks' financial statements;
- knowledge of the activity, structure and organisation of Banca Popolare di Sondrio and its Group.

In order to foster an adequate dialectical confrontation within the Board and to ensure informed and thoughtful decisions, it was considered appropriate that more individuals with proven skills in each of the areas listed above be present on the Board.

d) *Whether the bank has set up a separate risk committee and the number of times it has met during the year*

A Risk and Audit Committee has been set up as part of the Board of Directors. In this regard, please refer to the aforementioned "Report on corporate governance and ownership structures for 2019", paragraph 5.2 (<http://www.popso.it/informativa-societaria/relazione-sul-governo-societario-e-gli-asseti-proprietari>), which illustrates the composition, competences and functioning of the Committee (only in Italian). During 2019, the Risk and Audit Committee met 17 times, with each meeting lasting an average of 1.5 hours.

e) *Description of the flow of information on risks addressed to the Board of Directors*

In order to ensure the correct functioning of the internal control system, the Group has identified the most appropriate methods of coordination and collaboration between the corporate control bodies and functions, as well as the interactions between the Parent Company and the subsidiaries.

In this regard, in accordance with the principles established in the "Group Regulation on the system of internal controls and corporate governance", the provisions contained in "Coordination document between bodies and functions with control tasks" apply. This is a document which, among other things, defines the main exchanges of information to allow effective monitoring and control of risks within the Group.

The general guidelines for the configuration, preparation and circulation of information and management reporting on the results of operations and risks are also contained in the specific "Regulation on information flows and reporting".

In general, the internal control functions of the Parent Company report to the top bodies and committees, according to their respective responsibilities, periodic or event-by-event information to ensure, on the one hand, a decision-making process based on full knowledge and sharing of the facts and, on the other hand, suitable control measures to identify, supervise and mitigate the risks assumed. In particular, the information produced relates to the following aspects:

- planning and reporting of control activities;
- business risk evolution;
- deficiencies found in controls and any remedial actions planned or taken;
- violations, serious events and anomalies.

With specific reference to the flow of information on risks addressed to the Board of Directors in accordance with the provisions of art. 435, paragraph 2, letter e) of Regulation (EU) 575/2013 ("CRR"), a summary table of the main information, reports and periodic reporting on monitoring and control of corporate and Group risks prepared for the benefit of the Board of Directors of the Parent Company Banca Popolare di Sondrio is provided below.

Table 1 - List of periodic information flows on risk control addressed to the Board of the Parent Company Banca Popolare di Sondrio

#	Flow name	Responsible unit	Frequency
1	Report of the Risk Control Function on the activities carried out during the year <i>n</i> and Activity Programme for the year <i>n+1</i>	Risk Control Department	Annual
2	Report of the Risk Management Function pursuant to art. 23 Commission Delegated Regulation (EU) 565/2017 on investment services	Risk Control Department	Annual
3	Reporting of the Group's internal capital adequacy assessment process (ICAAP Report)	Risk Control Department	Annual
4	Reporting of the Group's internal liquidity adequacy assessment process (ILAAP Report)	Risk Control Department	Annual
5	Public Disclosures (Pillar 3 Report)	Risk Control Department	Semi-annual
6	Tableau de Bord – Risk Dashboard	Risk Control Department	Quarterly
7	Report of the Validation Function on the activities carried out during the year <i>n</i> and Activity Programme	Validation Office	Annual
8	Validation reports and information notes dedicated to the findings that emerged on the areas subject to verification (e.g. AIRB system) and the related	Validation Office	According to the periodicity and in the circumstances

#	Flow name	Responsible unit	Frequency
	overall assessment of adequacy		established by internal regulations
9	Report of the Compliance Function and Data Protection Officer (DPO) on the activities carried out during the year n and Activity Programme for the year $n+1$	Compliance Function and Data Protection Officer (DPO)	Annual (semi-annual update)
10	Report pursuant to art. Commission Delegated Regulation (EU) 565/2017 on controls and complaints in the context of the provision of investment services	Compliance Function and Data Protection Officer (DPO)	Annual
11	Report on internal infringement reporting systems ("whistleblowing")	Compliance Function and Data Protection Officer (DPO)	Annual
12	Report on transparency of banking and financial transactions and services	Compliance Function and Data Protection Officer (DPO)	Annual
13	DPO report on the processing of personal data (privacy)	Compliance Function and Data Protection Officer (DPO)	Annual
14	Periodic reporting on transactions with related parties/associated persons	Compliance Function and Data Protection Officer (DPO)	Quarterly
15	Compliance reports dedicated to the evidence emerging on specific areas subject to verification	Compliance Function and Data Protection Officer (DPO)	According to the periodicity and in the circumstances established by internal regulations
16	Report of the Anti-Money Laundering Function on the activities carried out during the year n (including the annual Self-Assessment of money laundering risks provided for by the Bank of Italy provisions) and Activity Programme for the year $n+1$	Anti-Money Laundering Function	Annual (semi-annual update)
17	Annual plan of business continuity controls	Business Continuity Function	Annual
18	Report of the Manager responsible for preparing the Company's accounting documents on the activities carried out during the year n and Activity Programme for the year $n+1$	Manager responsible for preparing the Company's accounting documents	Annual (semi-annual update)
19	Information relating to the supervisory activity on the implementation of the Organizational Model according to L.D. 231/2001	Supervisory Body as per Legislative Decree 231/2001	Annual
20	Report of the Internal Audit Department on the activities carried out in the year n and Audit plan	Internal Audit Department	Annual
21	Report on the checks carried out on important	Internal Audit Department	Annual

#	Flow name	Responsible unit	Frequency
	operational or outsourced control functions		
22	Report of the Internal Audit Department pursuant to art. 24 Commission Delegated Regulation (EU) 565/2017 on investment services	Internal Audit Department	Annual
23	Periodic information on audit activities and reports on specific areas of verification (e.g. ICAAP / ILAAP, AIRB internal rating systems, etc.)	Internal Audit Department	According to the periodicity and in the circumstances established by internal regulations
24	Report on investment services, ancillary activities and distribution of financial products issued by insurance companies or banks	Finance Department	Annual
25	Self-assessment of the persistence of the eligibility requirements in the exercise of the activity of custodian bank of UCITS and pension funds	Finance Department	Annual
26	Summary report on the ICT risk situation	ICT and Security Departments	Annual
27	Self-assessment report on ICT security risk	ICT and Security Departments	Annual

Section 2 - Scope of application (art. 436 CRR)

Qualitative information

These Public Disclosures, prepared by the Parent, apply to the Banca Popolare di Sondrio Banking Group, which at the reference date is made up as follows:

<i>Parent Company:</i>	Banca Popolare di Sondrio S.c.p.a. – Sondrio
<i>Group Companies:</i>	Banca Popolare di Sondrio (SUISSE) SA – Lugano (CH)
	Factorit S.p.a – Milan
	Sinergia Seconda S.r.l. – Milan
	Popso Covered Bond S.r.l. – Conegliano Veneto (TV)
	Banca della Nuova Terra S.p.A. – Milan

The scope of consolidation for regulatory purposes, which is determined in accordance with the supervisory regulations currently in force, provides for full (or "line-by-line") consolidation of the subsidiaries mentioned above, as banking, financial or service companies controlled directly by the Parent Company.

The scope of consolidation for accounting purposes includes the companies over which the Parent Company exercises "control" which, as defined by IFRS 10 exists when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

"Control" can be obtained in various ways, including by exposure to risks and returns of the investment, and not just as a consequence of the power to influence financial and operating policies of the investee. In particular, "control" is deemed to exist in the following circumstances:

- a) availability of actual and potential voting rights at a shareholders' meeting and/or other contractual rights, relations or other elements that guarantee influence over the relevant activities of the investment;
- b) exposure to the variability of results, for example in terms of an overall economic interest in the investment;
- c) with regard to the above points, existence of an ability to influence the economic results of the investment by the power exercised over it.

The scope of consolidation also includes the equity investments where the Parent Company exercises a "significant influence" in that the shareholding, directly or indirectly owned, is between 20% and 50%; or, if it has an interest of less than 20%, if one or more of the following circumstances apply:

- a) the Bank has a representative on the Board of Directors or the equivalent body of the affiliate;

- b) the Bank takes part in the decision-making process, including decisions regarding dividends;
- c) there are significant transactions between the parent company and the affiliate;
- d) there is an exchange of managers;
- e) essential technical information is being provided.

Banking, insurance and financial companies jointly controlled and subject to significant influence are measured using the equity method, with the exclusion of those that are less significant, which are valued at cost.

In compliance with the provisions of Regulation (EU) no. 575/2013 ("CRR"), these investments are deducted from Common Equity Tier 1 (CET 1) Capital only for the amount exceeding 10% of this aggregate, calculated as indicated in art. 48, para. 1, letter b), points i) and ii) of the CRR; the portion of the investments included in the previous threshold, not being deducted from Own Funds, receives a risk weighting factor of 250%.

Equity investments in jointly controlled and associated companies that are not of a banking, financial or service nature are generally measured using the equity method.

The composition of the scope of consolidation for accounting and regulatory purposes is shown below, with an indication, in the first case, of the valuation methods used for the shareholdings and, in the second case, of the treatment applied to calculate the regulatory capital requirements.

Table 2 - Scope of consolidation for accounting and regulatory purposes and additional entities deducted from Own Funds

Company name	Head office	% Holding	Type of activity	IAS/IFRS accounting treatment				Regulatory treatment		
				Line-by-line consolidation	Valuation at equity	Valuation at cost	Non-consolidated	Line-by-line consolidation	Deducted from own funds / Subject to threshold	Inclusion in RWAs
Banca Popolare di Sondrio (Suisse) S.A.	Lugano (CH)	100.00	Banking	X				X		
Banca della Nuova Terra S.p.a.	Milan	100.00	Banking	X				X		
Factorit S.p.a.	Milan	60.50	Financial	X				X		
Servizi Internazionali e Strutture Integrate 2000 S.r.l.	Milan	100.00	Non-financial	X						X
Sinergia Seconda S.r.l.	Milan	100.00	Real Estate	X				X		
Pirovano Stelvio S.p.a.	Sondrio	100.00	Non-financial	X						X
Immobiliare San Paolo S.r.l.	Tirano	100.00	(1) Real Estate	X						X
Immobiliare Borgo Palazzo S.r.l.	Tirano	100.00	(1) Real Estate	X						X
Popso Covered Bond S.r.l.	Conegliano V.	60.00	Financial	X				X		
Centro delle Alpi Real Estate	Milan	100.00	Financial	X						X
Rajna Immobiliare S.r.l.	Sondrio	50.00	Real Estate		X					X
Alba Leasing S.p.a.	Milan	19.26	Financial		X				X	
Arca Vita S.p.a.	Verona	14.84	Insurance		X				X	
Arca Holding S.p.a.	Milan	36.83	Financial		X				X	
Unione Fiduciaria S.p.a.	Milan	24.00	Financial		X				X	
Polis Fondi Sgrpa	Milan	19.60	Financial		X				X	
Bormio Golf S.p.a.	Bormio	25.24	Non-financial			X				X
Lago di Como Gal S.c.r.l.	Canzo	28.95	Non-financial			X				X
Sofipo S.A.	Lugano (CH)	30.00	(2) Financial		X				X	
Acquedotto dello Stelvio S.r.l.	Bormio	27.00	(3) Non-financial			X				X
Sifas S.p.a.	Bolzano	21.61	(3) Non-financial			X				X
Rent2Go S.r.l.	Bolzano	33.33	Non-financial		X					X
Cossi Costruzioni S.p.a.	Sondrio	18.25	Non-financial		X					X

(1) held by Sinergia Seconda S.r.l.

(2) held by Banca Popolare di Sondrio (Suisse) S.A.

(3) held by Pirovano Stelvio S.p.a.

Section 3 - Own funds (art. 437 CRR)

Qualitative information

Main characteristics of the elements constituting Own Funds

The key elements of Own Funds consist of:

- Common Equity Tier 1 Capital (CET1)
- Additional Tier 1 Capital (AT1)
- Tier 2 Capital (T2).

CET1 and AT1 constitute Tier 1 Capital (T1) which, added to Tier 2, gives Total Own Funds.

Common Equity Tier 1 Capital (CET1)

The Common Equity Tier 1 Capital (CET1) is made up of the following positive and negative components:

- Share capital and related share premium reserve
- Retained earnings
- Negative valuation reserves - OCI
- Other reserves
- Previous CET1 instruments subject to transitional instructions (grandfathering)
- Non-controlling interests
- Prudential filters
- Deductions.

The prudential filters are (positive or negative) regulatory adjustments to items in the financial statements aimed at safeguarding the quality of Own Funds, reducing the potential volatility caused by applying IAS/IFRS. The prudential filters exclude from CET1 the valuation reserve generated by cash flow hedges and unrealised gains/losses arising from changes in own creditworthiness (liabilities under the fair value option and derivative liabilities).

The main deductions from CET 1 capital consist of goodwill and other intangible assets and, from 30 June 2019, any amount of expected credit losses quantified through the risk parameters calculated with internal rating models that would exceed the total net adjustments for credit risk posted in the balance sheet (so-called "shortfall"), relating to the regulatory portfolios for which approval has been obtained from the Supervisory Authority for the purpose of measuring the capital requirements on credit risk under the Advanced Internal Rating-Based Approach ("Corporate" and "Retail" portfolios).

Additional significant deductions from CET1 are:

- deferred tax assets (DTA) that rely on future profitability;
- deferred tax assets that rely on future profitability and arise from temporary differences (deducted for the amount that exceeds the thresholds provided for in the regulations);
- non-significant investments in equity instruments issued by financial sector entities (deducted for the amount that exceeds the thresholds provided for in the regulations);
- significant investments in equity instruments issued by financial sector entities (deducted for the amount that exceeds the thresholds provided for in the regulations);
- any deductions exceeding the availability of Additional Tier 1 Capital.

Additional Tier 1 Capital (AT1)

The Additional Tier 1 Capital (AT1) consists of the following positive and negative components:

- Equity instruments and related premiums
- Previous AT1 instruments subject to transitional instructions (grandfathering)
- Instruments issued by subsidiaries and included in AT1
- Deductions.

Tier 2 Capital (T2)

The Tier 2 Capital (T2) consists of the following positive and negative elements:

- Equity instruments, subordinated loans and related premiums
- Previous T2 instruments subject to transitional instructions (grandfathering)
- Instruments issued by subsidiaries and included in T2
- Surplus on expected losses of recognized value adjustments, within the limit of 0.60% of weighted exposures for credit risk according to AIRB method
- Deductions.

Transitional arrangements

At 31 December 2019, Own Funds were calculated in application of the prudential regulations that came into force on 1 January 2014, which transposed the new capital standards defined by the Basel Committee for Banking Supervision ("Basel 3 Framework").

The supervisory rules established a transitional regime, which is still in progress, characterised by a progressive introductory period ("phase-in") of part of the new regulations on Own Funds and capital requirements, during which only a percentage of certain elements are deducted from or included in Tier 1 Capital, while the residual elements are otherwise included in/deducted from Additional Tier 1 Capital and Tier 2 Capital or considered as part of risk weighted assets.

The transition period also provides for safeguard clauses (known as "grandfathering") that allow the partial inclusion, with gradual exclusion by 2021, of previous equity instruments that do not meet all the requirements specified by the CRR for inclusion in CET1, AT1 or T2.

As explained in greater detail in Section 7 of this document, the Group's Own Funds and prudential capital ratios at 31 December 2019 are also calculated in application of the transitional provisions set out in Regulation (EU) no. 2017/2395 of the European Parliament and Council of 12 December 2017, designed to mitigate the impact of the introduction of IFRS 9.

Regulatory requirements

From 1 January 2014, banking groups must comply with the following minimum capital requirements:

- Common Equity Tier 1 (CET1) ratio of 4.5%
- Tier 1 ratio of 5.5% (6% from 2015)
- Total Capital ratio of 8%.

The following capital reserves (known as "buffers") have to be added to these minimum ratios provided by the CRR with the aim of providing supervised entities with high quality capital to be used in times of market tension to prevent malfunctions of the banking system and avoid interruptions to the credit disbursement process, as well as to face the risks deriving from the systemic relevance to global or domestic level of certain banks.

Each additional reserve performs a specific function; in particular:

- *Capital Conservation Buffer*: made up of an additional 2.5% of Common Equity Tier 1 Capital, intended to safeguard the minimum amount of regulatory capital under adverse market conditions. In this regard, with the 18th update of Circular no. 285/2013, the Bank of Italy, opting for the transposition at national level of the transitional regime envisaged in the CRD IV Directive, established that, from 1 January 2017, banks and banking groups were required to adopt a process to gradually introduce the capital conservation requirement, which provides for the application of a minimum reserve coefficient of:
 - 1.25% from 1 January 2017 to 31 December 2017
 - 1.875% from 1 January 2018 to 31 December 2018
 - 2.5% from 1 January 2019.
- *Countercyclical Capital Buffer*: this is also made up of Tier 1 Capital to protect the banking sector at times of excessive lending growth; it is not currently present for Italy and, following measures by the competent supervisory bodies, it could be set up during periods of economic expansion to cope with any losses that might arise during the downward phases of the cycle, based on a specific coefficient established nationally; the countercyclical capital ratio relating to exposures to Italian counterparties is reviewed quarterly by the Bank of Italy.
- *Additional reserves for systemic banks relevant globally or locally (Global Systemically Important Institution Buffer or G-SII buffers and Other Systemically Important Institution Buffer or O-SII buffer)*: consisting of Tier 1 Capital; they apply to institutions of marked global importance (G-SII, Global Systemically Important Institutions) and to other systemically important institutions (O-SII) to take into account the greater risks that potentially affect the stability of the financial system. The buffer for G-SIIs can vary between a minimum of 1% and a maximum of 3.5%, whereas for O-SIIs a non-binding maximum threshold of 2% is foreseen.

- *Systemic Risk Buffer*: additional reserve of an amount equal to at least 1% of the risk exposures, established by each individual EU Member State in order to mitigate long-term non-cyclical macro-prudential risks and, in this way, cope with the negative effects of unexpected systemic crises.

The sum of regulatory requirements and additional reserves determines the minimum level of capital conservation required for banks and banking groups (known as the "combined capital reserve requirement"). From 1 January 2019 these minimum regulatory capital levels for the Banca Popolare di Sondrio Group are as follows:

- Common Equity Tier 1 (CET1) ratio of 7%
- Tier 1 Ratio of 8.5%
- Total Capital Ratio of 10.5%.

Lower requirements were envisaged by the Group up to 31 December 2018, during the transitional phase of application of the capital conservation buffer.

Banks that do not hold capital reserves to the extent required are subject to distribution limits; in addition, they must adopt a capital conservation plan that indicates the measures to be taken in order to re-establish, within a reasonable period, the level of capital needed to maintain the required level of capital reserves.

On 13 December 2019, on the basis of the evidence collected as part of the annual Supervisory Review and Evaluation Process (SREP), the European Central Bank notified Banca Popolare di Sondrio of the Supervisory Board's decision regarding the new minimum ratios to be applied on a consolidated basis for the year 2020, with effect from 1 January. The new minimum capital levels to be met by the Group are indicated below:

- a minimum requirement of Common Equity Tier 1 ratio equal to 10.0%, made up of the sum of the minimum regulatory requirement of Pillar 1 (4.5%), of the "fully-loaded" amount of Capital Conservation Buffer for the current year (2.5%) and the additional Pillar 2 Requirement - P2R (3%);
- a minimum requirement for Tier 1 ratio of 11.5%, being the sum of the Pillar 1 regulatory minimum (6%), the "fully-loaded" amount of Capital Conservation Buffer for the current year (2.5%) and the additional Pillar 2 Requirement (3%);
- a minimum requirement for Total Capital ratio of 13.5%, calculated as the sum of the Pillar 1 regulatory minimum requirement (8%), the "fully-loaded" amount of Capital Conservation Buffer for the current year (2.5%) and the additional Pillar 2 Requirement (3%).

While the first two items of each coefficient are specified by the prudential regulations and are identical for all financial institutions within the same country, the third item is determined by the ECB based on the actual degree of risk faced by the individual entity.

A "Pillar 2 Guidance", which aims to offer a guideline to the prospective evolution of the Group's capital position, is added to the three minimum ratios. The latter target parameter, assigned by the Supervisory Authority as a result of the SREP process, however, assumes a confidential nature and, unlike the above mentioned capital requirements, is not publicly disclosed, as it is an element

which, also according to the Supervisory approach, is not relevant for the calculation of distributable dividends.

It should be noted that, with a press release dated 12 March 2020, the European Central Bank has granted a temporary relaxation of capital requirements and greater flexibility in supervisory operating costs in response to the spread of the Coronavirus epidemic, including the provision to make the P2G and capital conservation buffers fully available to deal with the emergency. The measures aim to allow banks directly supervised by the ECB to continue to play a central role in financing the real economy, in order to mitigate the impacts of COVID-19 on Europe.

Conditions for the inclusion of interim or year-end earnings

With reference to Regulation (EU) no. 575/2013 ("CRR"), on 4 February 2015 the European Central Bank issued a Decision establishing the procedures to be followed by banks or banking groups subject to its direct supervision (Regulation (EU) no. 468/2014) with regard to the inclusion in Common Equity Tier 1 Capital (CET1) of interim or year-end earnings before a formal decision-making act is taken to confirm the result.

They can only be included (art. 26 CRR) with the prior approval of the Competent Authority, which in this case is the ECB, and it will only give approval if the following conditions are met:

- earnings must be checked and certified by the Independent Auditors;
- the bank or banking group must deliver a specific declaration referring to such earnings with reference to the accounting standards applied and the inclusion of foreseeable charges and dividends, the latter calculated on the basis of specific methodologies as indicated.

The Decision also provides the model of certification that banks or banking groups must adopt for the purpose of requesting authorisation.

Quantitative information

The following tables summarise the main characteristics of the Group's equity instruments through the formats explaining consolidated Own funds at 31 December 2019 compared with those at 31 December 2018, both calculated in application of the phasing-in of the Basel 3 rules.

Composition of Own Funds

Table 3 - Composition of Own Funds

	31/12/2019	31/12/2018
A. Common Equity Tier 1-CET1 before the application of prudential filters	2,821,704	2,652,172
<i>of which: CET1 instruments subject to transitional instructions</i>	-	-
B. Prudential filters of CET1 (+/-)	-	-
C. CET1 gross of the elements to be deducted and the effects of the transitional instructions (A+/- B)	2,821,704	2,652,172
D. Elements to be deducted from CET1	113,745	50,121

E. Transitional arrangements - Impact on CET1 (+/-), including minority interest subject to transitional arrangements	4,372	33,645
F. Total Common Equity Tier 1 - CET1 (C-D +/-E)	2,712,331	2,635,696
G. Additional Tier 1 - AT1, gross of the elements to be deducted and the effects of the transitional instructions	9,191	9,042
<i>of which: AT1 instruments subject to transitional instructions</i>	-	-
H. Elements to be deducted from AT1	-	-
I. Transitional instructions - Impact on AT1 (+/-), including instruments issued by subsidiaries and included in AT1 due to the transitional instructions	-	-
L. Total Additional Tier 1 - AT1 (G-H+/-I)	9,191	9,042
M. Tier 2 - T2, gross of the elements to be deducted and the effects of the transitional instructions	499,047	350,838
<i>of which: T2 instruments subject to transitional instructions</i>	-	-
N. Elements to be deducted from T2	10,679	14,715
O. Transitional arrangements - Impact on T2 (+/-), including instruments issued by subsidiaries and included in T2 due to the transitional arrangements	-	-
P. Total Tier 2 - T2 (M-N +/-O)	488,368	336,123
Q. Total Own funds (F+L+P)	3,209,890	2,980,861

Source: Consolidated Financial Statements - Notes to the financial statements - Part F: Information on consolidated equity, Section 2: Capital and capital adequacy ratios

The composition of own funds as at 31 December 2019 took into account the portion of profits for the year achieved up to 30 September net of an estimate of the dividend payable. The portion of profits calculated among the positive elements of regulatory capital, net of those accrued in the third quarter of the year, was authorised by the European Central Bank in compliance with the provisions of art. 26, para. 2 of Regulation (EU) 575 of 26/6/2013 ("CRR") for the purpose of determining the Common Equity Tier 1 Capital.

The evolution of the Group's capital compared with the situation at 31 December 2018 has been to a large extent affected by the use, recognised by the Supervisory Authority from 30 June 2019, of the Advanced Internal Rating-Based Approach (AIRB) for determining the capital requirement against credit risk for the "Corporate" and "Retail" exposure segments of the Parent Company Banca Popolare di Sondrio⁷. In addition to the benefits in the calculation of risk-weighted capital absorption referred to in Section 4, a shortfall item emerged for approximately Euro 51 million at 31 December 2019, as an additional element to be deducted from the Tier 1 Capital.

In addition to the portion of non-distributable profit accrued up to the third quarter of 2019, the positive changes in shareholders' equity and valuation reserves of FVOCI securities are recognized as elements of primary capital growth.

The following also had a positive effect on the total amount of own funds at 31/12/2019: a) the dynamics of the computable values of subordinated liabilities included in Tier 2 capital, which increased in the last financial year thanks to a new issue of Tier 2 instruments placed at the end of July for Euro 200 million; on the other hand, the progressive exclusion of subordinated securities from the past has led to a decline in the amounts of old issues that can still be included in the calculation of own funds; b) the emergence of a positive amount, also computable in Tier 2 capital, due to the excess of accounting adjustments on the AIRB expected loss on non-performing loans.

⁷ For further details on the adoption of the Advanced IRB approach, see Section 10 of this document.

The table required by Annex IV "Own funds disclosure template" of the Implementing Regulation (EU) no. 1423/2013, with reference to the Group's situation at 31 June 2019, is provided below, prepared following the instructions contained in Annex V.

Table 4 - Model for the publication of information on own funds: detail of the constituent elements

		Amounts at 31/12/2019
	Common Equity Tier 1 capital	
1	Capital instruments and related share premium accounts	2,734,982
	<i>of which: share capital</i>	1,360,157
	<i>of which: share premium reserve</i>	79,005
	<i>of which: reserves - other</i>	1,295,820
2	Retained earnings	-
3	Accumulated other comprehensive income (and other reserves) ^(*)	(15,543)
3a	Provisions for general banking risks	-
4	Amount of qualifying items referred to in Article 484, paragraph 3, and the related share premium accounts subject to phase out from CET1	-
5	Minority interests (amount allowed in consolidated CET1)	43,043
5a	Independently reviewed interim profits, net of any foreseeable charge or dividend	92,725
6	Common Equity Tier 1 (CET 1) capital before regulatory adjustments	2,855,207
	Common Equity Tier 1 (CET1): regulatory adjustments	
7	Additional value adjustments (negative amount)	(3,646)
8	Intangible assets (net of the related tax liability) (negative amount)	(31,182)
9	Empty set in the EU	-
10	Deferred tax assets that rely on future profitability, excluding those arising from temporary differences (net of the related tax liability where the conditions in article 38, paragraph 3, are met) (negative amount)	(4,677)
11	Fair value reserves related to gains or losses on cash flow hedges	-
12	Negative amounts resulting from the calculation of expected loss amounts	(50,342)
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	-
15	Defined-benefit pension fund assets (negative amount)	-
16	Direct and indirect holdings by the institution of its own CET1 instruments (negative amount)	(37,673)
17	Direct, indirect and synthetic holdings by the institution of CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to artificially inflate the institution's Own Funds (negative amount)	-
18	Direct and indirect and synthetic holdings by the institution of 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 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)	(15,355)
20	Empty set in the EU	-
20a	Exposure amount of the following items which qualify for a risk weighting (RW) of 1250%, where the institution opts for the deduction alternative	-

20b	<i>of which: qualifying holdings outside the financial sector (negative amount)</i>	-
20c	<i>of which: securitisation positions (negative amount)</i>	-
20d	<i>of which: free deliveries (negative amount)</i>	-
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in article 38, paragraph 3, are met) (negative amount)	-
22	Amount exceeding the 15% threshold (negative amount)	-
23	<i>of which: direct and indirect holdings by the institution of CET1 instruments of financial sector entities where the institution has a significant investment in those entities</i>	-
24	Empty set in the EU	-
25	<i>of which: deferred tax assets arising from temporary differences</i>	-
25a	Losses for the current financial year (negative amount)	-
25b	Foreseeable tax charges relating to CET1 items (negative amount)	-
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	-
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(142,876)
29	Common Equity Tier 1 (CET1) capital	2,712,331
Additional Tier 1 (AT1): instruments		
30	Capital instruments and the related share premium accounts	-
31	<i>of which: classified as equity under applicable accounting standards</i>	-
32	<i>of which: classified as liabilities under applicable accounting standards</i>	-
33	Amount of qualifying items referred to in article 484, paragraph 4, and the related share premium accounts subject to phase out from AT1	-
34	Qualifying Tier 1 capital included in consolidated AT1 (including minority interests not included in row 5) issued by subsidiaries and held by third parties	9,191
35	<i>of which: instruments issued by affiliates subject to phase out</i>	-
36	Additional Tier 1 (AT1) capital before regulatory adjustments	9,191
Additional Tier 1 (AT1): regulatory adjustments		
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	-
38	Direct, indirect and synthetic holdings of AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to artificially inflate the institution's Own Funds (negative amount)	-
39	Direct and indirect and synthetic holdings of AT1 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)	-
40	Direct and 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	-
44	Additional Tier 1 (AT1) capital	9,191
45	Tier 1 capital (T1 = CET1 + AT1)	2,721,522
Tier 2 capital (T2): instruments and provisions		
46	Capital instruments and the related share premium accounts	456,072
47	Amount of qualifying items referred to in article 484, paragraph 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 affiliates and held by third parties	-
49	<i>of which: instruments issued by affiliates subject to phase out</i>	-
50	Loan write-downs	42,789
51	Tier 2 (T2) capital before regulatory adjustments	498,860
Tier 2 capital (T2): regulatory adjustments		
52	Direct and indirect holdings by an institution of its own T2 instruments and subordinated loans (negative amount)	(10,492)
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holding with the institution designed to artificially inflate the institution's Own Funds (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 by the institution 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 amount)	-
56	Empty set in the EU	-
57	Total regulatory adjustments to Tier 2 (T2) capital	(10,492)
58	Tier 2 capital (T2)	488,368
59	Total capital (TC = T1 + T2)	3,209,890
60	Total risk weighted assets	17,224,426
Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of the total risk exposure)	15.75%
62	Tier 1 (as a percentage of the total risk exposure)	15.80%
63	Total capital (as a percentage of the total risk exposure)	18.64%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92, paragraph 1, letter a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer expressed as a percentage of risk exposure amount)	2.65%
65	<i>of which: capital conservation buffer requirement</i>	2.50%
66	<i>of which: countercyclical buffer requirement</i>	0.15%
67	<i>of which: systemic risk buffer requirement</i>	-
67a	<i>of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer</i>	-
68	Common Equity Tier 1 available to meet buffers (as a percentage of the risk exposure)	-
69	[not relevant in EU legislation]	-
70	[not relevant in EU legislation]	-
71	[not relevant in EU legislation]	-
Capital ratios and buffers		
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)	233,775
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)	287,687
74	Empty set in the EU	-

75	Deferred tax assets arising from temporary differences (amount below the 10% threshold, net of related tax liability where the conditions in article 38, paragraph 3, are met)	71,224
Applicable caps on the inclusion of provisions in Tier 2 capital		
76	Credit risk adjustments included in T2 in respect of exposures subject to the standardised approach (before the application of the cap)	-
77	Cap on inclusion of credit risk adjustments in T2 capital under the standardised approach	-
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (before the application of the cap)	-
79	Cap for inclusion of credit risk adjustments in T2 capital under internal ratings-based approach	-
Capital instruments subject to phase-out arrangements (only applicable between 1 January 2013 and 1 January 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)	-

Source: COREP - Capital Adequacy: Models C 01.00-C05.01

(*) Line item 3 includes the positive capital element envisaged by the transitional regime referred to in paragraph 8 of art. 437-bis CRR aimed at mitigating the negative impact of IFRS 9 on Own Funds

Reconciliation of carrying amount of Equity with Own Funds

The information contained in this paragraph is presented according to the method indicated in Annex I "Balance sheet reconciliation methodology" of the Implementing Regulation (EU) no. 1423/2013 of the European Commission dated 20 December 2013, in compliance with the disclosure requirements provided by art. 437, para. 1, letter a) of the CRR.

In particular, the following table shows the reconciliation of Own Funds at 31 December 2019 and 31 December 2018 with the carrying amount of the Group's Equity.

Table 5 - Reconciliation of carrying amount of Equity with Own Funds

	31/12/2019	31/12/2018
Consolidated equity	2,841,780	2,650,822
Adjustments for companies not belonging to the banking group	(571)	(1,812)
Carrying amount of equity (banking group)	2,841,209	2,649,010
Difference between consolidated profit at banking group level and profit included in Own Funds	(45,951)	(22,769)
Difference in the calculation of valuation reserves	(4,298)	320
Minority interests that can be included in CET1	43,043	38,512
Treasury shares as collateral for exposures	(12,299)	(12,901)
Further deduction for potential repurchase of treasury shares	-	-
Prudential filter for property disposals	-	-
A. Common Equity Tier 1-CET1 before the application of prudential filters	2,821,704	2,652,172
of which: CET1 instruments subject to transitional instructions	-	-

B. Prudential filters of CET1 (+/-)	-	-
C. CET1 gross of the elements to be deducted and the effects of the transitional instructions (A+/- B)	2,821,704	2,652,172
D. Elements to be deducted from CET1	113,745	50,121
E. Transitional arrangements - Impact on CET1 (+/-), including minority interest subject to transitional arrangements	4,372	33,645
F. Total Common Equity Tier 1 (CET1) (C-D+/-E)	2,712,331	2,635,696
G. Additional Tier 1 - AT1, gross of the elements to be deducted and the effects of the transitional instructions	9,191	9,042
of which: AT1 instruments subject to transitional instructions	-	-
H. Elements to be deducted from AT1	-	-
I. Transitional instructions - Impact on AT1 (+/-), including instruments issued by subsidiaries and included in AT1 due to the transitional instructions	-	-
L. Total Additional Tier 1 - AT1 (G-H+/-I)	9,191	9,042
M. Tier 2 - T2, gross of the elements to be deducted and the effects of the transitional instructions	499,047	350,838
of which: T2 instruments subject to transitional instructions	-	-
N. Elements to be deducted from T2	10,679	14,715
O. Transitional arrangements - Impact on T2 (+/-), including instruments issued by subsidiaries and included in T2 due to the transitional arrangements	-	-
P. Total Tier 2 - T2 (M-N+/-O)	488,368	336,123
Q. Total Own funds (F+L+P)	3,209,890	2,980,861

In further detail, the following is a reconciliation between the elements of Own Funds, with related prudential filters and deductions, and the Group's balance sheet line items at 31 December 2019, in accordance with the disclosure requirements provided by art. 437, para. 1, letter a) of the CRR.

Table 6 - Reconciliation between balance sheet assets and liabilities and Own Funds

ASSET ITEMS	Accounting figures		Amount relevant for Own Funds
	Accounting scope	Prudential scope	
70. Equity investments	294,609	330,299	(15,355)
100. Intangible assets	31,186	31,182	(31,182)
- of which: Goodwill	12,632	12,632	(12,632)
- of which: Other intangible assets	18,554	18,550	(18,550)
110. Tax assets:	419,295	419,252	(4,677)
- of which b) deferred tax assets	414,324	414,319	(4,677)
LIABILITY ITEMS	Accounting figures		Amount relevant for Own Funds
	Accounting scope	Prudential scope	
10. Financial liabilities measured at amortised cost	36,949,458	36,949,526	433,511
c) Debt securities issued	2,804,752	2,804,752	433,511
- of which: Subordinated liabilities not subject to transitional provisions	714,130	714,130	433,511
- of which: Subordinated liabilities subject to transitional provisions	-	-	-
120. Valuation reserves	(6,885)	(7,076)	(11,373)

- of which: Actuarial profits (losses) on defined-benefit plans	(68,004)	(68,004)	(68,004)
- of which: Valuation reserves: Financial assets measured at fair value through other comprehensive income	56,630	56,630	56,630
150. Reserves	1,297,442	1,295,820	1,295,820
160. Share premium reserve	79,005	79,005	79,005
170. Share capital	1,360,157	1,360,157	1,360,157
180. Treasury shares (-)	(25,374)	(25,373)	(37,673)
190. Minority interests	95,041	95,030	64,489
- of which: to be included in CET1	-	-	43,043
- of which: to be included in AT1	-	-	9,191
- of which: to be included in T2	-	-	12,254
200. Profit for the period	137,435	138,676	92,725

OTHER ELEMENTS OF OWN FUNDS	Amount relevant for Own Funds
Other elements of Own funds	(15,370)
- of which: Negative elements of Tier 2 capital	(187)
TOTAL OWN FUNDS	3,209,890

Main features of equity instruments

The following is the information on the main features of the equity instruments issued by the Group at 31 June 2019 presented according to the model contained in Annex II of the EU Implementing Regulation no. 1423/2013 of the European Commission dated 20 December 2013.

Table 7 - Model on the main characteristics of equity instruments of Own Funds

1	Issuer	Banca Popolare di Sondrio scpa
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identification for private placements)	IT0000784196
3	Governing law of the instrument	Italian law
Regulatory treatment		
4	Transitional CRR rules	Common Equity Tier 1 capital
5	Post-transitional CRR rules	Common Equity Tier 1 capital
6	Eligible at solo (sub-) consolidation/solo and (sub-) consolidation	solo and (sub-) consolidation
7	Instrument type (types to be specified by each jurisdiction)	Cooperative share of Banca Popolare (CRR, art. 29)
8	Amount recognised in regulatory capital (millions of Euro, at the most recent reporting date)	1,322
9	Nominal amount of the instrument	1,360
9a	Issue price	N/A
9b	Redemption price	N/A
10	Accounting classification	equity
11	Original date of issuance	N/A
12	Perpetual or dated	perpetual
13	Original maturity date	without maturity
14	Early redemption at the issuer's discretion, subject to prior supervisory approval	no
15	Optional call date, contingent call dates and redemption amount	N/A

16	Subsequent call dates, if applicable	N/A
Coupons/dividends		
17	Fixed or floating dividend/coupon	floating
18	Coupon rate and any related index	N/A
19	Existence of a dividend stopper	no
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	fully discretionary
21	Existence of step up or other incentive to redeem	no
22	Non-cumulative or cumulative	non-cumulative
23	Convertible or non-convertible	non-convertible
24	If convertible, conversion trigger(s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down features	no
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier 1
36	Non-compliant transitioned features	no
37	If yes, specify non-compliant features	N/A

(*) N/A = not applicable

1	Issuer	Banca Popolare di Sondrio scpa
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identification for private placements)	IT0005092884
3	Governing law of the instrument	Italian law
Regulatory treatment		
4	Transitional CRR rules	Tier 2 Capital
5	Post-transitional CRR rules	Tier 2 Capital
6	Eligible at solo (sub-) consolidation/solo and (sub-) consolidation	solo and (sub-) consolidation
7	Instrument type (types to be specified by each jurisdiction)	Tier 2 instruments (CRR, art.63)
8	Amount recognised in regulatory capital (millions of Euro, at the most recent reporting date)	86
9	Nominal amount of the instrument	200
9a	Issue price	100
9b	Redemption price	100
10	Accounting classification	liabilities - amortised cost
11	Original date of issuance	30/03/2015
12	Perpetual or dated	at maturity
13	Original maturity date	30/03/2022
14	Early redemption at the issuer's discretion, subject to prior supervisory approval	no
15	Optional call date, contingent call dates and redemption amount	N/A
16	Subsequent call dates, if applicable	N/A
Coupons/dividends		
17	Fixed or floating dividend/coupon	fixed
18	Coupon rate and any related index	2.50%



19	Existence of a dividend stopper	no
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	mandatory
21	Existence of step up or other incentive to redeem	no
22	Non-cumulative or cumulative	non-cumulative
23	Convertible or non-convertible	non-convertible
24	If convertible, conversion trigger(s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down features	no
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	senior
36	Non-compliant transitioned features	no
37	If yes, specify non-compliant features	N/A

(*) N/A = not applicable

1	Issuer	Banca Popolare di Sondrio scpa
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identification for private placements)	IT0005135527
3	Governing law of the instrument	Italian law

Regulatory treatment

4	Transitional CRR rules	Tier 2 Capital
5	Post-transitional CRR rules	Tier 2 Capital
6	Eligible at solo (sub-) consolidation/solo and (sub-) consolidation	solo and (sub-) consolidation
7	Instrument type (types to be specified by each jurisdiction)	Tier 2 instruments (CRR, art.63)
8	Amount recognised in regulatory capital (millions of Euro, at the most recent reporting date)	147
9	Nominal amount of the instrument	274
9a	Issue price	100
9b	Redemption price	100
10	Accounting classification	liabilities - amortised cost
11	Original date of issuance	23/10/2015
12	Perpetual or dated	at maturity
13	Original maturity date	23/10/2022
14	Early redemption at the issuer's discretion, subject to prior supervisory approval	no
15	Optional call date, contingent call dates and redemption amount	N/A
16	Subsequent call dates, if applicable	N/A

Coupons/dividends

17	Fixed or floating dividend/coupon	fixed
18	Coupon rate and any related index	3.00%
19	Existence of a dividend stopper	no
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	mandatory
21	Existence of step up or other incentive to redeem	no
22	Non-cumulative or cumulative	non-cumulative
23	Convertible or non-convertible	non-convertible
24	If convertible, conversion trigger(s)	N/A
25	If convertible, fully or partially	N/A

26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down features	no
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	senior
36	Non-compliant transitioned features	no
37	If yes, specify non-compliant features	N/A

(*) N/A = not applicable

1	Issuer	Banca Popolare di Sondrio scpa
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identification for private placements)	XS2034847637
3	Governing law of the instrument	Italian law
Regulatory treatment		
4	Transitional CRR rules	Tier 2 Capital
5	Post-transitional CRR rules	Tier 2 Capital
6	Eligible at solo (sub-) consolidation/solo and (sub-) consolidation	solo and (sub-) consolidation
7	Instrument type (types to be specified by each jurisdiction)	Tier 2 instruments (CRR, art.63)
8	Amount recognised in regulatory capital (millions of Euro, at the most recent reporting date)	200
9	Nominal amount of the instrument	200
9a	Issue price	100
9b	Redemption price	100
10	Accounting classification	liabilities - amortised cost
11	Original date of issuance	30/07/2019
12	Perpetual or dated	at maturity
13	Original maturity date	30/07/2029
14	Early redemption at the issuer's discretion, subject to prior supervisory approval	no
15	Optional call date, contingent call dates and redemption amount	N/A
16	Subsequent call dates, if applicable	N/A
Coupons/dividends		
17	Fixed or floating dividend/coupon	fixed
18	Coupon rate and any related index	6.25%
19	Existence of a dividend stopper	no
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	mandatory
21	Existence of step up or other incentive to redeem	no
22	Non-cumulative or cumulative	non-cumulative
23	Convertible or non-convertible	non-convertible
24	If convertible, conversion trigger(s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down features	no
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A

33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	senior
36	Non-compliant transitioned features	no
37	If yes, specify non-compliant features	N/A

(*) N/A = not applicable

Section 4 - Capital requirements (art. 438 CRR)

Qualitative information

The Group constantly monitors its capital adequacy, considered both in terms of size and composition, in respect of the risks taken, and those to which the Group might be exposed in implementing business strategies.

According to this, also in line with the provisions set out in the Pillar 2 regulatory framework, the Group has in place an internal process to determine if its capital base is deemed adequate, in current and prospective terms, to cope with all the significant risks to which the Group is or might be exposed (ICAAP - *Internal Capital Adequacy Assessment Process*), based on the medium-term forecasts adopted for strategic, capital and financial planning.

Taking into account the projections of the balance sheet and consolidated income statement aggregates, the risk profiles considered relevant for the Group's core business are identified and analysed, according to their type, through quantitative and/or qualitative approaches.

Specifically, ICAAP assessments are conducted from a double perspective:

- *Internal regulatory perspective*: it represents a multi-year assessment of the Group's ability to meet all regulatory requirements and the Supervisory requests relating to capital, as well as to meet on an ongoing basis the other internal and external capital constraints applicable from time to time over a medium-term horizon (at least three years). This perspective takes into account the impacts of all risks considered material for the Group, not limited to those covered by Pillar 1 requirements.
- *Internal economic perspective*: it integrates the internal regulatory perspective and refers to the Group's ability to face, through a suitable supply of capital resources, all the material risks likely to generate economic losses and to reduce the total available capital. In this perspective, the Group ensures adequate risk coverage with capital that is commensurate with its internal concept of capital adequacy. In the economic perspective, the assessment horizon is normally one year.

The metrics used in the Group's capital adequacy analyses based on the aforementioned prospects refer to the following key concepts:

- *absorbed capital*, understood as the capital requirement relating to a specific risk which the Group deems necessary to cover losses exceeding a given expected level;
- *total absorbed capital*, understood as the amount of capital absorbed referring to all the material risks assumed by the Group in current or prospective terms, including any internal capital requirements due to strategic considerations;
- *total available capital*, understood as the series of assets that are expected to be used to cover the total capital absorptions by quantifying the risks.

The measurement of risk exposures, carried out in both current and prospective terms as well as under stressed conditions, makes it possible to determine the amount of internal capital needed to cover the nature and level of different risks that may have a material impact on the Group.

The Group's ability to continue operating by maintaining sound and robust financial conditions is regularly verified in the process of internal reporting of management performance and exposure to risks. The potential impacts on capital position of key managerial choices and initiatives, or any significant changes in strategies or in the external environment are also previously assessed before making any decision.

The targets and limits stated in the Risk Appetite Framework (RAF) for capital indicators are taken as a point of reference to evaluate the adequacy of the Group's capitalisation measures as determined in the ICAAP, both in current terms and under baseline and adverse scenarios, in line with the minimum regulatory requirements and with the additional supervisory constraints currently and prospectively in force.

Quantitative information

The following tables show the amounts of regulatory capital that are absorbed for credit and counterparty, market, operational and credit valuation adjustment (CVA) risks, as well as the levels reached by the supervisory capital ratios based on the Group's Common Equity Tier 1 Capital (Common equity Tier 1 ratio), Tier 1 Capital (Tier 1 ratio) and Total Own Funds (Total Capital ratio) at 31 December 2019, calculated according to the Basel 3 transitional ("phased-in") rules, compared with the equivalent figures reported at 31 December 2018.

Table 8 - Composition of prudential requirements

CAPITAL ADEQUACY	31/12/2019		31/12/2018	
	<i>Risk-weighted amount</i>	<i>Capital requirement</i>	<i>Risk-weighted amount</i>	<i>Capital requirement</i>
Credit and counterparty risk:	15,298,594	1,223,888	20,102,100	1,608,168
• standardised approach	8,167,147	653,372	20,102,100	1,608,168
• internal rating based approach (Advanced IRB)	7,131,447	570,516	-	-
Credit valuation adjustment risk: standardised approach	22,324	1,786	10,795	864
Market risk: standardised approach	315,649	25,252	235,336	18,827
Position risk on debt instruments	15,972	1,278	26,787	2,143
Position risk on equity instruments	130,094	10,407	166,191	13,295
Particular approach for position risk on UCITs	169,579	13,566	40,599	3,248
Foreign exchange risk	5	0	3	0
Commodity risk	-	-	1,757	141
Operational risk: standardised approach	1,587,858	127,029	1,559,497	124,760
TOTAL REQUIREMENTS	17,224,426	1,377,954	21,907,728	1,752,618

Source: COREP - Capital Adequacy - Risk Exposure Amounts: Model C 02.00

Table 9 - Composition of the prudential requirement on credit and counterparty risk calculated with the Standardised Approach

CREDIT AND COUNTERPARTY RISK: STANDARDISED APPROACH	31/12/2019		31/12/2018	
	<i>Risk-weighted amount</i>	<i>Capital requirement</i>	<i>Risk-weighted amount</i>	<i>Capital requirement</i>
Total Credit and counterparty risk	8,167,147	653,372	20,102,100	1,608,168
<i>Credit and counterparty risk – excl. securitisation positions</i>	<i>7,992,539</i>	<i>639,403</i>	<i>19,867,933</i>	<i>1,589,435</i>
- Central governments or central banks	3,934	315	6,432	515
- Regional governments or local authorities	17,178	1,374	28,327	2,266
- Public sector entities	117,247	9,380	23,124	1,850
- Multilateral development banks	-	-	-	-
- International organisations	-	-	-	-
- Institutions	927,990	74,239	773,764	61,901
- Corporates	2,693,698	215,496	8,925,251	714,020
- Retail	291,680	23,334	2,359,637	188,771
- Secured by mortgages on immovable property	1,491,534	119,323	3,268,345	261,468
- Exposures in default	63,239	5,059	1,852,753	148,220
- Items associated with particular high-risk	156,813	12,545	816,738	65,339
- Covered bonds	71,512	5,721	58,338	4,667
- Claims on institutions and corporates	-	-	-	-
with a short-term credit assessment	-	-	-	-
- Undertakings for the collective investment of transferable securities (UCITS)	295,391	23,631	258,340	20,667
- Equity	851,819	68,146	615,699	49,256
- Other items	1,010,504	80,840	881,184	70,495
<i>Securitisations - securitisation positions: total</i>	<i>173,392</i>	<i>13,871</i>	<i>234,064</i>	<i>18,725</i>
<i>Risk exposure amount for contributions to the default fund of central counterparties (CCP)</i>	<i>1,216</i>	<i>97</i>	<i>103</i>	<i>8</i>

Source: COREP - Capital Adequacy - Risk Exposure Amounts: Model C 02.00

Table 10 - Composition of the prudential requirement on credit and counterparty risk calculated with an advanced method based on internal ratings (Advanced IRB method)

CREDIT AND COUNTERPARTY RISK: INTERNAL RATING BASED APPROACH (ADVANCED IRB)	31/12/2019		31/12/2018	
	<i>Risk-weighted amount</i>	<i>Capital requirement</i>	<i>Risk-weighted amount</i>	<i>Capital requirement</i>
Total Credit and counterparty risk	7,131,447	570,516	-	-
<i>Exposures to Corporates</i>	<i>5,247,388</i>	<i>419,791</i>	-	-
- Corporates: SMEs	2,805,767	224,461	-	-
- Corporates: Other businesses	2,441,621	195,330	-	-
<i>Retail exposures</i>	<i>1,884,059</i>	<i>150,725</i>	-	-
- Retail - Secured by real estate: SMEs	373,714	29,897	-	-
- Retail - Secured by real estate: individuals	408,583	32,687	-	-
- Other Retail: SMEs	941,947	75,356	-	-
- Other Retail: individuals	136,687	10,935	-	-
- Other assets	23,129	1,850	-	-

Source: COREP - Capital Adequacy - Risk Exposure Amounts: Model C 02.00

Table 11 - Capital ratios

CAPITAL RATIOS	31/12/2019	31/12/2018
Common equity Tier 1 ratio (CET1 ratio)	15.75%	12.03%
Tier 1 ratio	15.80%	12.07%
Total Capital ratio	18.64%	13.61%

Source: COREP - Capital Adequacy - Capital Ratios: Model C 03.00

The figures reported in the previous tables referring to 31 December 2019 correspond to those communicated to the Authorities in the context of consolidated supervisory reporting.

The Group's capital ratios as of the reference date benefit significantly from the authorisation to use the internal rating system released by the ECB on 27 May 2019, whereas the ratios at 31 December 2018 - shown for comparative purposes - still reflected the use of the Standardised Approach for weighting risk when calculating capital absorption for all exposure portfolios.

In addition to the increase in available capital already represented in Section 3, adoption of the Advanced IRB Approach for measuring capital requirements for credit risk to which the "Corporate" and "Retail" portfolios of Parent Company Banca Popolare di Sondrio are exposed resulted in a substantial saving in the risk-weighted assets (RWAs), thanks to the application of internally estimated risk parameters combined with the supervisory formulas envisaged for the advanced IRB method instead of the previous standard weightings, only partly offset by higher absorption due to greater lending volumes granted during the year.

With regard to the contribution of other types of risk, the increase in market risks is noteworthy, as a consequence of investments in securities held for trading purposes (mainly instruments with a higher capital burden); the capital requirement to cover operational risks also increased marginally, following an annual update as per regulatory requirements. Despite a growth compared with the end of 2018, the risks of credit valuation adjustment (CVA) persisting on certain types of OTC derivative transactions remain poorly material.

Section 5 - Capital buffers (art. 440 CRR)

Qualitative information

The imposition of additional capital buffers with respect to the minimum requirements is designed to provide banks with high quality capital to be used in times of market tension to prevent malfunctions of the banking system and avoid interruptions in the credit disbursement process, as well as to face the risks deriving from the systemic relevance at global or domestic level of certain intermediaries.

In this context, the countercyclical capital buffer (CCyB) has the purpose of protecting the banking sector in the phases of excessive credit growth; its imposition, in fact, allows banks, during phases of overheating of the credit cycle, to accumulate Common Equity Tier 1 capital to absorb losses in a downturn.

As established in Article 140 (1) of Directive 2013/36/EU ("CRD IV"), supervised entities are required to hold a countercyclical capital buffer equal to their overall risk exposure (expressed in terms of risk weighted assets) multiplied by the specific countercyclical coefficient. The European legislation on the countercyclical buffer was implemented in Italy with Bank of Italy Circular 285/2013.

Like the other national authorities designated by the individual member states of the Single Supervisory Mechanism, the Bank of Italy has the obligation to determine quarterly the countercyclical coefficient applicable in the Italian legal system and to monitor the congruity of the analogous coefficients applied by the other countries, both EU and non-EU. The specific countercyclical coefficient of each supervised institution is equal to the weighted average of the coefficients applied in the countries where it has significant credit exposures.

The Bank of Italy has set at 0% the countercyclical buffer coefficient to be applied to the exposures held by intermediaries with Italian counterparties at 31 December 2019, the same as in the previous three quarters of the year.

Quantitative information

Below is the information relating to the main calculation elements of the Group's "countercyclical capital buffer", prepared on the basis of the coefficients applicable at 31 December 2019 pursuant to the Commission Delegated Regulation (EU) 2015/1555 of 28 May 2015, which establishes the regulatory technical standards for the publication of information on banks' compliance with the obligation to hold a countercyclical capital buffer pursuant to art. 440 of Regulation (EU) 575/2013 ("CRR").

Table 12 - Calculation of the bank's specific countercyclical capital buffer

	Own funds requirements	Own funds requirements weighted by the countercyclical coefficient of the country
Countries with countercyclical ratios other than 0%	12,528	133
Countries with countercyclical ratios set at 0%	1,127,936	-
TOTAL	1,140,464	133
A. Countercyclical buffer ratio of the bank calculated by applying the weighted average of the own funds requirements for the countercyclical ratios of the relevant countries		0.0116%
B. Countercyclical buffer requirement established by the Supervisory Authority of foreign subsidiaries under Swiss law in relation to the amount of mortgage loans with collateral property located in Switzerland		24,173
C. Total amount of risk exposure		17,224,426
D. Countercyclical buffer coefficient of foreign subsidiaries under Swiss law based on the total amount of risk exposure (B/C)		0.1403%
IS. Group specific countercyclical buffer ratio (A+D)		0.1520%
F. Group specific countercyclical capital buffer requirement (C * E)		26,174

Source: COREP - Capital adequacy: Models C 02.00 and C04.00

The countercyclical buffer to which the Group's Swiss subsidiary is subject, imposed by the local Authority in proportion to the amount of mortgage loans granted for the financing of residential properties located in Switzerland, contributes significantly to the calculation of the Group's specific countercyclical capital buffer.

The following table shows the geographical distribution of credit exposures relevant for the calculation of the Group's specific countercyclical capital buffer at 31 December 2019.

Table 13 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (Summary)

Line		General credit exposures		Trading book exposures		Exposure to securitisation		Own funds requirements				Weighting factors of own funds requirements	Countercyclical coefficient
		Exposure value for the SA	Exposure value for the IRB	Sum of long and short positions of the trading book	Value of the exposure in the trading book for internal models	Exposure value for the SA	Exposure value for the IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Exposure to securitisation	Total		
		10	20	30	40	50	60	70	80	90	100	110	120
010	<i>Breakdown by country</i>												
	ITALY	5,324,176	22,460,937	24,721	-	206,228	-	917,839	1,978	13,871	932,100	0.8	0.00%
	BULGARIA	371	556	-	-	-	-	40	-	-	40	0.0	0.50%
	CZECH REPUBLIC	1,253	-	-	-	-	-	100	-	-	100	0.0	1.50%
	DENMARK	8,856	73	-	-	-	-	710	-	-	710	0.0	1.00%
	FRANCE	62,457	2,075	-	-	-	-	2,373	-	-	2,947	0.0	0.25%
	UNITED KINGDOM	96,534	10,519	-	-	-	-	5,527	-	-	5,527	0.0	1.00%
	HONG KONG	1,686	551	-	-	-	-	137	-	-	137	0.0	2.00%
	IRELAND	2,519	1,100	-	-	-	-	219	-	-	219	0.0	1.00%
	ICELAND	0	-	-	-	-	-	0	-	-	0	0.0	1.75%
	LITHUANIA	12,482	-	-	-	-	-	999	-	-	999	0.0	1.00%
	NORWAY	263	24,348	-	-	-	-	1,637	-	-	1,637	0.0	2.50%
	SWEDEN	2,310	846	-	-	-	-	205	-	-	205	0.0	2.50%
	SLOVAKIA	63	188	-	-	-	-	6	-	-	6	0.0	1.50%
	OTHER	5,032,941	597,310	-	-	-	-	194,822	-	-	195,837	0.2	0.00%
020	Total countries	10,545,911	23,098,504	24,721	-	206,228	-	1,124,615	1,978	13,871	1,140,464		

Source: COREP reporting base - Breakdown of credit exposures relevant to the calculation of the countercyclical capital buffer by country and the bank's specific countercyclical buffer: Model C 09.04

Section 6 - Leverage (art. 451 CRR)

Qualitative information

Regulation (EU) no. 575/2013 ("CRR"), as partially amended by Delegated Regulation (EU) no. 2015/62, brought into effect from 1 January 2014 introducing the requirement for supervised entities to calculate a new leverage ratio in order to limit the build-up of an excessive leverage, namely a particularly high level of indebtedness compared with Own Funds which can make a bank vulnerable.

The indicator, which was implemented as part of the Basel 3 framework, is a simple backstop measure aimed at complementing the traditional risk-based capital requirements. The main objectives of its calculation and monitoring are to:

- prevent unsustainable leverage accumulation and, hence, mitigate the impact of sudden deleveraging processes, as experienced during the last global crisis;
- act as a constraint against model risk and measurement errors related to current systems to calculate risk-weighted assets, underlying the way the capital ratios are determined.

Banks must provide themselves with policies and procedures to identify, manage and adequately monitor the risk of excessive leverage. It is also envisaged that banks should manage leverage risk conservatively, bearing in mind the potential increases in risk due to reductions in Own Funds caused by expected or realised losses deriving from current accounting rules.

The leverage ratio is calculated quarterly, at individual and consolidated levels, as the ratio between a measure of high-quality capital (Tier 1 Capital) and an exposure measure, expressed as a percentage. The exposure measure includes both on-balance sheet exposures and off-balance sheet (OBS) items; the latter, which are calculated by applying predefined "credit conversion factors" to the relevant notional amount of each OBS item, mainly consist of credit commitments (disbursements also connected to undrawn portions of credit lines granted to customers), guarantees and exposures in derivative instruments.

The Basel Committee has proposed a regulatory minimum of 3% for the leverage ratio. This threshold is expected to be transposed into the EU legislation acting as a new harmonised requirement that supervised entities will be obliged to satisfy on a continuous basis; its introduction is foreseen on 28 June 2021 when Regulation (EU) no. 2019/876 of the European Parliament and Council of 20 May 2019 ("CRR II") will come into full effect.

In the period between 1 January 2015 and 31 December 2021, the coefficient is determined by using as the numerator both of the following configurations for Tier 1 Capital at each period-end:

- Tier 1 Capital calculated using the "phased-in" rules, i.e. according to the *pro tempore* arrangements applicable during the so-called "transitional period", in which the Basel 3 criteria to calculate regulatory Own Funds have to be applied in gradually increasing proportions;

- Tier 1 Capital calculated according to the "fully-phased" rules, i.e. without applying both the exceptions to the full adoption of Basel 3 schemes envisaged by the transitional provisions and the grandfathering clauses for eligibility of capital instruments in Own Funds calculation.

The risk of excessive leverage is managed by the Group by monitoring even more conservative levels for the leverage ratio which are set internally by the Risk Appetite Framework (RAF), in addition to the regulatory minimum required for the indicator.

More generally, the Group pursues strategies to carefully control its financial leverage by containing the dynamics of assets within sustainable levels compatible with a long-term equilibrium, taking into account a harmonious balance with the liability structure, with a view of safeguarding its capital and financial soundness. Maintenance of a well-balanced matching between assets and liabilities is an integral part of the overall evaluations carried out, from a current and future perspective, when setting the RAF and strategic plan objectives.

Quantitative information

A summary of the key elements of the Group's leverage ratio at 31 December 2019 is shown in the table below, both according to the Basel 3 "fully-loaded" rules and the "phased-in" criteria in force at the reference date, compared with the equivalent figures at 31 December 2018.

Table 14 - Leverage ratio

Capital and total exposures	31/12/2019	31/12/2018
Total leverage ratio exposures - fully phased	45,237,038	45,173,719
Total leverage ratio exposures - phased-in	45,237,038	45,197,919
Tier 1 capital - fully phased	2,717,150	2,611,093
Tier 1 capital - phased-in	2,721,522	2,644,738
Leverage ratio	31/12/2019	31/12/2018
Leverage ratio - fully phased	6.01%	5.78%
Leverage ratio - phased-in	6.02%	5.85%

Source: COREP - Leverage ratio calculation: Model C 47.00

The positive trend in the leverage ratio during 2019 (+23 basis points when measured with the "fully-phased" rules, +17 basis points when measured with "phased-in" rules in force in 2019) was largely due to the increase in the size of the numerator (Tier 1 capital).

As already mentioned in the previous sections, the Tier 1 Capital - both in the "phased-in" and "fully-loaded" configuration - has been significantly affected by the first recognition, among the capital deductions, of the shortfall component related to the Group's transition, as at 30 June 2019, to the Advanced IRB Method for determining its capital requirements on credit risk exposures pertaining to the Parent Company's "Corporate" and "Retail" segments. Moreover, the

only Tier 1 Capital calculated under "phased-in" regime was burdened with an additional negative contribution, which also emerged as a consequence of the IRB system at 30/06/2019, following the reduction of the "sterilised" part of the loan loss adjustments following First Time Adoption (FTA) of IFRS 9 that resulted from its progressive introduction, as applied in 2018 by the Group⁸.

The higher amount of available capital more than offset the increase in the total amount of exposure in the denominator, mainly related to an expansion of the volumes financed by the Group compared with the situation at the end of 2018, despite a reduction in asset volumes in December 2019 due to a substantial net withdrawal of funds deposited with the ECB.

The tables below summarise the main pieces of information about the Leverage ratio reported by the Group at 31 December 2019 and at 30 June 2019 as envisaged by article 451 of Regulation (EU) no. 575/2013 ("CRR"), prepared in accordance with the technical rules contained in the Implementing Regulation (EU) no. 2016/200 of 15 February 2016.

Table 15 - LRCom Model - Leverage ratio common disclosure

		31/12/2019	31/12/2018
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	39,887,602	39,806,929
2	(Asset amounts deducted in determining Tier 1 capital)	-	-
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	39,887,602	39,806,929
Derivative exposures			
4	Replacement cost associated with all derivative transactions (net of eligible cash variation margin)	20,188	13,048
5	Add-on amounts for potential future exposures associated with all derivative transactions (mark-to-market method)	15,016	9,671
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	(Deduction of receivables for cash variation margin provided in derivative transactions)	-	-
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 from 4 to 10)	35,204	22,719
Securities financing transaction exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	1,111,074	1,223,099

⁸ See also Section 7 of this document.

13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-
14	Counterparty credit risk exposure for SFT assets	84,640	126,308
EU-14a	Derogation for SFTs: counterparty credit risk exposure in accordance with articles 429 ter, paragraph 4 and 222 of Regulation (EU) 575/2013	-	-
15	Agent transaction exposures	-	-
EU-15a	(Exempted CCP leg of client-cleared SFT exposures)	-	-
16	Total securities financing transaction (SFT) exposures (sum of lines from 12 to 15a)	1,195,714	1,349,407
Other off-balance sheet exposures			
17	Off-balance sheet exposures at gross notional amount	19,295,606	19,596,891
18	(Adjustments for conversion to credit equivalent amounts)	(15,177,088)	(15,578,028)
19	Other off-balance sheet exposures (sum of lines 17 and 18)	4,118,518	4,018,863
(Exempted exposures in accordance with article 429, paras. 7 and 14, of Regulation (EU) 575/2013 (on- and off-balance sheet))			
EU-19a	(Intragroup exposures (solo basis) exempted in accordance with article 429, para. 7, of Regulation (EU) 575/2013 (on- and off-balance sheet))	-	-
EU-19b	(Exposures exempted in accordance with article 429, para. 14, of Regulation (EU) 575/2013 (on- and off-balance sheet))	-	-
Capital and total exposure measures			
20	Tier 1 capital	2,721,522	2,644,738
21	Leverage ratio total exposure measures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	45,237,038	45,197,919
Leverage ratio			
22	Leverage ratio	6.02%	5.85%
Choice on transitional arrangements and amount of derecognised fiduciary items			
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional arrangements	Transitional arrangements
EU-24	Amount of derecognised fiduciary items in accordance with article 429, paragraph 11, of Regulation (EU) 575/2013		-

Source: COREP - Leverage ratio calculation: C 47.00 Model

Table 16 - LRSpl Model - Breakdown of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

	CRR Leverage ratio exposures (CRR)	31/12/2019	31/12/2018
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures), of which:	39,887,602	39,806,929
EU-2	Trading book exposures	182,284	219,211
EU-3	Banking book exposures, of which:	39,705,318	39,587,718
EU-4	Covered bonds	278,427	168,868

EU-5	Exposures treated as sovereigns	9,005,387	11,148,372
EU-6	Exposures to regional governments, multilateral development banks (MDB), international organisations and public sector entities (PSE) not treated as sovereigns	289,579	92,583
EU-7	Institutions	2,506,571	2,199,310
EU-8	Secured by mortgages on immovable properties	9,714,919	8,502,877
EU-9	Retail exposures	3,402,723	3,598,104
EU-10	Corporate	9,881,135	9,135,280
EU-11	Exposures in default	1,573,249	1,678,612
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	3,053,329	3,063,711

Source: COREP - Breakdown of leverage ratio exposure measure components: Model C 43.00

Table 17 - LRSum Model - Summary reconciliation of accounting assets and Leverage ratio exposures

		31/12/2019	31/12/2018
1	Total assets as per published financial statements	41,146,189	41,128,185
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(1,649)	(1,415)
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with article 429, paragraph 13, of Regulation (EU) 575/2013)	-	-
4	Adjustments for derivative financial instruments	15,016	9,671
5	Adjustments for securities financing transactions (SFTs)	84,640	126,308
6	Adjustment for off-balance sheet items (conversion to credit equivalent amounts of off-balance sheet exposures)	4,118,518	4,018,863
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with article 429, paragraph 7, of Regulation (EU) 575/2013)	-	-
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429, paragraph 14, of Regulation (EU) 575/2013)	-	-
7	Other adjustments	(125,676)	(83,694)
8	Leverage ratio total exposure measure	45,237,038	45,197,919

Source: COREP - Leverage ratio calculation: C 47.00 Model

Section 7 - Effects of the IFRS 9 transitional provisions on Own Funds and capital ratios (art. 473-bis CRR)

Qualitative information

Regulation (EU) no. 2017/2395 of the European Parliament and Council of 12 December 2017 amending and integrating Regulation (EU) no. 575/2013 ("CRR") introduced transitional arrangements aimed at mitigating at system level the impact on the Own Funds and prudential ratios of supervised entities following the entry into of IFRS 9 force from 1 January 2018. Adoption of the transitional regime by banks was optional and could be "integral" or "partial" depending on whether it concerned all the regulatory provisions or only a portion of them, as specified below.

These amendments are applicable from 1/1/2018 to 31/12/2022 and allow intermediaries to include temporarily in the calculation of their Common Equity Tier 1 Capital (CET1) an additional amount in order to "neutralise" the potentially significant impact of the sudden increase in expected credit loss provisions on financial instruments that would probably result from the immediate adoption of the new accounting standards.

The total amount related to these additional loss provisions, calculated net of tax effects, is included in regulatory capital as a positive item. This can be broken down into:

- a "static" component, representing the increase in credit risk adjustments during first-time adoption of the new accounting standards; it is calculated as the difference between the amount of impairment losses on financial assets at 31/12/2017 (determined in accordance with the previous IAS 39) and the expected credit losses calculated at 1 January 2018 (date of FTA of IFRS 9); this component remains constant throughout the entire transitional period;
- a "dynamic" component, measuring the further increases in credit risk adjustments that could occur at each subsequent accounting date over the transitional period, i.e. with respect to the expected credit loss provisions in place at 1 January 2018 (the changes in loss allowances for lifetime expected credit losses on financial assets that are credit-impaired are excluded).

Institutions that decided to adhere to the IFRS 9 transitional arrangements are asked to add up this compensatory amount to their CET1 Capital with the application of decreasing percentages over time, from 95% in 2018 to 25% in 2022, until complete phase-out from 1/1/2023.

The additional loss provisions included as a positive element of CET1 get sterilised when calculating prudential ratios by applying a so-called "scaling factor" which has the effect of increasing the exposure value by compensating the impairment losses that, under the Standardised Approach for credit risk, are deducted from the exposure amount used to determine the risk-weighted assets (RWAs). This would ensure that the institutions applying the IFRS 9 transitional arrangements would not benefit from both an increase in its Common Equity Tier 1 capital due to the said compensatory adjustments as well as a reduced risk exposure amount.

The EU regulations have given banks the right to adopt the transitional IFRS 9 regime in an "integral" manner, i.e. including both the "static" and "dynamic" components, or in a "partial" manner, i.e. including only the "static" component. Any institutions that decided to apply the transitional provisions, in part or in full, had to make a specific communication to the competent Supervisory Authority by 1 February 2018.

Given the above, the Banca Popolare di Sondrio Group has chosen to make use of this transitional regime on an "integral" basis, i.e. with reference to the additional provisions for expected credit losses on performing and credit-impaired financial instruments observed at the time of FTA of IFRS 9 (the "static" component), as well as the increase in impairment losses recorded excluding credit-impaired instruments (only positions in Stage 1 and Stage 2) at each reference date following FTA (the "dynamic" component). The decision of the Group was formally communicated to the European Central Bank within the time allowed.

Quantitative information

Below we provide information on the Group's regulatory Own Funds, RWA-based capital ratios and Leverage ratio at 31 December 2019 and 31 December 2018 - both calculated using "phased-in" criteria taking into account the integral adoption of the progressive introduction of IFRS 9 - compared with the corresponding values calculated without the application of such transitional provisions.

Table 18 - IFRS 9-FL Model - Comparison of the Group's Own Funds and capital and leverage ratios, with and without the application of the transitional provisions for IFRS 9

Available capital (amounts)		31/12/2019	30/06/2019	31/12/2018
1	Common Equity Tier 1 (CET1) capital	2,712,331	2,597,015	2,635,696
2	Common Equity Tier 1 (CET1) capital as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	2,707,959	2,592,619	2,613,198
3	Tier 1 capital	2,721,522	2,606,597	2,644,738
4	Tier 1 capital as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	2,717,150	2,602,201	2,622,240
5	Total capital	3,209,890	2,898,169	2,980,861
6	Total capital as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	3,205,518	2,893,773	2,958,363
Risk-weighted assets (amounts)				
7	Total risk-weighted assets	17,224,426	16,755,407	21,907,728
8	Total risk-weighted assets as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	17,223,800	16,754,890	21,880,281
Capital ratios				

9	Common Equity Tier 1 (as a percentage of risk exposure amount)	15.75%	15.50%	12.03%
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	15.72%	15.47%	11.94%
11	Tier 1 (as a percentage of risk exposure amount)	15.80%	15.56%	12.07%
12	Tier 1 (as a percentage of risk exposure amount) as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	15.78%	15.53%	11.98%
13	Total capital (as a percentage of risk exposure amount)	18.64%	17.30%	13.61%
14	Total capital (as a percentage of risk exposure amount) as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	18.61%	17.27%	13.52%
Leverage ratio				
15	Leverage ratio total exposure measure	45,237,038	46,286,119	45,197,919
16	Leverage ratio	6.02%	5.63%	5.85%
17	Leverage ratio as if the transitional arrangements for IFRS 9 or analogous ECLs had not been applied	6.01%	5.62%	5.80%

Source: COREP - Capital adequacy: Models C 01.00-C05.01 and Leverage ratio calculation: Model C 47.00

An analysis of the data reported in the table demonstrates how the impacts on the capital adequacy of the Group deriving from immediate and full recognition of the new accounting standards would remain barely material. Moreover, the already small differences between the solvency and the leverage ratios at 31 December 2018 following the compensatory adjustments granted by the transitional regime and those that the Group would have if it had not opted for gradual inclusion of the larger loan loss adjustments subsequent to the date of first adoption of IFRS 9 decreased even more at 31 December 2019.

This reduction is largely attributable to the effects of the authorisation to use the internal rating system (Advanced IRB Method) obtained by the Group for measuring capital requirements on credit risk: in compliance with the provisions of Regulation (EU). 2017/2395, the amount of additional loan loss provisions that emerged following the first introduction of IFRS 9 has been restated separately by type of prudential treatment (AIRB/Standardised Approach) to which each risk position was subjected. Given that most of the larger IFRS 9-related credit adjustments pertained to exposures to counterparties of "Retail" and "Corporate" segments, i.e. falling within the first validation scope of the AIRB system, they no longer had the possibility provided by the IFRS 9 transitional regime to be counted as positive CET1 elements, as they have effectively been "neutralised" by expected losses estimated with internal models, giving rise to the shortfall item.

The additional expected credit loss provisions that, at 31 December 2019, net of tax effects and calculated at 85% of their actual value based on the progressive rules currently in force - have contributed to the quantification of the compensatory amount included in CET1 Capital are therefore entirely attributable to exposures treated according to the regulatory Standardised Approach for credit risk measurement.

Section 8 - Credit risk: general information and adjustments (art. 442 CRR)

Qualitative information

The classification of credit exposures in the various risk categories is carried out in accordance with the regulations issued by the Supervisory Authority and the current accounting standards.

Loans to banks or customers are divided into two macro-categories, consisting of the so-called "performing" and "non-performing" loans. The former present a situation of substantial relationship regularity; a monitoring is carried out on them, the level of detail of which depends on the rating attributed to the counterparty (where available). For the latter, signs of irregularity or tension occur and their level of severity determines the classification of the positions in one of the states of impairment according to the definitions of "non-performing exposures" introduced by the "Implementing Technical Standards" (ITS) of the European Banking Authority (EBA) of 24 July 2014 and transposed into the EU legal system with the issue of the EU Implementing Regulation 2015/227 by the European Commission on 9 January 2015.

Based on these provisions, exposures that meet any of the following criteria are classified as "impaired loans":

- they are due from counterparties that are not deemed able to meet their loan obligations in full without the enforced collection of guarantees, regardless of whether or not any amounts are overdue, or the number of days that payments are past due;
- the debtor has large exposures (as defined with reference to the materiality thresholds established in the supervisory regulations) that are past due or overdrawn by more than 90 days.

Impaired loans are split into the following categories according to the type and severity of the impairment:

- *Non-performing loans*: on- and off-balance sheet exposures to subjects in a state of insolvency (not necessarily ascertained in court) or in substantially comparable situations, regardless of any loss forecasts. Accordingly, no account is taken of any guarantees received in support of such exposures.
- *Unlikely-to-pay loans*: credit exposures, other than non-performing, for which the Group deems it improbable that the obligor will pay its credit obligations (principal and/or interest) in full without recourse to measures such as the enforcement of guarantees; this assessment is made regardless of whether there are any past due and unpaid amounts.
- *Past due and/or impaired overdrawn exposures*: exposures other than non-performing or unlikely to pay loans, which, at the reporting date, have remained unpaid and/or overdrawn continuously for more than 90 days and which exceed a set materiality threshold established by the regulations. Impaired past due and/or overdrawn exposures may be determined with

reference to the position of the individual debtor or, alternatively, solely for exposures to retail customers, with reference to a single transaction; the Group identifies all of these exposures according to the "counterparty" approach.

The management of "impaired" loans involves taking action, based on the gravity of the situation, to restore normality or, otherwise, to commence appropriate recovery procedures. More precisely, in the event of positions that are:

- *Non-performing loans*, suitable procedures are implemented to recover the loans; if circumstances permit, recovery plans are drawn up and/or settlements are proposed on an amicable basis in order to terminate the relationship;
- for *Unlikely to pay loans*, an assessment is made of the probability that the debtor will meet its contractual obligations in full, in order to re-establish the original conditions of reliability and profitability of the relationship, or, if this is impossible, steps are taken to transfer the position to the Non-performing category. For Unlikely to pay loans subject to restructuring agreements, checks are made continuously to ensure that the agreed conditions are met;
- *Past due and/or impaired overdrawn exposures* are monitored and timely attempts are made to get the situation back to normal; if it is seen that the borrower really is in financial difficulty, the necessary steps are taken to transfer the loan to Unlikely-to-pay or Non-performing, depending on the circumstances.

Taken together, cash loans are periodically subjected to impairment testing for accounting purposes, after assessing at an individual level any significant increase in credit risk compared with the date of initial recognition in order to recognise any impairment in the asset.

In fact, for accounting purposes, the loans and receivables valued at amortised cost, which make up the predominant part of the Group's total exposures, are classified in one of the following categories (known as "Stages"), in accordance with IFRS 9:

- Stage 1: this category includes "performing" loans which have not shown a significant increase in credit risk compared with the initial recognition date;
- Stage 2: "performing" loans that have shown a significant increase in credit risk since their initial recognition, but which do not show objective evidence of impairment, are classified in this category;
- Stage 3: this category includes the positions that are classified in one of the "impaired" states listed above at the reference date.

At each balance sheet date, the possible existence of a significant variation in the credit risk inherent in each position with respect to its initial recognition is assessed. The determination of a significant increase in credit risk and the subsequent estimate of the write-down over a certain time horizon - one year (for positions classified in Stage 1) or various years, depending on the residual duration of the exposure (for positions classified in Stage 2) - is carried out according to specific methods, which reconcile the use of absolute and relative classification criteria.

The absolute criteria considered for the "staging" of credit relationships are:

- *Low Credit Risk Exemption* In accordance with the rationale of IFRS 9 which allows you to assume the absence of a significant increase in credit risk compared with the initial

recognition date if an exposure presents a level of risk that is considered "low", the Group uses this option for limited types of counterparties and technical forms which, given their nature, are considered capable of automatic classification in Stage 1 (e.g. transactions with central banks, repurchase agreements with a maturity of less than a month).

- *Past due by over 30 days.* The accounting standard contains an explicit reference to the case in which a counterparty shows a delay in the fulfilment of its contractual obligations as an example of a possible indicator for classification in Stage 2, considered as a sign of impairment of that relationship.
- *State of forbearance.* Forborne exposures comprise loans to counterparties that have benefited from special concessions, marked by changes in the contractual conditions or refinancing arrangements, following a substantial change in economic condition that is considered particularly compromised. For the Group, this condition is considered sufficient for classification in Stage 2, exclusively with reference to performing exposures.
- *Impaired loans on acquisition or origin* Purchased or originated credit impaired (POCI) exposures are those positions that fall within the definition of an "impaired loan" at the time of initial recognition, and for which specific rules are established regarding the measurement of credit risk. This category includes loans and receivables acquired from third parties which, already at the time of purchase, are impaired (Purchased Credit-Impaired Assets), as well as those disbursed directly by the Group, but which feature subsequent contractual modifications involving cancellation of the previous credit (a derecognition event) and the recognition of an impaired loan, or for the disbursement of new loans to counterparties in a state of default (Originated Credit-Impaired Assets). For the Group, this condition is considered sufficient for classification in Stage 2, exclusively with reference to exposures classified as "performing" as of the reporting date.

Using the "staging" criteria, by analysing an appropriate PD-based metric, it is possible to assess the change in the riskiness of a position over a time horizon corresponding to its residual life, between the evaluation date and initial recognition date. For its construction, the Group makes use of forward structures of the probability of default (so-called "lifetime" PD curves), differentiated according to a suitable level of granularity. These structures are built starting from the internal rating system - where available - or from the rating assigned by an external agency, also considering elements of a predictive-evolutionary nature that are specific to the macro-economic scenario considered most plausible at each analysis date.

Loans recognised at amortised cost are assessed on the basis of the expected credit loss, which is defined as an estimate of the loss forecasts over the expected life of the position, weighted by the respective probabilities of occurrence. This estimate of impairment is determined differently according to the classification in the stages defined above. The following are calculated:

- the expected loss at 12 months, for loans classified in Stage 1. 12-month expected credit losses are those that result from default events that are possible within 12 months (or within a shorter period if the expected life is less than 12 months), weighted for the probability of occurrence of the default event;

- the "lifetime" expected loss, for loans classified in Stage 2. Expected lifetime losses derive from insolvency events deemed possible throughout the expected duration of the position, weighted by the probability that the default will occur within this time horizon.

For Stage 2 positions, the provisions relating to each counterparty may be amended to a level considered appropriate by the competent business functions, based on the results of applying the statistical methodology defined internally and specific operational information concerning the individual borrowers, if the theoretical expected loss associated to a specific borrower does not accurately reflect the level of risk identified.

Loans and receivables recognised at amortised cost can be assessed analytically or collectively. Collective assessments have the purpose of prudentially supervising the treatment of those credit exposures which, due to their intrinsic characteristics (numerous loans, each of an immaterial amount), are suitable for the application of agile and inexpensive assessment processes, mainly automatic and therefore able to guarantee uniform assessments. The process of determining the impairment on loans subject to collective evaluation concerns all of the positions classified as "performing", entailing the need to allocate them according to the expected losses over 12 months following the reference accounting date (Stage 1) or for the entire residual life of the loan (Stage 2). Among "impaired" loans, past due and/or impaired overdrawn exposures and the so-called "unlikely-to-pay loans" are subject to collective assessment.⁹

As regards performing positions, measurement is performed on an overall basis, taking account of the risk parameters consisting of probability of default (PD) and loss given default (LGD), as well as exposure at default (EAD).

As for credit relationships in a state of impairment, the valuation can take place both on a collective basis and on an analytical basis, depending on the amount of exposure and the administrative status in which the counterparty is classified. Losses in the value of individual loans are represented by the extent to which their recoverable value is lower than their amortised cost. In the case of detailed analysis, recoverable value is defined as the present value of expected cash flows, determined with reference to the following elements:

- value of contractual cash flows net of any expected losses, estimated with reference to both the ability of the borrower to meet its obligations and the value of any secured or unsecured guarantees assisting the loan;
- expected timing of recoveries, considering the recovery procedures;
- internal rate of return.

With regard to non-performing positions, the following calculation parameters are used for the analytical evaluation:

- recoveries forecast by the account managers;
- expected timing of recoveries based on historical-statistical data;

⁹ Automatic classification to unlikely-to-pay status, used by the bank for management purposes and applied to customers belonging to the "Past due and/or non-performing overdrawn" status for which the objective conditions of irregularity cease to exist as the beneficiary of a tolerance measure ("forbearance") for which the specific requirements regarding their return to performing status (with respect to the year of the "cure period" from application of the measure) are not complied with.

- original discounting rates or the actual contractual rates applying at the time of classifying the loans as non-performing.

Collective assessment is applied to positions with a limited amount of total exposure that does not exceed certain "threshold values". These thresholds are determined from time to time, using streamlined valuation processes that mainly involve the automatic application of specific minimum coefficients defined internally based on targeted quantitative analyses.

Unlikely-to-pay loans, which usually include loans subject to restructuring agreements, are also assessed on either a detailed or an overall basis. The detailed analysis takes the following parameters into account:

- recoveries forecast by the offices concerned;
- expected timing of recoveries based on historical-statistical data;
- original discounting rates represented by the actual contractual rates applying at the time the loans were classified as unlikely-to-pay or, with specific reference to loans subject to restructuring agreements, in force before signing the agreement with the debtor.

Collective assessment is carried out using a method similar to that applied to non-performing loans and regards positions with exposures above a certain "threshold value", identified from time to time, for which there are no specific loss forecasts individually attributable to single positions. In addition to the so-called "Automatic unlikely-to-pay loans", an impairment adjustment is applied to these assets, calculated on a collective basis by applying specific minimum coefficients estimated on the basis of targeted historical/statistical analyses.

Past due and/or impaired overdrawn exposures are identified using automated procedures that extrapolate anomalous positions with reference to specific parameters established by regulations in force from time to time. Analytical loss forecasts cannot be quantified on these positions; the adjustment is therefore determined according to historical evidence of losses recorded on transactions with this type of anomaly. The measurement of the impairment – and, therefore, of the adjustments to be applied on a collective basis – is performed by taking account of the possibility of the positions returning to "performing" or of a further deterioration in the state of insolvency and, accordingly, of the amount of the estimated expected loss arising from the recovery process. Measurement is also performed based on the availability of appropriate information of a macroeconomic and prospective nature that is deemed significant for estimating the credit risk adjustments.

As regards endorsement credits, the assessment process is pretty much the same as for cash loans. One difference is the fact that the actual loss occurs if, in addition to the debtor's "insolvency" event, the "enforcement" event of the endorsement credit also takes place: for this purpose, the so-called "credit conversion factor" (CCF) is taken into consideration. This is a statistical parameter that reflects the ratio between the undrawn portion of a credit line, which it is presumed will be used close to the insolvency of the counterparty, and the amount of the line currently not used, estimated on the basis of experience or identified by the supervisory regulations currently in force from time to time.

It should be noted that the impairment model relating to impaired loans (Stage 3) envisaged by IFRS 9 is based on an estimate of the difference between the original contractual flows and the

expected cash flows. In calculating the expected cash flows, it is therefore necessary to include collection forecasts at the reporting date according to different expected scenarios, including the possibility of loan assignment programmes. If a portion of the cash flows is expected to be recovered from outstanding exposures through sale procedures, these may be included in the quantification of the expected loss when certain conditions exist. The Group incorporates its various recovery/assignment strategies in its impairment estimates based on their probability.

Credit positions can also be evaluated at fair value through profit or loss (FVTPL) or through other comprehensive income (FVOCI - fair value through other comprehensive income, the so-called "OCI reserve") for accounting purposes.

The former include those forms of financing that are mandatory at fair value, that is, that do not meet the requirements for classification at amortized cost or at fair value through other comprehensive income, as they do not comply with the test criteria for verifying the characteristics of the cash flows (so-called "SPPI test")¹⁰ required by IFRS 9. If it is not possible to use prices quoted on official markets or provided by information providers, the fair value of the loans at each reference date is determined by using measurement models that differ according to the nature and characteristics of the instruments being measured. Currently, three main base models are applied:

- Discounted Cash Flow Model (DCF);
- Reverse Mortgage Model (RMM);
- Asset-Backed Securities model (ABS).

These models refer to the evaluation of "performing" exposures. In the case of "impaired" or revoked loans, the fair value is considered equal to the gross balance of the loan adjusted for impairment calculated according to the methods and logic previously explained for loans measured at amortised cost.

Assets measured at fair value through profit or loss also include the loans and receivables designated at fair value following the exercise of the so-called "fair value option". At present, the Banking Group has decided not to apply this option, without excluding the possibility of exercising it in the future.

In the category of assets valued at fair value through other comprehensive income ("OIC"), on the other hand, are those loans that are managed through a "HTC&S" business model and are compliant with the "SPPI Test". At each recognition date, the exposures classified in this item are valued on the basis of their fair value, according to the criteria previously illustrated for the assets measured at fair value through other comprehensive income.

¹⁰ By means of an SPPI test (Solely Payment of Principal and Interest Test), it is possible to check whether an asset can be considered a "Basic Lending Arrangement", whereby the contractual cash flows consist solely of payments of principal and interest accrued on the principal amount outstanding. If the test of the characteristics of the contractual cash flows shows compliance with the requirements of IFRS 9 (SPPI test has been passed), the asset may be measured at amortised cost, provided that it is held within a business model the objective of which is to collect the contractual cash flows during the instrument's life (HTC - Held to Collect - business model), or at fair value through other comprehensive income (FVOCI), provided that the asset is held within a business model the objective of which is to collect contractual cash flows over the entire life of the asset and to sell the asset (HTC&S - Held to Collect & Sell - business model). If the test of the characteristics of the contractual cash flows from a financial asset does not show compliance with the requirements of IFRS 9 (SPPI test has not been passed), the asset is measured at fair value through profit or loss (FVTPL). The test is performed before a loan is disbursed in such a way as to grant it with the awareness of the accounting implications in terms of its classification.

In the exercise of its coordination and control function, the Parent Company requires the other Group companies to adopt uniform methods also with the use of the same ICT tools. At the subsidiaries, the valuation models were developed according to approaches which, while fundamentally consistent with the methodological framework established by the Parent Company with regard to the key aspects of IFRS 9 (e.g. estimating risk parameters on multi-year horizons differentiated by scenarios, impairment horizon depending on the classification of the positions in Stages), do incorporate specific aspects related to them, such as the geographical and economic context in which the subsidiaries operate, the nature and the level of diversification of their core business, the complexity and size of their respective control structures.

Exposures subject to commercial renegotiations

Renegotiations that include changes to the original contractual conditions applied for purely commercial reasons to credit exposures to counterparties that do not present financial difficulties are included in this category. These changes therefore differ from forbearance and are made to align interest levels with current market conditions. In addition, commercial renegotiations include changes to the economic conditions applied to newly arranged credit relationships, being those established for not more than 6 months.

Commercial renegotiations are mainly granted in order to maintain the relationship with the customer ("retention" of loans), after an overall assessment of the position which includes the rating attributed to the debtor and their prospective profitability, precisely with a view to preserving and where possible, developing the business relationship with the counterparty.

Transactions with commercial renegotiations involve a change in the original conditions of the contract at the request of the debtor, concerning aspects related to the cost of the loan or its duration, with a consequent benefit for the counterparty. Generally speaking, every time the Group agrees to a renegotiation in order to avoid losing a customer, the renegotiation has to be considered substantial since, if it were not carried out, the customer would borrow from other institutions and the Group would suffer a decline in expected future revenues. These transactions are comparable with early repayment of the original debt and opening a new contract.

Forborne Exposures

Credit exposures for which changes have been made to the contractual conditions or refinancing due to the debtor's financial difficulties are called "forborne". Forborne as an attribute is transversal to all loans, whatever their administrative status. It can be used for performing loans just as well as for non-performing loans.

These are exposures to counterparties who have been granted so-called "forbearance" measures, in the form of loans, debt securities and revocable or irrevocable commitments to pay out loans (excluding exposures held for trading), as the debtor is or will soon be in difficulty meeting their financial obligations. A tolerance measure ("forbearance") is made when the amended contractual conditions are more favourable to the debtor than those applied previously; in particular, when:

- upon contractual modification, the credit relationship is classified as non-performing, or would have been classified as such if the modification had not been agreed;
- the contractual change led to a (total or partial) debt write-off;
- the exercise of contractual clauses is approved vis-à-vis a debtor classified as non-performing, or who would be if the exercise of these clauses were not to be approved;
- at the same time as the disbursement of new credit to a counterparty, they make payments on a pre-existing relationship classified as non-performing, or which would have been soon if the Group had not granted it new credit.

In particular, for the purpose of identifying and classifying "forborne" loans, a "forbearance" measure is normally represented by at least one of the following cases:

- a modification, favourable to the customer, of the pre-existing contractual terms granted to a counterparty who is no longer able to comply with due to their current (or imminent) situation of financial difficulty;
- total or partial refinancing of a pre-existing relationship that would not have been granted if the customer was not considered in a situation of financial difficulty.

This situation of financial difficulty of the debtor is confirmed objectively if the counterparty is classified as non-performing, while it is assumed, subject to detailed analysis and assessment, if the counterparty rating of a performing customer reflects a high degree of risk, or the position concerned is past due or was past due for at least 30 days during the three-month period prior to amending the contract, or there is evidence via the Central Risks database of "corrected non-performing" status.

In order to guarantee the quality of credit exposures and monitor their trends effectively, the Bank applies "industrialised" internal processes designed to identify the most suitable concessions for debtors experiencing financial difficulties, as well as to manage the forborne classification of the related exposures. Consistent with the relevant current regulations, the Group identifies a series of standardised concessions, distinguishing between short and medium/long-term measures, and periodically monitors their effectiveness in terms of bringing the exposures back into line.

When a concession is requested, the Operating Unit responsible for the loan determines the most suitable and sustainable forbearance measure for the customer, with support from dedicated tools that provide guidance. As part of this process, the Unit must assess the nature of the financial difficulties and ensure that the expected duration of the concession is consistent with the nature of the relationship. Subsequently, the economic sustainability of the measure is analysed with respect to the financial situation of the customer; in particular, the adequacy of the assets of the customer is analysed on a current and prospective basis, considering the need for credibility and prudence. On arrangement of the concession, dedicated IT procedures check if the conditions exist for classifying the relationship as forborne and, if they do, propose the assignment of this attribute to the competent Operating Unit. Any exceptions made to this classification must be supported by adequate reasons. Following approval of the concession and the proposed forborne classification by the competent decision-making body, specific objectives and deadlines are added to the loan contract, with which the customer must comply when repaying the debt. These

supplementary conditions are determined using prudent criteria and checked as part of the more general monitoring of the position.

In the event of non-substantial changes to a credit position, IFRS 9 requires the resulting gain or loss to be determined. A change is deemed to be "non-substantial" when it does not result in closure of the pre-existing relationship and/or involve the addition of clauses that might cause the relationship to fail the SPPI test".

All "forborne performing" positions are classified in stage 2 and the related adjustments are stated at an amount equal to the lifetime losses expected on the loan. The reduction in credit risk and the allocation of the relationship to Stage 1 reflects loss of the forborne attribute.

Purchased or originated impaired assets (POCI)

The category of Purchased or Originated Credit Impaired (POCI) financial instruments includes all purchased or originated loans that, on initial recognition, are found to be credit impaired.

The accounting rules relating to POCI apply to positions recorded under Financial assets measured at fair value through other comprehensive income (FVOCI) or under Financial assets measured at amortised cost, or to loans that have passed the "SPPI Test" managed according to business models whose objective is the possession of assets aimed at collecting contractual cash flows ("HTC", Held to Collect) or whose objective is pursued through both collection of contractual financial flows and sale of the asset ("HTC&S", Held to Collect and Sell). The "POCI" attribute remains assigned for the entire duration of the relationship and the assets concerned are written down to reflect any losses expected over their residual lifetime.

Banca Popolare di Sondrio recognises two categories of product associated with POCI financial instruments arising from the granting of loans:

- standard products with instalment repayment plans: in this case, the Company's procedure recognises the creation of the new relationship that passes the SPPI test, but with an impaired counterparty and automatically assigns the "POCI" attribute for approval by the competent decision-making body;
- standard products managed with the current accounts and international accounts, and non-standard contracts originated by the corporate finance department: for these relationships, the Unit responsible for monitoring and managing anomalous credit manually assigns the "POCI" attribute for approval by the competent decision-making body.

Regardless of how assigned (manual or automatic), the "POCI" attribute must always be confirmed by the competent decision-making body and, once approved, remains valid for the entire duration of the relationship.

Write-off

In line with IFRS 9, a "write-off" is defined as an event that gives rise to a cancellation from the accounting records, when there are no longer reasonable expectations of recovering the cash flows deriving from the asset - in whole or in part - also in cases of a waiver of the receivable,

therefore having to reduce directly the gross carrying amount of the asset concerned. This form of write-down constitutes a case of partial or total cancellation of a credit position.

The gross carrying amount of a financial asset is written off if the amount is confirmed to be unrecoverable or there are no realistic prospects of recovery.

The timely assessment of non-recoverability is based on certain criteria, such as the inability to enforce mortgage or personal guarantees, the unsuccessful completion of enforcement/court-supervised proceedings, the start of bankruptcy procedures, removal from the register of the business name of the debtor legal entity, the lack of traceability or advanced age of the customer.

The procedure to identify the absence of any reasonable prospects of recovery is focused on the counterparties included in the non-performing loans portfolio and differs depending on the existence of mortgage guarantees, the ageing of the position and the progress made with recovery actions.

Quantitative information

The following tables show:

- the distribution of cash and off-balance sheet credit exposures by portfolio, type of counterparty, credit quality, geographical area, economic sector;
- the distribution of the assets by residual life buckets;
- the dynamics and composition of impaired exposures, of those subject to forbearance measures and of the assets acquired by the Group as part of executive procedures for the recovery of impaired loans;
- the dynamics and composition of loan loss provisions and value adjustments.

The amounts reported here, which refer to the Banking Group, are those shown in the financial statements and FINREP reporting schedules at 31 December 2019, accompanied by figures obtained from internal sources.

The end-of-period values are believed to be representative of the Group's risk exposures during the entire reference period.

Distribution of financial assets by portfolio and quality of lending

Table 19 - Distribution of financial assets by portfolio and quality of lending (book values)

Portfolio/quality	Non-performing loans	Unlikely-to-pay loans	Impaired past due exposures	Performing past due exposures	Other performing exposures	Total
1. Financial liabilities measured at amortised cost	668,058	814,202	56,182	293,977	32,362,305	34,194,724
2. Financial assets measured at fair value through other comprehensive income	-	-	-	-	2,503,777	2,503,777
3. Financial assets designated at fair value	-	-	-	-	-	-
4. Other financial assets mandatorily measured at fair value	-	35,178	355	10,068	292,910	338,511
5. Financial assets being sold	-	-	-	-	-	-
Total (31/12/2019)	668,058	849,380	56,537	304,045	35,158,992	37,037,012
Total (31/12/2018)	760,413	1,006,090	84,655	415,638	35,203,898	37,470,694

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table A.1.1

Table 20 - Credit exposures by portfolio and quality of lending (book values)

Portfolio/quality	Impaired assets				Not impaired assets			Total (net exposure)
	Gross exposure	Total write-downs	Net exposure	Partial total write-off	Gross exposure	Total write-downs	Net exposure	
1. Financial liabilities measured at amortised cost	3,683,765	2,145,323	1,538,442	341,863	32,761,683	105,401	32,656,282	34,194,724
2. Financial assets measured at fair value through other comprehensive income	-	-	-	-	2,504,888	1,111	2,503,777	2,503,777
3. Financial assets designated at fair value	-	-	-	-	-	-	-	-
4. Other financial assets mandatorily measured at fair value	48,297	12,764	35,533	-	-	-	302,979	338,512
5. Financial assets being sold	-	-	-	-	-	-	-	-
Total (31/12/2019)	3,732,061	2,158,087	1,573,975	341,863	35,266,571	106,512	35,463,038	37,037,013
Total (31/12/2018)	4,172,101	2,320,945	1,851,158	194,013	35,456,403	102,580	35,619,536	37,470,694

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table A.1.2

Distribution of credit exposure by significant geographical areas

Table 21 - Territorial distribution of cash and off-balance sheet exposures to customers (book value)

Exposures/Geographical areas	ITALY		OTHER EU COUNTRIES		AMERICA		ASIA		REST OF THE WORLD	
	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs
A. Cash exposures										
A.1 Non-performing loans	663,573	1,550,148	4,479	41,897	6	536	-	3,852	-	11
A.2 Unlikely-to-pay loans	830,837	542,365	18,480	10,037	63	7	-	-	1	-
A.3 Past due exposures, impaired	29,428	3,666	27,052	5,743	48	6	9	3	-	-
A.4 Not impaired exposures	27,175,923	98,689	6,421,926	6,599	114,967	79	44,351	120	70,316	121
Total A	28,699,761	2,194,868	6,471,937	64,276	115,084	628	44,360	3,975	70,317	132
B. Off-balance sheet exposures										
B.1 Impaired exposures	278,615	33,770	91	6	-	-	-	-	-	-
B.2 Not impaired exposures	17,775,781	9,102	609,212	362	25,043	2	3,663	2	680	-
Total B	18,054,396	42,872	609,303	368	25,043	2	3,663	2	680	-
Total (31/12/2019)	46,754,157	2,237,740	7,081,240	64,644	140,127	630	48,023	3,977	70,997	132

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table B.2

Table 22 - Territorial distribution of cash and off-balance sheet exposures to banks (book value)

Exposures/Geographical areas	ITALY		OTHER EU COUNTRIES		AMERICA		ASIA		REST OF THE WORLD	
	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs
A. Cash exposures										
A.1 Non-performing loans	-	-	-	-	-	-	-	-	-	-
A.2 Unlikely-to-pay loans	-	-	-	-	-	-	-	-	-	-
A.3 Past due exposures, impaired	-	-	-	-	-	-	-	-	-	-
A.4 Not impaired exposures	1,290,441	832	355,667	61	29,548	7	9,547	2	29,258	9
Total A	1,290,441	832	355,667	61	29,548	7	9,547	2	29,258	9
B. Off-balance sheet exposures										
B.1 Impaired exposures	-	-	-	-	-	-	-	-	9	-
B.2 Not impaired exposures	195,809	155	220,167	11	583	-	47,787	2	3,505	-
Total B	195,809	155	220,167	11	583	-	47,787	2	3,514	-
Total (31/12/2019)	1,486,250	987	575,834	72	30,131	7	57,334	4	32,772	9

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table B.3

Distribution credit exposure by economic sector

Table 23 - Distribution by sector of the cash and off-balance sheet exposures to customers (book value)

Exposures/Counterparties	Public administrations		Financial companies		Insurance companies		Non-financial companies		Households	
	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs	Net exposure	Total write-downs
A. Cash exposure										
A.1 Non-performing loans	-	-	9,354	43,173	-	-	473,354	1,106,081	185,350	447,190
- of which exposures subject to forbearance	-	-	406	6,018	-	-	72,755	132,567	21,505	39,477
A.2 Unlikely-to-pay loans	190	206	13,467	13,365	-	-	610,470	449,423	225,254	89,415
- of which exposures subject to forbearance	-	-	10,814	10,030	-	-	358,861	249,697	87,221	38,316
A.3 Past due exposures, impaired	3	-	7	-	-	-	16,368	2,416	40,159	7,002
- of which exposures subject to forbearance	-	-	-	-	-	-	1,422	101	5,426	553
A.4 Not impaired exposures	8,075,861	3,740	3,381,565	10,335	14,404	67	13,414,607	56,988	8,955,450	34,545
- of which exposures subject to forbearance	43,513	48	803	28	-	-	456,250	12,022	247,228	6,421
Total A	8,076,054	3,946	3,404,393	66,873	14,404	67	14,514,799	1,614,908	9,406,213	578,152
B. Off-balance sheet credit exposures										
B.1 Impaired exposures	50	-	100	325	-	-	270,628	32,198	7,928	1,253
B.2 Not impaired exposures	510,309	9	1,292,873	2,299	9,969	-	15,125,298	5,253	1,485,899	1,907
Total B	510,359	9	1,292,973	2,624	9,969	-	15,395,926	37,451	1,493,827	3,160
Total (31/12/2019)	8,586,413	3,955	4,697,366	69,497	24,373	67	29,910,725	1,652,359	10,900,040	581,312

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table B.1

Distribution of impaired loans and value adjustments

Table 24 - Cash credit exposures to customers: trend of gross impaired exposures (carrying amounts)

Categories	Non-performing loans	Unlikely-to-pay loans	Past due exposures, impaired
A. Opening gross exposure	2,481,444	1,585,573	105,086
- of which: sold but not eliminated from the balance sheet	-	9,733	1,632
B. Increases	402,860	542,865	57,959
B.1 transfers from performing loans	33,478	224,137	49,810
B.2 transfers from impaired financial assets purchased or originated	17	25,502	-
B.3 transfers from other categories of impaired exposures	244,311	44,874	236
B.4 contractual amendments not resulting in derecognition	-	-	-
B.5 other increases	125,054	248,352	7,913
C. Decreases	(619,802)	(726,832)	(97,090)
C.1 transfers to performing loans	-	(94,341)	(9,373)
C.2 write-offs	(428,792)	(163)	-
C.3 collections	(174,965)	(374,899)	(33,608)
C.4 proceeds from disposals	(4,633)	(5,053)	-
C.5 losses on disposal	(264)	(422)	-
C.6 transfers to other categories of impaired exposure	-	(235,464)	(53,956)
C.7 contractual amendments not resulting in derecognition	-	(2,106)	-
C.8 other decreases	(11,147)	(14,384)	(153)
D. Closing gross exposure	2,264,502	1,401,606	65,955
- of which: sold but not eliminated from the balance sheet	-	7,887	850

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table A.1.7

Table 25 - Impaired cash exposure to customers: trend in total write-downs (book values)

Categories	Non-performing loans		Unlikely-to-pay loans		Past due exposures, impaired	
	Total	Of which: exposures subject to forbearance	Total	Of which: exposures subject to forbearance	Total	Of which: exposures subject to forbearance
A. Total opening adjustments	1,721,031	112,123	579,483	208,780	20,430	912
- of which: sold but not eliminated from the balance sheet	-	-	1,440	268	141	-
B. Increases	389,355	96,675	200,658	145,242	6,759	645
B.1 adjustments to impaired assets purchased or originated	-	-	1,593	-	-	-
B.2 other adjustments	195,165	24,358	175,514	99,319	4,648	448
B.3 losses on disposal	-	-	-	-	-	-
B.4 transfers from other categories of impaired exposures	105,574	26,193	13,619	558	94	-
B.5. contractual amendments not resulting in derecognition	-	-	-	-	-	-
B.6 other increases	88,616	46,124	9,932	45,365	2,017	197
C. Decreases	(513,942)	(30,736)	(227,916)	(56,164)	(17,771)	(903)
C.1 write-backs on valuation	(37,214)	-	(27,867)	(18,330)	(113)	(103)
C.2 write-backs due to collections	(43,955)	(4,805)	(83,915)	(11,288)	(2,980)	(1)
C.3 gains on disposal	(2,114)	-	(1,124)	-	-	-
C.4 write-offs	(428,779)	(22,350)	(163)	-	-	-
C.5 transfers to other categories of impaired exposure	-	-	(104,779)	(25,955)	(14,438)	(796)
C.6 contractual amendments not resulting in derecognition	-	-	(598)	(591)	-	-
C.7 other decreases	(1,880)	(3,581)	(9,470)	-	(240)	(3)
D. Total closing adjustments	1,596,444	178,062	552,225	297,858	9,418	654
- of which: sold but not eliminated from the balance sheet	-	-	933	262	84	-

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table A.1.9

At 31/12/2019 there were no gross and net impaired exposures to banks.

Distribution of cash assets and liabilities and “off-balance sheet” by residual maturity

Table 26 - Distribution by residual contractual maturity of financial assets and liabilities

Items/Time bands	Sight	1 to 7 days	7 to 15 days	15 days to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 to 5 years	Over 5 years	Unspecified duration	Total
Cash assets	4,939,849	1,249,551	1,353,430	1,740,267	2,357,847	1,692,682	2,379,510	14,291,669	7,794,249	128,845	37,927,899
A.1 Government securities	-	-	1,986	1,200	12,744	8,044	211,321	5,804,657	1,669,000	-	7,708,952
A.2 Other fixed-yield securities	119	-	80	1,292	213,282	10,326	159,222	555,561	726,016	-	1,665,898
A.3 UCITS	465,357	-	-	-	-	-	-	-	-	-	465,357
A.4 Loans	4,474,373	1,249,551	1,351,364	1,737,775	2,131,821	1,674,312	2,008,967	7,931,452	5,399,233	128,845	28,087,692
- Banks	222,611	52,526	85,256	72,825	10,980	23,247	30,424	-	-	80,548	578,416
- Customers	4,251,762	1,197,026	1,266,108	1,664,950	2,120,840	1,651,065	1,978,543	7,931,452	5,399,233	48,297	27,509,277
Cash liabilities	28,384,999	770,768	111,419	112,174	861,766	582,234	185,588	5,462,064	672,542	-	37,143,554
B.1 Deposits and current accounts	28,221,908	259,095	109,514	108,914	801,496	538,355	45,929	300,645	302,871	-	30,688,728
- Banks	453,438	187,141	104,127	72,901	198,631	90,857	18,539	297,586	302,871	-	1,726,091
- Customers	27,768,470	71,954	5,387	36,013	602,865	447,498	27,390	3,060	-	-	28,962,637
B.2 Fixed-yield securities	91,751	67	295	1,894	14,241	31,436	118,746	2,338,576	243,744	-	2,840,750
B.3 Other liabilities	71,341	511,605	1,609	1,366	46,029	12,443	20,913	2,822,843	125,926	-	3,614,076
Off-balance sheet transactions	6,509,508	546,547	1,067,793	4,403,466	1,987,313	2,984,503	3,362,028	307,103	653,888	-	21,822,147
C.1 Financial derivatives with exchange of capital	-	531,551	1,052,744	2,287,441	1,453,818	1,926,961	1,378,743	12,125	-	-	8,643,382
- Long positions	-	265,799	526,395	1,143,758	747,329	963,500	689,464	6,138	-	-	4,342,383
- Short positions	-	265,752	526,349	1,143,682	706,488	963,461	689,279	5,987	-	-	4,301,000
C.2 Financial derivatives without exchange of capital	30,916	-	59	373	1,025	1,826	2,749	-	-	-	36,948
- Long positions	19,720	-	-	-	-	-	-	-	-	-	19,720
- Short positions	11,197	-	59	373	1,025	1,826	2,749	-	-	-	17,229
C.3 Deposits and loans to be received	1,780	-	-	-	-	-	-	-	-	-	1,780
- Long positions	890	-	-	-	-	-	-	-	-	-	890
- Short positions	890	-	-	-	-	-	-	-	-	-	890
C.4 Irrevocable commitments to make loans	6,476,811	14,997	14,990	2,115,653	532,470	1,055,716	1,980,536	294,977	653,888	-	13,140,036
- Long positions	39,680	9,194	3,299	2,068,955	440,085	992,586	1,907,969	290,091	653,888	-	6,405,746
- Short positions	6,437,131	5,803	11,691	46,698	92,385	63,130	72,566	4,886	-	-	6,734,290
C.5 Financial guarantees issued	-	-	-	-	-	-	-	-	-	-	-

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Liquidity risk

Reporting on impaired and forborne exposures

The following tables contain the information at 31 December 2019 regarding impaired exposures, those subject to forbearance measures and the assets acquired by the Group as part of executive procedures for the workout of impaired loans. The tables comply with the harmonized formats envisaged by the "EBA/GL/2018/10 Guidelines on disclosure of non-performing and forborne exposures" of 17 December 2018.

Table 27 - Credit quality of forborne exposures (Template 1 - EBA/GL/2018/10)

		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	
		Performing forborne	Non-performing forborne			On performing forborne exposures	On non-performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
				Of which defaulted	Of which impaired				
1	Loans and advances	766,313	1,034,984	1,016,582	993,071	(18,519)	(476,575)	983,199	157,184
2	Central banks	-	-	-	-	-	-	-	-
3	General governments	43,562	-	-	-	(49)	-	24,984	-
4	Credit institutions	-	-	-	-	-	-	-	-
5	Other financial corporations	830	27,267	12,251	27,267	(28)	(16,048)	463	254
6	Non-financial corporations	468,272	815,219	815,219	777,305	(12,022)	(382,181)	659,794	132,639
7	Households	253,649	192,498	189,112	188,499	(6,421)	(78,347)	297,958	24,290
8	Debt Securities	-	-	-	-	-	-	-	-

9	Loan commitments given	45,003	18,853	18,853	18,853	276	6	13,669	11,701
10	Total	811,316	1,053,838	1,035,435	1,011,924	(18,243)	(476,569)	996,868	168,885

Source: FINREP - Exposures subject to forbearance measures (19): Model F19.00

Table 28 - Quality of forbearance (Template 2 - EBA/GL/2018/10)

		a
		Gross carrying amount of forborne exposures
1	Loans and advances that have been forborne more than twice	5,017
2	Non-performing forborne loans and advances that failed to meet the non-performing exit criteria	395,575

Source: Internal reporting - figures as of 31/12/2019

Table 29 - Credit quality of performing and non-performing exposures by past due days (Template 3 - EBA/GL/2018/10)

		a	b	c	d	e	f	g	h+i	j+k	l
Gross carrying amount/nominal amount											
Performing exposures					Non-performing exposures						
			Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 5 years	Past due > 5 years	Of which defaulted
1	Loans and advances	27,962,816	27,810,999	151,817	3,733,353	768,065	62,438	185,699	1,285,911	1,431,240	3,733,353
2	Central banks	1,756,594	1,756,594	-	-	-	-	-	-	-	-
3	General governments	262,078	258,707	3,371	401	-	-	1	398	2	401
4	Credit institutions	494,562	494,528	34	-	-	-	-	-	-	-
5	Other financial corporations	3,077,222	3,077,087	135	79,367	16,534	1	6,599	24,789	31,445	79,367
6	Non-financial corporations	13,383,655	13,298,837	84,818	2,657,924	566,190	44,145	116,541	931,118	999,931	2,657,924
7	Of which SMEs	7,171,081	7,111,836	59,245	1,648,715	453,575	33,416	83,451	620,879	457,394	1,648,715
8	Households	8,988,705	8,925,247	63,459	995,661	185,342	18,293	62,559	329,606	399,862	995,661
9	Debt securities	9,278,505	9,278,505	-	-	-	-	-	-	-	-
10	Central banks	-	-	-	-	-	-	-	-	-	-
11	General governments	7,734,826	7,734,826	-	-	-	-	-	-	-	-
12	Credit institutions	1,137,210	1,137,210	-	-	-	-	-	-	-	-
13	Other financial corporations	314,674	314,674	-	-	-	-	-	-	-	-
14	Non-financial corporations	91,796	91,796	-	-	-	-	-	-	-	-
15	Off-balance-sheet exposures	19,050,386			312,482						312,482
16	Central banks	-			-						-
17	General governments	511,239			50						50
18	Credit institutions	447,831			-						-
19	Other financial corporations	1,319,829			425						425
20	Non-financial corporations	15,226,294			302,826						302,826
21	Households	1,545,194			9,182						9,182
22	Total	56,291,707	37,089,504	151,817	4,045,835	768,065	62,438	185,699	1,285,911	1,431,240	4,045,835

Source: FINREP - Exposures in default: Model F 18.00

Table 30 - Performing and non-performing exposures and related provisions (Template 4 - EBA/GL/2018/10)

		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						Accumulat ed 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						
	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	27,962,816	24,522,652	3,440,164	3,733,353	-	3,733,353	(101,837)	(34,970)	(66,867)	(2,158,179)	-	(2,158,179)	(343,073)	17,734,984	1,354,682	
2	Central banks	1,756,594	1,756,594	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	General governments	262,078	214,623	47,454	401	-	401	(132)	(75)	(57)	(208)	-	(208)	-	25,489	-	
4	Credit institutions	494,562	490,209	4,353	-	-	-	(106)	(77)	(29)	-	-	-	-	27,132	-	
5	Other financial corporations	3,077,222	3,038,276	38,946	79,367	-	79,367	(10,116)	(8,181)	(1,936)	(56,539)	-	(56,539)	-	1,596,475	8,007	
6	Non-financial corporations	13,383,655	11,250,744	2,132,912	2,657,924	-	2,657,924	(56,937)	(16,458)	(40,479)	(1,557,827)	-	(1,557,827)	(338,761)	8,263,598	950,794	
7	Of which SMEs	7,171,081	6,021,651	1,149,430	1,648,715	-	1,648,715	(39,673)	(22,164)	(17,509)	(882,583)	-	(882,583)	(85,256)	5,226,503	704,069	
8	Households	8,988,705	7,772,207	1,216,498	995,661	-	995,661	(34,545)	(10,179)	(24,366)	(543,606)	-	(543,606)	(4,312)	7,822,290	395,881	
9	Debt securities	9,278,505	9,271,401	7,104	-	-	-	(4,581)	(4,581)	-	-	-	-	-	-	-	
10	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	General governments	7,734,826	7,734,826	-	-	-	-	(3,608)	(3,608)	-	-	-	-	-	-	-	
12	Credit institutions	1,137,210	1,132,085	5,124	-	-	-	(701)	(701)	-	-	-	-	-	-	-	
13	Other financial corporations	314,674	312,694	1,979	-	-	-	(219)	(219)	-	-	-	-	-	-	-	
14	Non-financial corporations	91,796	91,796	-	-	-	-	(53)	(53)	-	-	-	-	-	-	-	
15	Off-balance-sheet exposures	19,050,386	18,071,172	979,215	312,482	-	312,482	9,634	7,588	2,046	33,776	-	33,776		3,204,542	92,315	
16	Central banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
17	General governments	511,239	502,656	8,583	50	-	50	8	8	-	-	-	-		-	221	-
18	Credit institutions	447,831	429,941	17,890	-	-	-	170	159	11	-	-	-		-	38,899	-
19	Other financial corporations	1,319,829	1,316,909	2,920	425	-	425	2,296	2,292	4	325	-	325		-	183,137	77
20	Non-financial corporations	15,226,294	14,410,894	815,400	302,826	-	302,826	5,288	4,034	1,254	32,198	-	32,198		-	2,650,821	88,955
21	Households	1,545,194	1,410,772	134,422	9,182	-	9,182	1,872	1,094	778	1,253	-	1,253		-	331,464	3,283
22	Total	56,291,707	51,865,225	4,426,482	4,045,835	-	4,045,835	(96,784)	(31,963)	(64,820)	(2,124,403)	-	(2,124,403)	(343,073)	20,939,526	1,446,997	

Source: FINREP - Exposures in default (18): Model F 18.00; Exposure subject to forbearance (19): Model F19.00; Breakdown of financial assets by instrument and by counterparty sector (4): Model F 04.03.1 - F 04.04.1

Table 31 - Quality of non-performing exposures by geography (Template 5 - EBA/GL/2018/10)

		a	b	c	d	e	f	g
		Gross carrying/nominal amount				Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
			Of which non-performing	Of which subject to impairment				
				Of which defaulted				
1	On-balance sheet exposure	41,057,373	3,733,353	3,733,353	3,733,353	(2,251,741)		(12,856)
2	Italy	33,373,755	3,622,363	3,622,363	3,622,363	(2,182,929)		(12,856)
3	Switzerland	4,407,509	69,855	69,855	69,855	(34,450)		-
4	Spain	1,097,737	499	499	499	(423)		-
5	France	749,797	359	359	359	(263)		-
6	Principality of Monaco	232,947	553	553	553	(668)		-
7	Luxembourg	182,217	14,844	14,844	14,844	(13,628)		-
8	Germany	104,594	10,780	10,780	10,780	(10,624)		-
9	United States	101,925	67	67	67	(63)		-
10	Other countries	806,892	14,032	14,032	14,032	(8,694)		-
11	Off-balance sheet exposures	19,362,869	312,482	312,482			43,410	
12	Italy	18,285,846	312,386	312,386			42,841	
13	Switzerland	615,277	16	16			487	
14	Spain	20,013	-	-			6	
13	France	107,078	50	50			7	
14	Principality of Monaco	94,778	-	-			33	
15	Luxembourg	356	-	-			-	
16	Germany	5,759	-	-			1	
17	United States	3,363	-	-			-	
18	Other countries	230,399	30	30			35	
19	Total	60,420,241	4,045,835	4,045,835	3,733,353	(2,251,741)	43,410	(12,856)

Source: FINREP - Breakdown by geographical residence of counterparties (20): Model F 20.04 - F 20.05

Table 32 - Credit quality of loans and advances by industry (Template 6 - EBA/GL/2018/10)

		a	b	c	d	e	f
		Gross carrying amount			Of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
			Of which non-performing	Of which defaulted			
1	Agriculture, forestry and fishing	255,680	34,423	34,423	253,944	(23,845)	-
2	Mining and quarrying	65,881	8,569	8,569	65,849	(5,422)	-
3	Manufacturing	3,968,855	285,620	285,620	3,945,489	(186,088)	(112)
4	Electricity, gas, steam and air conditioning supply	596,571	14,772	14,772	593,599	(8,525)	(157)
5	Water supply	218,347	6,466	6,466	217,995	(10,405)	(20)
6	Construction	2,200,998	857,412	857,412	2,144,205	(522,776)	(2,016)
7	Wholesale and retail trade	2,482,283	299,650	299,650	2,458,033	(195,283)	(2,811)
8	Transport and storage	335,938	41,080	41,080	334,119	(27,614)	-
9	Accommodation and food service activities	747,462	105,735	105,735	737,521	(54,926)	(15)
10	Information and communication	471,775	49,078	49,078	467,432	(35,745)	-
11	Financial and insurance activities	144,545	12,952	12,952	144,501	(8,932)	-
12	Real estate activities	2,672,751	772,078	772,078	2,619,600	(413,175)	(7,202)
13	Professional, scientific and technical activities	728,233	88,771	88,771	719,523	(56,367)	(33)
14	Administrative and support service activities	374,099	37,144	37,144	373,699	(26,838)	-
15	Public administration and defense, compulsory social security	-	-	-	-	-	-
16	Education	16,006	520	520	15,966	(450)	-
17	Human health services and social work activities	223,569	6,618	6,618	221,701	(4,249)	(2)
18	Arts, entertainment and recreation	221,919	21,609	21,609	221,570	(11,439)	(19)
19	Other services	316,667	15,426	15,426	316,435	(10,281)	(17)
20	Total	16,041,580	2,657,924	2,657,924	15,851,180	(1,602,360)	(12,403)

Source: FINREP Breakdown of loans and advances not for trading to non-financial companies by NACE codes (6): Model F 06.01

Table 33 - Collateral valuation - loans and advances (Template 7 - EBA/GL/2018/10)

		a	b	c	d	e	f	g	h	i+j	k+l
		Loans and advances									
			Performing		Non-performing						
				Of which past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due by > 90 days				
							Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 5 years	Past due > 5 years	
1	Gross carrying amount	31,696,169	27,962,816	151,817	3,733,353	768,065	2,965,288	62,438	185,699	1,285,911	1,431,240
2	Of which secured	20,937,877	18,258,884	122,969	2,678,993	616,178	2,062,815	47,489	128,117	884,554	1,002,656
3	Of which secured with immovable property	13,750,272	11,526,129	53,797	2,224,143	499,890	1,724,253	30,722	108,174	717,673	867,685
4	Of which instruments with LTV higher than 60% and lower or equal to 80%	2,975,803	2,629,832		345,971	98,386	247,586				
5	Of which instruments with LTV higher than 80% and lower or equal to 100%	3,085,874	2,836,913		248,961	81,059	167,902				
6	Of which instruments with LTV higher than 100%	4,820,338	3,968,318		852,020	69,921	782,100				
7	Accumulated impairment for secured assets	(2,254,711)	(101,237)	(4,401)	(2,153,474)	(249,836)	(1,903,638)	(21,300)	(90,041)	(804,744)	(987,553)
8	Collateral										
9	Of which value capped at the value of exposure	16,103,157	14,908,061	104,917	1,195,096	385,939	809,157	26,201	71,592	364,457	346,907
10	Of which immovable property	12,556,350	11,392,555	84,381	1,163,795	377,210	786,585	24,484	69,850	346,003	346,248
11	Of which value above the cap	21,593,735	17,746,172	108,759	3,847,563	1,195,971	2,651,591	7,062	163,404	1,324,686	1,156,439
12	Of which immovable property	17,308,208	13,561,404	87,471	3,746,804	1,168,923	2,577,882	6,599	159,427	1,257,612	1,154,244
13	Financial guarantees received	2,980,486	2,806,373	17,841	174,113	67,843	106,270	7,062	8,495	42,653	48,060
14	Accumulated partial write-off	(330,650)	(951)	-	(329,699)	(724)	(328,975)	-	-	(153,684)	(175,290)

Table 34 - Changes in the stock of non-performing loans and advances (Template 8 - EBA/GL/2018/10)

		a	b
		Gross carrying amount	Related net accumulated recoveries
1	Initial stock of non-performing loans and advances	4,173,755	
2	Inflows to non-performing portfolios	415,935	
3	Outflows from non-performing portfolios	(856,337)	
4	<i>Outflow to performing portfolio</i>	<i>(142,342)</i>	
5	<i>Outflow due to loan repayment, partial or total</i>	<i>(175,057)</i>	
6	<i>Outflow due to collateral liquidations</i>	<i>(219,802)</i>	<i>(78,181)</i>
7	<i>Outflow due to taking possession of collateral</i>	-	-
8	<i>Outflow due to sale of instruments</i>	-	-
9	<i>Outflow due to risk transfers</i>	-	-
10	<i>Outflows due to write-offs</i>	<i>(254,449)</i>	
11	<i>Outflow due to other situations</i>	<i>(64,687)</i>	
12	<i>Outflow due to reclassification as held for sale</i>	-	
13	Final stock of non-performing loans and advances	3,733,353	

Source: Internal reporting - figures as of 31/12/2019

Table 35 - Collateral obtained by taking possession and execution processes (Template 9 - EBA/GL/2018/10)

The table is not subject to publication considering the low materiality of these operations for the Group.

Table 36 - Collateral obtained by taking possession and execution processes – vintage breakdown (Template 10 - EBA/GL/2018/10)

The table is not subject to publication considering the low materiality of these operations for the Group.

Section 9 - Credit risk: use of ECAIs (art. 444 CRR)

Qualitative information

For the purpose of calculating risk-weighted credit and counterparty assets according to the supervision "standardised approach", the Group has chosen to use the following external agencies for the assessment of creditworthiness (ECAI - *External Credit Assessment Institutions*).

Table 37 - List of ECAIs used for the weighting of credit risk exposures - Standardised approach

Regulatory class	ECAI	Type of rating (1)
Exposure to Central Administrations or Central Banks	Scope Ratings	<i>Unsolicited</i>
Exposure to supervised intermediaries	Fitch Ratings Standard & Poor's Rating Services	<i>Solicited</i>
Exposure to international organizations	Fitch Ratings Standard & Poor's Rating Services	<i>Solicited</i>
Exposure to multilateral development banks	Standard & Poor's Rating Services	<i>Solicited</i>
Exposure to corporates and other parties	Cerved Rating Agency	<i>Unsolicited</i>
Covered bonds	Fitch Ratings Standard & Poor's Rating Services	<i>Solicited</i>

(1) *Solicited rating*: rating issued on request from the rated party for a consideration.
Unsolicited rating: rating issued in the absence of a request from the rated entity.

Table 38 - List of ECAIs used for weighting positions towards securitisations

Regulatory class	ECAI
Positions towards securitisations with a short-term rating	Fitch Ratings Standard & Poor's Rating Services
Positions towards securitisations other than those with a short-term rating	Fitch Ratings Standard & Poor's Rating Services

The rating of exposures is carried out according to the methods listed below, in compliance with the supervisory provisions in force:

- the ratings related to the counterparty (issuer rating) are attributed to comparable financial assets, regardless of the allocation portfolio (banking or trading);
- the ratings relating to specific transactions (issue ratings) are not extended to other exposures of the same issuer;
- the ratings of companies belonging to an economic and/or legal group are not extended to other legal entities belonging to the same group.

Quantitative information

The following tables show the distribution of exposures subject to credit and counterparty risks on the basis of the regulatory classes in which they are classified and the associated weighting factors, according to the compilation rules provided for by the prudential supervisory reports. The amounts shown take into account the risk mitigation techniques adopted.

Table 39 -Credit and counterparty risks: distribution of exposures and EAD after credit risk mitigation by regulatory asset classes

Regulatory portfolio	AMOUNTS AT 31/12/2019		
	EAD after credit risk mitigation	Exposure after credit risk mitigation	Exposure without credit risk mitigation
Standardised approach			
Central governments or central banks	9,298,996	9,331,258	8,791,442
Regional governments or local authorities	71,048	177,844	177,844
Public sector entities	245,842	619,349	619,392
Multilateral development banks	160,095	161,781	134,242
International organisations	86,201	86,270	86,270
Supervised intermediaries	2,599,594	3,148,413	4,960,461
Corporates	3,104,076	4,899,795	5,091,258
Retail exposures	420,466	1,052,332	1,258,966
Exposure secured by real estate	3,617,725	3,629,189	3,629,189
Defaulted exposures	59,885	61,042	61,042
High-risk exposures	104,542	105,454	105,454
Covered bonds	278,427	278,427	278,427
Short-term exposures to supervised companies or intermediaries	-	-	-
Exposures to undertakings for the collective investment of transferable securities (UCITS)	486,660	707,771	707,771
Equities	501,322	501,322	501,322
Other items	1,776,408	1,782,673	1,782,673
TOTAL CREDIT AND COUNTERPARTY RISK	22,811,287	26,542,921	28,185,753

Source: COREP - Credit and counterparty risk - Standardised Approach: Model C 07.00

Table 40 - Credit and counterparty risks: distribution of exposures by creditworthiness and regulatory asset class - EAD after credit risk mitigation

Regulatory portfolio	Weighting factor												Other weightings	Total
	0%	2%	10%	20%	35%	50%	70%	75%	100%	150%	250%			
Standardised approach														
Central governments or central banks	9,295,045	-	-	-	-	34	-	-	3,917	-	-	-	9,298,996	
Regional governments or local authorities	-	-	-	66,762	-	920	-	-	3,366	-	-	-	71,048	
Public sector entities	-	-	-	160,641	-	164	-	-	85,037	-	-	-	245,842	
Multilateral development banks	160,095	-	-	-	-	-	-	-	-	-	-	-	160,095	
International organisations	86,201	-	-	-	-	-	-	-	-	-	-	-	86,201	
Supervised intermediaries	-	35,454	-	1,790,645	-	408,690	-	-	364,800	5	-	-	2,599,594	
Corporates	-	-	-	107,402	5,000	588,672	63,908	-	2,325,963	13,130	-	-	3,104,076	
Retail exposures	-	-	-	-	-	-	-	420,466	-	-	-	-	420,466	
Exposure secured by real estate	-	-	-	-	3,223,964	855	-	120,748	272,159	-	-	-	3,617,725	
Defaulted exposures	-	-	-	-	-	-	-	-	53,177	6,708	-	-	59,885	
High-risk exposures	-	-	-	-	-	-	-	-	-	104,542	-	-	104,542	
Covered bonds	-	-	108,423	81,109	-	88,895	-	-	-	-	-	-	278,427	
Short-term exposures to supervised companies or intermediaries	-	-	-	-	-	-	-	-	-	-	-	-	-	
Exposures to undertakings for the collective investment of transferable securities (UCITS)	-	-	-	-	-	-	-	-	209,129	-	-	277,531	486,660	
Equities	-	-	-	-	-	-	-	-	267,658	-	233,665	-	501,322	
Other items	814,377	-	-	27,976	-	-	-	-	886,821	-	47,235	-	1,776,408	
TOTAL CREDIT AND COUNTERPARTY RISK	10,355,718	35,454	108,423	2,234,535	3,228,964	1,088,230	63,908	541,214	4,472,026	124,385	280,900	277,531	22,811,287	

Source: COREP - Credit and counterparty risk - Standardised Approach: Model C 07.00

Table 41 - Credit and counterparty risks: distribution of exposures by creditworthiness and regulatory asset class - Exposure after credit risk mitigation

Regulatory portfolio	Weighting factor												Other weightings	Total
	0%	2%	10%	20%	35%	50%	70%	75%	100%	150%	250%			
Standardised approach														
Central governments or central banks	9,311,822	-	-	-	-	15,520	-	-	3,917	-	-	-	-	9,331,258
Regional governments or local authorities	-	-	-	170,229	-	920	-	-	6,695	-	-	-	-	177,844
Public sector entities	-	-	-	366,087	-	166	-	-	253,096	-	-	-	-	619,349
Multilateral development banks	161,781	-	-	-	-	-	-	-	-	-	-	-	-	161,781
International organisations	86,270	-	-	-	-	-	-	-	-	-	-	-	-	86,270
Supervised intermediaries	-	35,454	-	2,085,897	-	602,273	-	-	424,785	5	-	-	-	3,148,413
Corporates	-	-	-	111,997	5,000	802,739	64,100	-	3,898,433	17,526	-	-	-	4,899,795
Retail exposures	-	-	-	-	-	-	-	1,052,332	-	-	-	-	-	1,052,332
Exposure secured by real estate	-	-	-	-	3,233,617	855	-	121,110	273,607	-	-	-	-	3,629,189
Defaulted exposures	-	-	-	-	-	-	-	-	53,182	7,860	-	-	-	61,042
High-risk exposures	-	-	-	-	-	-	-	-	-	105,454	-	-	-	105,454
Covered bonds	-	-	108,423	81,109	-	88,895	-	-	-	-	-	-	-	278,427
Short-term exposures to supervised companies or intermediaries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures to undertakings for the collective investment of transferable securities (UCITS)	-	-	-	-	-	-	-	-	430,240	-	-	277,531	-	707,771
Equities	-	-	-	-	-	-	-	-	267,658	-	233,665	-	-	501,322
Other items	814,377	-	-	34,241	-	-	-	-	886,821	-	47,235	-	-	1,782,673
TOTAL CREDIT AND COUNTERPARTY RISK	10,374,249	35,454	108,423	2,849,559	3,238,617	1,511,368	64,100	1,173,442	6,498,432	130,844	280,900	277,531	-	26,542,921

Source: COREP - Credit and counterparty risk - Standardised Approach: Model C 07.00

The subsidiary Banca Popolare di Sondrio (SUISSE) determines its risk position according to the prudential regulations of the country of residence, in compliance with the provisions of the current supervisory provisions. For this reason, additional weighting factors are also reported in a specific reporting item ("Other weightings") in addition to those envisaged by Community regulations. The rules for attributing exposures to the categories of regulatory assets and/or creditworthiness classes may also partially differ from those used by the Parent Company.

Section 10 - Credit risk: information on the portfolios subject to the IRB approach (art. 452 CRR)

Qualitative information

ECB authorisation and roll-out plan for internal models

On 27 May 2019, the European Central Bank authorised the Banca Popolare di Sondrio Group to adopt its internal models for the purpose of measuring the capital requirements for credit risk (Advanced IRB Approach - AIRB) relating to "Corporate" and "Retail" regulatory portfolios, with effects starting from the supervisory reporting at 30 June 2019.

The initial model validation scope includes exclusively the Parent Company Banca Popolare di Sondrio Scpa. The subsidiaries Factorit Spa and Banca Popolare di Sondrio (SUISSE) SA are included in a multi-year roll-out plan for internal models, which also envisages the extension of advanced metrics for risk exposures comprised in the "Institutions" regulatory portfolio. The subsidiaries Sinergia Seconda Srl and Banca della Nuova Terra Spa, on the other hand, are not included in the roll-out plan and, subject to future reconsideration, will continue to use the Standardised Approach on a permanent basis (known as "PPU", Permanent Partial Use perimeter).

More specifically, the Group has been authorised by ECB to use its own internal models to estimate the following risk parameters:

- PD (Probability of Default), the probability that a borrower will not be able to meet his credit commitments;
- LGD (Loss Given Default), the estimated loss rate associated with a position at the time of default of a borrower;
- EAD (Exposure at Default), an estimate of a borrower's expected credit exposure at the time of default¹¹.

General structure, uses and control/review of internal rating systems

Structure of the rating models

The models used for the calculation of PD are differentiated according to the risk segment to which the counterparty belongs, as well as the phase of the credit process in which they are applied, i.e. at the time of the request for a loan ("acceptance model") or during its subsequent monitoring ("internal behaviour model").

¹¹ The authorisation received by the Supervisory Authority only concerned the EAD model for "Retail" regulatory portfolio. The development of a similar model for "Corporate" counterparties will be included in the multi-year roll-out plan.

The associated internal rating is primarily determined through an integrated statistical model structured in modules, which rely on data from multiple sources (Internal and External Performance, Qualitative Information, Financial Statements and Standard Models). The rating obtained is subject to automatic downgrades and, where relevant, specific adjustments that depend on the economic sector to which each borrower belongs.

In the application of the model, the rating is assigned at counterparty level, also taking into account - but only for "Corporate" customers of any economic or legal ties between components of a same corporate group that could influence it. In this way, it is possible to discriminate the creditworthiness of customers based on 13 rating classes, differentiated by risk segment.

The rating automatically assigned by the system is subject to expert "validation" by the branch network at least once a year; failure to do this will lead to rating expiry, which is activated also in cases where the rating is no longer representative of the counterparty's actual risk profile or signals of deterioration in the credit quality should be observed (according to a specific set of automatic triggers for early expiry).

For "Corporate" segments, a derogation from the rating assigned by the system (a so-called "override") is also possible, but only in the event that internally regulated specific conditions are met and subject to a maximum limit of upgrades. Requests for a rating override made by the competent structures are assessed centrally by a dedicated rating desk unit operating at the Parent Company's Risk Control Department, which, after examination of the proposals, is entitled to accept, change or reject them.

The LGD calculation models are estimated starting from the discounted cash flows originated by the credit recovery activities carried out by the bank on its past non-performing exposures ("workout LGD approach"), from which the "LGS"¹² component - relating to the loss rate of non-performing positions - is then derived. For exposures other than bad loans ("*Sofferenze*"), an adjustment factor, known as "Danger rate", is applied with the aim of quantifying the probability that a counterparty might shift to bad loans and, with it, the potential evolution of its exposure in the various stages of credit deterioration that precede a legal action to recover the impaired loan. This adjustment factor is differently derived depending on the administrative status in which each credit position is classified, distinguishing between performing, past due and unlikely-to-pay loans.

The LGD parameter is differently estimated according to the characteristics of the counterparty, the type of product offered and the possible presence of collaterals supporting the credit exposures. The so-called "downturn" component is subject to a dedicated estimation procedure, which incorporates the recessive effects of the business cycle, as well as an additional prudential adjustment applied to non-performing positions which consider the length of time they have been classified in a default state. Specific components of the model add further adjustments to account for the probability that a partial write-off ("*saldo e stralcio*") on doubtful loans will occur to recover whatever possible and avoid litigation or a claw-back action is taken on bad loans.

The models for calculating the EAD provide for estimates of so-called "credit conversion factors" (CCF) to be applied to loan positions with undrawn margins¹³ compared with the credit facility

¹² Acronym of "*Loss Given Sofferenza*"

¹³ "Undrawn margin" means the positive difference between the amount of the credit facility granted and the drawn portion of the credit line at each reference date.

originally granted to the customer in order to determine the actual use at the time of default. A corrective factor is also estimated to account for the expected exposure at the time of default for credit positions which are already overdrawn (so-called "K Factor").

The rating system is subject to regular audit and internal validation to guarantee through independent analyses the reliability and performance of the risk parameter estimation models, as well as compliance with the regulatory requirements time-to-time applicable.

Comparison between internal and ECAI ratings

The 13 internal rating classes related to performing counterparties are also aggregated, for management purposes, into 6 buckets of creditworthiness (Excellent, Good, Medium, Uncertain, Bad, Very Bad) and 3 risk categories (Low Risk, Medium Risk, High Risk).

The following table shows a reconciliation with the ECAI ratings - taking as a point of reference the risk classification adopted by Moody's for the "Corporate" models and the "Small Business" segment¹⁴ in the "Retail" sector (where the reconciliation is not clear, a range of values is given).

Risk	Credit-worthiness	Corporate	Retail – Small Business
<i>Low</i>	<i>Excellent</i>	Investment grade	Investment grade
	<i>Good</i>	Investment grade	Investment / Speculative grade
<i>Medium</i>	<i>Medium</i>	Speculative grade	Speculative grade
	<i>Uncertain</i>	Speculative grade	Speculative grade
<i>High</i>	<i>Bad</i>	Speculative grade	Speculative grade
	<i>Very Bad</i>	Speculative grade	Speculative grade

Uses of the rating system

The internal rating system represents a fundamental element of the bank's credit processes and procedures. It is fully integrated with them in accordance with regulatory requirements. IRB-related risk metrics are specifically used in the following areas:

- Granting of credit and determination of decision-making powers
- Credit monitoring
- Asset quality targets
- Management and branch network reporting
- Risk-adjusted pricing
- ICAAP and Risk Appetite Framework (RAF)
- Credit policies
- Impairment.

¹⁴ For details on the management segmentation of exposures, please refer to the following paragraph entitled "Risk Segmentation".

Granting of credit and determination of the decision-making powers

Rating systems are key elements of credit analysis in the preliminary investigation of new loan applications and in the mechanism for establishing decision-making powers in matters of credit disbursement and renewal, as the competent decision-making body is, inter alia, identified according to the risk profiles of the transaction to be resolved, of the borrower and any counterparties connected to it (and related exposures), involving the use of internal parameters.

These risk factors are also assessed upon the renewal/revision of outstanding loans, allowing for automatic revision in the presence of specific solvency criteria, including maximum thresholds for the counterparty's probability of default, differentiated by risk segment.

Credit monitoring

The credit monitoring process includes an automatic predictive "early warning" system designed to detect as timely as possible potentially problematic counterparties through a set of events or indicators acting as symptoms of difficulty in order to calibrate the organisational effort in the management of anomalous positions by addressing them within dedicated "monitoring paths" - differentiated by level of risk intercepted and customer segment - and, ultimately, allowing rapid and effective intervention by the managers (where necessary).

The monitoring system is based on several indicators that act as signals of a potential deterioration in credit quality of the positions; these include changes in internal rating classes assigned to individual counterparties, as well as the existence of overdrawn past due situations, the occurrence of external prejudicial events and any credit anomalies in the Central Credit Register ("Centrale dei Rischi" database) regarding the positions under observation.

Asset quality targets

The bank adopts a system for the assignment of specific objectives to the sales network in terms of the quality of the credit disbursed. These targets, set at budgetary level for each area and branch, are aimed at minimizing the portfolio exposure in the worst rating classes in order to prevent or even mitigate the risks for the credit positions to drift to a non-performing status.

Internal reporting

On a periodic basis, the bank prepares management-level reports on evolutionary aspects of credit portfolio composition and associated risks, lending dynamics and coverage of exposures. This reporting, structured in accordance with internal risk measurement methodologies, constitutes a valuable informative support to top management and other competent corporate bodies for the related assessments and decisions in the matter. Two reporting tools for risk-based analyses around the composition of the loan portfolio, updated on a monthly basis, are also addressed to the commercial network.

Risk-adjusted pricing

To support the determination of the price levels of loans that adequately compensate the risks associated with each transaction, the bank has developed an Economic Value Added (EVA) calculation tool which is integrated within the electronic credit line system.

This measure of "value creation" can be calculated by operators, both *ex ante* (i.e. during preliminary investigation of the loan application, prior to disbursement) and *ex post* (i.e. to monitor the ongoing risk-return profile of the credit exposures), it is based on the amount of the "expected credit loss", quantified for each position based on the risk parameters produced by the rating system, aimed at facilitating the formation of spreads on risk-related loans.

ICAAP and Risk Appetite Framework (RAF)

Within the ICAAP (Internal Capital Adequacy Assessment Process), the amount of capital needs related to risks to which the Groups' credit portfolio is exposed under current and forward-looking scenarios is assessed to evaluate capital resilience, even under stressed conditions. In assessing the impacts on the Group's equity position according to the future prospects expected for operations and in the event of unfavourable economic performance, such assessments assume the use of credit risk factors resulting from internal models for the purpose of quantifying the capital absorbed by the credit risk. For stress tests, these parameters, relating to "Retail" and "Corporate" portfolios, are derived from regulatory parameters calculated through the application of so-called "satellite models", which provide values for credit risk factors that are conditioned by the macro-economic scenarios defined by the bank.

The risk-based parameters estimated with internal rating models are also integrated in the RAF structure through the periodic quantification of key metrics expressing the credit risk appetite of the bank and the Banking Group as a whole.

Credit policies

The risk parameters estimated by the system also play an important role in the definition of credit policies, expressed in the form of guidelines and operational guidelines for the commercial network, with a view to configuring the optimal credit portfolio in terms of customer segments, economic sectors and geographical areas.

These translate into qualitative-quantitative objectives in terms of composition of the credit portfolio aimed at optimising the risk-return profile, limiting the weight of riskier exposures and favouring credit reallocation to segments with lower risks and higher expected profitability; the latter are also determined on the basis of metrics estimated by the internal rating system and the measure of capital absorption calculated with IRB method.

Impairment

The lending portfolio is periodically subjected to impairment adjustments by applying the accounting concept of "Expected Credit Losses" (ECL), with the aim of identifying any losses in the economic value of the positions. The type of assessment, based on the concept of "expected

credit loss", can be of a collective or analytical nature, depending on the classification status of the debtor and the amount of the exposure.

The process of determining impairment provisions by means of a collective assessment relates to credit exposures classified as performing, past due and/or overdrawn and impaired or automatic unlikely-to-pay loans¹⁵ recently retransferred to that status and - in accordance with IFRS 9 - requires methods for calculating expected losses over the 12 months following the relevant accounting date (for Stage 1 positions) or throughout the entire residual lifetime of the exposures (for Stage 2 positions). Analytical assessment, on the other hand, is carried out for unlikely-to-pay or bad loans, unless they have a negligible amount: in fact, for the latter, standard write-down coefficients based on specific clustering are applied¹⁶.

In the impairment process, IRB-based parameters (PD, LGD, EAD) are appropriately adjusted with the intention of satisfying the requirements indicated by the accounting principles, specifically modelling the "point-in-time", "forward-looking" and "scenario-dependent" components; in particular, the parameters of PD and Danger Rate for LGD are recalibrated in a short-term perspective. The parameters for the evolution of margins and overdrawn exposures (EAD) are applied from a management perspective - in this sense, a specific model is also available for the "Corporate" segments, not based on the validated AIRB solution - net of regulatory floors. To this end, specific econometric models ("satellite models") have been set up to define the possible evolutionary dynamics of the customers' credit risk factors in correspondence with different macro-economic scenarios.

Controls over and review of rating system

The degree of reliability of the internal models adopted by the Group is monitored periodically through qualitative and quantitative controls aimed at verifying the performance and maintenance of the original methodological features, especially the calibration and stability of the models and their dynamic characteristics. These checks are conducted quarterly or more frequently, where necessary, within the Risk Control Department by the Credit Model Development Office.

The Validation Office - an organisational unit that is independent of the business functions involved in the model development and credit granting processes - is responsible for performing periodic ratification checks (second level controls). In particular, the rating system is globally subject to regular validation processes, consisting of a formalised set of activities, tools and procedures aimed at continuously testing the reliability of the results produced by the system, while maintaining its compliance with regulatory requirements, the operational needs of the company and the developments in reference markets. These evidences are represented in a special annual report presented to the Board of Directors.

The Internal Audit Department, as an independent audit function, reviews internal rating systems at least once a year, ensuring that they function properly (third-level controls), in compliance with

¹⁵ Automatic classification to unlikely-to-pay status, used by the bank for management purposes and applied to customers belonging to the "Past due and/or non-performing overdrawn" status for which the objective conditions of irregularity cease to exist as the beneficiary of a tolerance measure ("forbearance") for which the specific requirements regarding their return to performing status (with respect to the year of the "cure period" from application of the measure) are not complied with.

¹⁶ In this context, a minimum quantitative threshold is established for identifying those credit exposures which, by their nature, are subjected to purely automatic valuation processes.

the provisions of Regulation (EU) 575/2013 ("CRR"). Specifically, the Department assesses the functionality of the overall control framework over the rating system by verifying the adequacy and completeness of the activities carried out by the competent functions and the consistency and merits of the ratification results, as well as the ongoing compliance of the internal rating-based (IRB) system with applicable regulatory requirements. The results of the audits carried out are summarized in a specific report submitted annually to the Board of Directors.

Lastly, the rating systems are managed through a specific organizational process for the evaluation, classification and internal approval of the changes made, differentiated in relation to the relevance of the changes envisaged, which provides for notification obligations or requests for approval to the Supervisory Authority, in accordance with the regulatory requirements set by Regulation (EU) 529/2014.

Description of rating system

Risk segmentation

The internal segmentation process (so-called "management" or "risk segmentation") allows for a disaggregated view of all borrowers exposed to credit risk by macro-portfolios. The overall bank's credit portfolio is divided into 16 management classes that combine homogeneous counterparties in terms of characteristics, needs, complexity and amount of credit lines granted, through a deterministic process based on four dimensions: Sector of Economic Activity (code SAE), exposure size, individual turnover and legal form.

The following is a breakdown of the risk segments into which the entire lending portfolio is classified for management purposes; these are in turn grouped by three macro-categories ("Retail", "Corporate" and "Other segments").

Group	Internal segment
Retail	Individuals
	Small Economic Operators
	Small Businesses
	Retail non-profit institutions
Corporate	SMEs
	Corporate non-profit institutions
	Large enterprises
	Public enterprises
	Non-resident non-financial companies
Other segments	Other intermediaries and financial businesses
	Banks and stockbrokers
	Governments
	Public administrations (not Governments)
	Other ¹⁷

¹⁷ This aggregate includes three residual classes.

The regulatory segmentation of exposures adopted for IRB purposes is attributable to internal segmentation according to specific correspondences, summarised in the following table.

Regulatory segment	Internal segment
Administrations and central banks	
Multilateral development banks weighted at 0%	Governments
International organisations weighted at 0%	
Public sector bodies	Public administrations (not Governments)
Local authorities	
Supervised intermediaries	Other intermediaries and financial businesses Banks and stockbrokers
Individuals	Individuals
Small and medium-sized retail enterprises	Small Economic Operators Small Businesses Retail non-profit institutions
Small and medium-sized corporate enterprises	SMEs
Other corporate businesses	Large enterprises Public enterprises Non-resident, non-financial companies Corporate non-profit institutions

PD models

The internal models for assessing the riskiness of each counterparty, expressed by the respective credit rating, are defined specifically for the various management segments (or homogeneous groups of them) according to a modular approach.

The PD models are composed of elementary modules, distinguished by information source, integrated statistically or by means of correction mechanisms ("notching") with respect to previously identified summary values. The differentiation in the number and method of integration of the rating modules is a function of both the segment to which the single counterparty belongs and the phase of the credit process in which they are applied, namely the initial request for financing ("acceptance model") or its continuous monitoring ("internal behaviour model").

The "internal behaviour model" is based primarily on a series of explanatory variables from different information sources (Internal Performance, External Performance, Qualitative Questionnaire, Financial Statements and Standard Models). Other information is added to these, coming from internal databases rather than from an external Credit Bureau or relating to known "prejudicial events", leading to an automatic deterioration mechanism. Further adjustments are foreseen depending on the specific sector of the counterparty or if it belongs to a specific legal and/or economic corporate group.

The "acceptance model"¹⁸ follows the general scheme for determining the counterparty rating envisaged in the "internal behavioural model" calculation, except for the absence of the "Internal

¹⁸ Specific for "Retail" counterparties. For "Corporate" counterparties, the performance models, net of the "Internal performance" module, are also taken during the initial acceptance phase and applied in full during the credit review/renewal phase.

Performance" module and a different way of integrating components related to information acquired from external sources. The derived PD values are then recalibrated to align the average probability of default of the estimate sample to the population's reference default rate (acting as an "anchor point"). The PD parameters, broken-down into specific ranges of values, therefore determine the internal rating classes assigned to borrowers.

The rating scales are specific for homogeneous cluster segments and consist of 13 classes for performing positions and 1 class for "default" positions (i.e. credit exposures in a Bad Loans, Unlikely-to-pay or Past Due administrative status).

Rating assignment process

The process of assigning the rating to the credit counterparties included in the segments covered by internal models is divided into a series of activities.

The first involves the credit officer collecting a series of information of a quantitative or qualitative nature (such as the financial statements, where available, and the qualitative questionnaire to integrate the statistical elements of the models). This information is needed to trigger the automatic rating calculation; they are accompanied by any further indications of a behavioural or trend nature (internal and external). The rating thus determined by the system can only be changed for "Corporate" counterparties via an "expert" intervention by the operators through an "override" mechanism, which requires confirmation or refusal by the central rating desk unit before being applied.

The internal rating is assigned on ad hoc basis to borrowers when new loans are granted or existing ones are renewed, and is re-determined on a monthly basis with updated information so as to ensure full alignment with the current risk level of the customers. The monthly recalculation takes place in automatic mode, with reference to the entire population of interest, in order to monitor the evolution of the risk profile of each counterparty and of the loan portfolio as a whole, appropriately adjusting the rating if objective elements occur which imply changes in customers' creditworthiness. Rating assignment is also prudentially supplemented by automatic worsening mechanisms in the event that negative elements not processed by the models are detected.

As foreseen by the supervisory regulations, the rating automatically assigned by the system is what is known as a "validated rating", which can be used in various operating contexts, but this entails an expert-based assessment before it is used. For each new loan application or in case of review/renewal of an existing credit, the "validation" by the competent manager takes place by accepting the rating elaborated by the system; alternatively, when allowed, the manager can propose an exception to the risk assigned.

The rating class resulting from the monthly recalculation by the system does not replace the "validated rating" in force (which instead continues to be used for the purpose of quantifying the RWAs based on the AIRB approach), except in the case where the discrepancy between the two ratings - "calculated" and "validated" - is higher than a specific number of classes; in this situation, the "validated rating" lapses as it is no longer fully representative of the borrower's riskiness.

Further causes for the cancellation of the rating are envisaged: first and foremost, its natural expiry 12 months after its previous assignment. Unless an automatic rating update is provided,

branch operators are promptly notified of the expiry of the ratings assigned to the borrowers they manage, so that they can carry out a new "rating validation".

LGD models

LGD models, referring to the regulatory "Corporate" and "Retail" portfolios, are divided into two sub-categories - "Companies" and "Households" - based on different logic that characterise the credit recovery process in the event of an insolvency (e.g. types of administrative procedures performed). The following table illustrates how the management segments covered the rating system are connected to each of the two LGD models developed by the Bank.

Model	Internal segment
Companies	Small Businesses
	Retail non-profit institutions
	SMEs
	Corporate non-profit institutions
	Large enterprises
	Non-resident, non-financial companies
	Public enterprises
Households	Individuals
	Small Economic Operators

LGD models are developed following a "structured" approach that involves the identification of different modules making up the single model, each parameterised independently and then included in the final LGD calculation. This approach allows the bank to directly isolate the link between the individual modules and the risk drivers that characterise them, preserving their consistency with the different stages of the recovery of non-performing loans in a state of pre-litigation and litigation. In this sense, the approach is configured as being attributable to two macro-phases, based on distinct estimation samples:

- a LGS ("*Loss Given Sofferenza*") component, relating to the estimate of possible recoveries and losses that might occur if a credit exposure drifts to bad loans ("*Sofferenze*");
- a Danger Rate component, a coefficient that, for exposures other than bad loans, estimates the probability to be reclassified as bad loans,¹⁹ as well as the consequent evolution of the exposure following the reclassification.

To determine the final LGD parameter to be applied, other model components are also available, such as the costs - both direct and indirect - linked to credit recovery processes and the potential losses associated with the positions subject to partial write-off ("*saldo e stralcio*").

¹⁹ This component only detects counterparties that are not in a in default; for borrowers who are already classified as non-performing, the danger rate can only be 1.

Lastly, for the LGD values to duly take into account the typical adverse effects of an economic slowdown, an additional "downturn" factor is estimated.

The calculation of the LGD, both for regulatory and management purposes, is updated monthly.

No override mechanisms are allowed for the calculated LGD values.

EAD models

The EAD models relating to "Retail" counterparties, authorised for regulatory purposes by the Supervisory Authority, have been estimated on data samples for the segments used for management purposes: "Individuals", "Small Economic Operators", "Small Businesses" and "Non-Profit Institutions (Retail)", whose temporal depth is representative of different phases of the economic cycle.

The framework for determining the internal EAD parameter involves estimating two distinct components, each applicable to a specific situation:

- *CCF (Credit Conversion Factor)*, referring to exposures that have available margins with respect to the amount of the credit lines granted to the borrowers in order to estimate their actual use at the time of default;
- *K Factor*, which quantifies the potential evolution of credit exposures at the time of default on already overdue loans.

Among the relevant factors considered in the EAD models, there are data relating to each counterparty and existing credit products.

From November 2019, only for purposes related to the calculation of impairment and not subject to validation for AIRB purposes, there are also EAD models for "Corporate" counterparties, estimated on samples based on the segments used for management purposes, namely "SMEs", "Large Enterprises", "Public Enterprises", "Non-profit institutions (Corporate)" and "Non-resident, non-financial companies". Similarly to what is provided for the EAD models for the "Retail" counterparties, the two components CCF and Factor K are envisaged. On the other hand, even though the key factors considered in these models are at the counterparty and product level in this case as well, they are specific, both during selection and when included in the final group of the key variables.

The EAD calculation is updated monthly, both for regulatory and management purposes.

Also in this case, similarly to the LGD parameter, no override mechanisms are allowed for the EAD values calculated by the system.

Quantitative information

Exposure value by regulatory asset class

Table 42 - Amounts of Group's exposures by regulatory portfolio (Advanced IRB Approach)

31/12/2019						
Regulatory portfolio	Nominal exposure				EAD	Credit risk adjustments
	Total	of which: exposures in the financial statements subject to credit risk	of which: off-balance sheet exposures subject to credit risk	of which: exposures subject to counterparty risk		
Exposures to Corporates	22,903,516	10,971,286	11,917,712	14,518	12,603,821	1,309,822
- Corporates: SMEs	11,253,230	6,769,102	4,480,821	3,307	7,246,686	788,033
- Corporates: Other businesses	11,650,286	4,202,184	7,436,890	11,211	5,357,134	521,789
Retail exposures	11,561,638	8,585,965	2,973,326	2,347	10,494,684	888,877
- Retail - Secured by real estate: SMEs	1,787,386	1,742,179	45,207	-	1,776,086	113,303
- Retail - Secured by real estate: individuals	3,093,704	3,058,272	35,432	-	3,091,509	124,288
- Other Retail: SMEs	5,218,708	2,855,966	2,361,128	1,615	4,162,844	470,176
- Other Retail: individuals	1,233,219	846,734	385,752	733	1,184,806	179,182
- Other assets	228,622	82,814	145,807	-	279,439	1,927
TOTAL CREDIT AND COUNTERPARTY RISK (ADVANCED IRB METHOD)	34,465,154	19,557,250	14,891,038	16,865	23,098,504	2,198,699

Source: COREP - Credit and counterparty risks - IRB Approach: Model C 08.01

NOTE: The amounts shown in the table do not include exposures which, even if they are formally part of the first AIRB validation scope, still fall within the treatment envisaged by the Standardised Approach due to the absence of internally estimated risk parameters (PD or LGD). At 31 December 2019, they represent approximately 5% of the total exposures falling within the AIRB scope.

Key:

- **Nominal exposure:** the sum of: a) amount of the original on-balance sheet exposures calculated on positions subject to credit risk, gross of any loan adjustments and the effect of recognised credit risk mitigation techniques (CRM); b) amount of off-balance sheet exposures subject to credit risk, calculated gross of any credit risk adjustments, credit conversion factors (CCF) and the effect of CRM techniques; c) original amount of exposures relating to transactions subject to counterparty risk (e.g. derivative transactions, securities financing transactions, long-term settlement transactions)
- **EAD:** amount of the exposure in accordance with articles 166 to 168 and article 230, paragraph 1, of the CRR, calculated net of specific credit risk adjustments and after the application of credit conversion factors (CCF)

Distribution of exposures by regulatory asset class and PD class

Table 43 - Distribution of exposures by regulatory portfolio and PD class (Advanced IRB Approach) - Exposures to or guaranteed by companies

31/12/2019						
<i>Regulatory portfolio</i>	<i>PD class</i>	<i>EAD</i>	<i>Average weighting factor (%)</i>	<i>RWA</i>	<i>PD weighted average (%)</i>	<i>LGD weighted average (%)</i>
Exposures to Corporates						
- <i>SMEs</i>	from 0.00 to <0.15	514,412	14.57%	74,939	0.12%	27.05%
	from 0.15 to <0.25	574,177	16.97%	97,416	0.16%	25.75%
	from 0.25 to <0.50	1,446,208	28.71%	415,191	0.40%	24.18%
	from 0.50 to <0.75	17,923	34.12%	6,116	0.73%	23.00%
	from 0.75 to <2.50	1,705,415	44.40%	757,133	1.42%	21.96%
	from 2.50 to <10.00	1,063,852	56.32%	599,114	4.90%	20.61%
	from 10.00 to ≤100.00	1,924,699	44.47%	855,858	26.60%	44.66%
	Total	7,246,686	38.72%	2,805,767	3.54%	28.90%
- <i>Other businesses</i>	from 0.00 to <0.15	459,307	19.05%	87,508	0.12%	29.63%
	from 0.15 to <0.25	789,747	22.71%	179,329	0.16%	28.83%
	from 0.25 to <0.50	1,602,639	35.93%	575,866	0.39%	29.39%
	from 0.50 to <0.75	942	46.97%	442	0.73%	19.46%
	from 0.75 to <2.50	877,893	63.41%	556,698	1.37%	28.34%
	from 2.50 to <10.00	832,259	84.39%	702,352	4.66%	25.72%
	from 10.00 to ≤100.00	794,347	42.73%	339,425	39.50%	64.19%
	Total	5,357,134	45.58%	2,441,621	1.95%	33.74%

COREP - Credit and counterparty credit risks and free deliveries - IRB Approach to capital requirements (Breakdown of exposures by obligor grades): Model C 08.02

Table 44 - Distribution of Group's exposures by regulatory portfolio and PD class (Advanced IRB Approach) – Retail exposures

<i>Regulatory portfolio</i>	<i>PD class</i>	<i>EAD</i>	<i>Average weighting factor (%)</i>	<i>RWA</i>	<i>PD weighted average (%)</i>	<i>LGD weighted average (%)</i>	<i>Average CCF (%)</i>
Retail exposures							
<i>- Secured by real estate</i>	from 0.00 to <0.15	75,326	2.08%	1,565	0.10%	10.03%	88.24%
	from 0.15 to <0.25	274,496	2.38%	6,533	0.18%	7.51%	81.75%
	from 0.25 to <0.50	278,054	4.63%	12,869	0.32%	9.83%	86.64%
	from 0.50 to <0.75	898,374	5.91%	53,112	0.56%	6.67%	86.17%
	from 0.75 to <2.50	1,278,109	11.19%	143,025	1.32%	7.70%	86.78%
	from 2.50 to <10.00	697,909	24.99%	174,382	4.64%	8.55%	87.82%
	from 10.00 to ≤100.00	1,365,325	28.62%	390,811	26.76%	20.09%	53.43%
	Total	4,867,594	16.07%	782,297	6.39%	11.25%	81.44%
<i>- Other Retail exposures</i>	from 0.00 to <0.15	392,768	6.33%	24,859	0.11%	29.86%	64.76%
	from 0.15 to <0.25	310,138	6.23%	19,328	0.17%	20.71%	68.11%
	from 0.25 to <0.50	501,253	12.91%	64,698	0.35%	27.05%	55.73%
	from 0.50 to <0.75	454,553	13.45%	61,115	0.62%	17.98%	73.32%
	from 0.75 to <2.50	1,165,412	20.30%	236,553	1.49%	20.60%	64.47%
	from 2.50 to <10.00	914,814	23.30%	213,194	4.85%	18.83%	59.52%
	from 10.00 to ≤100.00	1,608,713	28.53%	458,887	29.52%	47.67%	51.07%
	Total	5,347,650	20.17%	1,078,634	6.11%	29.51%	61.94%
<i>- Other assets</i>	from 0.00 to <0.15	54,645	0.65%	356	0.06%	15.42%	122.64%
	from 0.15 to <0.25	36,008	1.53%	551	0.17%	15.46%	131.59%
	from 0.25 to <0.50	-	-	-	-	-	-
	from 0.50 to <0.75	91,856	3.93%	3,612	0.55%	15.50%	136.25%
	from 0.75 to <2.50	40,679	7.54%	3,069	1.28%	15.50%	135.75%
	from 2.50 to <10.00	28,109	17.47%	4,911	4.19%	15.52%	145.78%
	from 10.00 to ≤100.00	28,142	37.78%	10,631	24.87%	17.68%	128.43%
	Total	279,439	8.28%	23,129	3.12%	15.70%	131.49%

COREP - Credit and counterparty risks - IRB Approach (Breakdown of exposures by obligor grades): Model C 08.02

NOTE: The PD weighted average values (EAD) are calculated only on performing positions. The average CCF amounts are calculated by comparing the off-balance sheet exposure (EAD) after application of the credit conversion factors with the total off-balance sheet exposures before application of these factors

Actual credit risk adjustments

The table below shows the value adjustments on loans recorded in the income statement at 31 December 2019 with reference to the exposures falling within the regulatory portfolios to which the Advanced IRB Approach is applied.

Table 45 - Credit risk adjustments by regulatory portfolio (Advanced IRB Approach)

Regulatory portfolio		Credit risk adjustments
Performing	<i>Exposures to Corporates</i>	43,656
	- Corporates: SMEs	28,815
	- Corporates: Other businesses	14,841
	<i>Retail exposures</i>	46,610
	- Retail - Secured by real estate: SMEs	11,340
	- Retail - Secured by real estate: individuals	13,200
	- Other Retail: SMEs	18,650
	- Other Retail: individuals	2,496
	- Other assets	924
	Total Performing exposures	90,265
Non-performing	<i>Exposures to Corporates</i>	1,266,167
	- Corporates: SMEs	759,218
	- Corporates: Other businesses	506,949
	<i>Retail exposures</i>	842,267
	- Retail - Secured by real estate: SMEs	101,963
	- Retail - Secured by real estate: individuals	111,089
	- Other Retail: SMEs	451,526
	- Other Retail: individuals	176,686
	- Other assets	1,003
Total Non-performing exposures		2,108,434
TOTAL CREDIT RISK ADJUSTMENTS		2,198,699

Source: COREP - Credit and counterparty credit risks and free deliveries - IRB Approach to capital requirements (Breakdown of exposures by obligor grades): Model C 08.02

Comparison between PD and default rates

As part of the maintenance and monitoring of the rating models, the Group carries out an annual test to verify how the point-in-time decay rates (for the last year) relate to the so-called "anchor point" for the calibration of each model, which represents a long-term "central tendency" (i.e. an expression of a more "through-the-cycle" perspective which, according to the prudential regulations, has to be a feature of models using the IRB Approach); on the other hand, it proceeds to verify the calibration of the rating scales, checking any underestimates of the risk implicit in the PD associated with the various classes versus the default rates observed during the year.

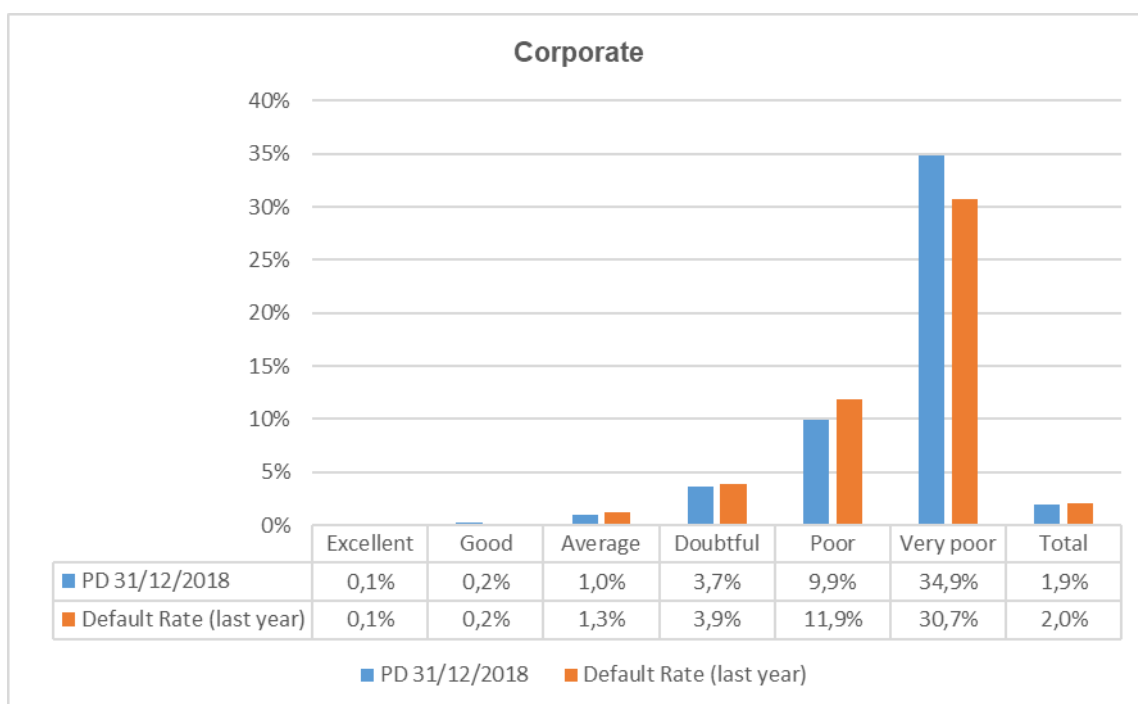
The following table shows the comparison between the long-term default rates and the default rates observed in the last year for each of the calibration segments.

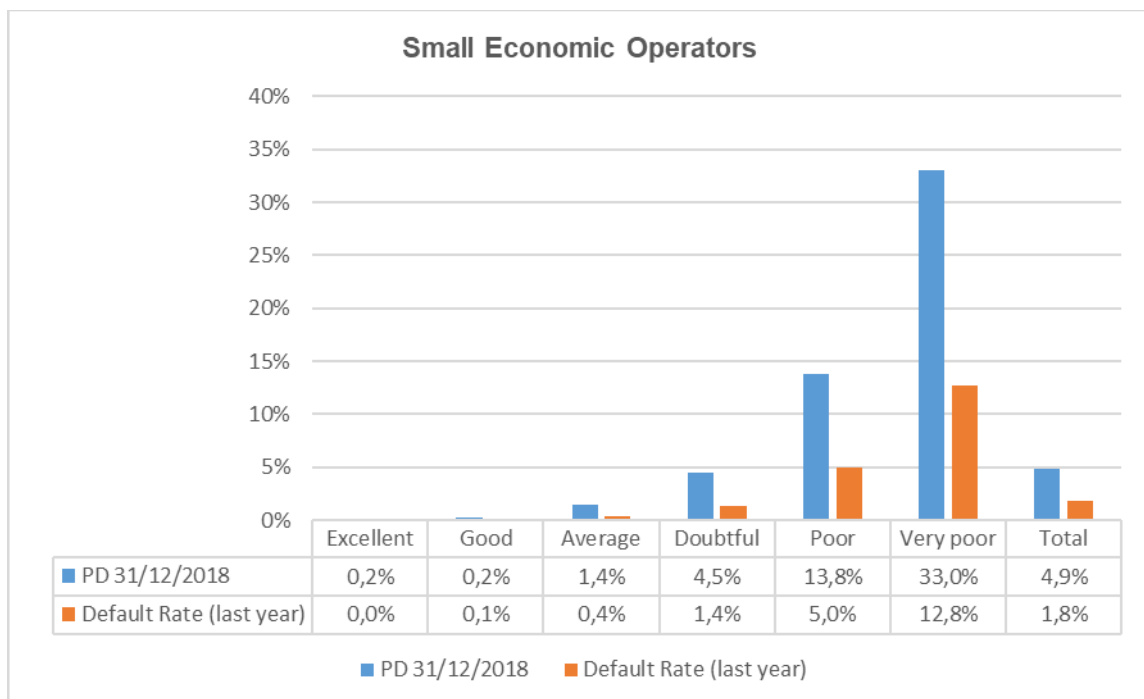
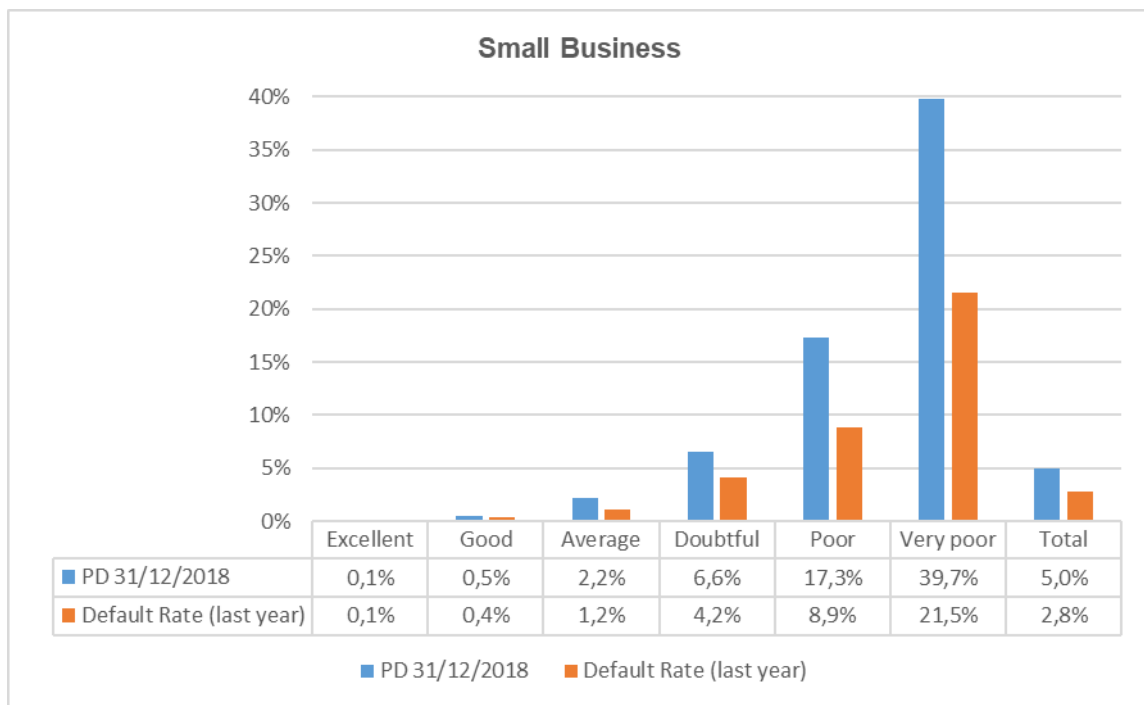
Table 46 - Comparison between calibration default rates of rating models (long-term) and default rates observed in the last year by calibration segment

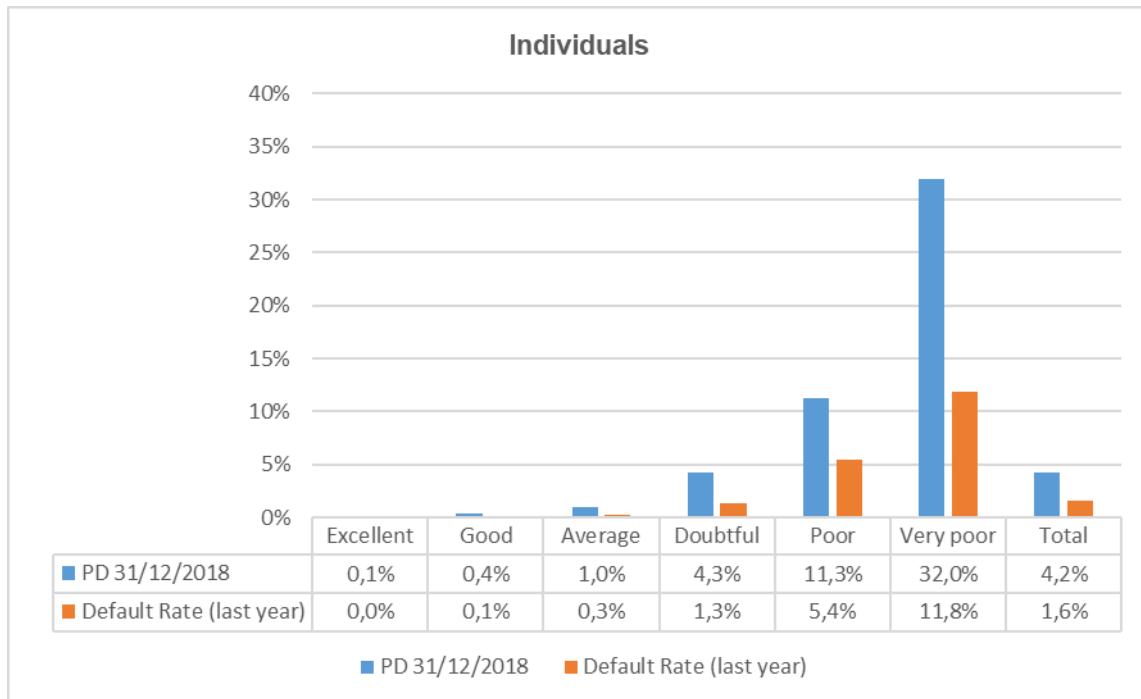
Segment	Calibration default rate (long-term)	Default rate (last year)
Corporate	4.76%	2.03%
Small Businesses	6.90%	2.75%
Small Economic Operators	5.12%	1.78%
Individuals	4.88%	2.75%

NOTE: The long-term average default rates refer to 2007-2016 annual cohorts for "Small Businesses", "Small Economic Operators" and "Individuals" segments and to 2009-2016 annual cohorts for the "Corporate" segment. The average default rates observed over the last year refer to the entire 2019 financial year.

The following graphs show the comparison between the values of the average default rates observed in the last year and the associated average values of PD at the beginning of the annual observation period, divided by calibration segment and rating category (Excellent, Good, Average, Doubtful, Poor, Very Poor) attributed to the counterparties according to their rating class.







NOTE: Last year's average default rates shown in the graphs, estimated as the straight average weighted by the number of counterparties included in each segment and rating class, refer to the observation period January-December 2019. The annual average PDs at 31 December 2018 are simple averages by number of counterparties falling into each segment and rating class.

Section 11 - Credit risk: use of risk mitigation techniques (art. 453 CRR)

Qualitative information

For the purposes of mitigating risk, the Group acquires the typical guarantees of banking operations: these principally comprise mortgages on buildings, pledges on financial instruments and unsecured guarantees. The latter principally comprise limited, general guarantees given by individuals and companies whose creditworthiness is considered adequate following a specific assessment.

The types of typical and atypical collateral most commonly used are:

- mortgage on real estate (residential and commercial) or registered movable assets;
- pledge on money and securities deposited with the Group or with third parties;
- pledge on goods and other movable assets, a "universality" (or collection) of furniture, credits and other rights concerning movable assets (patents, trademarks, intangible rights, corporate investments, insurance policies, etc.);
- assignment of loans and receivables;
- special lien.

The main forms of personal guarantees acquired by the Group include:

- guarantee;
- endorsement;
- letter of patronage;
- assumption;
- surety policy (insurance);
- credit mandate;
- collection mandate.

Guarantees received may only be valid for management purposes or they may also be recognised for prudential purposes as credit risk mitigation (CRM) instruments when calculating capital absorption. In this regard, unless otherwise required by the supervisory rules applicable to the individual Group companies, guarantees must comply with defined eligibility requirements from the moment they are created and for the entire duration; in general, a guarantee:

- must be legally valid, effective, binding on the protection provider and enforceable against third parties in all relevant jurisdictions, even in the event of the client or guarantor's insolvency (legal certainty);
- must ensure prompt realisation in the event of default, also through the adoption of techniques and procedures that allow immediate activation of recovery measures (timeliness of realisation).

To the above, more specific supervisory requirements may be added for the individual types of secured or unsecured credit protection in relation to their characteristics.

It is fundamental with regard to unsecured guarantees to check the quality of the guarantor's assets. This analysis is not limited to the initial phase of the relationship but is repeated over the life of the relationship. If the guarantor is found to be economically unsuitable, the Group reviews the relationship in order to verify the continued reliability of the borrowing counterparty.

The estimated value of collateral offered by counterparties is “discounted” on a prudent basis, having regard for the nature of the asset made available (mortgages on buildings, pledges of cash or other financial instruments, etc.).

During the periodical review of the credit relationship, or in conjunction with events relating to the loan granted and/or the protection acquired, the persistence of the original value of the guarantee and its ability to mitigate the credit risk assumed are assessed.

As mentioned, the risk mitigation effects of having additional guarantees can be considered in the calculation of the capital requirement for credit risk. As part of the standardised approach, the guarantees that are allowed contribute both to the risk weighting to be applied to the part of the exposure backed by the credit protection, and as an element that directly reduces the amount of the exposure. As part of the advanced IRB approach, the credit risk mitigation effects produced by the use of CRM techniques in estimating risk parameters are taken into account.

With regard to mortgage guarantees, the Group adopts reliable principles and standards for the valuation of properties in order to obtain realistic and detailed estimates of the value of the assets being used as collateral. There are also systems capable of ensuring the efficient management and timely evaluation of the encumbered assets, by means of a census of the mortgaged properties and expert appraisals that can be filed on specific IT procedures.

Also in order to comply with the supervisory provisions, a revaluation is carried out using statistical indexing methods at least annually for residential and commercial/instrumental assets. There are also processes for regular updating of the appraisal values of the collateral properties, especially to those operations which, in consideration of the risk profile, require constant checks and, based on their results, the preparation of any corrective measures.

By virtue of this, at the Parent Company the assessment of the properties used to protect impaired loans is updated by means of a new technical appraisal on the date that the loan is classified as non-performing and at least once a year thereafter for as long as it remains classified as an NPL. This applies to all impaired loans, with the exception of those that have a gross value of less than € 300 thousand, for which it is possible to do an index-based valuation.

Property must meet specific requirements in order to mitigate lending risk (value of the property independent of the creditworthiness of the counterparty, loan repayments independent of cash flows deriving from the asset, and residential property used directly or rented). These requirements are checked by the branches and the electronic credit application is processed for subsequent checks by the investigation office and the approval committees.

The value of security given in the form of financial instruments listed on regulated markets is automatically revised each day with reference to the quoted prices, in order to check that the cover remains within the agreed line of credit or, otherwise, to report the situation to the account managers on a timely basis.

Secured and unsecured guarantees are accepted as a subsidiary support for the credit line granted, as they are not considered as substitutes for the debtor's own repayment capacity. When acquiring, assessing, verifying and realising guarantees, suitable structural arrangements and processes are adopted to ensure that they will prevail over third parties and can be enforced, both at the time and in the future, in the event of the debtor's default. The central functions that perform the above checks are different from the functions that grant and review lending.

As part of its policy and coordination functions, the Parent Company requires the Subsidiaries to adopt suitable internal processes for the efficient management and prudent evaluation of the guarantees acquired.

Banca Popolare di Sondrio (SUISSE) adopts credit risk mitigation techniques substantially in line with those of the Parent Company. Note that lending with mortgage backing or financial collateral is long-standing practice in Switzerland: more than 80% of loans to customers granted by the subsidiary are guaranteed by mortgages, almost exclusively on residential property.

As regards Factorit's operations, mitigation to the risk assumed by the factor can be found in the techniques used to consolidate the transfer of risk versus the assigned debtor and in fragmenting it over the series of other persons or entities, a typical approach in operations of this kind. The shorter average maturity and, therefore, faster turnover of factoring loans with respect to normal banking transactions ensures a certain flexibility in the recovery of the resources invested.

In relation to personal loans repayable through the assignment of up to a fifth of one's salary or pension, granted by the subsidiary Banca della Nuova Terra, they following act as key elements to mitigate the risk assumed: i) with-recourse assignment of the credit, an arrangement in which the co-obligor required to pay the instalments is the debtor's pension fund or employer; ii) the mandatory acquisition of specific insurance coverage required by law to protect against the solvency risk of the debtor and his heirs in the event of premature death or loss of employment of the counterparties, signed directly by the company as party in the contract.

With regard to the advances paid against the contributions paid to the agricultural and agri-food sector by the European Common Agricultural Policy (CAP), credit risk is mitigated by the typical characteristic of the product, which provides for the channelling of the EU contributions due to customers by the paying agency.

The Group does not have offsetting agreements relating to on-balance sheet and off-balance sheet transactions and does not hedge transactions using credit derivatives.

Regarding concentration within the mitigations adopted for CRM purposes, the guarantees provided by private individuals, SMEs and small economic operators play a prominent role among the guarantees of a personal nature recognized as mitigation techniques. They represent 51.1% of the total eligible personal guarantees received by the Group at 31 December 2019.

Quantitative information

The following tables show the value at 31 December 2019 of the exposures covered by secured and unsecured guarantees, less the respective prudential haircuts, split by portfolio, as identified by the current prudential regulation.

The only credit risk mitigation instruments considered are those the effects of which, subject to compliance with the general and specific requirements established by the supervisory provisions and are recognized in the calculation of the capital requirement for credit risk, both in the context of the standardised approach and of the advanced IRB approach.

The exposures are shown net of the volatility adjustments required by law.

Table 47 - Credit and counterparty risks: distribution of exposures covered by collaterals and personal guarantees by regulatory asset class - Standardised approach

CREDIT AND COUNTERPARTY RISKS	Financial collaterals	Real estate collaterals	Personal guarantees and credit derivatives
Standardised approach			
Central governments or central banks	-	-	-
Regional governments or local authorities	-	-	-
Public sector entities	44	-	-
Multilateral development banks	-	-	-
International organisations	-	-	-
Supervised intermediaries	1,587,575	-	346,542
Corporates	98,134	-	178,970
Retail exposures	143,346	-	63,312
Exposures secured by real estate	-	3,629,189	-
Defaulted exposures	-	-	-
High-risk exposures	-	-	-
Covered bonds	-	-	-
Short-term exposures to supervised companies or intermediaries	-	-	-
Exposures to undertakings for the collective investment of transferable securities (UCITS)	-	-	-
Exposures in equity instruments	-	-	-
Other items	-	-	-
TOTAL	1,829,098	3,629,189	588,823

Source: COREP - Credit and counterparty risk: - Standardised Approach: Model C 07.00

Table 48 - Credit and counterparty risks: distribution of exposures covered by collaterals and personal guarantees by regulatory asset class - Advanced IRB Approach

CREDIT AND COUNTERPARTY RISKS	Financial collaterals	Real estate collaterals	Personal guarantees and credit derivatives
Internal rating-based approach (Advanced IRB)			
<i>Exposures to or guaranteed by Corporates</i>	341,893	2,725,148	2,509,755
- Corporates: SMEs	273,911	2,211,138	1,815,289
- Corporates: Other businesses	67,982	514,010	694,466
<i>Retail exposures</i>	250,660	4,974,932	1,815,669
- Retail - Secured by real estate: SMEs	765	1,503,872	258,272
- Retail - Secured by real estate: individuals	703	2,899,638	152,275
- Other Retail: SMEs	124,029	462,744	1,293,609
- Other Retail: individuals	125,163	108,677	111,513
- Other assets	-	-	-
TOTAL	592,553	7,700,080	4,325,425

Source: COREP - Credit and counterparty risks - IRB Approach: Model C 08.01

The calculation of financial collaterals includes, among other things, deposits received for repurchase agreements.

Section 12 - Counterparty credit risk (art. 439 CRR)

Qualitative information

Pursuant to the supervisory provisions, counterparty risk is the risk that the counterparty to a transaction involving certain financial instruments might default before making full settlement.

For the determination of the related Pillar 1 capital requirement, the regulation dictates specific rules for quantifying the value of exposures, while referring to the rules on credit risk for an indication of the weighting factors.

In accordance with the legislative provisions and for regulatory purposes, counterparty risk is measured for the following categories of transactions:

- OTC financial derivatives;
- SFT (Securities Financing Transactions), such as repurchase and reverse repurchase agreements on securities or commodities, lending or borrowing operations of securities or commodities and loans with margins;
- Long Settlement Transactions (LST), forward transactions in which a counterparty undertakes to deliver (or receive) a security, commodity or foreign currency against the receipt (or delivery) of cash, other financial instruments or goods with settlement on a defined contractual date, later than that established by market practice for transactions of the same kind.

The following characteristics are common to the three types mentioned above:

- they generate an exposure equal to their positive fair value;
- they have a market value that evolves over time according to the underlying market variables;
- they generate an exchange of payments or an exchange of financial instruments or goods against payments.

For the purpose of reducing the value of exposures, the recognition of specific types of contractual compensation is allowed, subject to compliance with the requirements established by the supervisory regulations; specifically:

- bilateral novation agreements for derivative contracts entered into with counterparties (i.e. written agreements on the basis of which the reciprocal positions are automatically offset, establishing a single net balance in just one new legally binding contract, which replaces the previous contracts);
- other bilateral netting agreements for derivative contracts (i.e. written agreements on the basis of which the reciprocal positions are automatically netted by establishing a single net balance, without any novation);
- bilateral netting agreements between different products (cross-product netting).

The Parent Company negotiates with specific counterparties derivative instruments governed by specific framework contracts called "International Swap and Derivatives Association (ISDA) Master Agreement". The possibility of making bilateral offsets between opposite-sign derivative transactions is guaranteed by the close-out netting clause, present both in the framework contracts stipulated with customers, and in the rules governing ISDA contracts for transactions with financial counterparties.

For most of the exposures to financial counterparties, mainly banking institutions, Credit Support Annex (CSA) collateralisation agreements have also been entered into, through which the parties undertake to deliver and receive collateral (for Banca Popolare di Sondrio, they are represented by cash in euro) to cover the risk of default by the counterparty on the uncovered position, the amount of which is restated daily on the basis of the fair value trend of the underlying derivatives.

For derivative transactions, as required by IFRS 13, the fair value of the instruments incorporates the effects of the credit risk of both the counterparty and the contracting bank. To this end, a model for the valuation of a risk component has been implemented to adjust the pure market value of the instrument. With regard to derivatives with positive mark-to-market adjustment, the additional risk component is known as the Credit Value Adjustment (CVA) and represents the potential loss associated with the counterparty credit risk, while for instruments with negative mark-to-market adjustments the Debit Value Adjustment (DVA) quantifies the Bank's default risk.

In the context of derivative transactions in place at 31 December 2019, no significant impacts are estimated on the amount of collateral guarantees pertaining to the Bank should a downgrade of its credit rating occur (downgrading).

Repurchase agreements may be subject to netting agreements governed by Global Master Repurchase Agreements (GMRA).

The management system for counterparty risk foresees that the Group's operations with the issuers of financial assets held in portfolio (bonds and similar), with banking and institutional counterparties in the context of financial relationships (e.g. repurchase agreements, derivatives, interbank deposits, spot and forward foreign exchange transactions) and with customers operating in OTC derivatives, can only take place after a dedicated credit facility has been activated, indicating the maximum risk that can be assumed on each counterparty for specific types of transaction.

In relation to the OTC derivative transactions carried out by customers (people and legal entities), the credit limit is released following a careful assessment of the financial appropriateness of the requested transactions, as well as of any guarantees that can be acquired. The request for granting the limit made by the customer follows the procedure normally used for all technical forms of credit. The riskiness of credit lines of this type always requires an in-depth study of the type of transactions that the customer intends to initiate and their purpose.

The credit limits given to counterparties of financial contracts and to issuers of debt or similar instruments held in portfolio are included in the wider scope of the operating limits granted to these counterparties/issuers, whose analysis of creditworthiness is based primarily on the ratings

(external, if any, or assigned internally), as well as on an in-depth examination of the financial and market information available.

From the management point of view, monitoring risk consists of estimating exposure metrics based on the "amount effectively granted"²⁰, suitably weighted by risk ratios linked to the creditworthiness class to which each counterparty/issuer is assigned.

The exposure to counterparties/issuers must remain within predefined limits, set both on an individual basis for the Parent Company only and on a consolidated basis. At an aggregate level, the overall operations with counterparties/issuers cannot exceed a specific "general limit", from which several granular operating limits derive, respectively expressed in terms of:

- maximum limit to the weighted exposure to the individual counterparty/issuer or group of counterparties/issuers ("Single-counterparty limit");
- maximum limit on all weighted exposures to the top 10 counterparties/issuers, individuals or groups ("Concentration limit");
- maximum limit on all exposures to counterparties/issuers belonging to the same nation, other than Italy, weighted according to the country's macro-class ("Country risk limit").

As regards the monitoring of credit limits for transactions in derivatives, their draw-down is the sum of two components: the "add-on", i.e. a given percentage of the nominal value of open positions, and the "mark to market", i.e. the replacement value of the instrument, which is continuously updated.

For reasons of prudence, the degree of use of the limits can never be less than the percentage of "add-ons" applied to existing operations.

Quantitative information

The following tables show the Group's exposure profile to counterparty risk as at 31 December 2019, with details relating to exposures in financial derivatives. At the reporting date, there are no credit derivatives outstanding.

²⁰ In operating terms, the "amount effectively granted" is the amount, measured at a specific point in time, obtained by multiplying the credit limit granted to counterparties/issuers by a corrective factor corresponding to the higher of the individual credit lines and the amount historically observed, in relation to all the credit lines granted, at a high level of statistical significance.

Table 49 - Counterparty risk: EAD values and risk weighted assets (RWA)

COUNTERPARTY RISK	EAD value (equivalent)		RWA	
	Standardised approach	Internal rating- based approach (Advanced IRB)	Standardised approach	Internal rating- based approach (Advanced IRB)
Derivative contracts and transactions with long-term settlement	112,940	16,865	45,652	9,271
SFT operations	35,484	-	731	-
<i>of which: Repurchase agreements</i>	9,324	-	208	-
<i>of which: Reverse repurchase agreements</i>	26,160	-	523	-
Total	148,424	16,865	46,383	9,271

Source: COREP - Credit and counterparty risk - Standardised Approach: Model C 07.00 and IRB Approach: Model C 08.01

The exposure at default (EAD) shown in the previous table was determined, in accordance with the provisions of the prudential supervisory provisions:

- according to the so-called "current value method" for financial derivative contracts and long-term settlement transactions, a value that approximates the cost that would have to be incurred to find another subject willing to take over the contractual obligations of the original negotiating counterparty if it proved insolvent;
- according to the so-called "Integral method" with supervisory adjustments for volatility for SFT transactions, represented by repurchase agreements.



Table 50 - Financial derivatives in the trading portfolio for supervisory purposes: notional values, gross positive and negative fair value - Contracts which are not part of settlement agreements

Contracts which are not part of settlement agreements	Governments and central banks	Banks	Financial companies	Other parties
1) Debt securities and interest rates				
- notional value		1,129,876	2,432	227,444
- positive fair value		5,963	15	5,272
- negative fair value		10,638	-	50
2) Equity securities and stock indices				
- notional value		8,000	-	11,500
- positive fair value		7,945	-	160
- negative fair value		-	-	190
3) Currency and gold				
- notional value		3,587,115	30,463	460,596
- positive fair value		7,313	50	4,919
- negative fair value		53,683	339	1,610
4) Commodities				
- notional value		18,075	-	16,421
- positive fair value		335	-	190
- negative fair value		191	-	318
5) Other				
- notional value		-	-	-
- positive fair value		-	-	-
- negative fair value		-	-	-

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table A.3



Table 51- Financial derivatives in the banking book: notional values, gross positive and negative fair value by counterparty - Contracts which are not part of settlement agreements

Contracts which are not part of settlement agreements	Governments and central banks	Banks	Financial companies	Other parties
1) Debt securities and interest rates				
- notional value		274,553	-	-
- positive fair value		-	-	-
- negative fair value		11,320	-	-
2) Equity securities and stock indices				
- notional value		-	-	-
- positive fair value		-	-	-
- negative fair value		-	-	-
3) Currency and gold				
- notional value		-	-	-
- positive fair value		-	-	-
- negative fair value		-	-	-
4) Commodities				
- notional value		-	-	-
- positive fair value		-	-	-
- negative fair value		-	-	-
5) Other				
- notional value		-	-	-
- positive fair value		-	-	-
- negative fair value		-	-	-

Source: Consolidated Financial Statements - Consolidation for supervisory purposes - Part E - Information on risks and related hedging policy - Table A-3

Section 13 - Securitisation positions (art. 449 CRR)

Qualitative information

Own securitisations

At 31 December 2019, there are no Group securitisations.

The Adriano SPV srl securitisation, which was present at 31 December 2018 by virtue of the acquisition of PrestiNuova from Banca Popolare di Vicenza S.p.A. in compulsory administrative liquidation, was closed ahead of schedule in May 2019.

Third-party securitisations

The Group holds, as an investor, exposures in securities related to traditional (not synthetic) securitisations, all of the "Senior" type deriving from third-party transactions. The investments, held for purposes other than trading, are classified for accounting purposes in "Financial assets measured at fair value" and "Financial assets measured at amortised cost". No guarantees or credit lines are provided on these issues.

Control of the risks assumed in the sector is ensured by the Parent Company Banca Popolare di Sondrio monitoring the positions taken in securities from securitisations, as part of the wider coverage of counterparty and market risks, as indicated in the previous sections.

As regards the methods of calculating risk-weighted exposures, note that the assets deriving from third-party securitisations are subject to a specific capital requirement in the context of credit and counterparty risk, determined by the Group according to the standardised approach. Since ABS securities are held without an ECAI external credit rating, a complete breakdown of segregated loans in the underlying portfolios is carried out (the so-called "look through" approach).

Covered bond and EMTN programmes

The main elements of the Covered Bond Issue Programme

During the board meetings of 14 May and 27 June 2014, the Board of Directors of Banca Popolare di Sondrio resolved to implement a Covered Bond issue programme pursuant to art. 7-bis of Law no. 130 of 30 April 1999 (as subsequently integrated and modified), of the Decree of the Ministry of Economy and Finance no. 310 of 14 December 2006, and the prudential Supervisory Provisions for banks contained in the Bank of Italy Circular no. 285 of 17 December 2013 (as subsequently integrated and modified).

The principal strategic objectives for this issue includes equipping the Parent Company with instruments that can be placed on the market, even via public transactions. In addition, the activation of instruments of this type can contribute to:

- extending the maturities of funding and therefore strengthening its correlation with the medium/long-term loans granted;
- diversifying the long-term sources of funding;
- obtaining favourable conditions, with respect to those available via the routine placement of unsecured bonds.

Covered bonds are financial debt instruments, issued by a bank ("Issuer") and mainly characterised by having an unconditional and irrevocable first demand guarantee, represented by a portfolio of prime quality loans, which is transferred to a Special Purpose Vehicle (SPV). The assets transferred (known as the "cover pool") form a separate amount of capital from that of the SPV, set up for the benefit of the bearers of the Bonds and other subjects for whom the guarantee is issued.

These Bonds are issued according to an operating scheme which envisages:

- the transfer by a bank ("transferor"), not necessarily the one issuing the bonds, to a special purpose vehicle of high credit quality assets, set up in a separate pool of funds under Law no. 130/99;
- the disbursement to the transferee company by the transferor bank or another bank, of a subordinated loan to provide the transferee with the necessary funding to purchase the assets being transferred;
- the provision by the transferee company of a guarantee in favour of the bearers of the bonds, within the limits of the segregated assets.

High credit quality assets are understood as being all those loans that comply with the selection criteria defined by the relevant legislation and contracts (so-called "eligible assets").

The multi-year Covered Bond issue programme envisaged by the bank, for a maximum amount of up to € 5 billion, has been structured according to the following operating scheme:

- the without-recourse transfer to a special purpose vehicle Popso Covered Bond Srl²¹ by Banca Popolare di Sondrio, of high credit quality assets represented by property mortgages and home purchase loans originated by the Bank; these assets are set up in segregated funds for the purposes of Law no. 130/99;
- the transfer to the transferee SPV by Banca Popolare di Sondrio as the Transferor Bank of a subordinated loan to provide the transferee with the funding needed to purchase the assets being transferred;
- the provision by the SPV of a guarantee in favour of the bearers of the covered bonds issued by the bank, within the limits of the segregated funds.

²¹ Popso Covered Bond Srl was set up as an SPV specifically for that purpose and its majority is held by Banca Popolare di Sondrio.

In this transaction, Banca Popolare di Sondrio is the Issuer. In addition to the August 2014 issue of € 500 million at a fixed interest rate of 1.375%, which expired on 5 August 2019, on 4 April 2016, a second issue of covered bonds was made, reserved for the institutional market, for a total of € 500 million (expiring on 4 April 2023 at a fixed rate of 0.75%).

Banca Popolare di Sondrio, as the transferor, has so far completed 7 assignments of eligible loans to the SPV Popso Covered Bond Srl, in line with the provisions of the framework assignment agreement signed on 30 May 2014 (as amended from time to time) and in compliance with the legislative requirements. The above transactions involved the sale of home-purchase loans to the SPV Popso Covered Bond Srl, which was simultaneously granted a subordinated loan in order to settle the sale price.

The transfer of the portfolios was notified to the customers by publication in the Official Gazette by the transferee SPV of a notice of assignment containing the general and specific selection criteria, filed at the Companies' Register; the ancillary obligations relating to the privacy legislation were also fulfilled (Legislative Decree no. 196/2003).

Moreover, the transferred customers maintain a direct operational relationship with Banca Popolare di Sondrio as the SPV has given the Issuer the role of Servicer, which involves carrying out administration and management of the assigned loans and related "servicing" (i.e. cashier and payment services). The above, in compliance with the applicable provisions, in order to minimise the commercial impact with customers and, at the same time, to optimise the operational management of the portfolio which, in fact, remains the responsibility of the Transferor Bank.

In this regard, on 5 June 2019 Fitch Ratings announced its downgrading of the long-term rating (from "BBB-" to "BB+") of the Servicer Banca Popolare di Sondrio. On 5 August 2019, this resulted in the appointment of Securitisation Services S.p.A. as the Back-up Servicer of the Programme, ready to take over from the Servicer if it is no longer able to fulfil this role.

The legislation also says that the objectives, risks - including legal and reputational risks - inherent in the Programme and the control procedures put in place have to be assessed by the supervisory and control bodies of the Issuer Bank.

In this regard, Banca Popolare di Sondrio has set up an articulated structure of controls over the Programme in order to meet the regulatory requirements; in particular, the process involves calculating and monitoring the tests required by law and contracts, checking compliance with the requirements governing the suitability of the assets assigned, preparing the reports required by the regulations and the rating agency, and performing all the related control activities. Among the various counterparts involved for various reasons, BDO Italia Spa, the independent auditing firm and "asset monitor", is responsible for verifying the tests.

All existing Covered Bond transactions show a regular trend; no critical issues emerged in 2019 with respect to what was contractually agreed.

The main characteristics of the bonds issued at 31 December 2019 are shown below:

Series and Class	Series 2
ISIN Code	IT0005175242
Issue date	04/04/2016
Maturity Date	04/04/2023

Extended maturity	04/04/2024
Value date	Euro
Amount	500,000,000
Type of rate	Fixed
Parameter	0.750%
Annual	Annual
Applicable law	Italian
Rating Agency	Fitch Ratings
Rating assigned	'AA' with negative outlook

Given that the Bank maintained all of the risks and benefits of the securitised loans, they have not been derecognised, pursuant to IAS 39M and have therefore been retained on the balance sheet.

The main elements of the EMTN Issue Programme

In addition to the consolidated Covered Bond Programme, on 6 March 2019, in London, Banca Popolare di Sondrio signed an update of its Euro Medium Term Note (EMTN) issue programme launched on 15 January 2018. Through it, Banca Popolare di Sondrio can issue "Senior Preferred", "Senior Non-Preferred" and Subordinated (Tier 2) unsecured financial instruments on the Eurobond market, intended for institutional investors, up to a maximum amount of € 5 billion.

Thanks to the EMTN Programme, the issuing bank has the possibility of having access to a wider spectrum of funding sources, ensuring adequate coverage of its financial needs.

As part of the Programme, the first placement of a Senior Preferred bond on the primary market reserved for institutional investors was successfully concluded on 28 March 2019. This is a fixed rate bond issued by the Bank for an amount of Euro 500 million maturing on 3 April 2024, with an annual coupon of 2.375% and a yield of 2.408%. Instruments of this kind have a threefold objective:

- extending the maturities of funding and therefore strengthening its correlation with the medium/long-term loans granted;
- diversifying long-term sources of funding compared with the traditional funding through bonds placed with households and some institutions;
- strengthening the MREL requirement introduced by the European Bank Recovery and Resolution Directive (BRRD).

This issue was followed, on 23 July 2019, by the placement of a subordinated Tier 2 bond on the primary market reserved for institutional investors. This is a fixed rate bond issued by the bank for an amount of Euro 200 million with 10-year maturity and call option starting from the fifth year, annual coupon of 6.25% and gross yield of 6.25%. The issue had positive effects on the Group's total capital ratio, in addition to having determined a further strengthening of the loss absorption capacity envisaged by the MREL requirement.

Quantitative information

The following tables show the exposure of the Banking Group to securities deriving from own and third-party securitisations at 31 December 2019. Evidence is also given of the issues of covered bonds outstanding on the same date and of the composition of the underlying assets transferred.

Exposures in securities from third-party securitisations

Table 52 - Exposure deriving from the main securitisation transactions of "third parties" broken down by type of securitised assets and type of exposure

Type of underlying assets/Exposures	Weighting method	On-balance sheet exposures					
		Senior		Mezzanine		Junior	
		Year-end balance	Credit risk adjustments	Year-end balance	Adjustments	Year-end balance	Credit risk adjustments
BNT Portfolio SPV Srl 15.05.2014/08.02.2042	look-through	-	-	-	-	-	-
mortgage loans		31,128	-	-	-	-	-
Alba 6 SPV 27.06.2014/25.10.2045	look-through	-	-	-	-	-	-
lease contracts		174,894	162	-	-	-	-
Sheep Cheese Finance 06.07.2018/10.07.2021	1250%	-	-	-	-	-	-
Other assets		203	-	-	-	-	-

Source: Internal reporting - figures as of 31/12/2019

For the purposes of determining prudential requirements, the ABS securities relating to the BNT Portfolio SPV Srl, Alba 6 SPV and Sheep Cheese Finance securitisations are unrated and are held by the Group for purposes other than trading. The first two are treated with the "look through" method, which provides for a detailed analysis of the items making up the portfolio underlying the acquired financial instruments. A standard weighting of 1250% is applied to the third one²².

From an accounting point of view, at 31 December 2019 the notes of the BNT Portfolio SPV Srl and Sheep Cheese Finance securitisations are classified under "Financial assets measured at fair value"; the securities of the Alba 6 SPV securitisation, on the other hand, are classified under "Financial assets measured at amortised cost".

²² From 1 January 2019 the entry into force of Regulation (EU) 2017/2401 of the European Parliament and of the Council of 12 December 2017, which amends Regulation (EU) no. 575/2013 ("CRR"), introduced changes to the prudential framework relating to securitisations. Given that the securities in portfolio at 31 December 2019 fall into the cases for which the transitional regime governed by art. 2 of the aforementioned Regulation, the previous procedures for determining the capital requirements on securitisation assets were maintained.

Covered bonds issued

Table 53 - Issue of covered bonds

Name of covered bonds / Tranche	Type of assets sold	Current rating	Original nominal value	Current nominal value
BANCA POP.DI SONDRIO 04.04.2016/04.04.2023 0.75%	residential mortgage loans	AA	500,000	500,000

Source: Internal reporting - figures as of 31/12/2019

The value and composition as at 31 December 2019 of residential mortgage loans to guarantee the covered bonds issued by Banca Popolare di Sondrio are shown below.

Table 54 - Value and composition of the portfolio of eligible assets transferred as collateral for covered bond issues

Popso Covered Bond S.r.l.	Gross exposure	Adjustments	Net exposure
Exposures in default	8,737	1,017	7,720
Not impaired exposures	1,712,165	6,771	1,705,394
TOTAL MORTGAGE LOANS TRANSFERRED	1,720,902	7,788	1,713,114
Cash reserve and other flows	486,230	-	486,230
TOTAL EXPOSURE	2,207,132	7,788	2,199,344

Source: Internal reporting - figures as of 31/12/2019

In relation to the eligible assets transferred for existing issues, there are no gains or losses on disposal during the period.

Section 14 - Operational risk (art. 446 CRR)

Qualitative information

For the purposes of quantifying the minimum requirement for operational risk, the Group adopts the so-called "Traditional Standardised Approach" (TSA). This regulatory method provides for the application of different coefficients for each of the business lines into which the last three annual observations of the income statement components constituting the so-called "Relevant Indicator" can be split, calculated in accordance with the regulatory provisions of the EU regulation.

At 31 December 2019, the adoption of this approach determined a capital requirement on a consolidated basis equal to Euro 127 million.

It should be noted that the "Relevant Indicator" for 2019 includes the contribution made by PrestiNuova S.p.A., already included in the scope of the Banking Group and absorbed by Banca della Nuova Terra S.p.A. with effect for legal purposes from 24 June 2019.

Section 15 - Liquidity risk (art. 435 CRR)

Qualitative information

The Group regularly monitors its exposure to liquidity risk and the adequacy of the related management and mitigation systems from a current, prospective and stressed perspective, using metrics calculated for both regulatory and internal purposes, the latter defined on the basis of operational specificities and the range of activities performed by the Group.

At an operational level, liquidity management is carried out by Group companies through dedicated business structures; in this context, the Parent Company acts as fund-raising preferential counterparty for its subsidiaries, intervening to cover part of their liquidity needs, as well as in the eventual use of liquidity surplus.

The liquidity reserves available to the Group are mainly held in Euro, to cover any financial requirements in this currency. These remain mainly constituted by bonds issued by the Italian Government, qualifying as "Level 1" assets for the calculation of the Liquidity Coverage Ratio (LCR); following a portfolio diversification policy, however, proprietary investments have been increased in other bond instruments issued by sovereign States - France and Spain, in particular - as well as by banks and financial companies. The Swiss subsidiary Banca Popolare di Sondrio (SUISSE), in turn, holds a bond portfolio which is mainly composed of Central Bank eligible securities, integrated by cash amounts in CHF deposited with it, aimed at counterbalancing the specific liquidity requirements.

The liquidity risks connected to derivative exposures are limited, given the risk strategy pursued which provides for a "back-to-back" hedging of all open positions related to transactions with customers. The risks associated with the concentration of funding sources are mitigated by maintaining a solid retail funding base, which is by definition adequately diversified; further significant sources of funding are represented by national and international private entities and companies, from which the Group has never had problems in raising money at market conditions, given its high reputation.

The Group also makes use of funds granted by the European Central Bank through targeted longer-term refinancing operations (T-LTRO) for a total of € 2.7 billion at 31 December 2019, of which € 1.1 billion maturing in March 2021 and € 1.6 billion maturing in December 2022.

Quantitative information

The following table shows the average value of the Liquidity Coverage Ratio (LCR) of the Group and its main aggregates, in accordance with the indications contained in the EBA/GL/2017/01 "Guidelines on the disclosure requirements for the Liquidity Coverage Ratio to complement the disclosure of liquidity risk management under Article 435 of Regulation (EU) no. 575/2013".

The LCR disclosure is published in a simplified form, as the Group opted for the specific faculty recognised by the Bank of Italy when implementing the said Guidelines by issuing the 22nd update of the "Supervisory Instructions for Banks" (Circular no. 285 of 17 December 2013) of 12 June 2018.

Table 55 - Model EU-LIQ1 - Disclosure model containing quantitative information on the LCR, which integrates article 435, paragraph 1, letter f) of Regulation (EU) 575/2013

Figures in millions of euro				
Reference quarter: Number of observations used in the average calculation:	Table of weighted amounts			
	Dec-19	Sep-19	Jun-19	Mar-19
21 LIQUIDITY RESERVE	7,625	7,485	7,818	8,233
22 TOTAL NET CASH OUTFLOWS	4,402	4,411	4,922	5,491
23 LIQUIDITY COVERAGE RATIO (%)	175%	172%	162%	152%

Source: COREP - Liquidity: Models C 76.00

NOTE: figures are calculated as a simple (unweighted) average of the end-of-month observations over the twelve months preceding the end of each quarter

The figures reported in the table above shows an increasing pattern in the average level of the Group's LCR, which over the entire period far exceeds the minimum regulatory requirement (100%). The high quality liquid assets ("HQLA"), representing the liquidity reserves that can be computed in the numerator of the coefficient, remain predominantly made up of instruments issued by eligible sovereign entities classified in the "EHQLA" category (Level 1)²³, recognised as being of extremely high liquidity and credit quality pursuant to the Commission Delegated Regulation (EU) no. 2015/61 of 10 October 2014. Net cash outflows are determined by applying the liquidity outflow and inflow adjustment factors envisaged by the regulatory provisions to all the demand liabilities and assets or those with maturity within 30 days, so as to incorporate in the calculation of the coefficient stress effects of both a systemic and idiosyncratic nature.

More generally, during the reporting period, the Group's liquidity profile has proved to be solid, both in the short term ("operational liquidity") and in the longer term ("structural liquidity"), with no breaches in the risk limits established internally and, where present, in the regulatory minimum levels (for LCR and NSFR indicators).

In examining the periodic disclosure on the trend in significant risks, having taken note of the values assumed by the LCR index and by the additional liquidity risk exposure measures described in Section 1 of this Document, the Parent Company's Board of Directors confirmed that at 31 December 2019 liquidity levels were still adequate to cope with the risks assumed by the Group and their consistency with the system of risk appetite parameters established by the Group's Risk Appetite Framework (RAF).

²³ The rules for calculating the LCR splits high quality liquid assets ("HQLA") into three categories, considered in decreasing order of liquidity: "Level 1" ("EHQLA"), "Level 2A" and "Level 2B". Gradually increasing prudential haircuts are applied to these categories, in addition to limits in terms of composition.

Section 16 - Exposures in equities not included in the trading book (art. 447 CRR)

Qualitative information

The portfolio of "Financial assets measured at fair value through profit of loss" (FVTPL) includes those equity securities and units of UCITs that are compulsorily valued at fair value according to accounting principle IFRS 9, which: a) regardless of their purpose, they do not meet the requirements for classification at amortised cost or for measurement at fair value through other comprehensive income (FVOCI), as they do not comply with the SPPI test criteria for checking the characteristics of the contractual cash flows required by the accounting standard; b) as they are not held for trading purposes, they belong to a business model with a management strategy on a fair value basis²⁴. These assets are initially recognized at their fair value, which normally corresponds to the consideration paid with the exclusion of transaction costs and income which are charged directly to the income statement.

Subsequent to initial recording, trading financial instruments are stated at their fair value at the reference date. With regard to instruments listed on official markets, fair value is calculated with reference to their official bid price at the close of trading, while the fair value of instruments not listed on official markets is determined by reference to prices supplied by information providers such as Bloomberg and Reuters. If this is not possible, estimates and valuation models that take account of market data are used, where available; these methods are based on the valuation of listed instruments with similar characteristics, calculations of discounted cash flows or models for the determination of option prices, taking into account the credit risk profile of the issuer. If data are not available to make assessments using the aforementioned models, the fair value is determined using data that cannot be observed on the market (e.g. adjusted equity or cost, if they are considered the best expression of fair value).

The income components deriving from positive or negative changes in fair value, both during the holding period of the security and upon its cancellation (due to the expiry of the contractual rights on the financial flows deriving from the asset or when the instrument is sold by transferring substantially all the risks and benefits associated with it), are recognized in specific income statement captions in the period in which they arise.

The equity instruments for which the "FVOCI option" was irrevocably exercised at the time of registration are allocated to "Financial assets measured at fair value through other comprehensive income" (FVOCI) the option envisaged by IFRS 9 which at the time of initial recognition allows the company to designate the securities at fair value with impact on equity without any possibility of subsequent reclassification.

²⁴ This business model is adopted when the Group makes decisions based on the fair values of the financial assets in the portfolio, which it manages with a view to their realisation.

These assets are initially recorded at fair value which normally corresponds to the current value of the consideration paid to acquire them. Subsequent to their initial recording, the instruments are measured at fair value at the reporting date according to the criteria for financial assets measured at fair value through profit or loss.

These comprise equities held by way of support for the core business and to encourage the development of initiatives in the territories where the Group operates. These instruments show that equities represent the majority in this portfolio.

Income and charges deriving from changes in fair value, net of the related deferred tax effect, are recognised in an equity reserve named "Valuation reserves" or "OIC reserve". When the asset is derecognised, the accumulated profit or loss is booked in an equity reserve.

The portfolio of equity investments comprises holdings in subsidiaries, associates and joint ventures, other than those classified as "financial assets measured at fair value through other comprehensive income" pursuant to IAS 28 and IFRS 11.

The equity investments in portfolio are mainly held for strategic and instrumental purposes for the banking group's business; they are therefore functional to the completion of the typical commercial offer with the aim of increasing its competitiveness and diversification. The equity investments mostly refer to consolidated minority interests in specialized entities that the Group uses to expand the range of products and/or services offered in certain operating segments (e.g. mutual funds, insurance, leases, securities brokerage, trustee sector).

Equity investments are initially recorded at cost, which normally corresponds to the current value of the price paid, supplemented by the accessory costs directly attributable to the acquisition; after initial recognition, they are valued using the equity method, determined on the basis of the value indicated in the latest approved financial statements of the investee company. The initially recorded value of each equity investment is increased or decreased in proportion to the profit or loss for the year of the company concerned, and is reduced by the amount of any dividends collected. If the solvency of an equity investment appears to have deteriorated, it is subjected to impairment testing to check if there has been any loss in value. The impairment loss is measured by the difference between the new value attributed to the equity investment and its book value. Any subsequent writebacks cannot exceed the impairment losses recorded previously.

The negative differences on initial recognition, the interest in profits or losses for the year, gains and losses on disposal and impairment losses are recorded in the "net gains (losses) on equity investments" caption of the income statement, except for "profit (loss) from disposal of subsidiaries" which are recorded under caption "Net gains on sales of investments".

Quantitative information

Table 56 - Type, carrying amount, market value and fair value of equity exposures; profits and losses from disposals and capital gains/losses

Type of exposure	Carrying amount		Fair value		Market value	Profits / losses from disposals	Gains/losses		
	Listed	Unlisted	Listed	Unlisted	Listed		recorded in BS and not in IS	of which in Common Equity Tier 1	of which in Tier 2 Capital
1) Equity securities	27,716	59,736	27,716	59,736	27,716	44,939	43,798	43,786	-
Financial assets mandatorily measured at fair value through profit and loss	-	-	-	-	-	5	-	-	-
Financial assets measured at fair value through other comprehensive income	27,716	59,736	27,716	59,736	27,716	44,934	43,798	43,786	-
2) Mutual funds	141	422,821	141	422,821	141	805	-	-	-
Financial assets mandatorily measured at fair value through profit and loss	141	422,821	141	422,821	141	805	-	-	-
3) Shareholdings	-	294,609	-	294,609	-	-	-	-	-
Total	27,857	777,166	27,857	777,166	27,857	45,744	43,798	43,786	-

Source: Processing from consolidated balance sheet items (prudential consolidation) and internal information sources - figures as at 31/12/2019

Note: "Listed" instruments refer to equity instruments valued through quotations on recognised markets.

Section 17 - Exposure to interest rate risk on positions not included in the trading book (art. 448 CRR)

Qualitative information

The interest rate risk on the banking book is the possibility that an unexpected change in market interest rates could negatively affect the economic value of equity (understood as the difference between the economic value of assets and liabilities that generate interest income) and the Group's net interest income.

In this regard, we can distinguish between:

- economic value perspective (sensitivity of equity): this identifies the risk generated by the different repricing methods and/or the misalignment of maturities between assets and liabilities in the banking book over a long-term time horizon (fair value interest rate risk");
- and current earnings perspective (sensitivity of net-interest income): this has the purpose of assessing the interest rate risk on the basis of the sensitivity of the net interest income generated by the assets and liabilities in the banking book to changes in market rates over a short-medium term horizon (cash flow interest rate risk").

As described in Section 1 "General disclosure requirement", the Asset & Liability Management (ALM) system in use at the Parent Company supports the adoption of two complementary interest rate risk measurement models: the "Sensitivity Analysis in Full Evaluation" model, for the equity sensitivity analysis, and the "Interactive Simulation" model; after a recent update, both methods are applied on the balance sheet assets and liabilities not belonging to the trading portfolio.

The "Sensitivity Analysis in Full Evaluation" model is used both in the context of the ICAAP, with the aim of quantifying the capital requirement associated with the interest rate risk on the entire financial statements, and for the purpose of measuring the degree of exposure to risk monthly.

The subsidiaries control interest rate risk on a company basis by using of monitoring techniques that are commensurate with the operations carried out and, as far as possible, the same as those used by the Parent Company.

In the methodologies used by the Parent Company, for the purpose of a more complete assessment of the interest rate risk exposure, the results are based on a specific statistical model for the treatment of "non-maturing items".

A further portion of the operations subject to modelling regards some types of loans granted by the Bank. In these operations, the borrower has an early extinction (or "pre-payment") option with respect to the contractual maturity of the loan, which can be exercised at any time. Otherwise, the individual transactions are treated according to their specific contractual characteristics, without assumptions regarding behavioural options.

Quantitative information

The tables below summarize the figures concerning the exposure of the banking group to interest rate risk detected during 2019 by the Parent Company's ALM procedure, compared with the similar measurements carried out at the end of 2018.

Effects of a change in interest rates over a twelve-month period on the future net interest income

It is specified that the results of the measurements reported below refer to hypothetical scenarios of changes in interest rates that are not homogeneous in the annual period under examination.

In particular, the scenarios used in the surveys from December 2018 to February 2019, while maintaining the intensity of changes in interest rates (200 basis points), reflect the different movements in the interest rate curves (parallel, rotary, short-term, medium-term and long-term) described in the document containing the "Standards for the interest rate risk of the banking book" published by the Basel Committee for Banking Supervision in April 2016.

The rate trend scenarios used starting from March 2019 refer instead to the set of scenarios contained in "Annex III - The standardised interest rate shock scenarios" of the "Guidelines on the management of interest rate risk arising from non-trading book activities" published on 19 July 2018 by the European Banking Authority (EBA).

On the end-of-period survey of 31/12/2019, following the resolution of the Board of Directors of 20 December 2019, the minimum level of interest rates described in the guidelines of the European Banking Authority was introduced in the rate scenarios in relation to the so-called "Supervisory Outlier Test", replacing the previous minimum level of 0%. The end-of-period survey at 31/12/2019 does not include forward contracts on exchange rates.

Table 57 - Interest rate risk exposure: change in net interest income (December 2018 - February 2019)

Risk exposure	Change in net interest income				
	28/02/2019				31/12/2018
	at period end	average	minimum	maximum	at period end
positive parallel shift	92,417	85,932	79,446	92,417	59,297
negative parallel shift	4,568	4,339	4,109	4,568	4,218
flat rotary shift	175,038	162,419	149,799	175,038	111,762
steep rotary shift	5,945	5,737	5,530	5,945	8,035
short-term positive shift	182,079	169,149	156,218	182,079	117,643
short-term negative shift	5,945	5,738	5,531	5,945	8,316
long-term positive shift	7,974	7,669	7,364	7,974	5,715
long-term negative shift	273	234	196	273	168
medium-term positive shift	15,680	15,085	14,489	15,680	11,571
medium-term negative shift	562	516	470	562	444
worst-case scenario	273	234	196	273	168

Source: Consolidated Financial Statements - Notes to the financial statements - Part E - Information on risks and related hedging policy
 - Trading portfolio for supervisory purposes - internal models and methodologies for the analysis of sensitivity

Table 58 - Interest rate risk exposure: change in net interest income (March 2019 - December 2019)

Risk exposure	Change in net interest income				
	From 31/03/2019 to 31/12/2019				31/03/2019
	at period end	average	minimum	maximum	at beginning of period
positive parallel shift	34,168	132,380	34,168	162,522	110,501
negative parallel shift	(17,665)	790	(17,665)	4,055	4,055
shock up parallel shift	21,245	119,880	21,245	149,125	98,356
shock down parallel shift	(17,659)	797	(17,659)	4,064	4,064
steepener shock shift	(13,643)	720	(13,643)	2,882	2,882
flattener shock shift	16,930	95,225	16,930	118,785	76,680
short shock up shift	22,595	119,380	22,595	149,894	97,135
short shock down shift	(17,103)	980	(17,103)	4,762	4,762
worst-case scenario	(17,665)	720	(17,665)	2,882	2,882

Source: Consolidated Financial Statements - Notes to the financial statements - Part E - Information on risks and related hedging policy
 - Trading portfolio for supervisory purposes - internal models and methodologies for the analysis of sensitivity

The “future interest margin” is understood as being the difference between the future interest income and the future interest expense, based solely on transactions outstanding at the reference date, possibly renewed with the same volumes.

Effects of a change in interest rates on net equity

It is specified that the results of the measurements reported below refer to hypothetical scenarios of changes in interest rates that are not homogeneous in the annual period under examination.

In particular, the scenarios used in the surveys from December 2018 to February 2019, while maintaining the intensity of changes in interest rates (200 basis points), reflect the different movements in the interest rate curves (parallel, rotary, short-term, medium-term and long-term) described in the document containing the "Standards for the interest rate risk of the banking book" published by the Basel Committee for Banking Supervision in April 2016.

The rate trend scenarios used starting from March 2019 refer instead to the set of scenarios contained in "Annex III - The standardised interest rate shock scenarios" of the "Guidelines on the management of interest rate risk arising from non-trading book activities" published on 19 July 2018 by the European Banking Authority (EBA).

On the end-of-period survey of 31/12/2019, following the resolution of the Board of Directors of 20 December 2019, the minimum level of interest rates described in the guidelines of the European Banking Authority was introduced in the rate scenarios in relation to the so-called "Supervisory Outlier Test", replacing the previous minimum level of 0%.

Table 59 - Interest rate risk exposure: change in net equity (December 2018 - February 2019)

Figures in thousands of euro		Change in net equity			
Risk exposure	28/0/2019				31/12/2018
	at period end	average	minimum	maximum	at period end
positive parallel shift	(46,678)	(57,107)	(67,535)	(46,678)	(72,543)
negative parallel shift	(96,503)	(97,493)	(98,483)	(96,503)	(100,134)
flat rotary shift	(203,459)	(220,577)	(237,695)	(203,459)	(242,157)
steep rotary shift	(97,512)	(98,412)	(99,312)	(97,512)	(92,428)
short-term positive shift	(152,337)	(170,679)	(189,021)	(152,337)	(200,327)
short-term negative shift	(122,387)	(123,034)	(123,681)	(122,387)	(123,572)
long-term positive shift	98,417	96,224	94,031	98,417	93,090
long-term negative shift	(98,426)	(99,231)	(100,036)	(98,426)	(101,711)
medium-term positive shift	234,182	230,598	227,015	234,182	223,200
medium-term negative shift	(122,625)	(123,172)	(123,720)	(122,625)	(124,857)
worst-case scenario	(203,459)	(220,577)	(237,695)	(203,459)	(242,157)

Source: Consolidated Financial Statements - Notes to the financial statements - Part E - Information on risks and related hedging policy
 - Trading portfolio for supervisory purposes - internal models and methodologies for the analysis of sensitivity

Table 60 - Interest rate risk exposure: change in net equity (March 2019 - December 2019)

Figures in thousands of euro		Change in net equity			
Risk exposure	From 31/03/2019 to 31/12/2019				31/03/2019
	at period end	average	minimum	maximum	at beginning of period
positive parallel shift	(32,831)	154,962	(32,831)	285,675	79,214
negative parallel shift	(101,192)	(65,321)	(142,275)	7,467	(132,491)
shock up parallel shift	(3,303)	182,788	(3,303)	313,828	105,319
shock down parallel shift	(101,195)	(65,324)	(142,276)	7,462	(132,493)
steepener shock shift	97,591	117,956	93,879	158,914	95,415
flattener shock shift	(147,242)	(33,090)	(147,242)	49,392	(59,091)
short shock up shift	(77,933)	40,711	(77,933)	80,031	28,584
short shock down shift	11,758	(24,705)	(47,442)	11,758	(41,435)
worst-case scenario	(147,242)	(65,324)	(147,242)	7,462	(132,493)

Source: Consolidated Financial Statements - Notes to the financial statements - Part E - Information on risks and related hedging policy
 - Trading portfolio for supervisory purposes - internal models and methodologies for the analysis of sensitivity

“Net equity” is understood as being the difference between the present value of assets and liabilities items in the banking book.

Section 18 - Compensation and incentive policies and practices (art. 450 CRR)

Qualitative information

With reference to the information required by art. 450 of Regulation (EU) no. 575/2013 ("CRR") on compensation and incentive policies and practices, as better specified in the EBA/GL/2015/22 guidelines on healthy compensation policies pursuant to article 74, paragraph 3, and article 75, paragraph 2, of Directive 2013/36/EU and on the disclosure pursuant to article 450 of CRR, in the summary table below references are provided to other documentation made public by the Bank in a specific section of the corporate website (<https://www.popso.it/informativa-societaria/Governo-societario-/Informativa-al-pubblico-prevista-dalla-normativa-di-vigilanza-in-tema-di-Politiche-e-prassi-di-remunerazione-e-incentivazione>) in which the disclosure requirements relating to year 2019 are already satisfied. Specific reference is therefore made to this documentation.

Table 61 - Compensation and incentive policies and practices: summary table

Reg. (EU) 575/2013 (CRR)	Description of the disclosure requirement	References to other documentation
art. 450, para. 1, letter a)	1. With regard to the institution's compensation policy and practices relating to the categories of personnel whose professional activities have a significant impact on the institution's risk profile, the institution shall publish at least the following information: a) information relating to the decision-making process followed to define the compensation policy, as well as the number of meetings held by the main body responsible for supervising compensation during the year, including, where appropriate, information on the composition and mandate of the compensation committee, the external consultant whose services were used to define the compensation policy and the role of the parties involved;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. a)
art. 450, para. 1, letter b)	b) information on the link between compensation and performance;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. b)
art. 450, para. 1, letter c)	c) the most important features of the compensation system, including information on the criteria used for performance evaluation and risk adjustment, deferral policies and attribution criteria;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. c)
art. 450, para. 1, letter d)	d) the relationships between the fixed and variable components of compensation established in accordance with article 94, paragraph 1, letter g), of Directive / 2013/36/EU;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. d)
art. 450, para. 1, letter e)	e) information on the performance evaluation criteria by which options, shares or other variable components of compensation are granted;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. e)
art. 450, para. 1, letter f)	f) the main parameters and the reasons for any variable compensation regime and any other non-monetary benefits;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. f)

art. 450, para. 1, letter g	g) aggregate quantitative information on compensation, broken down by lines of activity;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. g)
art. 450, para. 1, letter h)	h) aggregate quantitative information on compensation, broken down by senior management and staff members whose actions have a significant impact on the institution's risk profile, indicating the following elements: i. the amounts of compensation per year, divided into fixed and variable compensation, and the number of beneficiaries; ii. the amounts and forms of the variable component of the compensation, divided into cash, shares, instruments linked to the shares and other types; iii. the existing deferred compensation amounts, divided into assigned and unassigned portions; iv. the amounts of deferred compensation recognized during the year, paid and reduced through performance adjustments; v. new payments for start and end of treatment made during the year and the number of beneficiaries; iv. the amounts of termination indemnities recognized during the year, the number of relevant beneficiaries and the highest amount recognized per person;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. h)
art. 450, para. 1, letter i)	i) the number of persons remunerated with Euro 1 million or more per financial year, for compensation of between Euro 1 and 5 million divided into payment bands of Euro 500 000 and for compensation equal to or greater than Euro 5 million distributed in bands of payment of Euro 1 million;	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. i)
art. 450, para. 1, letter j)	j) at the request of the Member State or the competent authority, the total compensation of each member of the Board of Directors or senior management.	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. j)
art. 450, para. 2	2. In the case of entities that are of significant size, internal organization and nature, scope and complexity of the business, the quantitative information referred to in this article is also made available to the public to the members of the institution's management body.	"Disclosure to the public required by supervisory regulations on compensation and incentive policies and practices", para. j)

Certain non-quantitative information is further detailed in the document "Compensation policies of the Banca Popolare di Sondrio Banking Group" published on the company website at www.popso.it/assemblea2020.

Section 19 - Encumbered and unencumbered assets (art. 443 CRR)

Qualitative information

At 31 December 2019 the transactions for which the Group encumbers a part of its financial assets or those received as collateral on the reference date mainly refer to the following cases:

- "ABACO" mortgage loans pledged to guarantee refinancing operations with the European Central Bank (33.5% of the total);
- residential mortgage loans included in cover pools to guarantee outstanding covered bond issues (19.6% of the total);
- securities pledged to guarantee refinancing operations with the European Central Bank (17.5% of the total);
- mortgage loans pledged to obtain advances (12.8% of the total);
- securities pledged for repurchase agreements (5.8% of the total);
- securities pledged to associated/subsidiary companies (5.3% of the total);
- securities pledged to obtain mortgage loans from the European Investment Bank (EIB) (1.3% of the total);
- initial margin and pre-funded contribution to the guarantee fund for operations with Qualified Central Counterparties (Compensation and Guarantee Fund) (1.2% of the total);
- securities pledged for trading in derivatives on regulated markets (0.5% of the total);
- monetary guarantee deposits set up as collateral against changes in the market value of OTC derivative transactions (0.4% of the total);
- own securities pledged for the issue of cashier's cheques (0.3% of the total);
- securities pledged to the retirement and pension/assistance fund (0.2% of the total);
- other securities and assets pledged (1.7% of the total).

At 31 December 2019, the liabilities obtained by the Group for the assets subject to encumbrance are mainly composed of:

- refinancing obtained from the European Central Bank (62.4% of the total);
- funding from repurchase agreements and other advance payments (21.8% of the total);
- covered bond issues (11.6% of the total);
- mortgage loans from the European Investment Bank (EIB) (2.2% of the total);
- cashier's cheques in circulation (2.1% of the total).

Unencumbered assets mainly consist of loans to customers and banks and fixed-yield securities held in portfolio (mainly issued by Governments and Public Administrations).

The use of guarantees in the context of collateralised financing transactions normally requires that the value of the pledged assets is at all times higher than the amount of the funds raised. In particular, also as part of the Covered Bond Issuance Programme implemented by the Group, it is expected that an additional portion of the portfolio will be kept to cover the bonds issued in order to preserve a stated level of over-collateralisation. At 31 December 2019, the amount of the cover pools (made up of home-purchase loans) encumbered to guarantee outstanding issues exceeds the minimum coverage requirement of € 1,245.8 million envisaged by the current regulatory regime for maintaining the current rating of the agency in charge and the highest minimum amount of rating maintenance established on a voluntary basis within the Programme of € 935.8 million.

Quantitative information

The Group's pledged and unpledged assets at 31 December 2019 are shown below on the basis of the schedules proposed by the EBA/GL/2014/03 Guidelines on information on encumbered and unencumbered assets and by the Delegated Regulation (EU) 2017/2295 of the Commission of 4 September 2017, supplementing and implementing the provisions relating to the information on Asset Encumbrance laid down in Regulation (EU) 575/2013 ("CRR"), art. 433.

It is specified that, in application of the aforementioned technical standards, the figures shown in the tables below are based on the average values of the quarterly reports relating to the 2019 financial year.

Table 62 - Model A - Encumbered and unencumbered assets

		AMOUNTS AT 31/12/2019							
		Book value of encumbered assets	Fair value of encumbered assets	Book value of unencumbered assets	Fair value of unencumbered assets				
ITEMS		<i>of which assets with very high/high liquidity and credit quality (EHQLA/HQLA) that are notionally eligible</i>	<i>of which assets with very high/high liquidity and credit quality (EHQLA/HQLA) that are notionally eligible</i>	<i>of which assets with very high/high liquidity and credit quality (EHQLA/HQLA) that are notionally eligible</i>	<i>of which assets with very high/high liquidity and credit quality (EHQLA/HQLA) that are notionally eligible</i>				
		10	30	40	50	60	80	90	100
10	Assets of the reporting entity	9,974,604	4,960,751			32,181,997	9,236,592		
30	Equity instruments	15,442	-			575,615	29,228		
40	Fixed-yield securities	4,097,892	3,894,426	4,073,162	3,853,770	5,638,023	5,139,525	5,622,886	5,123,753
50	of which: covered bonds	63,855	40,147	63,591	39,960	204,862	123,738	208,631	126,619
60	of which: asset-backed securities	51,180	-	52,044	-	172,515	-	172,513	-
70	of which: issued by public administrations	3,566,157	3,509,270	3,538,838	3,473,870	4,888,016	4,883,152	4,858,001	4,852,860
80	of which: issued by financial companies	497,388	368,744	493,137	364,415	737,006	265,959	735,957	264,562
90	of which: issued by non-financial companies	26,006	6,641	30,238	6,610	72,545	44,174	74,404	44,732
120	Other assets	5,881,709	1,066,324			25,589,517	4,046,655		

Source: FINREP - Asset Encumbrance: Models F 32.01 Assets of the reporting entity - liquid assets

The Parent Company Banca Popolare di Sondrio and the Subsidiary BPS (SUISSE) mainly contribute to the total of the Group's encumbered assets. In absolute terms at 31 December 2019, the first one accounts for 87% of total pledged assets (90% of the corresponding liabilities); the second one, for 13% of the total assets subject to encumbrance (10% of the corresponding liabilities). The portion of encumbered assets pertaining to BPS (SUISSE) is denominated in a currency other than the euro (mainly CHF); however, there is no material exposure to exchange rate risk, since the liabilities deriving from the assets subject to encumbrance are denominated in the same currency.

The unencumbered assets mainly consist of loans (€ 23.5 billion in absolute terms at 31 December 2019), fixed-yield securities (€ 6.5 billion in absolute terms at 31 December 2019) and equity securities (€ 0.6 billion in absolute terms at 31 December 2019). These types of assets can potentially be used as guarantees within the main transactions listed above. The other unencumbered assets, amounting to approximately 1.7 billion euro in absolute terms at 31 December 2019, are considered unencumbered in the normal course of business; they are mainly attributable to the following balance sheet items: current and deferred tax assets, intangible and tangible assets, derivative operations, cash, regulatory investments and other residual assets.

Table 63 - Model B - Guarantees received

ITEMS	AMOUNTS AT 31/12/2019			
	Encumbered assets		Unencumbered assets	
	Fair value of guarantees received or of encumbered own issue fixed-yield securities		Fair value of guarantees received or own issue fixed-yield securities that could be encumbered	
	<i>of which assets with very high/high liquidity and credit quality (EHQLA/HQLA) that are notionally eligible</i>		<i>of which assets with very high/high liquidity and credit quality (EHQLA/HQLA) that are notionally eligible</i>	
	10	30	40	50
130 Guarantees received by the reporting entity	-	-	1,164,858	1,164,858
140 Loans on demand	-	-	-	-
150 Equity instruments	-	-	-	-
160 Fixed-yield securities	-	-	1,164,858	1,164,858
170 <i>of which: covered bonds</i>	-	-	-	-
180 <i>of which: asset-backed securities</i>	-	-	-	-
190 <i>of which: issued by public administrations</i>	-	-	1,164,858	1,164,858
200 <i>of which: issued by financial companies</i>	-	-	-	-
210 <i>of which: issued by non-financial companies</i>	-	-	-	-
220 Loans, receivables and advances, excluding loans on demand	-	-	-	-

230	Other guarantees received	-	-	-	-
240	Own issue fixed-yield securities other than covered bonds and asset-backed securities	-	-	-	-
241	Covered bonds and securities backed by own-issue assets not yet pledged as collateral			-	-
250	TOTAL ASSETS, GUARANTEES RECEIVED AND FIXED-YIELD SECURITIES	9,974,604	4,960,751		

Source: FINREP reporting base - Asset Encumbrance: Forms F 32.01 Assets of the reporting entity - F 32.02 Guarantees received - F 32.03 Guaranteed bonds and securities guaranteed by own-issue assets not yet pledged - liquidity data

Table 64 - Model C - Source of encumbrance

ITEMS	AMOUNTS AT 31/12/2019	
	Corresponding liabilities, contingent liabilities or loaned securities	Assets, guarantees received and own issue fixed-yield securities, other than covered bonds and asset-backed securities, encumbered
	10	30
10 Book value of selected financial liabilities	6,001,845	9,178,890

Source: FINREP - Asset Encumbrance: Models F 32.04 Source of encumbrance

NOTE: The assets with very high liquidity and credit quality (EHQLA) are the "level 1 assets" referred to in art. 416 (Reports on liquid assets), paragraph 1, second sub-paragraph, of Regulation (EU) no. 575/2013 ("CRR"). The assets with high liquidity and credit quality (HQLA) are the "level 2 assets" referred to in art. 416, paragraph 1, second sub-paragraph, of Regulation (EU) no. 575/2013 ("CRR"); the "level 2 assets" are further divided into "level 2A assets" and "level 2B assets" in accordance with Title II, Chapter 2 of the Commission Delegated Regulation (EU) of 10 October 2014

Certification of the Manager responsible for preparing the Company's accounting documents

The undersigned Maurizio Bertoletti, as Manager responsible for preparing the Company's accounting documents of Banca Popolare di Sondrio S.c.p.a., taking account of the provisions of article 154-bis, paragraph 2, of Legislative Decree 58 of 24 February 1998, certifies that the accounting information contained in this document agrees with the underlying accounting entries, records and documentation.

Sondrio, 8 April 2020

Signed Maurizio Bertoletti
Manager responsible for preparing the
Company's accounting documents



Glossary

ABS – Asset Backed Securities

Fixed-yield securities generally issued in securitisation transactions by an SPV guaranteed by portfolios of various types of assets (mortgage loans, consumer loans, receivables from credit card transactions, etc.) and intended solely to satisfy the rights incorporated in the financial instruments. The repayment of principal and the payment of interest are conditioned by the performance of the assets subject to securitisation and by any additional guarantees backing the transaction. ABS securities are divided into different tranches (senior, mezzanine, junior) based on the priority attributed to them in the repayment of principal and interest.

Add-on

Future credit exposure, determined as a percentage of the nominal value of a derivative contract.

ALM – Asset & Liability Management

System for the integrated management of assets and liabilities aimed at ensuring the management of exposure to financial risks in accordance with the set objectives and risk limits, as well as the optimisation of the risk-return profile of an intermediary with a view to monitoring interest rate risk.

Amortised cost

Accounting measurement of a financial instrument corresponding to the amount at which it is evaluated at the time of its initial recognition, net of principal repayments, increased or decreased by accumulated amortisation, and adjusted for any loss allowance or adjustment due to non-recoverability.

Business model

Management model for homogeneous portfolios of financial instruments, defined for accounting purposes in accordance with IFRS 9. It is determined to an extent that reflects the ways in which the financial instruments entered or to be entered in the financial statements are effectively managed for pursuit of the company's objectives.

Cash flow hedge

Assets to hedge the exposure to the risk of variability in financial flows, with the aim of stabilising the cash flows of the instrument hedged with the flows of the hedging instrument. The elements that can be hedged are future cash flows deriving from different types of transactions, such as variable rate loans and variable rate financing.

Collateral

Asset or group of assets to secure a financing transaction.

Common Equity Tier 1 (CET1) ratio

Prudential capital adequacy coefficient expressed by the ratio between Common Equity Tier 1 capital (CET1) and total risk exposure amount represented by risk-weighted assets (RWAs).

Contingency Funding Plan

Action plan for liquidity management in the event of liquidity stress, determining the exogenous or endogenous nature of situations of tension and defining the specific skills and responsibilities of the company functions in emergency conditions. Its main purpose is to protect the Group's assets in situations of liquidity drainage, through the preparation of crisis management strategies and procedures for finding sources of funding in the event of an emergency.

Counterbalancing Capacity

Amount of high-quality liquid assets unencumbered and eligible for central banks, which can be readily converted into cash to meet an intermediary's liquidity needs.

Credit Bureau

Database that provides updated credit information of loan applicants with the aim of evaluating their creditworthiness and reliability.

Duration

Average residual maturities of the cash flows generated by a financial instrument (capital and interest) weighted by the respective flows. In the case of fixed rate items, it also represents an indication of the average residual duration of those items. The duration of a portfolio is equal to the weighted average duration of the individual instruments that make it up.

EAD – Exposure At Default

Expected exposure at the time of insolvency of the counterparty of a risk position.

EBA – European Banking Authority

European Banking Authority. It is a regulatory body of the European Union, based in London, established by Regulation 1093/2010/EU to replace the Committee of European Banking Supervisors (in abbreviated form, "CEBS").

ECAI – External Credit Assessment Institutions

External agencies providing credit assessments, recognised by the Supervisory Authorities, which are specialised in rating services to financial institutions that are allowed to use them for measuring their regulatory capital requirements for credit risk within the Standardised Approach.

ECL - Expected Credit Loss

Average loss that is expected from a financial asset, loan or portfolio; it represents the average value of a statistical distribution of losses due to credit risk resulting from the combination of three elements: the Exposure at Default (EAD), the Probability of Default (PD) and the Loss Given Default (LGD). As required by accounting principles set by IFRS 9, it is calculated over a time horizon of 12 months for positions classified in Stage 1 and over the entire residual life of the instrument for positions classified in Stage 2 and Stage 3.

Fair value

Value for which an asset could be exchanged or a liability settled in an orderly market transaction between knowledgeable and independent parties.

Fair value option

Option introduced by IAS/IFRS to measure financial assets and liabilities that meet certain characteristics at fair value.

FVOCI – Fair Value through Other Comprehensive Income

Financial instrument (asset or liability) measured at fair value with changes recorded in a specific equity valuation reserve (the so-called "OCI reserve"), i.e. with an impact on comprehensive income. The cases envisaged by IFRS 9 for classification as FVOCI are: i) for instruments with contractual cash flows compatible with the SPPI Test (Solely Payments of Principal & Interests) established by the accounting standard, those that the bank allocates to a portfolio managed according to a "Held to Collect & Sell" (HTC&S) business model; ii) for variable-yield securities, those for which the bank makes an irrevocable designation called the "FVOCI option".

FVTPL – Fair Value Through Profit or Loss

Financial instrument (asset or liability) measured at fair value with changes recognised in the income statement. The cases envisaged in IFRS 9 for classification as FVTPL are: i) holding the instrument for trading purposes; ii) designation at fair value recorded in the income statement ("Through Profit or Loss" or TPL) at the time of initial recognition, iii) mandatory measurement at fair value for those instruments that have contractual cash flows that are incompatible with other accounting classifications envisaged by the standard, or in the event of failure to pass the SPPI Test.

Grandfathering

Capital adequacy safeguard clause. It is implemented in situations where an old rule continues to apply to certain current situations, before the final transition to the new prudential regime established by Basel 3.

HTC – Held to Collect

Business model envisaged by accounting standard IFRS 9 with the exclusive objective of holding the financial instruments classified in it in order to receive the contractual cash flows for its entire duration. Sales are deemed to be eligible only if frequent but not significant or significant but not frequent or if due to an increase in credit risk. Frequency is measured based on the number of sales made in the period, while significance is measured based on the total amount of sales compared to the portfolio at the beginning of the period.

HTC&S – Held to Collect and Sell

Business model envisaged by IFRS 9 to hold the financial instruments classified in it with the aim of receiving the contractual cash flows for the entire duration of the instrument, and of selling the instruments when the opportunity arises.

IAS/IFRS

International Accounting Standards (IAS) issued by the International Accounting Standard Board (IASB), a body in which the accounting professionals of the major countries worldwide are represented, with the European Union, the IOSCO (International Organisation of Securities Commissions) and the Basel Committee on Banking Supervision taking part as observers. This body, which inherited the legacy of the International Accounting Standards Committee (IASC), aims to promote the harmonisation of the accounting rules for the preparation of company financial statements. With the transformation of the IASC into IASB, it was decided, among other things, to call the new accounting standards "International Financial Reporting Standards" (IFRS).

ICAAP – Internal Capital Adequacy Assessment Process

Internal process to evaluate capital adequacy, as provided for by the "Pillar 2" rules of prudential supervisory regulations, which financial institutions are required to implement to determine an adequate level of internal capital to cope with all relevant risks; these may differ from those covered by the total regulatory capital requirements ("Pillar 1"), as they are part of an individual assessment - both current and prospective - that takes into account the business strategies and the evolution of the macro-economic context, also under stress conditions.

IFRS 9 (Financial instruments)

International accounting standard which, from 1 January 2018, replaced IAS 39 "Financial Instruments: Recognition and Measurement". It applies to all financial instruments that can be classified as assets and liabilities in the balance sheet, having regard to the classification and measurement criteria and the methods for determining impairment adjustments.

ILAAP – Internal Liquidity Adequacy Assessment Process

Internal process for evaluating the adequacy of the governance and management mechanisms in place to face current and prospective liquidity risks, consisting in the processes for the identification, measurement, management and monitoring of liquidity implemented by the financial institutions.

Impairment

Situation in which a financial instrument recorded in the financial statement has a higher carrying amount than what is expected to be recovered, i.e. the amount that can be collected by selling or using the asset, showing a permanent reduction in value. Financial assets that are not measured at fair value through profit or loss (FVTPL) based on the requirements of IFRS 9 are subject to impairment testing, or a process for estimating the recoverable value using a model based on loss expectations, determined on the basis of past events, current and reasonable conditions and "supportable" future forecasts. With regard to assets that do not fall within the scope of application of IFRS 9, an impairment test is carried out periodically. Where it is found an excess of carrying amount over recoverable amount, the asset would suffer a write-down to be recorded in the accounts. Intangible assets with an indefinite useful life, goodwill acquired in a business combination and, in general, any other asset showing signs of a permanent reduction in value, are submitted to impairment testing annually.

Interactive Simulation

Method of measuring the sensitivity of net interest income on the banking book to changes in market rates, which takes into account the financial characteristics of the various assets and liabilities that are part of the banking book, based on their contribution to the formation of income.

IRB – Internal Rating Based Approach

Methods based on internal ratings, which can be distinguished between a "basic" approach (FIRB, Foundation Internal Rating-Based Approach) and an "advanced" approach (AIRB, Advanced Internal Rating-Based Approach) in relation to the credit risk parameters that the banks are allowed to estimate internally. In particular, the Advanced IRB method involves internal estimation of all the main risk parameters (PD, LGD, EAD, CCF and, where required, actual maturity) used in the weighting formulas for calculating the capital requirement for credit risk. Adoption of IRB methods for the purpose of calculating capital requirements is subject to authorisation from the Supervisory Authority, after verification of compliance with a set of organisational and quantitative requirements.

LCR – Liquidity Coverage Ratio (or Liquidity Coverage Requirement)

Short-term liquidity coverage indicator determined according to Part 6 of Regulation (EU) no. 575/2013 of 26 June 2013 ("CRR") referring to the minimum proportion of highly liquid assets to be held by financial institutions to ensure their ongoing ability to meet short-term obligations. The coefficient aims to ensure that intermediaries hold an amount of high-quality liquid reserves, readily convertible into cash, sufficient to cover liquidity outflows for a period of at least 30 days, even in a scenario of particularly severe liquidity stress. The indicator is calculated as the ratio between the stock of high-quality liquid assets (HQLA) and total net cash outflows scheduled in the 30 calendar days following the observation date, determined under particularly acute stress assumptions. The parameter must always remain at or above the minimum level of 100%.

Leverage ratio

Prudential ratio introduced by the Basel 3 framework with the aim of containing the degree of financial leverage in the banking sector, which complements the traditional risk-based capital requirements with a metric based on financial aggregates not weighted for risk. It is obtained as the ratio between Tier 1 Capital and Total Exposure, the latter being the sum of on-balance and off-balance sheet exposures.

LGD – Loss Given Default

Loss rate in the event of insolvency of a borrower, determined as the ratio between the expected loss on a credit exposure due to the default of the counterparty and the estimated residual exposure at the time of default.

Mark to market

Valuation process of financial instruments based on market prices.

NSFR – Net Stable Funding Ratio (or Net Stable Funding Requirement)

Regulatory long-term liquidity indicator envisaged by the Basel 3 frameworks. It is intended as a mechanism aimed at complementing the LCR index with a view to favouring more stable and longer-term financing of assets, offsetting the incentives that banking and financial institutions would have to finance their stock of liquid assets with short-term funds that expire immediately after the 30-day horizon. The index is calculated as the ratio between the available amount of stable funding (ASF) and the required amount of stable funding (RSF). This parameter, which should always be kept equal to or greater than 100%, is structured in such a way as to ensure that long-term assets are financed with at least a minimum amount of stable liabilities in relation to the respective liquidity risk profiles.

OTC – Over The Counter

Feature of transactions in derivative instruments traded "over the counter", i.e. concluded directly between the parties without making use of an organised market.

PD – Probability of Default

Probability that a counterparty becomes insolvent within a given time horizon.

RAF – Risk Appetite Framework

Also called the "risk target system". It represents the reference framework that defines - in line with the maximum risk that can be assumed, the business model and the strategic plan - the risk appetite, tolerance thresholds, risk limits, risk governance policies and the necessary reference processes to define and implement them.

RAS – Risk Appetite Statement

A formal statement of the levels and types of risk that the company intends to take for the pursuit of its corporate strategies, as well as of the qualitative objectives in terms of prevention and management of significant risks. This expresses the "risk appetite statement" and is an integral part of the Risk Appetite Framework.

Rating

Synthetic estimate of a debtor's ability to fulfil its credit commitments issued by specialised agencies (external rating) or by the bank itself (internal rating) on the basis of aspects such as financial solvency and growth prospects.

Recovery Plan

Device provided for by the banking crisis resolution legislation aimed at preventing, through early warning signals, the occurrence of conditions of financial instability and at restoring the Group's equity and financial situation resulting from a significant deterioration. It is prepared by each credit institution subject to Directive 2014/59/EU (Bank Recovery and Resolution Directive, BRRD). The national resolution authority - for Italy, the designated body is the Bank of Italy - is responsible for preparing specific "Resolution plans" with which, if necessary, the measures to be put in place are identified in advance for each supervised entity should it prove necessary to initiate a resolution procedure for an intermediary in crisis.

REPO

Repurchase agreement.

RWA – Risk-Weighted Assets

On- and off-balance sheet assets classified and weighted on the basis of different risk-based factors according to the provisions delivered by the Regulatory and Supervisory Authorities for the calculation of solvency ratios.

Securitisation

Transaction involving the transfer of asset portfolios to a special purpose vehicle and the issue by the latter of securities with varying degrees of subordination in bearing any losses incurred on the underlying assets.

Sensitivity Analysis in Full Evaluation

Method of measuring the sensitivity of the economic value of assets to changes in market rates, in terms of the impact on the "Present value" of the assets and liabilities in the banking book by discounting all the cash flows originating from them at the rates of two different curves of yields, the current one and the one that would arise in the event of changes in rates, and comparing the results.

SREP – Supervisory Review and Evaluation Process

Prudential review and assessment process with which the Supervisory Authorities periodically assess the ICAAP of financial institutions and its results. Through the SREP the Authority: a) analyses the risk profiles of a supervised entity, individually and in an aggregate perspective, also under stress conditions, and the related contribution to systemic risk; b) evaluates its corporate governance system, the functionality of its internal bodies, its organisational structure and the internal control system; c) verifies compliance of the institution with the set of prudential rules applicable.

Stress test

Quantitative and/or qualitative techniques with which banks assess their vulnerability to exceptional but plausible events; they are expressed in assessing the effects of specific events (sensitivity analysis) or joint movements of a set of economic and financial variables on the bank's risks in the event of adverse scenarios (scenario analysis).

Subordinated loan/bond

An unsecured bond/loan characterised by a subordination clause which, in the event of liquidation of the issuer, gives the subscribers a right to repayment, but only once any privileged and general creditors have been satisfied in full.

Tier 1 ratio

Prudential capital adequacy coefficient expressed by the ratio between Tier 1 Capital and total risk exposure amount represented by risk-weighted assets (RWA).

Total Capital Ratio

Prudential capital adequacy coefficient expressed by the ratio between Total Capital and total risk exposure amount represented by risk-weighted assets (RWAs).

TSA – Traditional Standardised Approach

The standardised approach for calculating the capital requirement for operational risk, which is obtained by applying different weighting coefficients to each of the regulatory business lines to which the last three observations on an annual basis of the "Relevant Indicator" refer, as a figure representative of the volume of business operations, quantified on the basis of specific income statement components.

UCITS, AMC, SICAF, SICAV, SIM

Undertakings for the Collective Investment of Transferable Securities, Asset Management Companies, Fixed Capital Investment Companies, Variable Capital Investment Companies, Securities Brokerage Companies.

VaR – Value at Risk

Value indicating the maximum possible loss on a portfolio, with a certain level of probability and on a specific time horizon, due to the unfavourable market trend.