



Pillar 3 Report Public Disclosures Banca Popolare di Sondrio Group

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Banca Popolare di Sondrio
Società per azioni

Head Office and General Management:

piazza Garibaldi n.16 - 23100 Sondrio (SO)

Tel. 0342/528.111 – Fax 0342/528.204

Website: www.popso.it - Company website: <https://istituzionale.popso.it>

E-mail info@popso.it - Certified e-mail (PEC) postacertificata@pec.popso.it

Sondrio Companies Register no. 00053810149

Official List of Banks no. 842

Parent Company of the Banca Popolare di Sondrio Banking Group

Official List of Banking Groups under no. 5696.0

Member of the Interbank Deposit Guarantee Fund

Tax code and VAT number: 00053810149

Share capital: € 1,360,157,331; Reserves: € 1,153,959,091

(Figures approved at the Shareholders' meeting of 30 April 2022)

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

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Introduction

The “Basel III” regulatory framework transposed into the European Union regulatory system has been in force since 1 January 2014:

- 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);
- 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 investment firms;

On 7 June 2019, after the publication in the Official Journal of the European Union, the following reform package introducing significant changes to the Union's regulatory framework was issued:

- Regulation (EU) no. 876/2019 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”) ¹;
- Directive (EU) 2019/878 of the European Parliament and Council of 20 May 2019, which amends Directive 2013/36/EU on access to the activity of credit institutions and the 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”) ¹.

These measures transposed into the European Union the set of prudential reforms approved by the Basel Committee on Banking Supervision in recent years (the so-called “Basel 3” framework and subsequent developments and additions to the regulatory framework conventionally referred to as “Basel 4”). The CRR and its subsequent amendments have direct effect on the EU Member States, while the rules contained in the CRD IV and its subsequent amendments provide for their transposition into the various national laws.

The relevant regulatory framework 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 (ESA).

The prudential regime applicable to financial institutions is based on three “Pillars”.

“Pillar 1” (*Minimum prudential requirements*) imposes specific capital requirements to all supervised entities designed to cope with typical banking and finance risks, providing for alternative calculation methods characterised by different levels of complexity. This is integrated by the imposition of

¹ Except as expressly provided for by the two provisions, the “CRR II” standards have been applied since 28 June 2021, while the “CRD V” was expected to be transposed by the member states of the European Union by 28 December 2020.

constraints on excessive leverage, new requirements and supervisory arrangements for liquidity risk and the integration of provisions under the bank resolution framework (MREL-TLAC).

“Pillar 2” (*Supervisory review process*) requires banks to equip themselves with strategies and internal processes in order to verify the adequacy of both capital (ICAAP - Internal Capital Adequacy Assessment Process) and liquidity positions (ILAAP - Internal Liquidity Adequacy Assessment Process) in a current and future perspective, 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. Verifying the reliability and consistency of the results of these two processes and adopting, if necessary, appropriate corrective measures, is up to the Supervisory Authorities as part of their Supervisory Review and Evaluation Process (SREP). Increasing importance is also attributed to corporate governance structures and internal control frameworks as determining factors for the stability of individual institutions as well as of the financial system as a whole.

“Pillar 3” (*Market discipline*) establishes specific 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, key 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.

With the issuance of the CRR II Regulation, public disclosure requirements provided for by the “Pillar 3” of prudential regulations have undergone a thorough revision. New publication requirements, effective from 28 June 2021, were detailed in the Commission Implementing Regulation (EU) 2021/637 of 15 March 2021, published on 21 April 2021 in the Official Journal of the European Union, which established innovative technical standards of implementation regarding the publication of information to the public by entities.

The measure implemented with the force of law the draft implementing technical standards drawn up by the European Banking Authority (EBA) aimed at a comprehensive review of the framework for fulfilling “Pillar 3” obligations, in execution of the amendments to the set of rules provided for by CRR II. The measure (ITS/2020/04) instituted a new organic set of rules governing the models for the publication of “Pillar 3” disclosures, aimed at rationalising the existing regulatory framework while increasing the level of clarity and standardisation of the disclosures to be published². The new framework has provided an integrated, comprehensive and uniform set of rules, formats and schedules with the objective of ensuring high quality and comparable public disclosures.

The templates and tables provided are applied according to the entity's classification in terms of size and complexity. From the reporting of 30 June 2021 Banca Popolare di Sondrio Group publishes its information in adherence to the aforementioned Implementing Regulations.

² The new technical standards developed by the EBA replaced the uniform disclosure models included in a number of previous ones: a) regulatory technical standards (RTS) and implementing technical standards (ITS) issued by the European Commission on public disclosure of information regarding own funds, leverage, capital buffers, committed and uncommitted balance sheet assets and systemically important indicators; b) guidelines issued by the EBA on disclosure requirements under Part Eight of the CRR (mainly applicable to systemically important institutions), on liquidity coverage ratio (LCR) disclosures as well as on disclosure requirements regarding entities' remuneration policies, systemically important indicators, impaired exposures and exposures subject to concession measures.

Following the latest revision of the “Pillar 3” regulatory framework, public disclosure obligations by entities are now 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), as amended by Regulation (EU) 2019/876 (“CRR II”);
- the Commission Implementing Regulation (EU) 2021/637 of 15 March 2021 laying down implementing technical standards with regard to the publication of information to the public;
- the Bank of Italy Circular no. 285 of 17 December 2013, Part Two “Application in Italy of the CRR”, Chapter 13 “Public disclosures”;
- the following guidelines issued by the EBA, which have remained in force:
 - EBA/GL/2014/14 Guidelines on the materiality, proprietary, confidentiality and on disclosure frequency under articles 432, paragraphs 1 and 2, and 433 of the CRR;
 - EBA/GL/2018/01 Guidelines on uniform disclosures under article 473-bis of the CRR as regards the transitional arrangements for mitigating the impact of the introduction of IFRS 9 on own funds.

Within the context created by the spread of the COVID-19 pandemic, the following additional regulations were issued:

- EU Regulation 2020/873 of 24 June 2020 (CRR Quick-fix), amending Regulations (EU) no. 575/2013 and (EU) 2019/876 with regard to certain adjustments in response to the pandemic (CRR Quick-fix), some relating to the public disclosure requirements governed by those provisions.
- the following Guidelines issued by the EBA:
 - EBA/GL/2020/07 Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis;
 - EBA/GL/2020/11 Guidelines on supervisory reporting and disclosure requirements in compliance with the CRR ‘quick fix’ in response to the COVID-19 pandemic, which provided guidance until the entry into force of the *reporting framework v3.0*³ and Implementing Regulation (EU) 2021/637⁴;

³ New harmonised supervisory reporting schemes effective from 30/06/2021.

⁴ The Guidelines have provided guidance:

- a) for the purposes of calculating the leverage ratio: i) the temporary exclusion of exposures to central banks from the calculation of the measure of an entity's total exposure (Article 500-ter CRR); ii) the anticipated entry into force, compared to the provisions of CRR II, of the regulatory treatment of purchases and sales of “standardised contracts” (so-called regular-way) pending regulation (Article 500-quinquies of the CRR);
- b) for the purposes of calculating capital requirements for credit risk, the more favourable prudential treatment provided for SMEs, for infrastructure exposures for loans to pensioners and employees (with permanent contract) secured by the pension or salary of the borrower (Articles 123, 501 and 501-bis of the CRR);
- c) for the purposes of reporting related to own funds: (i) the introduction of a temporary prudential filter for unrealised gains and losses on financial assets measured at fair value with an impact on other comprehensive income (FVOCI) to counterparties referred to in Articles 115, para. 2 and 116 para. 4 of the CRR (Article 468 of the CRR); ii) the amendments to the transitional arrangements for mitigating the impact of IFRS 9 on Common Equity Tier 1 capital (CET1) which provide, inter alia, for an increase in the percentage of expected losses to be reinstated in the amount of own funds and the extension of the transitional period by two years (Article 473-bis of the CRR).

- EBA/GL/2020/12 Guidelines amending the Guidelines EBA/GL/2018/01 on uniform disclosures under article 473-bis of the CRR on the transitional period for mitigating the impact of the introduction of IFRS 9 on own funds to ensure compliance with the CRR ‘quick fix’ in response to the COVID-19 pandemic ⁵;

The Guidelines, issued by the EBA in response to the epidemiological emergency, were implemented by the Bank of Italy in national law with a communication dated 8 September 2020.

With these Public Disclosures, Banca Popolare di Sondrio Group (also referred to as the “Group”) intends to fulfil the disclosure requirements envisaged in the Pillar 3 legislation mentioned above. The frequency of disclosure by the Group conforms to the rules dictated for the category of listed “large institutions” by article 433-bis of CRR/CRR II.

This document has been prepared by Banca Popolare di Sondrio, the Parent company, on a consolidated basis with reference to the prudential scope of consolidation and is available in the “*Investor Relations*” section of the Bank website (<https://istituzionale.popso.it>), sub-section “*Pillar 3*”. The document also contains the attestations:

- pursuant to art. 154-bis, para. 2, of Legislative Decree 58/98 (Consolidated Law on Finance, “TUF”) by the Manager responsible for preparing the accounting documents of the Parent Company Banca Popolare di Sondrio;
- referred to in article 435, paragraph 1, points e) and f) of the CRR/CRR II.

In compliance with article 434 of the CRR/CRR II (“Means of disclosure”), if similar information have already been published in other equivalent documents, reference is made to the document in which such piece of information is disclosed.

* * *

NOTE:

All the amounts indicated in the sections of this Disclosure, except where expressly indicated, are shown in thousands of euro. Any failure to reconcile between the figures shown in this document depends solely on rounding.

Any significant changes with respect to previous publication periods are mentioned in this document.

In order to provide only significant information for users, the publication of data or information considered irrelevant or not applicable to the Group is omitted. In such cases, the omitted elements and the reasons for the publication omission are specified.

⁵ The Guidelines amend the EBA/GL/2018/01 Guidelines to take into account the impacts on own funds of the regulatory amendments introduced by the CRR Quick-fix. The main amendments relate to: i) the extension of the disclosure period due to the extension of the transitional arrangements for IFRS 9 and the introduction of additional qualitative disclosure requirements aimed at covering decisions taken as part of the discretions provided for in article 473-bis of the CRR, as amended by the CRR Quick-fix; ii) the introduction of new disclosure requirements relating to the transitional prudential treatment provided for unrealised gains and losses on exposures to certain counterparties measured at fair value with an impact on other comprehensive income (FVOCI).

Summary of information published in accordance with CRR/CRR II requirements

The following summary table links the articles of Regulation (EU) no. 575/2013 ("CRR"), as amended by (UE) Regulation no. 876/2019 ("CRR II") to the relevant disclosure requirements for Banca Popolare di Sondrio Group, integrated by the respective disclosure frequency and the sections of this document in which qualitative or quantitative information required by the "Pillar 3" regulations are reported with regard to the Group's situation as at 31 December 2021.

Art. CRR/ CRR II	Article description	Frequency of publication	Section Public Disclosures as at 31 December 2021
Art. 431	Disclosure requirements and policies	-	
Art. 432	Non-material, proprietary or confidential information	-	
Art. 433	Frequency and scope of disclosures	-	
Art. 433-bis	Disclosure by large institutions	-	
Art. 433-ter	Disclosure by other institutions	-	
Art. 433-quater	Disclosure by small and non-complex entities	-	
Art. 434	Means of disclosure	-	
Art. 435	Disclosure of risk management objectives and policies	Annual	2 - Disclosure of risk management objectives and policies
Art. 436	Disclosure of the scope of application	Quarterly/ Half-yearly <i>Scope of consolidation</i>	1 - Scope of application
		Annual <i>Full art. 436</i>	
Art. 437	Disclosure of own funds	Half-yearly <i>lett. a)</i>	4 - Disclosure of own funds
		Annual <i>Full art. 437</i>	
Art. 437-bis	Disclosure of own funds and eligible liabilities	Annual	Annual disclosure requirement expected from 01/01/2024
Art. 438	Disclosure of own funds requirements and risk-weighted exposure amounts	Quarterly <i>lett. d) and h)</i>	3 - Disclosure of key metrics and overview of risk-weighted exposure amounts
		Half-yearly <i>lett. e)</i>	11 - Disclosure of the use of the IRB approach to credit risk
		Annual <i>Full art. 438</i>	12 - Disclosure on specialised finance and equity exposures under the simple weight approach

Art. CRR/ CRR II	Article description	Frequency of publication	Section Public Disclosures as at 31 December 2021
			13 - Disclosure of exposures to counterparty risk
Art. 439	Disclosure of exposures to counterparty risk	Half-yearly <i>lett. e) to l)</i>	13 - Disclosure of exposures to counterparty risk
		Annual <i>Full art. 439</i>	
Art. 440	Disclosure of countercyclical capital buffers	Half-yearly/ Annual	5 - Disclosure of capital reserves
Art. 442	Disclosure of exposures to credit risk and dilution risk	Half-yearly <i>points c), e), f) and g)</i>	8 - Disclosure of exposures to credit risk
		Annual <i>Full art. 442</i>	
Art. 443	Disclosure on encumbered and unencumbered assets	Annual	18 - Disclosure of encumbered and unencumbered assets
Art. 444	Disclosure of the use of the Standardised Approach	Half-yearly <i>lett. e)</i>	10 - Disclosure of the use of the standardised approach to credit risk
		Annual <i>Full art. 444</i>	
Art. 445	Disclosure of exposure to market risk	Half-yearly	16 - Disclosure of the use of the standardised approach to market risk
Art. 446	Disclosure of operational risk management	Annual	15 - Disclosure of operational risk management
Art. 447	Disclosure of key metrics	Quarterly/Half-yearly/Annual	3 - Disclosure of key metrics and overview of risk-weighted exposure amounts
Art. 448	Disclosure of exposures to interest rate risk on positions not held in the trading book	Half-yearly <i>par. 1, lett. a) and b)</i>	17 - Disclosure of exposures to interest rate risk on positions not held in the trading book
		Annual <i>Full art. 448</i>	
Art. 449	Disclosure of exposure to securitisation positions	Half-yearly <i>lett. j), k) and l)</i>	14 - Disclosure of exposure to securitisation positions
		Annual <i>Full art. 449</i>	
Art. 449-bis	Disclosure of environmental, social and governance risks (ESG risks)	Annual/ Half-yearly	Disclosure requirement expected from 31/12/2022
Art. 450	Disclosure of remuneration policy	Annual	19 - Disclosure of remuneration policy
Art. 451	Disclosure of the leverage ratio	Half-yearly <i>par. 1, lett. a) and b)</i>	6 - Disclosure of the leverage ratio
		Annual <i>Full art. 451</i>	
Art. 451-bis	Disclosure of liquidity requirements	Quarterly <i>par. 2</i>	7 - Disclosure of liquidity requirements
		Half-yearly <i>par. 3</i>	
		Annual	

Art. CRR/ CRR II	Article description	Frequency of publication	Section Public Disclosures as at 31 December 2021
		<i>Full art. 451-bis</i>	
Art. 452	Disclosure of the use of the IRB approach to credit risk	Half-yearly <i>lett. g)</i>	11 - Disclosure of the use of the IRB approach to credit risk
		Annual <i>Full art. 452</i>	
Art. 453	Disclosure of the use of credit risk mitigation techniques	Half-yearly <i>lett. f) to j)</i>	9 - Disclosure of the use of credit risk mitigation techniques
		Annual <i>Full art. 453</i>	10 - Disclosure of the use of the standardised approach to credit risk 11 - Disclosure of the use of the IRB approach to credit risk
Art. 473-bis	Introduction of IFRS 9	Quarterly/Half-yearly/Annual	3 - Disclosure of key metrics and overview of risk-weighted exposure amounts

As of the reporting date of this Disclosure, the following articles of Regulation (EU) no. 575/2013, as amended by Regulation (EU) no. 876/2019, to which it would be subject as a listed “large institution” pursuant to article 433-bis of the same EU provision, are not relevant for Banca Popolare di Sondrio Group:

- Art. 441 - Disclosure of indicators of global systemic importance.
- Art. 454 - Disclosure of the use of Advanced Measurement Approaches to operational risk.
- Art. 455 - Use of internal market risk models

Section 1 - Scope of application (art. 436 CRR/CRR II)

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

	Company Name	Status	Registered office	Operative office
1	Banca Popolare di Sondrio ScpA	Bank – Parent Company	Sondrio	Sondrio
2	Banca Popolare di Sondrio (SUISSE) SA	Swiss bank (registered in the Lugano Commercial Register) – wholly-owned	Lugano (CH)	Lugano (CH)
3	Factorit SpA	Factoring company (registered in the Register of Financial Intermediaries pursuant to art. 106 of the CBA) – 60.5% held	Milano	Milano
4	Sinergia Seconda Srl	Real estate company – wholly-owned	Milano	Milano
5	Popso Covered Bond Srl	SPV for the issue of covered bonds – 60% held	Conegliano Veneto (TV)	Conegliano Veneto (TV)
6	Banca della Nuova Terra SpA	Bank – Wholly-owned	Sondrio	Milano
7	PrestiNuova S.r.l. - Agenzia in Attività Finanziaria	Agenzia in Attività Finanziaria – Wholly owned (100%) by Banca della Nuova Terra SpA	Roma	Roma

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

Table 1 - Template EU LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories – part 1

(million of euro)	a	b	c	d
	<i>Carrying values as reported in published financial statements</i>	<i>Carrying values under scope of regulatory consolidation</i>	<i>Carrying values of items Subject to the credit risk framework</i>	<i>Subject to the CCR framework</i>
ASSETS				
Cash and cash equivalents	(5,653)	(5,643)	(5,643)	-
Financial assets held for trading	(204)	(204)	-	(29)
Financial assets designated at fair value	-	-	-	-
Other financial assets mandatorily designated at fair value	(1,228)	(1,298)	(1,268)	-
Financial assets at fair value through other comprehensive income	(3,102)	(3,102)	(3,102)	-
Loans to banks	(3,276)	(3,276)	(3,276)	-
Loans to customers	(39,441)	(39,446)	(38,727)	-
Hedging derivatives	-	-	-	-
Change in value of macro-hedged financial assets	-	-	-	-
Equity investments	(339)	(388)	(388)	-
Reinsurers' share of technical reserves	-	-	-	-
Property, plant and equipment	(579)	(466)	(466)	-
Intangible assets	(31)	(31)	-	-
Tax assets	(330)	(330)	(324)	-
Non-current assets and disposal groups classified as held for sale	-	-	-	-
Other assets	(831)	(828)	(828)	-
TOTAL ASSETS	(55,016)	(55,014)	(54,023)	(29)
LIABILITIES				
Amounts owed to banks	10,875	10,875	-	-
Amounts owed to customers	35,603	35,603	-	-
Securities issued	3,700	3,700	-	-
Financial liabilities held for trading	104	104	-	104
Financial liabilities designated at fair value	-	-	-	-
Hedging derivatives	2	2	-	2
Change in value of macro-hedged financial liabilities	-	-	-	-
Tax liabilities	40	40	-	-
Liabilities included in disposal groups classified as held for sale	-	-	-	-
Other liabilities	987	988	-	-
Provision for employee severance pay	40	40	-	-
Provisions for risks and charges	289	288	-	-
Technical reserves	-	-	-	-
Valuation reserves	32	32	-	-
Redeemable shares	-	-	-	-
Equity	-	-	-	-
Interim dividends	-	-	-	-
Reserves	1,556	1,555	-	-
Share premium accounts	79	79	-	-
Share capital	1,360	1,360	-	-
Treasury shares (-)	(25)	(25)	-	-
Minority shareholders' equity	105	105	-	-
Profit (Loss) for the period	269	267	-	-
TOTAL LIABILITIES	55,016	55,014	-	107

Source: Consolidated balance sheet, FINREP/COREP reporting framework

Table 2 - Template EU LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories – part 2

(million of euro)	e	f	g
	Carrying values of items		Not subject to own funds requirements or subject to deduction from own funds
	Subject to the securitisation framework	Subject to the market risk framework	
ASSETS			
Cash and cash equivalents	-	-	-
Financial assets held for trading	-	(175)	-
Financial assets designated at fair value	-	-	-
Other financial assets mandatorily designated at fair value	(29)	-	-
Financial assets at fair value through other comprehensive income	-	-	-
Loans to banks	-	-	-
Loans to customers	(720)	-	-
Hedging derivatives	-	-	-
Change in value of macro-hedged financial assets	-	-	-
Equity investments	-	-	-
Reinsurers' share of technical reserves	-	-	-
Property, plant and equipment	-	-	-
Intangible assets	-	-	(31)
Tax assets	-	-	(6)
Non-current assets and disposal groups classified as held for sale	-	-	-
Other assets	-	-	-
TOTAL ASSETS	(749)	(175)	(37)
LIABILITIES			
Amounts owed to banks	-	-	10,875
Amounts owed to customers	-	-	35,603
Outstanding securities	-	-	3,700
Financial liabilities held for trading	-	-	-
Financial liabilities designated at fair value	-	-	-
Hedging derivatives	-	-	-
Change in value of macro-hedged financial liabilities	-	-	-
Tax liabilities	-	-	40
Liabilities included in disposal groups classified as held for sale	-	-	-
Other liabilities	-	-	988
Provision for employee severance pay	-	-	40
Provisions for risks and charges	-	-	288
Technical reserves	-	-	-
Valuation reserves	-	-	32
Redeemable shares	-	-	-
Equity	-	-	-
Interim dividends	-	-	-
Reserves	-	-	1,555
Share premium accounts	-	-	79
Share capital	-	-	1,360
Treasury shares (-)	-	-	(25)
Minority shareholders' equity	-	-	105
Profit (Loss) for the period	-	-	267
TOTAL LIABILITIES	-	-	54,907

Source: Consolidated balance sheet, FINREP/COREP reporting bases

For the compilation of EU LI1 Template, a logic of prevalence is adopted regarding the prudential treatment of items separately for each balance sheet item. The only exception relates to the portfolio of financial assets held for trading (HFT) for which the portion attributable to derivative exposures has been separated out in order to bring it under the counterparty risk (CCR) framework.

Table 3 - Template EU LI2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements

		a	b	c	d	e
		Total	Items subject to			
			Credit risk framework	Securitisation framework	CCR framework	Market risk framework
1	Assets carrying value amount under the scope of regulatory consolidation (as per template LI1)	(54,977)	(54,023)	(749)	(29)	(175)
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template LI1)	107	-	-	107	-
3	Total net amount under the regulatory scope of consolidation	(54,870)	(54,023)	(749)	78	(175)
4	Off-balance-sheet amounts	(20,400)	(20,400)	-	-	-
5	Differences in valuations	(78)	-	-	(78)	-
6	Differences due to different netting rules, other than those already included in row 2	-	-	-	-	-
7	Differences due to consideration of provisions	(1,115)	(1,115)	-	-	-
8	Differences due to the use of credit risk mitigation techniques (CRMs)	535	313	222	-	-
9	Differences due to credit conversion factors	15,331	15,331	-	-	-
10	Differences due to Securitisation with risk transfer	-	-	-	-	-
11	Other differences	(430)	(58)	-	(372)	-
12	Exposure amounts considered for regulatory purposes	(61,027)	59,953	527	372	182

Source: Consolidated balance sheet, FINREP/COREP reporting bases

The main differences between carrying values and exposure amounts determined for regulatory purposes, regarding:

a) the *Credit Risk Framework*, can be ascribed to the following phenomena:

- amounts of off-balance sheet exposures: not included in carrying amounts and reported for regulatory purposes at nominal value after application of credit conversion factors;
- amounts referring to value adjustments: deducted from the gross value for accounting purposes, while for regulatory purposes and for cash exposures subject to internal rating models, they do not have a reducing effect on the value of EAD (Exposure at Default);
- amounts related to the value of financial collateral received: with the standardised methodology, they subtract the book value for the purpose of determining the value of exposure to risk (EAD);

b) the *Securitisation Framework*, can be ascribed to the following phenomena:

- amounts related to the value of the GACS guarantee on own securitisations: the portion of exposure covered by a government guarantee and therefore subject to credit risk mitigation (CRM) techniques is brought back to the credit risk framework.

Table 4 - Template EU LI3: Outline of the differences in the scopes of consolidation (entity by entity)

a	b	c	d	e	f	g	h
Name of the entity	Method of accounting consolidation	Method of regulatory consolidation					Description of the entity
		Full consolidation	Proportional consolidation	Equity method	Neither consolidated nor deducted	Deducted	
Banca Popolare di Sondrio (Suisse) S.A.	Full consolidation	X					Credit institution
Banca della Nuova Terra S.p.a.	Full consolidation	X					Credit institution
Factorit S.p.a.	Full consolidation	X					Financial corporations
Servizi Internazionali e Strutture Integrate 2000 S.r.l.	Full consolidation				X		Non-financial corporations
Sinergia Seconda S.r.l.	Full consolidation	X					Real estate company
Pirovano Stelvio S.p.a.	Full consolidation				X		Non-financial corporations
Immobiliare San Paolo S.r.l.	Full consolidation				X		Real estate company
Immobiliare Borgo Palazzo S.r.l.	Full consolidation				X		Real estate company
PrestiNuova S.r.l.	Full consolidation	X					Financial corporations
Popso Covered Bond S.r.l.	Full consolidation	X					Financial corporations
Rajna Immobiliare S.r.l.	Equity method			X			Real estate company
Alba Leasing S.p.a.	Equity method			X			Leasing company
Arca Vita S.p.a.	Equity method			X			Insurance company
Arca Holding S.p.a.	Equity method			X			Financial corporations
Unione Fiduciaria S.p.a.	Equity method			X			Financial corporations
Polis Fondi Sgrpa	Equity method			X			Financial corporations
Bormio Golf S.p.a.	Valued at cost				X		Non-financial corporations
Lago di Como Gal S.c.r.l.	Valued at cost				X		Non-financial corporations
Sofipo S.A.	Equity method			X			Financial corporations
Acquedotto dello Stelvio S.r.l.	Valued at cost				X		Non-financial corporations
Rent2Go S.r.l.	Equity method			X			Non-financial corporations
Cossi Costruzioni S.p.a.	Equity method			X			Non-financial corporations

Table 5 - Template EU PV1: Prudent valuation adjustments (PVA)

The table is not subject to publication because the Group, in accordance with Chapter II of Delegated Regulation (EU) no. 101/2016, adopts the simplified method for determining Additional Valuation Adjustments (AVA) required by prudential rules in order to adjust the fair value of assets to their prudent value.

* * *

Regarding any impediments to the rapid transfer of equity or repayment of liabilities within the Group, and specifically between the Parent Company and the controlled entities, there are no particular restrictions or constraints to report.

As of the reporting date, there are no subsidiaries excluded from the scope of consolidation with amounts of own funds below the minimum required, and there are no conditions for exemptions to the application of prudential requirements on an individual basis or to the consolidation method under articles 7 and 9 of the CRR, respectively.

Section 2 - Disclosure of risk management objectives and policies (art. 435 CRR/CRR II)

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

With reference to the provisions of art. 435, paragraph 1, letter f) of Regulation (EU) 575/2013 ("CRR"), some key evidence representing the link between the overall risk profile and the Group's strategies is provided below.

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

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 at periodically monitoring the results achieved by the management. Business choices and strategic directions are in fact defined in accordance with capital adequacy and liquidity and risk-taking constraints established by the RAF over the prospective horizon, and consistent with the objectives and characteristics of the business project pursued by the Group.

Below are the values as at 31 December 2021, of the main indicators representative of Banca Popolare di Sondrio Group's risk profile, compared with what was recorded in the previous year.

Group risk profile: key summary indicators as at 31 December 2021

Summary indicator	Value at 31/12/2021	Value at 31/12/2020
Common Equity Tier 1 ratio (fully phased)	15.67%	16.20%
Tier 1 ratio (fully phased)	15.72%	16.25%
Total Capital ratio (fully phased)	18.77%	18.44%
Leverage ratio (fully phased)	5.25%	5.45%
Liquidity Coverage ratio (LCR)	164%	252%
Net Stable Funding ratio (NSFR)	132%	128%
Counterbalancing Capacity (CBC)	9,765 million euro	8,040 million euro
Loans to customers/direct customer deposits (Loan-to-Deposit ratio)	79.02%	82.62%
NPL ratio	5.8%	7.5%

Summary indicator	Value at 31/12/2021	Value at 31/12/2020
Texas ratio	25.8%	36.8%
Cost of credit	0.43%	0.74%
Return on Equity (ROE)	8.9%	3.7%
Cost Income ratio	54.1%	60.0%

The Board of Directors of the Parent Company Banca Popolare di Sondrio periodically monitors the alignment with the risk appetite of the entire Group by comparing, for each metric adopted by the RAF, the risk tolerance targets and limits set by it with the corresponding values recorded. Based on the analysis and monitoring conducted during 2021, the Group's overall risk profile was found to be consistent with the internal objectives and business strategy adopted by the governing body.

With reference to transactions and activities of particular economic, financial and equity importance carried out during 2021 by the Bank or the Subsidiaries that are likely to affect the Group's risk profile, there are no reported transactions that are likely to significantly affect the financial position or results of operations for the year. The same applies to related party transactions of greater or lesser significance completed during the period under review.

For a review of the major economic, financial and balance sheet activities that took place in 2021, please refer to the 2021 Annual Report (<https://istituzionale.popso.it/it/investor-relations/bilanci-e-relazioni>), paying particular attention to:

- Directors' Report on Operations
- Report of the Board of Statutory Auditors to the Shareholders' Meeting convened to approve the financial statements at 31 December 2021
- Notes to the Financial Statements, Part H (*Related Party Transactions*).

* * *

In general, the guidelines in terms of risk assumption and management help the Board of Directors to formulate orientation and guiding principles with which to conform the definition of strategic objectives and the overall programming of the business in the medium term at Group level. These guidelines express the Group's strategic attitude towards risk and are the basis of the 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 by adopting coherent risk management policies.

The guidelines for managing risks and their qualitative-quantitative classification through the parameters of risk appetite represent a key condition to be respected for the identification of strategic priorities and the definition of long-term objectives over the planning horizon.

The forward-looking 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 feasibility analysis with respect to maintaining the Group's financial and capital balance, so as 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 feasibility 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 combined with the corresponding monitoring of compliance with the risk objectives set in the RAF, providing for a harmonious approach to identify corrective measures in the event of significant deviations.

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

- Confirmation, also in a different corporate structure, of an entrepreneurial model oriented towards a conscious, prudent and balanced assumption of risk, such as to prevent the emergence of any risk 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 risks, while ensuring that the risk dimension is adequately integrated into strategic decisions and choices that have to be made by the management.
- Pursuit of corporate policies aimed at a stable and recurring generation of profits and an 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.
- Keeping of adequate safety margins in relation to the capital and liquidity constraints imposed by regulations or required by 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, and can guarantee a high capacity to refinance with central counterparties in order 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 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 counterparties effective degree of risk by analysing their ability to generate wealth, not only in the present 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 that might 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 a selective, efficient and predictive assessment of the customer's creditworthiness and probability of default;
 - an intensification of risk identification, monitoring and management in order to safeguard the quality of credit assets from deterioration, with the aim of progressively limiting the cost of risk and the amount of 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 evident risk profile.
- Trading operations on 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 closely 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 an effective prevention and mitigation policies aimed at reducing the main sources of risk by limiting the frequency and/or severity of events that generate or could generate economic losses and damages to the Group's assets and reputation.

- Adequate control and containment of risks relating to the technologies adopted for information and communications management , including those arising from cyber threats, by means of: i) the promotion and adoption of security standards suitable for ensuring the availability (including business continuity and disaster recovery plans), confidentiality and integrity of data and technological components, including from third-party suppliers; ii) the continuous strengthening of the flexibility, resilience and agility of information systems, to enhance the available resources and in response to a context of increasing centrality and innovation of digital channels, as part of a consolidated multi-channel approach towards the customer.
- Protection of the Group's distinctive reputation, considered to be the main critical success factor, through:
 - A full formal and substantial observance, with a view to compliance, of the primary and secondary legislation and a timely compliance with the implementing regulations as well as with the self-regulation provisions;
 - safeguarding the trust placed in the Group by shareholders, 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 stakeholders and adopting accurate behavioural models;
 - a customer-centric business conduct, aimed at applying the principles of correctness, transparency, integrity and professionalism;
 - the supply of products and services linked to the risk profile and the needs of each specific customer segment and not characterised by particularly complex structures or elements that may be difficult to understand nor by 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.
- The importance of an integrated and informed management of climate, environmental, social and governance risks to which the Group is exposed, including through its counterparties, by means of governance tools and processes designed to ensure the integrity of the Group's assets and its long-term viability and to contribute to an orderly transition to a sustainable economy, in accordance with the values and principles set forth in the Articles of Association.

Risk control system

The purpose of risk management and control activities is to ensure a reliable and sustainable generation of value, to safeguard the Group's financial solidity and reputation 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 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 Group's overall internal control system, as drawn by the internal regulation in compliance with the supervisory provisions in force (Bank of Italy Circular no. 285 of 17 December 2013) and the indications provided by regulatory and supervisory bodies from time to time, 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 the identification, measurement, management and monitoring of risks, the achievement of the following purposes:

- the verification of the implementation of company's strategies and policies and operational equilibrium;
- the containment of risks within the limits set in the reference framework for determining the risk appetite (Risk Appetite Framework, RAF);
- the safeguard of the assets value and the protection from losses;
- the efficiency and effectiveness of business processes and the operational correctness;
- the reliability and security of the company information and the supporting procedures;
- the prevention of 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);
- the compliance of transactions 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 corporate areas and structures, each called upon to ensure constant and continuous monitoring of risks, to the extent of their own sphere of competence, and it is formalised in a specific internal regulatory framework aimed at defining, for each type of risk, the roles and responsibilities of corporate bodies, managerial functions and organisational units.

The Group's internal control system, in accordance with the indications provided by the 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 control functions from operating units;
- definition of control activities at each operating level, which means controls extended to all relevant business areas;
- diffusion 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 control bodies and functions in charge of designing and/or assessing the internal control system;
- direct communication, without restrictions or intermediations, between control functions and corporate bodies in order to guarantee that any significant anomaly or deficiency found is 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 a proper articulation of the roles and responsibilities of key decision-making functions, 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 the role of stating the general guidelines for the management and control of the Group, by defining the Group's business model, strategic objectives and risk appetite and approving 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 body and committee with control duties (Board Committees and Managerial Committees), providing for the appointment and dismissal of their members; ii) the constitution of control functions and their duties and responsibilities, the coordination mechanisms and the information flows among these functions and between these and 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 regulations, 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 which the Board ensures 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 Control and Risks 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, it supports the Board of Directors in defining the Group's risk objectives and strategies regarding the prevention and governance of relevant risks from both a current and a forward-looking perspective, in periodically monitoring risk exposure in relation to set objectives and limits, and in verifying the completeness, adequacy and functionality of the internal control system.

The Chief Executive Officer (CEO), the members of the Top Management and the Heads of Governance Areas, according to their respective powers and attributions, 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, the CEO:

- 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/revisions to the Risk Appetite Framework (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;
- establishes rules, activities, procedures and organisational structures relating to the risk management process, taking care of its implementation;
- takes care of the implementation of the decisions taken by the Board of Directors, with particular regard to: 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 consistency with the RAF; iii) the 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;
- oversees the functionality of each 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 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 referring to 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. Specifically, he oversees the overall functioning and the administrative processes of the bank, verifying the effective application of the provisions issued and ensuring the concrete and correct exercise of the powers delegated; moreover, as Head of personnel management, he sets guidelines and policies for human resources management, defines proposals for career advancement and determines the qualitative and quantitative requirements of the organisation, monitoring the results achieved.

The organisational structure of the Governance Area brings together a number of Services and Offices responsible for carrying out activities that are consistent with each other. The Heads of the Governance Areas, who together make up the so-called C-Level Suite, oversee the Services and Offices that report to them; at the same time, they report hierarchically and functionally to the CEO, who oversees all the Governance Areas. The heads of the Governance Areas are also entrusted with specific management and coordination tasks towards the other components of the banking Group, in accordance with their respective areas of operation.

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 deficiency and irregularity found. With its supervisory action it contributes to ensure 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 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 the typical risks associated with the business on an ongoing basis. 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 an 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 ensure the correct performance of the operations to the extent of its sphere of competence by carrying out so-called "first-line controls".

The internal control system 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 is subject to internal auditing, as a whole and in its relevant components.

As part of the internal control system, risk management and compliance controls ("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 overcome and ascertain that the company processes and procedures are compliant with laws and the provisions of the supervisory authorities.

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

At Banca Popolare di Sondrio, the risk management function is managed by the Chief Risk Officer Governance Area (CRO Area), which is composed by a series of specialist and support offices coordinated by the Chief Risk Officer (CRO).

The mission of the CRO Area is to assist management bodies in the configuration and implementation of the Risk Appetite Framework (RAF) and risk management policies and in monitoring 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) - also by producing relevant data and information and, if necessary, assuming the role of direct contact point.

More specifically, the Chief Risk Officer Area, whose manager reports hierarchically and functionally to the Chief Executive Officer:

- supports corporate governing bodies in formulating guidelines for risk taking, management and control policies;
- contributes to the definition, review and updating of the Group's Risk Appetite Framework and operational limits for the assumption of the various types of risk, continuously verifying their adequacy and functionality;
- oversees the development, validation, and management of systems for identifying, assessing, measuring and controlling risks, ensuring that they are regularly tested and reviewed;
- monitors the performance of relevant risks, checking their consistency with the system of limits expressive of risk appetite and preparing appropriate reports;
- with regard to credit risk, verifies that credit exposures are monitored properly, especially impaired exposures, and assesses the consistency of classifications and the adequacy of provisions and recovery processes;
- coordinates the Group's capital adequacy assessment (ICAAP) and liquidity assessment (ILAAP) processes, the preparation of the Pillar 3 Public Disclosure as well as the annual update of the Recovery Plan;
- executes supervisory systemic stress tests;
- analyses, on a precautionary basis, the risks associated with the offer of new products and services, entry into new operating and market segments, decisions to outsource activities and information systems and, in general, the pursuit of "innovative" corporate projects;

- supervises the assessment and control activities on key positions and checks on the overall riskiness of the loan portfolio;
- assumes, with reference to the areas of competence, a role of direct representative with the Supervisory Authority, promoting initiatives for the provision of data and information.

The structure of the CRO Area is characterised by:

- an articulated coverage of credit risk matters, which, given their significance, are spread out over three distinct Offices: the *Credit Risk Office* responsible for monitoring exposure to credit risk through the use of methodologies and tools suitable for identifying the criticality of the underlying processes and the actions needed to overcome them, contributing to: a) assessing the consistency of the NPL portfolio management strategies with the RAF parameters and estimating the impacts of the reduction and recovery objectives of bad loans on profitability and capital profiles; b) in relation to the internal rating system, overseeing and coordinating the activities related to the development of A-IRB models, providing for the appropriate measurements; the *Credit Model Development Office*, in charge of designing, developing and maintaining the models and quantitative metrics adopted to measure credit risk for both regulatory and management purposes (A-IRB rating system), as well as defining and updating the credit risk parameters used to determine accounting provisions; the *Large Exposures and Rating Desk Office*, responsible for assessing the riskiness of major credit exposures, validating internal rating judgments assigned to borrowers belonging to the “major customers” managerial segment and carrying out verification and validation activities for exceptions to automatic rating judgments requested by the competent operating units;
- 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 maintenance of the related identification, measurement, control and reporting systems (*Financial Risks Office*);
- a unit operating in an integrated perspective with reference to all significant risks, designed to supervise the definition and monitoring of the risk objectives established by the RAF, to fulfil the obligations of Pillar 2 (ICAAP) and Pillar 3 (Disclosure to the Public) and those relating to the Recovery Plan, to govern the execution of stress exercises to verify the stability of the Group's capital and financial conditions in adverse scenarios and to monitor risks not monitored by other specialist units, including environmental, social and governance (ESG) risks (*Integrated Risks Office*);
- a specialised function for the management of risks related to information and communication technologies (*ICT Risk Technical Committee*), organisationally located within the Government Area Chief Information & Operations Officer (CIOO Area) but operating side-by-side with the structure responsible for the management of operational and reputational risks (*Integrated Risk Office*), to which IT risks by nature pertain;
- the presence of a unit responsible for designing, developing and monitoring specific quantitative methodologies and risk models (e.g., IFRS 9 stage allocation and impairment, operational risk measurement, analysis of macro-economic scenarios) and valuation models (e.g., pricing models, Independent Price Verification methodologies, fair value determination and related adjustments) (*Pricing and Valuation Models Office*);

- a unit dedicated to the governance and control of risk data management and the relative quality controls (data quality), guaranteeing integration with the bank's data governance processes, also with the task of monitoring the IT architecture supporting the internal rating system (*Risk Data Management Office*);
- a unit responsible for ensuring effective and homogeneous risk management among the Group's components through project management and support functions for risk governance activities, assisting the Group entities in coordinating and overseeing the overall risk control framework in adherence to the Parent Company's guidelines, as well as implementing and supervising risk mitigation initiatives (*Group Risk Control Coordination Office*);
- a function, which operates autonomously and independently from other units in charge of internal models' development, responsible for verifying the quality and reliability of the internal risk measurement systems, at the initial set-up stage as well as on an ongoing basis, and for the evaluation of company activities used for both regulatory and management purposes, with specific regard to the correct calibration and use of rating systems (*Validation Office*);
- a further unit with a technical role supporting the operational and control activities carried out by the other Offices of the CRO Area, with the task of ensuring the fulfilment of information and reporting obligations towards Authorities and institutional bodies (*Reporting Systems Office*).

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

- the *Compliance and DPO Function*, under the hierarchical-functional dependence of the Chief Executive Officer, responsible for overseeing the risk of non-compliance with the regulations of the entire company activity - except for what is the responsibility of other specialised functions - carrying out consultancy and control activities for the purpose of detecting and preventing the risks of non-compliance of corporate processes and procedures with the system of hetero-regulation (laws and regulations) and self-regulation (internal provisions) applicable from time to time; moreover, the Head of the Function is also assigned the role of Data Protection Officer (DPO), a figure that forms an integral part of the data protection business model, adopted pursuant to Regulation (EU) 2016/679 of 27 April 2016 (General Regulation on the Protection of Personal Data, “GDPR”) relating to the protection of individuals with regard to the processing of personal 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 has the purpose of supervising the functioning and observance of the organisational model adopted by the Parent Company and compares itself with similar structures, if any, set up within the Subsidiaries, in order to make homogeneous the organisational controls put in place to mitigate the specific risks.

Specific Committees at management and executive level are also set up within the Parent Company were, with consultative, propositional and/or decision-making roles, responsible for providing technical and operational assistance and support to corporate bodies in their specific areas of competence, contributing to integrated risk management and sound and prudent business management. In addition to those with investigative and decision-making duties, in relation to the disbursement of credit and the management of NPL exposures, the following permanent committees with policy and control functions are worthy of note:

- Risk Committee
- ALM and Investment Committee
- Scenario Committee
- Outsourcing Committee
- Financial Products Governance Committee

as well as the following Committees that can be convened in an emergency situation:

- Crisis Management Committee
- Business Continuity Committee.

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 for a documented, complete and aware assessment of risk exposures, favouring the related management, control and mitigation activities, as well as of the adequacy of the capital available to cover them. Key trends in risk profiles are also communicated to 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, with regards to the Group's corporate governance framework, 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 risk governance framework based on the principle 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 the 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 a specific RAF structure and governance model 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 appropriately under control.

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 deviation 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, which drive 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 *primary indicators*, the Group's appetite for risk is expressed through key metrics which can 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*), whose breach involves the evaluation of suitable corrective actions to mitigate risk. 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 will mean a strengthening of controls 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 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 for the higher hierarchical levels of RAF is articulated in more specific and granular limits to risk assumption (risk limits) based on the principle of proportionality. 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 risk limits system, 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 of the risk appetite parameters, the Bank establishes the organisational mechanisms which regulate the governance and the 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 limits 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 banks to carry out an accurate identification and materiality assessment of risks to which they are or could be exposed in managing their operations.

This activity, performed at least annually, is aimed at identifying the risks likely to compromise 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 profile 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 bank's operations.

This recognition process is particularly relevant for the entire risk governance system as it constitutes a link between 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: 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: those 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 (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"> • IT Risk • Legal risk • Conduct risk • Fraud risk • Model risk • Organisational risk
	Compliance risk
	Money laundering and terrorist financing risks
	Reputational risk
Interest rate risk	Repricing or yield-curve risk (Gap risk)
	Basis risk
	Option risk
Liquidity risk	Funding liquidity risk
	Market liquidity risk

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

With reference to 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 might not be able to meet its obligations on time and in full, or that a change in its creditworthiness might generate 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 might not be able to meet its obligations on time and in full (*default risk*), or that the amount recovered after liquidating the assets of an insolvent counterparty might be lower than the amount originally foreseen (*recovery risk*). This includes the risk deriving from cash credit facilities and guarantees to central and local governments of the Italian Republic;
- *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)*: 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 (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. It may result in a reduction in the economic or market value of Italian government securities held in banking books measured at fair value, or in exposure to default, recovery and migration risks on Italian government securities held in banking books measured at amortised cost. Risks associated with possible cash and unsecured credit exposures to central and local government entities of the Italian State are excluded;
- *Other (non-sovereign) banking book instruments risk*: the risk of suffering impairment losses on financial assets - other than securities issued by the Italian State - held in banking books, due to adverse changes in financial markets or to a deterioration in the creditworthiness of issuers or issues. It may result in a reduction in the economic or market value of shares and other equity investments, UCITs and debt securities - excluding Italian government securities - included in banking books measured at fair value, or in an exposure to default, recovery and migration risks on the same types of financial assets included in banking books measured at amortised cost;
- *Single name concentration risk*: the risk arising 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

The Group, even after the transformation into a joint-stock company, continues, through the exercise of lending activities, to fulfil its function as an entity primarily oriented towards supporting local economies by granting financial resources to those who pursue worthy goals and meet adequate reliability criteria in requesting those resources.

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 mutual trust and transparency; this in order to enhance the Group's distinctive 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 favours lending towards SMEs and small businesses since they do not take part to broader financial circles and, consequently, they need a point of reference able to understand their requirements and meet their specific needs with expertise, efficiency and speed, following the evolution of their 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, when creditworthiness, ascertained through a rigorous preliminary investigation, demonstrates solidity and reliability.

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

- measurement of the current and prospective risk linked to 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 settlement of limits on exposure towards larger counterparties and economic sectors with a more pronounced risk profile;
- rejection of transactions that could compromise 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 risks associated with the lending activity and a 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 in the present and in the future;
- an intensification of risk identification, monitoring and management to prevent the quality of credit assets from deterioration, with the aim of progressively limiting the cost of risk and the amount of non-performing loans (NPLs);
- 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 implementing the strategic guidelines set and in compliance with the risk thresholds established, the credit policy defines credit portfolio objectives in terms of size and qualitative composition in order to guarantee an adequate combination between the risk profile assumed and the levels of return achieved. 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 limits.

Procedures and organisational structures in place are formalised in the internal regulatory framework, clearly specifying activities, roles and responsibilities. In order to avoid potential conflicts of interest, the separation between operating functions and control functions is ensured.

The system of decision-making powers approved by the Board of Directors, based on the principle of “cascade delegation”, provides the attribution of limited powers to peripheral structures, preferring to give control duties to specialist central units.

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

The Parent Company, in exercising its strategic and coordination function towards the subsidiaries, ensures that at Group level uniform credit policies are adopted and that homogeneous classification, valuation, management and monitoring criteria are set. The strategic guidelines 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 subsidiaries in compliance of the peculiarities that can derive from the nature of the counterparties served and the specific types of products offered, as well as the characteristics of reference markets, taking into account any differences in local laws in the countries where the foreign subsidiaries operate.

Measurement and control systems

Assumption of risks associated to lending takes place through the use of methodologies, procedures, organisational structures and tools that are capable of guaranteeing the awareness of the exposure's size and evolution over time. In this regard, in compliance with current regulations and inspired by 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 leave intermediaries the possibility to choose between three alternative approaches to determine capital requirements. As regards Parent Company's “Corporate” and “Retail” exposures, the Advanced Internal Rating-Based Approach (A-IRB) is applied, which uses risk parameters calculated by means of internally estimated rating models. For further details on the methods applied for determining risk factors and on their pervasive use within credit management and control processes, please refer to Section 11 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 risk weighting ratios on the basis of ratings 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), where available; if no external rating is available, 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.

For ICAAP purposes, it is also important to highlight the Bank's adoption of a statistical portfolio model for measuring the economic capital to be allocated to the risk considered.

From an operational point of view, the credit risk management process is based on the full involvement of the different levels of the Group's organisation, in order to balance the necessity to give a prompt reply to customers' requests with an analytical assessment of the risk involved. More in detail, the process is divided into different stages: credit policy and planning, appraisal phase, disbursement, periodic review, monitoring and management/recovery of impaired loans.

In implementing the strategic guidelines dictated by corporate governance bodies, the credit policy defines portfolio volumes and qualitative composition 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 mitigating the risk.

The appraisal phase, which aims at establishing if applicants satisfy certain conditions for credit-worthiness, considers whether the loan characteristics are consistent with its purpose, whether any collateral provided is suitable for covering the risk of non-repayment and reviews the economic effectiveness of the loan itself. In this context, the evaluation expressed by the internal rating system, if available, and the associated probability of default are taken into maximum consideration as essential elements for an overall assessment 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 on the LGD of the transaction) and for the opportunity cost of the regulatory capital absorbed that is connected to the individual lending relationship, reaching an estimate of the value added by current or potential exposures. This tool makes it possible to identify non-performing exposures 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 financing 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 loan disbursement, carefully assessing all of the information emerged during the appraisal procedure, as well as any other useful input that might be available. In order to ensure greater control over risks, the mechanism for establishing the autonomy of decision-making bodies that constitute the decision-making ladder 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 made operational and, therefore, available to the borrower only 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 to the assessment of their suitability to mitigate credit risk.

After disbursement, credit positions are reviewed periodically to check whether all of the conditions established during the appraisal and taken into consideration when granting the loan are still valid. Credit lines can also be automatically reviewed for low-risk positions, ascertained through the examination of suitable indicators that are established in advance, among which the internal rating takes on a great deal of importance.

The monitoring of the loan and the supporting guarantees, carried out in order to detect as quickly as possible any negative symptom that might arise and to implement promptly and effectively the necessary actions to prevent further deterioration, is performed in compliance with formal organisational procedures and is supported by automatic tools and applications. These entail a constant observation of the degree of reliability of the counterparties and a periodic verification of the persistence of general and specific requirements and of the value of the collaterals 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 lending portfolio quality and the phenomena that characterise its deterioration is based on a complex set of rules, processes and control methods. In this regard, the organisational units responsible for credit positions management play an important role since they are able to immediately identify any sign of anomaly thanks to their direct relationships with borrowers. The competent structures are supported in these activities by a variety of reports produced internally or by external contributors.

Specific central structures are in charge of analysing the available information, in order to continuously assess the creditworthiness 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 data and synthetic indicators representative 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 showing signs of anomaly, formal processes have been established for the identification, resolution and monitoring of forbore position (credit exposures for which modifications to terms and conditions or refinancing have been granted due to the borrower's financial difficulties); the forbore attribute is transversal to the administrative status of the credit. It is also important the specifically analyse overruns in terms of both severity and duration, so that the Bank can promptly intervene on positions that are beginning to show critical repayment issues.

Positions identified as being at significant risk are analysed appropriately and, if 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, carry on their activities, aimed at regularising positions, where possible, or recovering the amount owed in the event of the borrowers' insolvency, in close collaboration with the domiciliary structures of the relationships and with "corporate managers" and "retail managers" located throughout the territory. In order to simplify operational tasks, 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.

To rapidly intervene on deteriorating relationships and effectively monitor the credit quality of the overall loan portfolio, monitoring processes which, supported by dedicated tools, promote actions

aimed at regularising relationships are adopted. At the Parent Company, specialised risk management units (CRO Area) provide support to the functions responsible for identifying “performing” customers showing first signs of difficulties and relationship anomalies, as well as counterparties with persistently past due. These structures also operate through second-level controls to ensure the correct performance monitoring of the positions, the consistency of their classification, the adequacy of the related provisions and the adequacy of recovery process.

In-depth controls are performed during the appraisal phase, 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, differentiated 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 completing the procedure.

In order to support credit management activities and risk exposure monitoring, periodic heterogeneous reports are prepared, both at managerial and operational level, concerning the development of 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.

The Parent Company, by exercising its strategic and coordination functions, ensures that uniform credit policies are adopted at Group level and homogenous criteria for the assessment, classification, monitoring and risk management are set. These policies are then applied by every company of the Group according to the peculiarities of their counterparties and the particular types of products being offered, as well as the characteristics of the reference market.

The subsidiaries – depending on the specific sector to which they belong, on their organisational peculiarities and, as regards to Banca Popolare di Sondrio (SUISSE), on the constraints imposed by a different legal system – adopt substantially homogeneous procedures for credit risk managing and controlling.

In this regard, it should be noted that the Swiss entity has its own rating system to be applied to its loans towards customers, based on the subjective-discretionary opinion expressed by industry insiders. This approach gathers various primary indicators and financial and qualitative information together, depending on the counterparty characteristics; the combined assessment 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 has been analysed by independent auditors, who consider it appropriate given the size, complexity and risks involved in the activities performed.

The sister company Factorit, although at the moment does not have its own rating system for the evaluation of its counterparties, applies to joint customers the ratings attributed by the Parent Company, for which it can continuously verify the risk status and its evolution over time.

In order to limit so-called “residual risk” (i.e. the possibility that the credit risk mitigation techniques adopted are less effective than expected, if activated), the Group is equipped with an articulated system for managing real and personal guarantees which makes it possible to oversee the entire process of acquiring, evaluating, verifying and disposing them. This system involves formal policies

and procedures relating to their use, eligibility requirements – both general and specific - required by regulatory provisions and constant monitoring to ensure that the amount is appropriate.

Guarantees acquired are revalued on the basis of events connected to the status of the loan and/or the collateral 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. Information systems and operating procedures in fact allow the acquisition, storage and management of all data useful for the correct identification and assessment of the guarantees assumed.

Suitable arrangements are made when obtaining, assessing and verifying guarantees to ensure that they will prevail over third parties, both in the present and in the future, and can be fully enforced in case of a counterparty default.

With regard to mortgage guarantees, Group companies adopt reliable principles and standards for the assessment 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 capable of ensuring an efficient management and a timely assessment of properties that are subject to real encumbrances, by realizing an inventory of the assets and filing expert appraisals in specific IT applications.

At the Parent Company, the value of the properties is updated using external expert appraisers, equipped with 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, the revaluation of the entire property portfolio used as collateral is also envisaged, based on statistical parameters that reflect market conditions. The entire loans portfolio backed by mortgage guarantees is periodically undergoes a further level of monitoring, centrally managed by the relevant departments with the aim of highlighting the exposures and related property valuations that present risk characteristics. This can lead to specific controls and, depending on the outcome, corrective actions 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 risk profiles related to the occurrence, in the country of origin or of the customer's main business, of socio-political, economic or other types of events likely to compromise their solvency, from an operational point of view can be traced back to the broader and detailed creditworthiness analysis of the counterparties conducted when the risk was 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, UCIT, AMC) with which financial transactions are carried out (repurchase agreements, transactions in derivative instruments, spot or forward exchange rates, interbank deposits). This risk does not apply to financial contracts negotiated on regulated markets where guarantee mechanisms operate.

Another risk driver 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 by the Group with customers. 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 and 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 internal regulations.

Specific risk limits are also established in terms of portfolio exposures with counterparties / issuers.

Measurement and control systems

The Group determines its capital requirement for counterparty risk on the basis of: a) the “Internal Model Method” for exposures to counterparties falling within the A-IRB Corporate and Retail segments and b) the “Standardised Approach” for remaining exposure portfolios. The latter approximates the cost to the Group for finding another party willing to take over the obligations of the original contractual counterparty if the latter proves 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 according to the “Market value method”, as stated by prudential provisions.

Furthermore, limited to OTC derivative transactions - with the exception of any credit derivatives possibly 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 counterparties. For this purpose, the standardised method envisaged by prudential regulations in force is adopted.

With regard to the management of “credit risks arising from financial activities” (a category to which counterparty and issuer risks are managerially attributed), the management framework establishes that each counterparty/issuer can be authorised to operate with the Group only after opening specific internal credit lines (plafond) and being assigned to a defined creditworthiness class; the operating ceilings granted are subject to periodic review by the competent corporate structures.

Regarding the exposures to Italian and foreign banks, for valuation purposes Banca Popolare di Sondrio uses ratings released by leading agencies, if available, 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, where the first one represents a counterparty/issuer with minimal risk and the ninth identifies the highest level of risk, beaten only by a state of default, represented by the tenth class. In order to allow an easier correlation with the assessments expressed by international agencies, these 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 competent central structures by considering a series of indicators, including the rating trend (internal or external), data deriving from the accounting information of the counterparty/issuer and market data.

Monitoring is based, at operating level, on a system of limits articulated in two levels. The first one includes a “general limit”, representative of the maximum exposure deemed admissible for overall operations with counterparties/issuers. The exposure is based on aggregate measures of the “amount effectively granted”⁶ 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. In the second one more granular operating limits are set, parametrised to the dimensions of the said “general limit”, to which they refer, namely: a) the exposure towards 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 towards 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 towards counterparties/issuers of the same country (excluding Italy), weighted according to the country's macro-class (“Country risk limit”).

The results of the controls carried out are periodically reported to corporate bodies and functions belonging to the Chief Risk Officer Area.

The aforementioned processes for counterparty and issuer risk monitoring and management apply to exposures towards the following subjects:

- 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, UCITs, AMCs);
- other issuers of bonds and similar securities acquired in the portfolio (limited to issuer risk), excluding the Italian State and other specific issuers, central counterparties and governments with an equal or lower risk profile.

⁶ 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.

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

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

For all exposures towards financial counterparties, mainly banks, Credit Support Annex (CSA) agreements are stipulated; 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 mitigate the credit risk associated with a positive mark-to-market. The amount of these collateral assets is recalculated periodically basing on the fair value of the underlying derivative.

Additional forms of risk mitigation are represented by 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).

In addition to the monitoring system previously described, a methodological and procedural framework aimed at quantifying and monitoring “counterparty risk” properly referred to according to both a regulatory and management perspective is being progressively defined and developed. Within the CRO Area, a dedicated office provides periodic risk measurement regarding particular types of financial transactions carried out by the Bank, namely OTC derivatives trading, Security Financing Transactions (SFT) and Long Settlement Transactions (LST). A monthly calculation of the estimated capital requirement is carried out for this purpose in accordance with the current standardised supervisory approach (SA-CCR), which is also used in reporting⁷. Only for OTC derivative transactions with positive mark-to-market, an additional independent calculation of the CVA (Counterparty Valuation Adjustment) metric, expressive of the loss risk component associated with the default of the transaction's counterparty in determining the fair value of traded instruments, is carried out, applying an alternative methodology to that adopted for accounting purposes⁸.

Sovereign risk on banking book (Italy)

Strategy

According to 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.

⁷ For benchmarking purposes, the estimation of homologous counterparty risk exposure metrics is also carried out based on alternative methodologies prescribed by prudential supervisory regulations, such as the original exposure method (OEM) and the market value method (CEM).

⁸ The methodology based on positive expected effective exposure (effective EPE or EffEPE) also prescribed by the prudential supervisory framework is used in the estimation.

The Group's assumption of long-term positions in domestic sovereign debt is strongly influenced by monetary policy decisions taken by the European Central Bank, by the trend in the national economic situation and by any need to maintain adequate financial assets reserves that can easily be turned into cash. In order to take account of the risk, the modified duration of the sovereign portfolio has been kept fairly short, and at the end of the previous year was further reduced compared to the approximately 2 years thanks to the operations carried out during the year that favoured the purchase of floating-rate Italian government bonds, amounting at the end of 2021 to approximately 59% of the segment under analysis.

For the Parent Company the main source of risk exposure on the sovereign portfolio - an expression of both the risk of suffering reductions in economic or market value from Italian government securities held in the banking book portfolios measured at fair value for accounting purposes, and the exposure to default, recovery and migration risks on government securities included among the banking book instruments measured at amortised cost - is given by the holdings of Italian government debt securities classified for accounting purposes among "financial assets measured at fair value through other comprehensive income" (HTCS - Held To Collect and Sell), in which approximately 26% of the type of securities under analysis is allocated, and "financial assets measured at amortised cost" (HTC - Held To Collect), in which the remainder is placed. A minimal portion of Italian government securities belonging to the "financial activities valued at the amortised cost" portfolio can be attributed to the BPS employee retirement scheme, which does not fall under the Italian sovereign risk monitoring.

Among the subsidiaries, only Banca della Nuova Terra S.p.A. has exposures, albeit marginal, classifiable under 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.

Relevant collective bodies define strategic guidelines regarding the management of financial instruments within the scope of the risk under consideration, taking into account potential impacts on current risk objectives and limits. The Operating Areas then undertake risk by operating in the financial markets and manage the exposure based on the guidelines received, and also monitor any operational limits to trading activities.

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

From a management perspective, the CRO Area determines on a daily basis the risk exposure related to investments in Italian government debt securities falling within the scope of activity identified above separately for amortised cost and fair value positions.

For positions at amortised cost, from the 1 January 2021 exposure reviews are based on a new risk metric called "Stressed Expected Credit Loss" (sECL - Stressed ECL), which replaced the former

probabilistic measure of VaR (Value at Risk). This new measure aims to quantify the degree of risk associated with the specific portion of the portfolio by focusing specifically on the credit risk profile: this, in fact, represents the estimated expected loss assuming a reduction in the creditworthiness of securities/issuers in the portfolio. The sECL limit expressed as a percentage of Tier 1 primary capital (CET1) and distinctly articulated on an individual and consolidated basis, is configured as a complementary RAF parameter, like the “Maximum Acceptable Loss” limits described below (which instead find application on instruments measured at fair value) and is accompanied by attention thresholds aimed at reporting any tightening of risk as it approaches the threshold-limit.

With reference to banking book instruments measured at fair value, the exposure to risk - derived from the possibility of suffering impairment losses as a result of unexpected trends in market rates representative of risk-free asset yields, the risk of incurring losses as a result of unexpected changes in the differential between the yield on securities and the current level of risk-free interest rates (so-called credit spread risk) by virtue of elements related to the issuer's situation and/or the characteristics of the instrument issued, as well as the risk of incurring losses because of changes in inflationary expectations (inflation risk) for inflation-linked securities - is determined primarily through an internal historical Value-at-Risk (VaR) quantification method. The figure resulting from this 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 actual historical observations of the returns of the risk factors that contribute to determining the value of the elements making up the portfolio. The aggregation of the VaR at portfolio level occurs by taking into account the implicit correlations between the various risk profiles, 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 statistical model, comparing them with the results achieved on the sovereign portfolio in the past. This involves a comparison between the daily VaR figures and: a) the changes in market value the next day for the same positions on which the VaR measurements were calculated (theoretical losses), b) the changes in the hypothetical present value of the instrument/portfolio, calculated using the respective pricing model applied by the risk exposure calculation tool (theoretical losses from the model) and c) the changes in market value on the following day recorded on the portfolio including the actual increases/decreases that have taken place (actual losses).

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 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”) on the overall positions in securities at fair value 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 one year horizon (first level limits). A monitoring threshold is also set in order to signal that the risk profile is approaching the set “Maximum Acceptable Loss” limit of; exceeding it leads to more intense controls over the risk exposure.

The measure of “Maximum Acceptable Loss” (MAL) compares with an aggregate equal to the sum of the “Effective Cumulative Loss” (ECL), which reflects any negative result of the portfolio

management, 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. There is no specific reference threshold for ECL; however, this metric is taken into account in the dynamic determination of the VaRhp limit (second-level limit) which is calculated as a percentage of the MAL monitoring threshold less any ECL amount, to take account - where present - of the negative results already achieved 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, only for positions in financial instruments measured at fair value, into daily early warning thresholds which can promptly report any increase in the risk associated with portfolio positions (third level limits). These are specific daily VaR thresholds provided for exposure towards 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 towards the risk-free interest rate risk, credit spread risk and inflation 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 at fair value, i.e. not only on the positions in Italian sovereign securities.

In addition, a maximum limit is set on the share of domestic sovereign debt securities to the overall market value of the banking book, considered in the RAF as a risk appetite limit.

If the existing limits are found to have been exceeded, based on the measurements made on the level reached by one of the indicators of exposure to the above risks, 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. For example, management measures to be implemented to bring risk exposure back within set limits may include: reshaping financial investment strategies; recomposition of financial portfolios by investment size or issuer type (e.g. by changing risk allocation toward issuers characterised by more favourable regulatory weighting); imposition of additional operational limits expressed in terms of position ceilings (nominal, book, or market values; stop losses) or sensitivities; and use of hedging transactions.

The control system also contemplates additional daily risk metrics (so-called sensitivities, which are synthetic parameters that measure the extent of potential changes in the value of assets in reaction to smaller changes in respective risk factors) and monthly (so-called Stressed Present Value, which measures the impact on securities value in the portfolio of an hypothetical stress scenario), calculated by type of instrument and separately for each portfolio to which it belongs.

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

The maturity VaR and sECL calculated on the sovereign portfolio are 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

Exposed to this type of risk - understood as the risk of suffering impairment losses on financial assets (other than securities issued by the Italian State) present in the banking book portfolios due both to adverse changes in financial markets and to deterioration in the creditworthiness of issuers or issues - are equity securities and other interests not included in the accounting item "Equity investments", UCITs and debt instruments falling under the non-trading portfolios, excluding assets issued by the Italian state (treated, as mentioned, under "Italy sovereign risk"), units of real estate funds in the portfolio (treated under "real estate risk") and financial investments made by the personnel pension fund (treated under "pension fund-related risk").

The overall exposure to this risk is broken down, for the portion of securities measured at fair value, into the subspecies of "interest rate risk" (risk-free), "credit spread risk", "price risk" and "optionality risk", depending on whether the risk consists, respectively, of a fluctuation in risk-free interest rates, in risk premiums related to the situation of the issuer and/or the characteristics of the debt security issued, in equity securities prices or UCITs or in the volatility of the underlying options.

As regards interest rate and credit spread risk, the Group's exposure is represented by holdings of debt instruments 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". Exposure to default, recovery and migration risks, on the other hand, comes from the same types of financial assets found under "financial assets measured at amortised cost" (HTC - Held To Collect).

The focus on prudent risk assumption and management translates into a bond portfolio consisting of fixed-rate European government bonds (in particular, Spain and France) and debt securities of corporate issuers, mainly senior preferred, green and social financials, with good credit quality. During 2021, the largest increases were in HTC, which was also a prudent choice. The share of securitisations in the portfolio increased, stemming mainly from the repurchase of part of the securitisation securities issued against the sales of NPL loans made during the year. The overall modified duration of the bond portfolio, net of securitisations, increased slightly to 4.2 years at year-end compared to 3.9 years at the end of 2020.

The main source of exposure to "price risk", on the other hand, consists of equity securities and UCITs classified under "other financial assets mandatorily measured at fair value" and "financial assets measured at fair value through other comprehensive income". On a prudential basis, investments in funds continue to be mainly concentrated on euro UCITs, and the share in bond UCITs has further increased compared to last year and has become predominant. Equity securities do not show significant changes.

Finally, the source of exposure to "optionality risk" derives from the few instruments in the portfolio, mainly bonds, with implicit optionality.

The subsidiary Banca Popolare di Sondrio (SUISSE) is marginally exposed to this type of risk on the fair value component of its own financial securities. The other Subsidiaries are not significantly exposed to this type of risk.

Relevant corporate bodies define strategic guidelines regarding financial instruments management within the scope of the risk under consideration, taking into account potential impacts on current risk objectives and limits. Operating Areas then undertake risks by operating in the financial markets and manage the exposure based on the guidelines received, and also monitor any operational limits to trading activities.

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 a management perspective, the Chief Risk Officer Area of the Parent Company determines on a daily basis the risk exposure at consolidated and individual levels, separately for amortised cost and fair value positions.

For positions at amortised cost, effective 1 January 2021, controls on exposures are based, similarly to what has been exposed for “Italy sovereign risk,” on the new metric of “Stressed Expected Credit Loss” (sECL - stressed ECL), replacing the former VaR measure. This measure aims to quantify the degree of risk associated with the specific portion of the portfolio by focusing specifically on the credit risk profile: this, in fact, represents the amount of estimated expected loss assuming a reduction in the creditworthiness of securities/issuers in the portfolio. The sECL limit expressed as a percentage of Tier 1 primary capital (CET1) and distinctly articulated on an individual and consolidated basis, is configured as a complementary RAF parameter and is accompanied by attention thresholds aimed at reporting any tightening of risk as it approaches the threshold-limit.

With reference to banking book instruments measured at fair value, risk exposure - investigated separately in its components of “interest rate risk” (risk-free), “credit spread risk”, “price risk” and “optionality risk” - is quantified through the same Value-at-Risk (VaR) model illustrated for “Italy sovereign risk.” The resulting figure indicates, at aggregate level, the 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 implicit returns and correlations observed historically between the individual risk factors to which these assets are exposed.

For debt securities, equities and UCITs falling within the fair value part of the portfolio under analysis, the forecast results of the VaR model are backtested with those historically achieved on the entire portfolio of instruments according to the same method illustrated in the paragraph dedicated to “Italian sovereign risk”.

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, for the banking sub-portfolio exposed to “other securities risk” measured at fair value, second level limits applied to “Maturity VaR” (VaR_{hp}) translate into more specific daily VaR thresholds (early warnings or third level limits), set separately to monitor “risk-free interest rate risk”, “credit spread risk”, “price risk” and “optionality risk” on the instruments in the portfolio.

If, thanks to 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 also contemplates additional daily risk metrics (so-called sensitivities, which are synthetic parameters that commensurate the extent of potential changes in the value of assets in reaction to smallest changes in the respective risk factors) and monthly (so-called Stressed Present Value, which is a metric of the impact securities value in the portfolio of a hypothetical stress scenario), calculated by type of instrument and separately for each portfolio to which it belongs.

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

The measurements of maturity VaR and sECL calculated on the instruments included in the banking book, other than securities issued by the Italian Government, are 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 lending activities by ensuring a strict control of risk concentration levels, which is in turn an expression of its traditional vocation to sustain local economic operators, especially SMEs and households.

This implies a managerial appetite to risk diversification and fragmentation (except for a number of exposures towards 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.

As for the distribution of the portfolio by economic sector, the Group's overall exposure in the real estate sector assumes importance for 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 these sectors, whose repayment capacity mainly depends on the building, rental or sale of real estate.

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" (Lombardia and Lazio regions, where the Group's presence on the territory is particularly widespread).

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

Measurement and control systems

The prudential discipline does not prescribe, for the purposes of Pillar 1, the determination of specific minimum capital requirements to deal with the exposure to credit concentration risks (single-name and geo-sectoral), leaving the evaluation to intermediaries, as part of Pillar 2 analyses, regarding the advisability of placing specific capital amounts to cover these risk profiles. Considering the importance of these risk types, 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 attribute a magnitude of economic capital to the concentration risk derives from the need to fill the gaps inherent in regulatory models for measuring credit risk; in fact, supervisory approaches to quantify capital absorption do not take into account the fact that a loan 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 perfectly diversified portfolio. For this quantification, the Group adopts a special statistical portfolio model, which is used more generally for estimating economic capital requirements for credit risk exposure strictly as well as for additional risk components related to it (e.g., residual risk, migration risk, concentration risks).

From a managerial point of view, during the appraisal phase, as well as in credits 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 towards individual counterparties or groups of connected clients.

For loans applications qualified to be “of greater significance” according to the size 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 main members of the Group, supplemented by the related report, are sent to a dedicated office operating at the Parent Company's Chief Risk Officer Area, 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 appraisal, an in-depth analysis by this unit is envisaged to support the assessments of the decision-making bodies.

The Chief Risk Officer Area is also responsible for:

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

The Risk Appetite Framework (RAF) in turn sets limits on the concentration of the loan portfolio towards larger counterparties and “unattractive” economic sectors.

If needed or in order to hold down the level of concentration, specific mitigation measures can be taken as part of credit and the related risk management. The tools 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;

- actions 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, both at business portfolios and economic sectors levels, 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, guarantees given and received and the duration of the credit lines granted.

With reference to financial operations, the concentration risk is monitored through the periodic determination of the exposure to risk against credit lines granted towards financial counterparties or issuers of debt securities in portfolio, calculated using the "amount effectively granted"⁹ by credit line, suitably weighted by means of risk ratios linked to the creditworthiness class in which each counterparty/issuer is classified.

This exposure, neither at the time of granting the credit lines nor on an ongoing basis, may exceed the quantitative limits illustrated in the paragraph dedicated to "Counterparty and credit valuation adjustment risks", respectively expressed in terms of:

- maximum exposure towards each counterparty/issuer ("Single counterparty limit");
- maximum cumulative exposure towards top 10 counterparties/issuers ("Concentration limit");
- maximum cumulative exposure towards 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 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:
 - *Generic 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 market interest rates levels representing

⁹ 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.

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 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 towards 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";
- *Exchange rate risk*: the risk of suffering losses due to adverse changes in foreign currencies prices 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 commercial operations and 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

The overall exposure to market risk, referring to all financial assets held for trading purposes, is divided, for management monitoring purposes, into the subspecies of "interest rate risk", "inflation risk", "exchange risk", "price risk", "commodity risk", "credit spread risk" and "optionality risk", depending on whether the relevant risk factor consists, respectively, of a change in interest rates risk-free, inflationary expectations, exchange rates, prices of equities, UCITs or commodities, risk premiums related to the situation of the issuer and/or the characteristics of the financial instrument issued, the volatility of the optional underlying components.

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).

Objectives and strategies underlying proprietary trading, designed to manage the securities portfolio held for trading purposes, are aimed at maximising its profitability, seizing any investment opportunity 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 customer's request, transactions in options on interest rates and interest rate swaps, which are then hedged with other financial counterparties, while activities with other innovative or complex instruments is almost irrelevant.

There were no exposures subject to "inflation risk" during the year.

The main source of "price risk" is represented by equities and UCITs classified in the portfolio of "financial assets held for trading" (FVTPLT - Fair Value Through Profit or Loss Trading), from which the investments of the personnel pension fund are excluded (treated as part of the identification of the "risk associated with pension funds") and the shares of real estate funds in the portfolio (treated as part of the measurement of "real estate risk"). As for the "interest rate risk", also for the "price risk" the strategy pursued in the context of the overall assumption of market risks is oriented towards a prudent management of the assets held.

Likewise, the composition within equity securities in the portfolio favours those issued by primary large markets companies. Once again, the trading activity put in place by Banca Popolare di Sondrio focuses on exploiting short-term trading opportunities and operations are particularly focused on Italian and European equities; units in UCITs (ETF) sharply raised in an effort to increase investment diversification. With regard to derivative instruments, equity option transactions are reported.

Exposure to "commodity risk" arises from forward commodity purchase transactions made in response to specific customer needs, then balanced by contracts signed with leading financial counterparties. The residual risk exposure is therefore almost zero.

The subsidiaries Factorit, Sinergia Seconda and Banca della Nuova Terra have no exposures inherent to the trading portfolio in a strict sense; Popso Covered Bond, consolidated on a synthetic basis with the Parent Company, contributes to the same exposures referred to with reference to the Parent Company 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 side "commodity risk" derives from occasional trading in options on commodities on behalf of customers, which are usually promptly balanced; lastly, no exposures to "price risk" are present.

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 relevant operating structures, deriving from intermediation on spot and forward transactions with both 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, the Bank's role in foreign currency transactions is largely commercial, with a view to meeting customers' needs.

The exchange risk exposure is marginal for the subsidiary Factorit, given the company's policy of systematic hedging of foreign currency amounts. It 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 any 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 customers' needs, except for transitory treasury phases, which still have to comply with prudent limits set internally by the Company.

Finally, the exposure to "optionality risk" arises from trading in instruments with optional elements, including implicit ones; however, it is contained given the substantial back-to-back balancing of derivatives trading carried out on behalf of customers.

The relevant collective bodies define strategic guidelines regarding the management of financial instruments within the scope of the risk under consideration, taking into account potential impacts on current risk objectives and limits. The Operating Areas then undertake risk by operating in the financial markets and manage the exposure following the guidelines received, and also monitor any operational limit to trading activities.

Measurement and control systems

The Group quantifies its capital requirement on market risk by aggregating individual requirements for each component, as obtained on the basis of the respective national rules. The Parent Company determines accordingly a capital requirement separately for each particular type of market risk, applying the standardised measurement methods envisaged by prudential regulations.

According to supervisory regulations, the following risk types are identified in the market risk category for which, where relevant, the quantification of a Pillar 1 capital requirement is needed:

- with reference to financial assets included in the trading portfolio:
 - *position risk*
 - *concentration risk*
- with reference to the entire financial statement:
 - *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 calculate capital requirements for *position risk* to offset the positions held 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 the end of September 2020, for supervisory reporting purposes only (with the filling of a dedicated COREP template), the calculation of the alternative standard requirement for market risks based on the dictates of the FRTB (Fundamental Review of the Trading Book) has entered into force. This new capital requirement is given by the sum of the requirements calculated for each of the following three components:

- Sensitivity Based Approach (SBA): a calculation methodology based on sensitivities;
- Default Risk Charge (DRC): a metric that captures issuer risk-Jump-To-Default (JTD) for debt, equity and derivative that have these instruments as underlying assets;
- Residual Risk Add-On (RRAO): an additional metric that captures residual risks not considered by the previous two components.

From an operational point of view, the daily estimate of the exposure, to market risk (position risks in trading, exchange rate and position in commodities), at consolidated and individual company level, is carried out by the Parent Company's Chief Risk Officer Area - investigated separately in its components of risk-free interest rate risk, credit spread risk, inflation risk, price risk, commodity risk, optionality risk and exchange rate risk – and is based on an internal method of determining the Value at Risk (VaR) applied to financial instruments subject to measurement in relation to fluctuations in market variables observed historically. The figure resulting from the statistical 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 “other non-sovereign” of the banking book, the VaR model used for the measurement of exposure to market risks is historic. The aggregation of the VaR at portfolio level occurs by taking into account implicit correlations between the various risk profiles, by virtue of which the overall VaR value is normally lower than the sum of the individual VaRs.

Backtesting is performed on the forecasts of the statistical model, comparing them with the results achieved in the past. This involves a comparison, on the one hand, between daily VaR figures and, on the other hand: a) the changes in market value the next day for the same positions on which the VaR was calculated (theoretical losses), b) the changes in the hypothetical present value of the instrument/portfolio, calculated using the respective pricing model applied by the risk exposure calculation tool (theoretical losses from the model) and c) the changes in market value recorded on the following day on the portfolio including the actual increases/decreases that have taken place (actual losses).

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) for 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 limit*).

The general measure of “Maximum Acceptable Loss” compares with an aggregate corresponding to the sum of the “Effective Cumulative Loss” (ECL), which reflects any negative result of the portfolio management, 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. No specific maximum threshold is set for ECL; however, the metric is taken into account in the dynamic determination of the VaRhp limit (*second-level limit*): in fact, this is calculated as a percentage of the MAL monitoring threshold less any ECL accrued, to take account - where present - of negative results already achieved on the portfolio from the beginning of the year. 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 individual risk factors underlying the assets aggregates in the portfolio; these thresholds aim in particular to contain the daily exposure to “risk-free interest rate risk”, “credit spread risk”, “inflation risk”, “price risk”, “commodity risk”, “optionality risk” and “exchange rate risk”.

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

If the existing limits are found to be exceeded, from the surveys on the level from time to time reached by the indicators of exposure to the aforementioned risks, 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 also contemplates additional daily risk metrics (so-called sensitivities, which are synthetic parameters that measure the extent of potential changes in the value of financial assets in reaction to smaller changes in the respective risk factors) and monthly (so-called Stressed Present Value, which is a measure of the impact on the securities value in the portfolio of an hypothetical stress scenario), calculated by type of instrument and separately for each portfolio to which it belongs.

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

The global 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 losses or damages 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 damages resulting from money laundering and terrorist financing risks and from risks of non-compliance with regulations;
 - *Conduct risk*: the current or prospective risk of losses resulting from inappropriate provision of financial services and resulting from litigation costs, including cases of intentionally inappropriate or negligent conduct; this includes intentional violation and/or non-compliance with professional obligations, codes and internal rules of conduct for the customer protection;
 - *ICT risk (or ICT and security risk)*: the risk of incurring economic, reputational and market share losses caused by breaches of confidentiality, lack of integrity, inadequacy or unavailability of data and systems, as well as by failure to adapt and/or update the technological components of ICT (Information and Communication Technology) systems within reasonable time and at reasonable costs, depending on internal or external factors or changes in business needs. It is divided into: risks related to the outsourcing of information system components (ICT outsourcing risk), risks related to the availability and continuity of data and systems (ICT availability and continuity risk), risks related to ICT security (ICT security risk), risks related to system changes (ICT change risk) and risks related to data integrity (ICT data integrity risk). This includes current or potential risks due to the inadequacy or failure of technical infrastructures and applications, as well as logical or physical security risks arising from inadequate or inefficient internal processes and from internal or external events of a culpable or malicious nature, including cyber attacks. *Cyber risk* is generally attributed to the latter;
 - *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, or generating personal profit, perpetrated by people inside or outside the organisation;
 - *Model risk*: the risk of suffering losses, reputational damages or negative consequences on strategic and business decisions related to the development, implementation or improper or incorrect use of models applied internally to estimate risks or for other measurements of financial phenomena, also deriving from their inaccuracy or malfunctioning;

- *Organisational risk*: risk linked to the inadequacy, inefficiency or ineffectiveness of organisational structures, processes and procedures; it includes risks linked to the outsourcing of processes, services or company activities;
- *Compliance risk*: the risk of incurring judicial or administrative sanctions, financial losses or damages to the 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 risk (ML/TF risk)*: current or prospective risks arising from the violation of legal, regulatory and self-regulatory provisions designed to prevent the use of the financial system for the purpose of laundering, terrorist financing or weapons of mass destruction development programmes as well as risks of involvement in episodes of laundering and terrorist financing or weapons of mass destruction development programmes;
- *Reputation 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 Authorities.

Operational risk

Strategy

The operational risk management system is supported by a solid internal risk culture aimed at preventing and/or mitigating risk sources to which business operations are exposed.

To this end, 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 organisational solutions for preventing and limiting the frequency and the severity of risk occurrence, and thus containing 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 not very convenient from an economic point of view, the Group assesses the opportunity to take out specific insurance coverages with the aim of transferring the risk to third parties (for example, against exposure to the risk of operational losses of exogenous origin or of a potentially significant amount).

Strategies for the operational risk governance include the adequate control and containment of risks, including those arising from cyber threats, attributable to the use of information and communication technology in support of company operations, by means of:

- the promotion and adoption of appropriate security standards to guarantee availability (including business continuity and disaster recovery plans), confidentiality and integrity of data and technological components, including those made available by external suppliers;
- the continuous strengthening of the flexibility, resilience and agility of information systems, in order to enhance the available ICT resources and technology, and also in response to a context of increasing centrality and innovation of digital channels, as part of a consolidated multi-channel approach to customer services.

Measurement and control systems

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

This framework - adopted in the last two years also for the identification and prospective analysis of operational risk manifestations directly or indirectly attributable to the COVID-19 pandemic emergency - during 2021 underwent a specific self-assessment exercise functional to verify its current degree of compliance with the standards published in December 2017 by the “Basel Committee on Banking Supervision” for the purpose of the adoption of the New Standardised Approach (SA) for the calculation of own funds on operational risk and with the management practices outlined in Delegated Regulation (EU) 2018/959 with regard to the advanced methods of calculating operational risk (so-called “RTS AMA”); positioning analysis instrumental in initiating appropriate evolutionary refinements to maximise its use for management purposes.

Specifically, the operational risk management system envisages:

- 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 and conduct 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;
- an Operational 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 company experts about proposed, activated or implemented interventions for the risk prevention and mitigation;

- an operational risk 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 VaR - OpVaR);
- periodic monitoring activities of the actual and prospective exposure to operational risk and its developments, as well through Key Risk Indicators (KRI) and risk appetite parameters.

Evidences of the above-mentioned processes make up dedicated information flows (reporting) for the competent corporate Bodies and Functions, in order to ensure a complete knowledge and governance, as well as an effective control, of risks, including potential ones, to which the Group is exposed, in support of the identification of any operational criticalities / areas of vulnerability (and related triggering factors) as well as the activation of the most appropriate prevention, mitigation and, where possible, transfer of the identified risks.

At Parent Company level, the findings of the aforementioned processes are also brought to the attention, as part of dedicated annual disclosures, of the business functions involved at the forefront of identifying, assessing and mitigating operational risks, in order to spread the risk culture and lead to activities aimed at refining existing management safeguards and/or to actions aimed at mitigating any areas of operational weakness detected.

Information sources derived from the operational risk management system are integrated with evidences from the integrated security and ICT risk management model, operationally implemented by the *ICT Risk Technical Committee*, constituting the subject of dedicated information flows, both technical/operational and managerial in nature, to support the implementation of suitable interventions to resolve detected vulnerabilities and protect against multiple threats weighing on corporate information systems. Specifically, this model is based on dynamic processes of:

- identification of the perimeter of IT resources that can be qualified as critical for the performance of company operations, taking into account the extent and number of historical incidents and the intrinsic vulnerabilities potentially compromising the achievement of strategic objectives, the fulfilment of business needs, business operational continuity and/or compliance with sector regulatory requirements;
- identification of information technology risk scenarios (and related threats) - collected in a dedicated Register - potentially on ICT resources preliminarily identified as critical, suitably contextualised, by risk subcategory (ICT availability and continuity risk, ICT change risk, ICT data integrity risk, ICT outsourcing risk, ICT security risk) and connected with operational risk taxonomies (e.g., Event Type);
- expert assessment of risk scenarios, in terms of both probability of occurrence of the related threats and of the impact on different dimensions of analysis, in order to estimate the residual exposure to risk, which take into account the effectiveness of associated control measures;
- monitoring - launched during 2021 - of a structured set of management indicators (Key Risk Indicators, KRI), also qualifying as risk appetite metrics, reporting any critical profile and/or anomalous trend found with reference to the technological solutions identified as critical to the performance of the company's business.

This is flanked by an ICT governance structure, with the task of managing coordinated development of information systems, through the definition of effective and efficient architectural and organisational models, the addressing and monitoring of projects and corrective and evolutionary interventions and the proposition of ICT service sourcing policies, in constant alignment with corporate strategies and in compliance with applicable regulations.

With reference to the specific perimeter of the Parent Company Banca Popolare di Sondrio, it should also be noted that the company has a certified system for managing the security of information and personal data, compliant with international standards ISO/IEC 27001 and ISO/IEC 27701, in relation to the design, development and maintenance of on-line banking services and in support of application design and development, as well as the management of IT systems and networks located in the server farm.

Through the implementation of these processes the Group aims to guarantee the monitoring of the overall exposure to the assumed risk with respect to the company's defined appetite, as well as - where necessary - the promotion of suitable corrective actions aimed at preventing its occurrence or, at least, containing the prejudicial effects of potential criticalities connected with the use of IT systems and infrastructures.

Lastly, the presence of controls for handling emergency situations to ensure suitable levels of business continuity contributes to operational risks prevention and containment within the Group, in 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 allow systems and procedures timely recovery in the event of a disastrous event.

Albeit with some inevitable adaptations dictated by the different operating and market context, the operational risk management systems defined by the Parent Company are implemented and applied by the subsidiaries, which contribute with specific information flows to understand the degree of operational and IT risk exposure to which the entire Group is subject.

Compliance risk

Strategy

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

On these consolidated bases, 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 a 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 where the risk is generated, making necessary adequate training, empowerment and awareness of all personnel, within the framework of a corporate culture based on the basic principles of honesty, fairness and compliance with the rules.

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 existing controls.

Measurement and control systems

The process for managing compliance takes place, on the one hand, through a constant monitoring of mandatory external legislation (laws, regulations) and self-regulation (for example, self-regulatory codes, internal procedures and codes of conduct) and, on the other, through the identification, measurement and control of the compliance risks, according to the Group's internal policies.

Compliance risk management is based on the principle of widespread individual responsibility, according to which the carrying out of business activities in line with regulatory provisions should be a personal responsibility of each individual, regardless of its role in the company. Since the risk in question involves all levels of the company organisation, especially within the operational lines, the prevention activities are first of all implemented where the risk is generated, thus making it necessary to make all personnel responsible and aware of the risk and, in this way, spreading a culture of compliance throughout the organisation, as an essential element for correct behaviour and a good and healthy company management.

Within the Banking Group the risk of non-compliance with regulations is mainly overseen by specific organisational units operating on the basis of common principles and guidelines, with the aim of mitigating 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 change 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 dedicated 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 Compliance Function operates through a “widespread compliance” model, which is structured as follows:

- for the most important regulations for compliance risk management purposes (known as “core legislations”), such as rules on financial intermediation, conflicts of interest handling (activity with related parties/associated persons, interlocking ban, compensation and incentive policies), rules on transparency and, more generally, consumer protection regulations, the Compliance Function is directly responsible for monitoring compliance risk;

- specialised resources belonging to other business 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 regulatory perimeters of reference;
 - definition of 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 reference regulatory sources, involving the continuous identification of amendments in the regulatory framework and the assessment of the possible impact of the applicable regulations on the company's operations: in this phase, new regulations issued and the amendments of those in force are analysed with reference to the operating perimeter of the function/manager in charge of compliance controls.
- Internal process analysis: internal processes, organisation and procedures are checked from time to time to ensure that they are consistent with regulations.
- Identification of risks and mitigation actions: following the analyses carried out, specific risks and safeguards aimed at ensuring the compliance with regulations are identified and assessed; 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 involved.
- Monitoring: the effectiveness of organisational adjustments (structures, processes, procedures, including operational and commercial procedures) suggested for the prevention of the risk of non-compliance with standards is verified.
- Consultancy and assistance to corporate bodies and structures: this activity takes the form of:
 - a) preparing adequate information on the risk of non-compliance for competent corporate bodies;
 - b) issuing compliance opinions and reviews to requesting units for the regulatory aspects for which they are responsible: the former as part of the process of issuing/amending internal regulations; the latter relating to the interpretation of matters for which compliance with the regulations is 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, new markets or new types of customers).

- 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 compliance risk monitoring within the Group, the Parent Company's Compliance Function provides to the equivalent structures in the subsidiaries with basic guidelines for the controls they have to perform and gets from them periodic reports on the controls 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 and actively collaborates with the authorities responsible for guaranteeing public safety, so also in preventing and fighting 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, the 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 for the banking and financial system, as they are likely to alter the orderly activation of market mechanisms and affect the efficiency and integrity 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. 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 calibrate 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 maximise 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 their 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 referred 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 an operational model to prevent and fight money laundering, terrorist financing and, more generally, the illegal and shadow economy according to a qualitatively structured and calibrated risk-based approach. To this end, subsidiaries are equipped with rules, processes, controls and ICT tools which aim to be reasonably homogeneous at Group level.

Within the Group, 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 regulatory obligations and the foreign subsidiaries have established autonomous anti-money laundering units and appointed a manager in charge of each of them.

As regards customer operations due diligence requirements and risk profiling and monitoring, the Group has developed over time a system of 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 registering personal data, consultation of checklists 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 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), 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 extra-EEA banks located in) or who become relevant after checking “external lists” (e.g. Politically Exposed Persons);
- systematic controls on transactions carried out by customers (such as, for example, those related to the atypical use of cash; intense and recurrent movements towards countries “at risk”

as they are subject to embargo or are characterised by highly risky AML regimes as identified by authoritative sources such as FATF, EU, 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 feed and recording systems in standardised archives.

With reference to additional controls 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 list. 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 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 money laundering and terrorist financing risks 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 control processes.

The self-assessment of money laundering and terrorist financing risks is conducted at Group level, in accordance with 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 address the interventions on the operating segments involved with the aim of 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, collaborating with the anti-money-laundering counterparties 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 pursues a 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;
- offering 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;
- enhancing human resources through an 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 Supervisory Authorities;
- implementing initiatives aimed at promoting the naturalistic, historical, cultural and artistic heritage of local communities and territories where the Bank is present, including, at the Parent Company, the publication of a quarterly "Newsletter" and annual series of conferences held by illustrious cultural and entrepreneurial personalities.

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

Measurement and control systems

The Group adopts an eminently qualitative reputational risk management model which provides for the identification of risks that are potentially detrimental to 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 indirect impacts on the reputation that risk events could have by monitoring complaints, claims and out-of-court appeals received from customers, on the one hand, and analysing key news published by mass media or on the web, on the other, in order to gather useful information on the level of reputation enjoyed and ideas for constantly improve the services offered.

The reputational risk scenarios identified are subjected to a self-assessment process (Reputational Risk Self-Assessment) conducted involving business experts and specialist supervision functions responsible for preventing and/or managing those types of risk from which reputational effects typically derive; this in order to investigate potential negative impacts on the perception of the Group's image with reference to the various interlocutors and stakeholders, to identify any

appropriate intervention aimed at preventing and/or mitigating critical issues found and prepare regular information to the competent Bodies and structures.

During 2021, in compliance with the action plan defined with the purpose of adapting to the expectations promoted by the European Central Bank regarding climate and environmental risks, the inventory of reputational risk cases investigated as part of the annual Reputational Risk Self-Assessment campaign was enriched with risk scenarios pertaining to the Group's failure or deficient adherence to issues related to environmental, social and corporate governance sustainability. Further activities to strengthen reputational safeguards from an ESG (Environmental, Social, Governance) perspective are being implemented.

Among other instruments in place to monitor this type of risk, it is remarkable how the Group deems it appropriate to carry on periodic 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 constantly improving the services offered.

To lead the business according to ethical principles of fairness, transparency, integrity and professionalism as well as to the punctual compliance with codes of conduct, regulations and laws, is a fundamental form of protection against the assumption of risks related to illegal behaviour by employees, thus foreseeing or mitigating the consequent impacts on the corporate reputation. Among them, specific attention is traditionally paid to overseeing 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 comply 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 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 maintain a solid reputation. For a concrete implementation of the 231 Model the monitoring ensured 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, is fundamental.

With a view to mitigating reputational risks, Banca Popolare di Sondrio has adopted, pursuant to the aforementioned Legislative Decree 231/2001, a Code of Ethics which contains a set of principles, rules of conduct, rights, duties and responsibilities that must guide the company's activities. The Code is applied to all internal and external persons with whom the Bank enters into a relationship for the achievement of its corporate purpose which are interlocutors who can determine and, at the same time, judge, its reputation. Behavioural principles and standards set out in the Code are also 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 assets value and/or an increase in liabilities value not belonging to the trading portfolio for supervisory purposes following adverse changes in the interest rates levels (economic value perspective), as well as the risk that interest rate movements might have a negative impact on present and future profitability deriving from banking book assets and liabilities that generate 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 and 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 occurs with changes in interest rates that have different tenors (tenor basis risk), changes in interest linked to different currencies (currency basis risk), changes in interest rates with different recognition methods (indexation basis risk), changes in rates that are 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 (equity sensitivity): this identifies the risk generated by 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);
- margin approach and current earnings outlook (sensitivity of net interest income and net income): interest rate risk is assessed on the basis of the sensitivity of net interest income and net income generated by assets and liabilities in the banking book to changes in market rates over the short to medium term ("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 the matching of asset and liability aggregates with homogeneous financial characteristics. This balance is pursued by minimising the differences between maturities and 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 systems, methods and instruments for identifying, assessing and managing risks deriving from potential changes in the level of interest rates, so as to promote an integrated view of the assets and liabilities sensitive to changes in rates, 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 established.

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.

At the subsidiary Banca Popolare di Sondrio (SUISSE), the main source of interest rate risk is represented by fixed-rate lending transactions (mortgages), maturity funding transactions from banks and on-demand funding transactions from customers with appropriate maturity modelling.

For Factorit the risk is originated by the different timing and methods used in repricing the interest rate of its assets and liabilities. The presence of diversified fluctuations in rates leads to a variation in the expected interest margin, as well as a change in assets and liabilities present value; this in turn alters the net economic value of the items at risk. The characteristics of the financial statements structure of the investee also make the impact of movements in market rates on corporate assets and liabilities current value marginal. The high turnover of advances granted in the context of factoring loans and receivables and the fact that the funding is exclusively short-term, which ensure a frequent repricing of operations, 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 linked to operations of lending to customers and, albeit limited to investment in securities, partially offset by fixed-term funding, mainly at the Parent Company.

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

Measurement and control systems

The control of exposures to interest rate risk takes place through an articulated Asset & Liability Management (ALM) system. The system, governed by the Parent Company's CRO Area, supports both a "Sensitivity Analysis in Full Evaluation" model, dedicated to the sensitivity analysis of shareholders' net equity, carried out in the hypothesis of inertial volumes, and an "Interactive Simulation" model, dedicated to the sensitivity analysis of net interest income, with simulations carried out on the assumption of constant volumes. The profit sensitivity analysis integrates the results of the "Interactive Simulation" model applied to assets and liabilities in scope with those of the "Sensitivity Analysis in Full Evaluation" model obtained on a specific portion of operations calculated at "fair value".

The first methodology is used to determine expected 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; 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) and two hypothetical scenarios of interest rate movements aimed at capturing future market expectations and specific particularly adverse situations that occurred in the past, respectively. 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 “Modified present value” of each asset and liability¹⁰.

Then, for each operation falling within the scope of risk measurement, the change in present value is calculated as the difference between the “modified present value” and the “non-modified present value”. In this way, the model makes it possible to estimate the banking book sensitivity in terms of changes in the economic value of shareholders' equity in the face of an increase or decrease in market rates, adopted, in case of a parallel movement (shock), undifferentiated by currency, of reference curves equal to +/- 200 basis points, also in the ICAAP process as an estimate of the internal capital requirement against interest rate risk of the banking book.

In addition, sight deposits which are very stable in terms of volumes and whose interest rates are not usually established by contract, are represented through “behavioural models” aimed at capturing the time persistence of the volumes - which, however, with regard to liabilities and separately for each currency, cannot have an average repricing date of more than 5 years - and their financial elasticity with respect to changes in market rates. The parameters constituting these models are re-evaluated at least on an annual basis.

A further portion of modelled transactions relates to certain types of loans granted by the Parent Company, in consideration of the fact that in these loan agreements the borrower has an option to repay the loan earlier than the contractual maturity date, as well as an option to renegotiate the type of interest rate applicable (from fixed to variable or vice versa) or the level of rate/spread/cap/floor, which may be exercised at any time at the borrower's discretion. The adoption of specific behavioural modelling, whose parameters are subject to re-estimation at least every two years, makes it possible to better understand said phenomena, globally known as “pre-payment”.

Specific methodological treatments are reserved for: a) securities indexed to Italian inflation (BTP Italia) and European inflation (BTP €i), for which the principal and interest flows are considered, including the related revaluation component; b) Banca Popolare di Sondrio credit exposures classified as non-performing and likely to default, already included in measurements provided for at regulatory level, but also considered in those of a managerial nature with a value net of write-downs

¹⁰ In the event of an increase in the rate curve, no non-negative constraint is imposed. In the event of a negative variation in the levels of the market curves, a minimum value (floor) is applied to the shocked curve: this is applied only if the value of the rate recorded on the date of analysis is higher than the floor itself; vice versa, if the value recorded is lower, no further shock is applied.

and with estimated financial characteristics. The scope of recognition for both managerial and regulatory purposes is also integrated with the expected use of irrevocable fixed-rate credit lines and the related hypothetical funding component.

Exposures measured on a monthly basis with the “Sensitivity Analysis in Full Evaluation” method, determined in inertial conditions with simulation of parallel movements in reference curves equal to +/- 200 bps, are then expressed as ratios of total own funds to calculate two separate risk indicators, to be compared with related RAF thresholds-limits. In addition, a further indicator based on the ratio between the worst outcome linked to the further six simulated scenarios of interest rate changes and Tier 1 capital is quantified; lastly, the so-called “Supervisory Outlier Test” metrics envisaged by guidelines published by the European Banking Authority are calculated on a quarterly basis.

Previous analyses are supplemented by the results of the “Interactive Simulation” method, which assumes the occurrence of shocks to market rate curves in order to measure the sensitivity of the net interest income generated by banking book assets and liabilities, according to the positioning of capital flows on the date when the transactions begin to be sensitive to changes in market 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, consisting mainly of fixed-rate transactions, is neutral in determining the sensitivity of the margin up to the natural maturity of the transaction, but is impacted at the time of renewal since it refers to a coupon rate that includes the risk-free market component, subject to change, and the risk premium associated with the original transaction, which is kept constant. The second, represented by floating-rate transactions, is conditioned by the change in interest rates during the coupon rate review period. The difference between the net interest income generated by each banking book transaction following the application of shocked market curves and the one generated under current market conditions, determines the marginal contribution to the overall sensitivity. By adding this differential for all transactions, separately for asset and liability items, the overall value of the sensitivity of net interest income to the risk of fluctuations in market rates is obtained.

Global exposures measured on a monthly basis using the method described above, determined by simulating parallel movements of 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 interest rate curves, thus giving two specific risk indicators. The value assumed by these indices is then compared with the related RAF thresholds-limits. An additional risk indicator based on the worst outcome of the further six simulated EBA scenarios of interest rate movements is also quantified.

By integrating the results obtained using the “Interactive Simulation” method with the exposure measured using the “Sensitivity Analysis in Full Evaluation” method for a specific portion of transactions represented by debt securities in the banking book classified in the accounting categories “Fair Value through Other Comprehensive Income” (FVOCI) and “Fair Value through Profit or Loss Mandatory” (FVTPLM), the sensitivity of profit to interest rate risk is obtained. Exposures determined by simulating parallel movements of reference curves of +/- 200 basis points, are then expressed as a ratio of the value of the economic result expected along the time horizon of one year, generated without the application of shock to the rate curves, thus giving two specific

risk indicators. An additional risk indicator based on the worst outcome of the further six simulated EBA scenarios of interest rate movements is also quantified.

Interest rate risk governance strategies require that, as part of the annual stress testing of key capital, income and financial variables carried out as part of the ICAAP, joint simulations dependent on scenario assumptions are carried out to determine the impacts of the shocks taken as reference in the identification of adverse scenarios on: a) economic value of banking book assets; b) performance of net interest income, referring to banking and trading book items.

Consistently with the “Sensitivity Analysis in Full Evaluation” and “Interactive Simulation” methods described above, more specific stress tests are carried out, characterised by the execution of simulative analyses based on a predefined set of hypotheses on the evolution of market rates, aimed at identifying, in particularly adverse market conditions, the trend of the rate risk profile. The main objective of these stress simulations, conducted on a monthly basis, is to estimate impacts on exposures caused by sudden and unpredictable changes in market rates general levels induced by changes in one or more specific risk factors. Stress analysis, carried out including the dynamics of the volumes of operations, is conducted both from the point of view of the “fair value” related interest rate risk and the “cash flow” related interest rate risk.

In support of interest rate 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 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 payment commitments at 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*: the risk arising from the inability to raise funds or to obtain funds at a reasonable cost. It can in turn be divided into:
 - *Mismatch Liquidity risk*: risk generated by the misalignment between the amounts and/or the timing of the inflows and outflows;
 - *Contingency Liquidity risk*: risk that unexpected future events may require a greater amount of liquidity than expected on the basis of the operations known to date; the following fall into this case: 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 in a funding cost 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 assets in the portfolio.

Strategy

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

- the rejection of speculative or otherwise excessively risky operations that could affect the Group profitability and stability;
- 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 top quality reserves that can easily be turned into cash, represented to a large extent by sovereign securities, which guarantee a high capacity of refinancing with central counterparties to cope with any liquidity crises;
- the keeping of a structural liquidity position supported by a stable and diversified funding base.

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

Measurement and control systems

With regard to liquidity risk management and measurement, the Group relies on internal systems for monitoring its 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 controls carried out at different organisational levels. A first level of 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 business operations on a daily basis.

This control is accompanied by a systematic monitoring of the expected liquidity position carried out by the Chief Risk Officer Area of the Parent Company, based on gathering data on the activities of the Parent Company 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 requirements is aimed at verifying the Group's ability to meet its 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 and assimilated operations, 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 sign of systemic or specific crisis, which is associated with the monitoring of specific surveillance thresholds. The impact of predefined scenario assumptions on the liquidity position being measured is also estimated, subjecting the results obtained from the monitoring activity to stress tests. The outcomes of the stress tests conducted are also used to establish the limits of specific contingency indicators, as

well as to define remedial actions that could potentially be implemented in any stress situation. 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 amounts of financial instruments 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 of specific structural risk indicators on a monthly basis, 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 performance is carried out through a system of real-time controls over how corporate liquidity is used, including the measurement of indicators regarding cash reserves available at the beginning of each working day as well as the amount and the time sequence of payments throughout a day. Special synthetic metrics pertaining to the month just ended are also quantified monthly, which are subjected to the same stress tests used on the operating liquidity position adding a peculiar scenario for the intraday liquidity position.

The results of the operational monitoring are accompanied by the recognition of specific ratios calculated in accordance with supervisory instructions: in particular, the LCR (Liquidity Coverage Ratio) and NSFR (Net Stable Funding Ratio) parameters. These indicators, which are subject to specific supervisory reports, are calculated on a monthly and quarterly basis respectively. With equal frequency, the two metrics are also quantified under stress test applying the same hypotheses used for simulations of the operational liquidity indicators.

At 31 December 2021, 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% 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 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 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. The Committee is then updated monthly on the evolution of the risk position through dedicated reports including all key results 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 key 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 communicated through this reporting, formalised by 30 April of each year, together with all the other liquidity risk exposure data provided over time, constitute a fundamental assessment basis for the purposes of SREP (Supervisory Review and Evaluation Process) for the Supervisory Authority.

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 risk levels assumed in the present 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. The ILAAP assessment has been carried out in April 2022 with reference to the end of 2021.

Subsidiaries control liquidity risk exposure on an individual basis by using monitoring tools and methods 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 AND BUSINESS RISK

Definition

Current or prospective risk of declines in profits or capital deriving from changes in the operating context or from incorrect strategic decisions, inadequate implementation or updating of strategic and management guidelines, poor reactivity to changes in the competitive scenario.

This category includes the following sub-types of risk:

- *Strategic risk*: the risk that the Group's decisions and guidance regarding competitive/strategic positioning will not have the expected results, penalising the achievement of medium/long-term economic and financial objectives;
- *Risks associated with equity investments*: risk of suffering losses in value with respect to the portfolio of equity investments other than those held for trading purposes; this concerns in particular equity holdings characterised by stability and a long-term investment rationale, outside the Group's perimeter, not already considered within the scope of other securities risk (banking book); this can occur due to the possibility of incurring losses deriving from the fluctuation in the value of the shares or units held in relation to the economic prospects of the company in which the investment is held, or as a result of the insolvency of the company itself, or due to an excessive immobilisation of assets or a change in the Group's financial and equity structure following a significant acquisition, or lastly, due to the occurrence of potential conflicts of interest between the investment activity in equity investments and other activities carried out, and lending in particular;

- *Business risk*: the risk associated with the uncertainty of economic results not caused by other types of risk but mainly deriving from changes in the competitive context, in the economic conditions of the activity carried out or in customers behaviours.
- *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 horizons. 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 the implementation.

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

- defining rules and deliberative procedures aimed at ensuring the substantial and procedural suitability of these transactions, in compliance with the reference standards;
- ensuring compliance with the quantitative limits on 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 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 and, therefore, are necessary for the achievement and maintenance of an effective competitive position. These holdings are stable and strengthened by the BPS's traditional intention to give the investee companies 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 instead 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 aimed at ensuring a 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 guaranteeing 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

In order to control and mitigate strategic and business risks the Group adopts rigorous policies, 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 other entities of the Group, are represented by the constant observation of reference markets, the diligent execution of strategic, capital and operational planning and the careful monitoring of business trends.

These criteria are applied to all areas of operation, 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, transactions of major economic 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 between the actual economic and financial results and the objectives set in multi-year plans and annual budgets.

At the Parent Company this activity is carried out periodically by the top management with the support of the relevant offices and 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 issue or deviation from the path being pursued.

The general trend in operations and related outlook are normally analysed by top management and the Board of Directors when quarterly reports are presented for approval, paying particular attention to the level of efficiency and effectiveness achieved. In case 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 clear, articulated and timely internal reporting functional to the adoption of interventions consistent with strategic objectives, support the Group's ability to perceive and respond appropriately to changes in the context. In this regard, the adequate circulation of information between corporate bodies and within them, as well as between them and business and control structures is considered an essential prerequisite for the maintenance of decision-making processes based on adequate knowledge of 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 conduction of business activities withing the Group, the existence of mechanisms for sharing top management tasks between the Parent Company and the subsidiaries contributes to the adoption of uniform strategic lines. This coordination system mitigates the risks that the affiliates take decisions that could harm the Group's sound management and 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 located in geographic areas where BPS traditionally had its roots. Since these companies are well-known to the Parent Company, also thanks to the appointment of its representatives in their respective corporate bodies, strategic risks associated with these holdings are carefully controlled and monitored.

The acquisition and sale of shareholdings, which are statutorily reserved to top corporate bodies, are subject to in-depth assessment and are inspired by 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 a prior examination by the Board of Directors of the Parent Company, according to 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.

For business and underwriting risk exposures, due to their significance, the Group estimates specific internal capital allocations as part of ICAAP.

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ESG / SUSTAINABILITY RISKS

The Group recognizes that the integration of “sustainability” risks related to the consideration of environmental, social and corporate governance factors (so-called “ESG risks”, Environmental, Social, Governance) in its strategic and risk management processes is an essential lever in order to better understand the context in which it operates, a more considered assumption of risk and, ultimately, greater effectiveness in responding to ‘customers’ and communities’ needs.

ESG risk factors have significant impacts on economic activities, affecting the financial system through various transmission channels. As determining or accentuating factors of various risk categories that typically characterise the operations of financial institutions, their occurrence could affect the resilience of the Group's business model over a medium and long-term time horizon, compromising its capital stability, competitive potential and reputational credibility.

In addition to being an important driver and lender of the system, the Group is aware that it plays a significant role as a social operator and, in this capacity, it aims to participate with its own business activities in an orderly transition process towards a more sustainable economy on a “human scale”, also for the benefit of future generations.

In compliance with specific regulatory and supervisory obligations, the Group also pursues the strengthening of internal and external communication channels and the intensification of publications on climatic and environmental aspects and, in general, on issues related to sustainability and the management of the related risks, in order to increase markets transparency and promote the understanding of players regarding the financial implications of these factors.

During 2021, the Bank continued along the path taken in previous years with the aim of ensuring effective oversight in terms of identifying and managing “sustainability” risks. In relation to this topic, multiple internal tools and methodologies are being developed for the identification, recognition and analysis of potential impacts of risks related to environmental and climate, social and governance aspects within corporate management systems.

For further details of completed, planned and ongoing initiatives carried out for the progressive enhancement of techniques, processes and tools for assessing, quantifying and reporting on ESG risks, please refer to the contents of the “2021 Consolidated Non-financial Statement” (<https://istituzionale.popso.it/it/sostenibilita/dichiarazione-non-finanziaria>) and to the “2021 Financial Statements” - Directors' Report on Operations (section “Risk Management”) and Notes, Part E *Information on Risks and Related Hedging Policies* (section “ESG (Environmental, Social and Governance) risks: disclosures made in compliance with the recommendations in ESMA Public Statement of 29 October 2021 regarding supervisory priorities for financial and non-financial information for the year 2021”) (<https://istituzionale.popso.it/it/investor-relations/bilanci-e-relazioni>).

Corporate governance arrangements

With regard to 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 (<https://istituzionale.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, reference should be made to the “Report on Corporate Governance and Ownership Structure for the year 2021”, prepared pursuant to art. 123 bis of Legislative Decree no. 58 of 24 February 1998 (Consolidated Law on Finance) and available on the Bank's website at the following address <https://istituzionale.popso.it/it/governance/relazioni-sul-governo-societario>. The document contains the Bank's Directors curricula vitae, indicating 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 <https://istituzionale.popso.it/it/investor-relations/assemblea-dei-soci> (2022 Shareholders' Meeting, Meeting documents).

- 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. 20, paragraph 2, of the Articles of Association of Banca Popolare di Sondrio - document available (only in Italian) on the company's website at <https://istituzionale.popso.it/it/governance/documenti-societari> – establishes that: “*The composition of the Board of Directors must ensure gender balance in accordance with current regulations*”.

In accordance with the above-mentioned statutory regulations, 6 out of 15 Directors are an expression of the less represented gender, the female one. Therefore, the obligation of at least two-fifths of the offices attributed to the less represented gender envisaged by the provisions of Law 160 of 27 December 2019 in terms of equal access to administration and control bodies of companies listed on regulated markets is fully respected.

With regard 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 Spa” (<https://istituzionale.popso.it/it/investor-relations/assemblea-dei-soci> - 2022 Shareholders' Meeting, Meeting Documents).

In the above-mentioned document, the importance of Board diversity and heterogeneity is emphasised (paragraph 9), particularly in terms of skills, experience, gender, age and length of tenure, in order to foster plurality of approaches and perspectives in analysing issues and making decisions.

Section 10 of the document outlines the criteria of professionalism and suitability that the Board of Directors considers optimal consistent with current regulations. 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 following areas were present in the Board.

- knowledge of banking;
- knowledge of the dynamics of the economic and financial system;
- knowledge of credit, finance and market regulation;
- 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 planning and 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 role of technology in the evolution of the banking sector;

- knowledge of the activity, structure and organisation of Banca Popolare di Sondrio and its Group.

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

The Control and Risks Committee is set up within the Board of Directors. In this regard, please refer to the aforementioned “Report on Corporate Governance and Ownership Structures for 2021”, paragraph 5.2 (<https://istituzionale.popso.it/it/governance/relazioni-sul-governo-societario>), which illustrates the composition, competences and functioning of the Committee. During 2021, the Control and Risks Committee met 12 times, with each meeting lasting an average of 2.7 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 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 document, 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 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 remedial actions planned or taken;
- violations, serious events and anomalies.

With specific reference to the information flow 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.

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 n and Activity Programme for the year n+1	Governance Area <i>Chief Risk Officer</i>	Annual
2	Report of the Risk Management Function pursuant to art. 23 Commission Delegated Regulation (EU) 565/2017 on investment services	Governance Area <i>Chief Risk Officer</i>	Annual
3	Reporting of the Group's internal capital adequacy assessment process (ICAAP Report)	Governance Area <i>Chief Risk Officer</i>	Annual
4	Reporting of the Group's internal liquidity adequacy assessment process (ILAAP Report)	Governance Area <i>Chief Risk Officer</i>	Annual
5	Public Disclosures (Pillar 3 Report)	Governance Area <i>Chief Risk Officer</i>	Quarterly
6	Tableau de Bord – Risk Dashboard	Governance Area <i>Chief Risk Officer</i>	Quarterly
7	Report of the Validation Function on the activities carried out during the year n and Activity Plan for the year n+1	Governance Area <i>Chief Risk Officer - Validation Office</i>	Annual
8	Validation Office Notes on Updates to Model A-IRB (model change)	Governance Area <i>Chief Risk Officer - Validation Office</i>	According to the periodicity and in the circumstances 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 (half-yearly update)
10	Report pursuant to art. 22 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

	Flow name	Responsible unit	Frequency
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 (half-yearly update)
17	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 (half-yearly update)
18	Information relating to the supervisory activity on the implementation of the Organisational Model according to L.D. 231/2001	Supervisory Body pursuant to Legislative Decree 231/2001	Annual
19	Report of the Internal Audit Department on the activities carried out in the year n and Audit plan	Internal Audit Department	Annual
20	Report on the checks carried out on important operational or outsourced control functions	Internal Audit Department	Annual
21	Report of the Internal Audit Department pursuant to art. 24 Commission Delegated Regulation (EU) 565/2017 on investment services	Internal Audit Department	Annual
22	Periodic information on audit activities and reports on specific areas of verification (e.g. ICAAP / ILAAP, A-IRB internal rating systems, etc.)	Internal Audit Department	According to the periodicity and in the circumstances established by internal regulations
23	Report on investment services, ancillary activities and distribution of financial products issued by insurance companies or banks	Governance Area Chief Financial Officer - Finance Service	Annual
24	Self-assessment of the persistence of the eligibility requirements in the exercise of the activity of custodian bank of UCITS and pension funds	Governance Area Chief Financial Officer - Finance Service	Annual
25	Annual plan of business continuity controls	Governance Area Chief Information & Operations Officer -	Annual

	Flow name	Responsible unit	Frequency
		Business Continuity Function	
26	Summary report on the ICT risk situation	Governance Area <i>Chief Information & Operations Officer</i> Governance Area <i>Chief Risk Officer</i>	Annual
27	Self-assessment report on ICT security risk	Governance Area <i>Chief Information & Operations Officer</i>	Annual
28	Report on the findings of operational and security risks related to payment services	Governance Area <i>Chief Risk Officer</i> Governance Area <i>Chief Information & Operations Officer</i>	Annual
29	Annual Report of the Group Outsourcing Manager	Group Outsourcing Manager	Annual

Section 3 - Disclosure of key metrics and overview of risk-weighted exposure amounts (art. 438, 447 and 473-bis CRR/CRR II)

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, in line with the provisions set out in the Pillar 2 regulatory framework, the Group has in place an internal process (ICAAP - Internal Capital Adequacy Assessment Process) to regularly evaluate if its capital level and composition are adequate, in current and prospective terms, to cope with all the significant risks to which the Group is or might be exposed, 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, 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 ability of the Group's capital position to meet all regulatory and Supervisory requirements, as well as to face, on an ongoing basis, all 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 potential impacts of all capital risks considered material for the Group, not limited to those covered by Pillar 1 requirements.
- *Internal economic perspective*: it integrates the 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 usually one year. However, it was extended to three years with the ICAAP as at 31 December 2021 in adherence to specific ECB expectations.

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

- *absorbed capital*, understood as the capital need relating to a specific risk which is deemed 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 needs due to strategic considerations;
- *total available capital*, consisting of the overall capital resources that are expected to cover the amount of capital needs determined through risk quantification.

The correct 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 different types of risk 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 as part of the management reporting on business performance and risk exposures. Potential impacts on the capital position of key managerial choices and initiatives, or any significant changes in corporate strategies and in the external environment, are also previously assessed before making any related decision.

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

The following tables provide a summary of the performance of some key figures of Banca Popolare di Sondrio Group, represented by key prudential and regulatory metrics envisaged by the CRR/CRR II regulations. The additional Pillar 2 requirements to which the Group is subject by virtue of regulatory provisions or decisions of the Supervisory Authority are also represented.

Table 6 - Template EU KM1: Key metrics (1 of 2)

		a	b
		12/31/2021	09/30/2021
Available own funds (amounts)			
1	Common Equity Tier 1 (CET1) capital	3,163,255	3,051,706
2	Tier 1 capital	3,173,556	3,059,104
3	Total capital	3,784,789	3,383,934
Risk-weighted exposure (amounts)			
4	Total risk-weighted exposure amount	20,042,635	18,463,957
Capital ratios (as a percentage of risk-weighted exposure amount)			
5	Common Equity Tier 1 ratio (%)	15.7826 %	16.5279 %
6	Tier 1 ratio (%)	15.8340 %	16.5680 %
7	Total capital ratio (%)	18.8837 %	18.3272 %
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)			
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	3.0000 %	3.0000 %
EU 7b	of which: to be made up of CET1 capital (percentage points)	1.6875 %	1.6875 %
EU 7c	of which: to be made up of Tier 1 capital (percentage points)	2.2500 %	2.2500 %
EU 7d	Total SREP own funds requirements (%)	11.0000 %	11.0000 %
Combined buffer requirement (as a percentage of risk-weighted exposure amount)			
8	Capital conservation buffer (%)	2.5000 %	2.5000 %
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	-
9	Institution specific countercyclical capital buffer (%)	0.0007 %	0.0014 %
EU 9a	Systemic risk buffer (%)	-	-
10	Global Systemically Important Institution buffer (%)	-	-
EU 10a	Other Systemically Important Institution buffer	-	-
11	Combined buffer requirement (%)	2.5007 %	2.5014 %
EU 11a	Overall capital requirements (%)	13.5007 %	13.5014 %
12	CET1 available after meeting the total SREP own funds requirements (%)	9.5951 %	10,3404%
Leverage ratio			
13	Leverage ratio total exposure measure	54,362,126	53,401,150
14	Leverage ratio	5.8378 %	5.7285 %
Additional own funds requirements to address risks of excessive leverage (as a percentage of leverage ratio total exposure amount)			
EU 14a	Additional own funds requirements to address the risk of excessive leverage (%)	-	-
EU 14b	of which: to be made up of CET1 capital (percentage points)	-	-
EU 14c	Total SREP leverage ratio requirements (%)	3.2740 %	3.2840 %
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)			
EU 14d	Leverage ratio buffer requirement (%)	-	-
EU 14e	Overall leverage ratio requirement (%)	3.2740 %	3.2840 %
Liquidity Coverage Ratio			
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	9,561,024	8,757,262
EU 16a	Cash outflows - Total weighted value	10,344,584	10,040,423
EU 16b	Cash inflows - Total weighted value	6,106,095	6,412,180
16	Total net cash outflows (adjusted value)	4,238,489	3,628,243
17	Liquidity coverage ratio (%)	234.2043 %	245.0845 %
Net Stable Funding Ratio			
18	Total available stable funding	40,681,347	39,577,697
19	Total required stable funding	30,892,952	29,896,843
20	NSFR ratio (%)	131.6849 %	132.3809 %

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00; Calculation of the leverage ratio: Template C 47.00; Liquidity Coverage: Templates C 72.00 - C 73.00 - C 74.00 - C 75.01 - C 76.00

Table 7 - Template EU KM1: key metrics (2 of 2)

		c	d	e
		06/30/2021	03/31/2021	12/31/2020
Available own funds (amounts)				
1	Common Equity Tier 1 (CET1) capital	3,066,344	2,942,749	2,967,432
2	Tier 1 capital	3,074,806	2,950,357	2,976,039
3	Total capital	3,425,313	3,322,293	3,373,534
Risk-weighted exposure (amounts)				
4	Total risk-weighted exposure amount	18,355,373	17,763,117	18,187,330
Capital ratios (as a percentage of risk-weighted exposure amount)				
5	Common Equity Tier 1 ratio (%)	16.7054 %	16.5666 %	16.3159 %
6	Tier 1 ratio (%)	16.7515 %	16.6095 %	16.3633 %
7	Total capital ratio (%)	18.6611 %	18.7033 %	18.5488 %
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)				
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	3.0000 %	3.0000 %	3.0000 %
EU 7b	of which: to be made up of CET1 capital (percentage points)	1.6875 %	1.6875 %	1.6875 %
EU 7c	of which: to be made up of Tier 1 capital (percentage points)	2.2500 %	2.2500 %	2.2500 %
EU 7d	Total SREP own funds requirements (%)	11.0000 %	11.0000 %	11.0000 %
Combined buffer requirement (as a percentage of risk-weighted exposure amount)				
8	Capital conservation buffer (%)	2.5000 %	2.5000 %	2.5000 %
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	-	-
9	Institution specific countercyclical capital buffer (%)	0.0021 %	0.0048 %	0.0030 %
EU 9a	Systemic risk buffer (%)	-	-	-
10	Global Systemically Important Institution buffer (%)	-	-	-
EU 10a	Other Systemically Important Institution buffer	-	-	-
11	Combined buffer requirement (%)	2.5021 %	2.5048 %	2.5030 %
EU 11a	Overall capital requirements (%)	13.5021 %	13.5048 %	13.5030 %
12	CET1 available after meeting the total SREP own funds requirements (%)	10.5179 %	-	-
Leverage ratio				
13	Leverage ratio total exposure measure	52,652,000	48,880,314	46,928,386
14	Leverage ratio	5.8399 %	6.0359 %	6.3417 %
Additional own funds requirements to address risks of excessive leverage (as a percentage of leverage ratio total exposure amount)				
EU 14a	Additional own funds requirements to address the risk of excessive leverage (%)	-	-	-
EU 14b	of which: to be made up of CET1 capital (percentage points)	-	-	-
EU 14c	Total SREP leverage ratio requirements (%)	3.2860 %	3,0000%	3,0000%
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)				
EU 14d	Leverage ratio buffer requirement (%)	-	-	-
EU 14e	Overall leverage ratio requirement (%)	3.2860 %	3,0000%	3,0000%
Liquidity Coverage Ratio				
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	8,396,953	8,178,818	8,175,653
EU 16a	Cash outflows - Total weighted value	9,615,741	9,280,172	8,962,107
EU 16b	Cash inflows - Total weighted value	6,031,582	5,363,856	4,607,697
16	Total net cash outflows (adjusted value)	3,584,159	3,916,315	4,354,410
17	Liquidity coverage ratio (%)	238.5352 %	217.9816 %	196.3171 %
Net Stable Funding Ratio				
18	Total available stable funding	38,885,020	-	-
19	Total required stable funding	30,230,235	-	-
20	NSFR ratio (%)	128.6296 %	-	-

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00; Calculation of the leverage ratio: Template C 47.00; Liquidity Coverage: Templates C 72.00 - C 73.00 - C 74.00 - C 75.01 - C 76.00

Capital requirements

Banking groups must comply with the following minimum capital requirements:

- Common Equity Tier 1 (CET1) ratio of 4.5%;
- Tier 1 Ratio of 6%;
- 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 risks deriving from certain banks systemic relevance at a global or domestic level.

Each additional capital reserve plays a specific role; in particular:

- *Capital Conservation Buffer*: made up of an additional 2.5% of Common Equity Tier 1 Capital, aimed at safeguarding the minimum regulatory capital under adverse market conditions.
- *Countercyclical Capital Buffer*: this additional buffer is made up of Tier 1 Capital to protect the banking sector at times of excessive lending growth; following measures by 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 at a national level. The countercyclical coefficient for exposures to Italian counterparties, which is reviewed by the Bank of Italy on a quarterly basis, was 0% in 2021 also confirmed as such in the first two quarters of 2022.
- *Global Systemically Important Institution Buffer (G-SII buffer) and Other Systemically Important Institution Buffer (O-SII buffer)*: reserves consisting of Common Equity Tier 1 capital; applied to Global Systemically Important Institutions (G-SII) and Other Systemically Important Institutions (O-SII) to account for the increased risks they potentially pose to the financial system stability. 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 capital reserve equal to at least 1% of the risk-weighted 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 negative effects related to unexpected systemic crises.

The sum of regulatory requirements and additional capital reserves determines the minimum level of capital conservation required for banks and banking groups (known as the “combined buffer requirement”). From 1 January 2019, for Banca Popolare di Sondrio Group these minimum capital quantities are the following:

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

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

It is noted that 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 had notified Banca Popolare di Sondrio of the Supervisory Board's decision regarding new minimum ratios to be applied on a consolidated basis for 2020, with effect from 1 January. The minimum capital levels to be met by the Group¹¹ included:

- a minimum requirement for Common Equity Tier 1 Ratio equal to 10.0%, made up of the sum of the Pillar 1 regulatory requirement (4.50%), the amount of Capital Conservation Buffer for the current year (2.50%) and the additional Pillar 2 Requirement - P2R (3.0%);
- a minimum requirement for Tier 1 Ratio of 11.50%, being the sum of the Pillar 1 regulatory requirement (6.0%), the amount of Capital Conservation Buffer for the current year (2.50%) and the additional Pillar 2 Requirement (3.0%);
- a minimum requirement for Total Capital Ratio of 13.50%, being the sum of the Pillar 1 regulatory requirement (8%), the amount of Capital Conservation Buffer for the current year (2.50%) and the additional Pillar 2 Requirement (3.0%).

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

With a press release dated 12 March 2020, the European Central Bank announced the introduction of a temporary capital relief and greater operational flexibility in the implementation of bank-specific supervisory measures in reaction to the spread of the Coronavirus, in order to allow banks directly supervised by the ECB to continue playing a central role in funding the real economy and thus mitigating the COVID-19 impact on the European countries. Consequently, through a communication dated 8 April 2020, the European Central Bank had established, with effect from 12 March 2020, that the additional Pillar 2 requirement (P2R) of the Group should be satisfied by Common Equity Tier 1 (CET1) capital for a minimum of 56.25% and by Tier 1 (T1) capital for a minimum of 75%. Following the re-composition of capital for P2R component, the following applied to the Group:

- a minimum requirement for the Common Equity Tier 1 Ratio of 8.69%;
- a minimum requirement for the Tier 1 Ratio of 10.75%;
- a minimum requirement for the Total Capital Ratio of 13.50% (unchanged).

At the same time, the possibility of operating temporarily below the level defined by the Capital Conservation Buffer was envisaged as a further measure of flexibility.

As a result of the 2020 SREP process, conducted by the ECB with a pragmatic approach as a consequence of the difficulties posed by the COVID-19 crisis, the Supervisory Authority

¹¹ The minimum requirements are calculated net of the contribution from the Group's specific countercyclical capital buffer.

communicated, as a general rule, that the requirements of supervised entities set for the previous year, as revised by the aforementioned decision with effect from 12 March 2020, would have continued to be applied for 2021.

On 2 February 2022, at the conclusion of the SREP process conducted in 2021, the ECB, overcoming the previous approach related to the COVID-19 crisis, released the new prudential requirements applicable to the Group effective from 1 March 2022. The new additional P2R requirement, to be held in the form of Common Equity Tier 1 (CET1) capital at least for 56.25% and Tier 1 (T1) capital for at least 75%, has been set at 2.77%, including an add-on of 0.02% as an increase in the Pillar 2 requirement for impaired exposures. As a result, the minimum level of Common Equity Tier 1 Ratio required is now 8.56%, determined as the sum of the minimum Pillar I regulatory requirement (4.50%), the additional Pillar II requirement (1.56%) and the capital conservation buffer (2.50%). The new Tier 1 Ratio requirement is 10.58%, while the new minimum Total Capital Ratio requirement is 13.27%.

In addition to these minimum ratios, a specific “Pillar 2 Guidance” (P2G) is also set by the Authority, which aims to be a guideline to the prospective evolution of the Group's capital position. The latter target parameter, assigned by the Supervisor as a result of the SREP process, however, assumes a confidential nature and, unlike the abovementioned binding 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.

As of 31 December 2021, the Group's capital ratios are confirmed to be at particularly high values with a wide margin over regulatory requirements. Phased-in, the CET1 Ratio stands at 15.78 %, the Tier 1 Ratio is 15.83% while the Total Capital Ratio stands at 18.88%.

Further information on the performance of the Group's capital ratios in relation to minimum requirements is provided in Section 4 of this Disclosure.

Leverage and liquidity requirements

Banca Popolare di Sondrio Group is also subject to minimum requirements in relation to:

- Leverage Ratio;
- Liquidity Coverage Ratio (LCR);
- Net Stable Funding Ratio (NSFR).

For further information on the first coefficient please refer to Section 6, for the second and third ratios please refer to Section 7 of this Disclosure.

The following tables provide the values of the Group's regulatory own funds, risk-weighted assets (RWA), capital ratios and leverage ratio, calculated as at 31 December 2021 and in the four previous quarterly periods taking into account the complete fulfilment of the phase-in rules for the gradual introduction of IFRS 9, compared with the homologous quantities calculated in case transitional provisions or applicable temporary treatments are missing/absent.

Table 8 - Template IFRS 9/art. 468-FL (EBA/GL/2020/07): Comparison of own funds and capital and leverage ratios, with and without the application of the transitional provisions for IFRS 9 and with or without the application of the temporary treatment referred to in article 468 of the CRR (1 of 2)

		12/31/2021	09/30/2021	06/30/2021	03/31/2021	12/31/2020
Available capital (amounts)						
1	Common Equity Tier 1 (CET1) capital	3,163,255	3,051,706	3,066,344	2,942,749	2,967,432
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,138,875	3,034,155	3,049,798	2,912,357	2,944,495
2a	CET1 capital as if the temporary treatment of unrealised gains and losses measured at fair value through OCI (other comprehensive income) in accordance with Article 468 of the CRR had not been applied	3,163,255	3,051,706	3,066,344	2,942,749	2,967,432
3	Tier 1 capital	3,173,556	3,059,104	3,074,806	2,950,357	2,976,039
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,149,177	3,041,553	3,058,260	2,919,966	2,953,102
4a	Tier 1 capital as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	3,173,556	3,059,104	3,074,806	2,950,357	2,976,039
5	Total capital	3,784,789	3,383,934	3,425,313	3,322,293	3,373,534
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,760,409	3,366,383	3,408,767	3,291,901	3,350,598
6a	Total capital as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	3,784,789	3,383,934	3,425,313	3,322,293	3,373,534
Risk-weighted assets (amounts)						
7	Total risk-weighted assets	20,042,635	18,463,957	18,355,373	17,763,117	18,187,330
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	20,035,857	18,453,781	18,345,311	17,751,558	18,174,801

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00-C05.01 and Leverage ratio calculation: Template C 47.00

Table 9 - Template IFRS 9/art. 468-FL (EBA/GL/2020/07): Comparison of own funds and capital and leverage ratios, with and without the application of the transitional provisions for IFRS 9 and with or without the application of the temporary treatment referred to in article 468 of the CRR (2 of 2)

		12/31/2021	09/30/2021	06/30/2021	03/31/2021	12/31/2020
Capital ratios						
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	15.7826 %	16.5279 %	16.7054 %	16.5666 %	16.3159 %
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.6663 %	16.4419 %	16.6244 %	16.4062 %	16.2010 %
10a	CET1 (as a percentage of risk exposure amount) as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	15.7826 %	16.5279 %	16.7054 %	16.5666 %	16.3159 %
11	Tier 1 (as a percentage of risk exposure amount)	15.8340 %	16.5680 %	16.7515 %	16.6095 %	16.3633 %
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.7177 %	16.4820 %	16.6705 %	16.4491 %	16.2483 %
12a	Tier 1 (as a percentage of risk exposure amount) as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	15.8340 %	16.5680 %	16.7515 %	16.6095 %	16.3633 %
13	Total capital (as a percentage of risk exposure amount)	18.8837 %	18.3272 %	18.6611 %	18.7033 %	18.5488 %
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	18.7684 %	18.2422 %	18.5811 %	18.5443 %	18.4354 %
14a	Total capital (as a percentage of risk exposure amount) as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	18.8837 %	18.3272 %	18.6611 %	18.7033 %	18.5488 %
Leverage ratio						
15	Leverage ratio total exposure measure	54,362,126	53,401,150	52,652,000	48,880,314	46,928,386
16	Leverage ratio	5.8378 %	5.7285 %	5.8399 %	6.0359 %	6.3417 %
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	5.7930 %	5.6957 %	5.8084 %	5.9737 %	6.2928 %
17a	Leverage ratio as if the temporary treatment of unrealised gains and losses measured at fair value through OCI in accordance with Article 468 of the CRR had not been applied	5.8378 %	5.7285 %	5.8399 %	6.0359 %	6.3417 %

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00-C05.01 and Leverage ratio calculation: Template C 47.00

Transitional IFRS 9 provisions

The Group's own funds, capital and leverage ratios as at 31 December 2021 are calculated by applying the transitional provisions set out in Regulation (EU) 2017/2395 of 12 December 2017, as amended by Regulation (EU) 2020/873 of 24 June 2020 (so-called CRR "Quick-fix")¹², aimed at containing capital impacts of the adoption, effective 1 January 2018, of the IFRS 9 accounting standards, appropriately amending and supplementing Regulation (EU) no. 575/2013 ("CRR"). The

¹² Regulation (EU) 2020/873 amended the previous transitional provisions with regard to both the time period and the eligibility percentages. The additional adjustments related to the entry into force of the IFRS 9 accounting standard continue to be calculated according to the percentages already provided for by the previous regulations, while, for those related to the COVID-19 emergency, they are applied to the value of CET1 capital taking into account a decreasing percentage of calculation over time, from 100% in 2020 and 2021, to 75% in 2022, to 50% in 2023, to 25% in 2024, until its total elimination in 2025.

adoption of transitional arrangements by banks was optional and could be either “integral” or “partial” depending on whether it concerned all regulatory provisions or only a portion of them.

These amendments apply from 1/1/2018 to 31/12/2024 and allow intermediaries to include temporarily in the calculation of their CET1 Capital an additional amount in order to “neutralise” the potentially significant impact of the possible increase in provisions to cover expected losses on financial instruments that would probably result from the immediate adoption of the new standards.

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

- a “static” component, representing the increase in credit risk adjustments during the 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 further increases in credit risk adjustments that could occur at each subsequent accounting date over the transitional period, i.e. with respect to expected credit loss provisions in place at 1 January 2018 (changes in loss allowances for lifetime expected credit losses on financial assets that are credit-impaired are excluded).

This additional amount is applied to the value of the Common Equity Tier 1 capital of entities that choose to adhere to the aforementioned transitional provisions according to a percentage of eligibility (so-called “adjustment percentage”) progressively decreasing over time.

The amount of value adjustments included as a positive element of CET1 is therefore “sterilised” in the calculation of capital ratios through the application of a scaling factor with the effect of limiting the amount of new write-downs which, in relation to positions treated according to the standardised method, are deducted from the exposure value used to calculate risk-weighted assets (RWA). This would ensure that those institutions applying transitional arrangements would not benefit from both an increase in their Common Equity Tier 1 capital due to said compensatory adjustments and a reduced risk exposure amount.

EU regulations have given banks the right to adopt the transitional IFRS 9 regime in an “integral” manner, i.e. including both “static” and “dynamic” components, or in a “partial” manner, i.e. including only the “static” component. Any institution 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, Banca Popolare di Sondrio Group has chosen to take advantage of these transitional arrangements on an “integral” basis, i.e. with reference to both additional credit risk 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 to the increase in impairment losses recorded excluding credit-impaired instruments (only positions classified into Stage 1 and Stage 2) at each reference date following FTA of IFRS 9 (the “dynamic” component). The decision of the Group was communicated to the ECB within the time allowed.

Lastly, it is recalled that, in light of the possible effects of the COVID-19 pandemic, Regulation (EU) 2020/873 of 24 June 2020 (so-called “CRR Quick-fix”) granted supervised entities the further right, for the three-year period 2020-2022, to mitigate for prudential purposes the cumulative effects of profits and losses not yet realised starting from 1 January 2020 on performing exposures towards central governments and public sector entities classified in the portfolio of “Financial assets measured at fair value through other comprehensive income” (FVOCI). In particular, the complete elimination of the effects was envisaged for the year 2020, with decreasing percentages in the following two years (70% in 2021 and 40% in 2022), through a corresponding increase in Common Equity Tier 1 (CET1) capital.

At 31 December 2021, Banca Popolare di Sondrio Group decided not to take advantage of this further temporary treatment.

An analysis of the data presented in tables 8 and 9 shows that the Group's capital impacts in the event of immediate and full recognition of the effects of the accounting standard are confirmed as fully contained also as at 31 December 2021. The differentials between the capital solvency and financial leverage ratios calculated taking into account the compensatory adjustments granted by the IFRS 9 transitional regime and those available to the Group in the event that it had not opted for this possibility remain substantially in line with those observed in the previous quarter.

As indicated, the Group does not benefit from the temporary treatment granted by Regulation (EU) 2020/873 of the European Parliament and of the Council of 24 June 2020 (CRR “Quick-fix”) and implemented in article 468 of the CRR. Therefore, values shown in the table do not indicate any impact related to this temporary regime as at 31 December 2021.

The table below provides an overview of the Group's risk-weighted exposures (RWA or TREA) and capital absorption as at 31 December 2021, broken down by type of exposure and calculation method required by prudential regulations.

Table 10 - Template EU OV1: Overview of risk weighted exposure amounts

		RWA		Capital requirements
		a	b	a
		12/31/2021	09/30/2021	12/31/2021
1	Credit risk (excluding CCR)	17,173,593	15,867,108	1,373,887
2	Of which the standardised approach	9,421,126	9,042,401	753,690
3	Of which the foundation IRB (FIRB) approach	-	-	-
4	Of which: slotting approach	-	-	-
EU 4°	Of which: equities under the simple riskweighted approach	-	-	-
5	Of which the advanced IRB (AIRB) approach	7,752,467	6,824,707	620,197
6	Counterparty credit risk - CCR	151,255	119,957	12,100
7	Of which the standardised approach	42,231	52,895	3,379
8	Of which internal model method (IMM)	-	-	-
EU 8°	Of which exposures to a CCP	56	345	5
EU 8b	Of which credit valuation adjustment - CVA	11,835	15,109	947
9	Of which other CCR	97,133	51,608	7,771
15	Settlement risk	-	-	-
16	Securitisation exposures in the non-trading book (after the cap)	200,477	96,626	16,038
17	Of which SEC-IRBA approach	-	-	-
18	Of which SEC-ERBA (including IAA)	102,581	-	8,207
19	Of which SEC-SA approach	87,412	86,334	6,993
EU 19°	Of which 1250%/ deduction	10,484	10,293	839
20	Position, foreign exchange and commodities risks (Market risk)	909,293	831,723	72,743
21	Of which the standardised approach	909,293	831,723	72,743
22	Of which IMA	-	-	-
EU 22°	Large exposures	-	-	-
23	Operational risk	1,608,016	1,548,543	128,641
EU 23°	Of which basic indicator approach	-	-	-
EU 23b	Of which standardised approach	1,608,016	1,548,543	128,641
EU 23c	Of which advanced measurement approach	-	-	-
24	Amounts below the thresholds for deduction (subject to 250% risk weight) (For information)	927,911	661,347	74,233
29	Total	20,042,635	18,463,957	1,603,411

Source: COREP reporting framework - Capital Adequacy: Templates C 02.00 - C 07.00 - C 04.00 - C 08.01 - C 10.01 - C 13.01 - C 14.00 - C 14.01 - C 34.10 - C 34.02

In the last quarter the Group's total weighted assets have raised sharply. Capital requirements for credit risks, in particular, registered a significant change, both as a result of revisions to the RWA facility generated using the A-IRB approach (also resulting from updates in internal models) and due to an increase in the volumes of new credit disbursed. The increase associated with market risks was more moderate consistently with the dynamics of securities trading operations, which expressed a greater boost in the share of investments in UCITS. Operational risk requirements, updated on year-end as per regulatory expectation, increased due to the inclusion in the prudential formula of actual 2021 evidence, marked by a higher gross profitability. Lastly, CVA risks on OTC derivative transactions remained scarcely material.

Table 11 - Template EU INS1: Insurance participations

The template is not subject to publication given the absence of operations in this area by the Group.

Table 12 - Template EU INS2: Financial conglomerates information on own funds and capital adequacy ratio

The template is not subject to publication because Banca Popolare di Sondrio Group is not given the status of “financial conglomerate” in application of Directive 2002/87/EC of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate.

Section 4 - Disclosure of own funds (art. 437 CRR/CRR II)

The components of regulatory own funds: main characteristics

The key elements of regulatory own funds consist of:

- Common Equity Tier 1 Capital (CET1)
- Additional Tier 1 capital (Additional Tier 1 - 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
- Profit reserves
- Valuation reserves as per UCI Accumulated Other Comprehensive Income
- Other reserves
- Previous CET1 instruments subject to transitional instructions (grandfathering)
- Non-controlling interests
- Prudential filters
- Deductions.

Prudential filters are (positive or negative) regulatory adjustments to items in the financial statement aimed at granting the quality of own funds, reducing the potential volatility caused by applying IAS/IFRS. These 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 to which common equity capital is subject consist of goodwill and other intangible assets and for Banca Popolare di Sondrio Group, with effect from 30 June 2019, of any excess of expected losses quantified through credit risk parameters calculated with internal models over total net impairment losses recognised in the financial statements (shortfall), referring to regulatory portfolios for which the Supervisory Authorities have authorized the Group to use the Advanced Internal Rating Based Approach to estimate capital requirement for credit risk (namely, Corporate and Retail exposure 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);
- significant investments in equity instruments issued by financial sector entities (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);
- any deduction 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 recognised value adjustments, within the limit of 0.60% of weighted exposures for credit risk according to the A-IRB approach
- Deductions.

Transitional arrangements

At 31 December 2021, the Group's own funds were calculated applying the prudential regulations that came into force with the CRR on 1 January 2014, as subsequently amended and supplemented, which transposed the new capital standards defined by the Basel Committee for Banking Supervision ("Basel 3 Framework" and subsequent evolutions and additions to the regulatory framework conventionally referred to as "Basel 4").

Supervisory rules established transitional provisions, which are still in progress, characterised by a progressive introductory period ("phase-in") of part of the regulations on own funds and capital requirements, during which, for example, 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.

As already indicated in Section 3 above, the Group's own funds and prudential capital ratios at 31 December 2021 were calculated in accordance with the transitional arrangements set out in

Regulation (EU) 2017/2395 of 12 December 2017, as partially amended by Regulation (EU) 2020/873 of 24 June 2020, designed to mitigate the impact of the introduction of IFRS 9.

Lastly, it is recalled that, in light of the possible effects of the COVID-19 pandemic, Regulation (EU) 2020/873 of 24 June 2020 (CRR Quick-fix) granted supervised entities the right, only for the three-year period 2020-2022, to mitigate for prudential purposes the cumulative effects of profits and losses not yet realised starting from 1 January 2020 on performing exposures to central governments and public sector entities classified in the portfolio of “Financial assets measured at fair value through other comprehensive income” (FVOCI). At 31 December 2021, the Group decided not to take advantage of this temporary treatment.

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 results.

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

- earnings must be checked and certified by Independent Auditors of the bank or banking group;
- 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 certification model that banks or banking groups must adopt for requesting the authorisation.

The table below provides an illustrative diagram of the main components of the Group's regulatory capital at the reporting date, indicating the values of the capital ratios and the minimum requirements to which they are subject.

Table 13 - Template EU CC1: Composition of regulatory own funds (1 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Common equity tier 1 (CET1) capital: instruments and reserves					
1	Capital instruments and the related share premium accounts	1,439,162	160. SHARE PREMIUM ACCOUNTS 170. SHARE CAPITAL	1,439,162	160. SHARE PREMIUM ACCOUNTS 170. SHARE CAPITAL
	<i>Of which: ordinary shares</i>	1,439,162		1,439,162	
2	Retained earnings	-		-	
3	Accumulated other comprehensive income (and other reserves)	1,580,280	150. RESERVES 120. VALUATION RESERVES	1,473,557	150. RESERVES 120. VALUATION RESERVES
EU-3a	Funds for general banking risk	-		-	
4	Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET1	-		-	
5	Minority interests (amount allowed in consolidated CET1)	48,236	190. MINORITY SHAREHOLDERS' EQUITY (+/-)	40,440	190. MINORITY SHAREHOLDERS' EQUITY (+/-)
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	176,146	200. PROFIT (LOSS) FOR THE PERIOD	78,962	200. PROFIT (LOSS) FOR THE PERIOD
6	COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	3,243,824		3,032,120	

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

Table 14 - Template EU CC1: Composition of regulatory own funds (2 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Common Equity Tier 1 (CET1) capital: regulatory adjustments					
7	Additional value adjustments (negative amount)	(4,711)		(3,959)	
8	Intangible assets (net of related tax liability) (negative amount)	(31,013)	100. INTANGIBLE ASSETS	(28,327)	100. INTANGIBLE ASSETS
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	(6,299)	110. TAX ASSETS	(4,916)	110. TAX ASSETS
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	-		-	
12	Negative amounts resulting from the calculation of expected loss amounts	-		-	
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 an institution of own CET1 instruments (negative amount)	(36,147)	180. TREASURY SHARES (-)	(36,618)	180. TREASURY SHARES (-)
17	Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-		-	
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-		-	
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	(15,597)	70. EQUITY INVESTMENTS	(2,668)	70. EQUITY INVESTMENTS

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

Table 15 - Template EU CC1: Composition of regulatory own funds (3 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Common Equity Tier 1 (CET1) capital: regulatory adjustments					
EU-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	-		-	
EU-20b	of which: qualifying holdings outside the financial sector (negative amount)	-		-	
EU-20c	of which: securitisation positions (negative amount)	-		-	
EU-20d	of which: free deliveries (negative amount)	-		-	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	-		-	
22	Amount exceeding the 17,65% threshold (negative amount)	-		-	
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	-		-	
25	of which: deferred tax assets arising from temporary differences	-		-	
EU-25a	Losses for the current financial year (negative amount)	-	200. PROFIT (LOSS) FOR THE PERIOD	-	200. PROFIT (LOSS) FOR THE PERIOD
EU-25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	-		-	
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	-		-	
27a	Other regulatory adjustments	13,199		11,798	
28	TOTAL REGULATORY ADJUSTMENTS TO COMMON EQUITY TIER 1 (CET1)	(80,569)		(64,689)	
29	COMMON EQUITY TIER 1 (CET1) CAPITAL	3,163,255		2,967,432	

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

Table 16 - Template EU CC1: Composition of regulatory own funds (4 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Additional Tier 1 (AT1) capital: instruments					
30	Capital instruments and the related share premium accounts	-		-	
31	of which: classified as equity under applicable accounting standards	10,301		8,607	
32	of which: classified as liabilities under applicable accounting standards	-	10. FINANCIAL LIABILITIES AT AMORTISED COST	-	10. FINANCIAL LIABILITIES AT AMORTISED COST
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1 as described in Article 486(3) of CRR	-		-	
EU-33a	Amount of qualifying items referred to in Article 494a(1) subject to phase out from AT1	-		-	
EU-33b	Amount of qualifying items referred to in Article 494b(1) subject to phase out from AT1	-		-	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	10,301	190. MINORITY SHAREHOLDERS' EQUITY (+/-)	8,607	190. MINORITY SHAREHOLDERS' EQUITY (+/-)
35	of which: instruments issued by subsidiaries subject to phase out	-		-	
36	ADDITIONAL TIER 1 (AT1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	10,301		8,607	
Additional Tier 1 (AT1) capital: regulatory adjustments					
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	-		-	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-		-	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-		-	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-		-	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	-		-	
42a	Other regulatory adjustments to AT1 capital	-		-	
43	TOTAL REGULATORY ADJUSTMENTS TO ADDITIONAL TIER 1 (AT1) CAPITAL	-		-	
44	ADDITIONAL TIER 1 (AT1) CAPITAL	10,301		8,607	
45	TIER 1 CAPITAL (T1 = CET1 + AT1)	3,173,556		2,976,039	

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

Table 17 - Template EU CC1: Composition of regulatory own funds (5 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Tier 2 (T2) capital: instruments					
46	Capital instruments and the related share premium accounts	554,188	10. FINANCIAL LIABILITIES AT AMORTISED COST	348,966	10. FINANCIAL LIABILITIES AT AMORTISED COST
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2 as described in Article 486 (4) CRR	-		-	
EU-47a	Amount of qualifying items referred to in Article 494a (2) subject to phase out from T2	-		-	
EU-47b	Amount of qualifying items referred to in Article 494b (2) subject to phase out from T2	-		-	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	13,735	190. MINORITY SHAREHOLDERS' EQUITY (+/-)	-	190. MINORITY SHAREHOLDERS' EQUITY (+/-)
49	of which: instruments issued by subsidiaries subject to phase out	-		-	
50	Credit risk adjustments	46,600		43,040	
51	TIER 2 (T2) CAPITAL BEFORE REGULATORY ADJUSTMENTS	614,524		392,006	
Tier 2 (T2) capital: regulatory adjustments					
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(3,149)		(5,899)	
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-		-	
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-		-	
55	Direct and indirect holdings 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)	-		-	
EU-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	-		-	
EU-56b	Other regulatory adjustments to T2 capital	(142)		11,388	
57	TOTAL REGULATORY ADJUSTMENTS TO TIER 2 (T2) CAPITAL	(3,291)		5,489	
58	TIER 2 (T2) CAPITAL	611,232		397,496	
59	TOTAL CAPITAL (TC = T1 + T2)	3,784,789		3,373,534	
60	TOTAL RISK EXPOSURE AMOUNT	20,042,635		18,187,330	

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

Table 18 - Template EU CC1: Composition of regulatory own funds (6 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Capital ratios and requirements including buffers					
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	15.7826 %		16.3159 %	
62	Tier 1 (as a percentage of total risk exposure amount)	15.8340 %		16.3633 %	
63	Total capital (as a percentage of total risk exposure amount)	18.8837 %		18.5488 %	
64	Institution CET1 overall capital requirements	8.6882 %		8.6905 %	
65	of which: capital conservation buffer requirement	2.5000 %		2.5000 %	
66	of which: countercyclical buffer requirement	0.0007 %		0.0030 %	
67	of which: systemic risk buffer requirement	-		-	
EU-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-		-	
EU-67b	of which: additional own funds requirements to address the risks other than the risk of excessive leverage	1.6875 %		1.6875 %	
68	COMMON EQUITY TIER 1 AVAILABLE TO MEET BUFFER (AS A PERCENTAGE OF RISK EXPOSURE AMOUNT)	9.5951 %		10.1284%	
Amounts below the thresholds for deduction (before risk weighting)					
72	Direct and indirect holdings of own funds and eligible liabilities 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)	307,691		284,615	
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 17.65% thresholds and net of eligible short positions)	315,452		297,384	
75	Deferred tax assets arising from temporary differences (amount below 17,65% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met)	40,116		43,604	

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

Table 19 - Template EU CC1: Composition of regulatory own funds (7 of 7)

		12/31/2021		12/31/2020	
		a	b	a	b
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation	Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Applicable caps on the inclusion of provisions in TIER 2					
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-		-	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	-		-	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	313,546		52,288	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	46,600		43,040	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)					
80	Current cap on CET1 instruments subject to phase out arrangements	-		-	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-		-	
82	Current cap on AT1 instruments subject to phase out arrangements	-		-	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-		-	
84	Current cap on T2 instruments subject to phase out arrangements	-		-	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-		-	

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 02.00 - C 03.00 - C 04.00 - C 05.01 - C 05.02

The following table shows the reconciliation of the elements making up regulatory capital, as well as the filters and deductions applied to them, indicated in the previous template with the relevant items in the Group's balance sheet at the reference date, taking into account the differences in the areas of consolidation for balance sheet and prudential purposes.

Table 20 - Template EU CC2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements

		12/31/2021			12/31/2020		
		a	b	c	a	b	c
		<i>Balance sheet as in published financial statements</i>	<i>Under regulatory scope of consolidation</i>	<i>Reference</i>	<i>Balance sheet as in published financial statements</i>	<i>Under regulatory scope of consolidation</i>	<i>Reference</i>
		<i>As at period end</i>	<i>As at period end</i>		<i>As at period end</i>	<i>As at period end</i>	
Assets - Breakdown by asset classes according to the balance sheet in the published financial statements							
70.	EQUITY INVESTMENTS	339,333	388,276	19	305,444	350,319	19
100.	INTANGIBLE ASSETS	31,013	31,013	8	28,328	28,327	8
	- Goodwill	12,632	12,632	8	12,632	12,632	8
	- Other intangible assets	18,381	18,381	8	15,696	15,695	8
110.	TAX ASSETS	330,343	330,304	10	423,785	423,740	10
b)	Advanced	321,685	321,681	10	377,189	377,184	10
TOTAL ASSETS		700,689	749,593		757,557	802,386	
Liabilities - Breakdown by liability classes according to the balance sheet in the published financial statements							
10.	FINANCIAL LIABILITIES AT AMORTISED COST	50,178,641	50,178,641	32,46	45,386,147	45,386,164	32,46
c)	Securities issued	3,700,303	3,700,303	32,46	2,831,112	2,831,112	32,46
120.	VALUATION RESERVES	32,437	32,243	3	27,840	27,648	3
150.	RESERVES	1,555,718	1,555,216	3	1,449,360	1,448,990	3
160.	SHARE PREMIUM ACCOUNTS	79,005	79,005	1	79,005	79,005	1
170.	SHARE CAPITAL	1,360,157	1,360,157	1	1,360,157	1,360,157	1
180.	TREASURY SHARES (-)	(25,457)	(25,456)	16	(25,388)	(25,387)	16
190.	MINORITY SHAREHOLDERS' EQUITY (+/-)	104,583	104,573	5, 34, 48	98,103	98,092	5, 34, 48
Shareholders' Equity							
200.	PROFIT (LOSS) FOR THE PERIOD	268,634	267,122	5a	106,597	106,467	5a
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		53,553,718	53,551,501		48,481,821	48,481,136	

Source: Consolidated balance sheet, FINREP reporting framework

Note: Total assets and liabilities are the sum of only the items listed in the table.

The portion of second-half profits net of distributable dividends contributed to the composition of own funds as at 31 December 2021. The portion interim / year-end profits calculated among the positive elements of regulatory capital was authorised by the European Central Bank in compliance with the provisions of art. 26, para. 2 of Regulation (EU) no. 575 of 26/6/2013 ("CRR") for the purpose of determining the Common Equity Tier 1 Capital.

In 2021, a marked increase in the Group's better-quality capital resources was observed, mainly due to the positive effect of the generation of profits for self-financing. In the last quarter of the year changes in equity reserves and minority interests also contributed positively.

The strengthening of core capital achieved during the year was matched by a significant increase in overall volumes of risk-weighted assets. As a result, the CET1 Ratio and the Tier 1 Ratio, respectively 15.78% and 15.83% as at 31 December 2021, showed a moderate reduction in their values at the beginning of the year, with a further decline in the last quarter.

Also relevant in determining the total amount of own funds is the issue in November 2021 of a Tier II subordinated bond placed to institutional investors for an amount of 300 million Euro, partly offset by the application of the regime of gradual phasing-out from own funds of subordinated securities issued in the past, which results in a regular decline in the computable values of old issues of Tier II instruments. As a result, the Total Capital Ratio remained, like the previous year, stably above 18% (18.88% as at 31 December 2021), rising in the last quarter of the year.

Table 21 - Template EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments (1 of 4) – part 1

		a	b	c
1	Issuer	Banca Popolare di Sondrio spa	Banca Popolare di Sondrio spa	Banca Popolare di Sondrio spa
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	IT0000784196	IT0005092884	IT0005135527
2a	Public or private placement	Public	Public	Public
3	Governing law(s) of the instrument	Italian law	Italian law	Italian law
3a	Contractual recognition of write down and conversion powers of resolution authorities	N/A	Yes	Yes
Regulatory treatment				
4	Current treatment taking into account, where applicable, transitional CRR rules	CET1	Tier 2	Tier 2
5	Post-transitional CRR rules	CET1	Tier 2	Tier 2
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares	Tier 2 - (CRR, art.63)	Tier 2 - (CRR, art.63)
8	Amount recognised in regulatory capital or eligible liabilities (Currency in million, as of most recent reporting date)	1,324	9	43
9	Nominal amount of instrument	1,360	200	274
EU-9a	Issue price	N/A	100	100
EU-9b	Redemption price	N/A	100	100
10	Accounting classification	Equity	Liabilities - amortised cost	Liabilities - amortised cost
11	Original date of issuance	N/A	30/03/2015	23/10/2015
12	Perpetual or dated	Perpetual	Dated	Dated
13	Original maturity date	Without expiration	30/03/2022	23/10/2022
14	Issuer call subject to prior supervisory approval	no	no	no
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A

Table 22 - Template EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments (2 of 4) – part 1

		a	b	c
Coupons / dividends				
17	Fixed or floating dividend/coupon	Floating	Fixed	Fixed
18	Coupon rate and any related index	N/A	2.50%	3.00%
19	Existence of a dividend stopper	no	no	no
EU-20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Mandatory	Mandatory
EU-20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	no	no	no
22	Noncumulative or cumulative	Non cumulative	Non cumulative	Non cumulative
23	Convertible or non-convertible	Non convertible	Non convertible	Non convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A
30	Write-down features	no	no	no
31	If write-down, write-down trigger(s)	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A
34a	Type of subordination (only for eligible liabilities)	N/A	Contractual	Contractual
EU-34b	Ranking of the instrument in normal insolvency proceedings	Rank 1	Rank 2	Rank 2
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier 1	Senior	Senior
36	Non-compliant transitioned features	no	no	no
37	If yes, specify non-compliant features	N/A	N/A	N/A
37a	Link to the full term and conditions of the instrument (signposting)	N/A	https://www.popso.it/prodotti-servizi/privati-investimenti/prestiti-obbligazionari/prospetti-di-base/archivio-prospetti-base	https://www.popso.it/prodotti-servizi/privati-investimenti/prestiti-obbligazionari/prospetti-di-base/archivio-prospetti-base

Table 23 - Template EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments (3 of 4) – part 2

		d	e
1	Issuer	Banca Popolare di Sondrio spa	Banca Popolare di Sondrio spa
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	XS2034847637	XS2411537033
2°	Public or private placement	Public	Public
3	Governing law(s) of the instrument	Italian law	Italian law
3a	Contractual recognition of write down and conversion powers of resolution authorities	Yes	Yes
Regulatory treatment			
4	Current treatment taking into account, where applicable, transitional CRR rules	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Solo and Consolidated	Solo and Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Tier 2 - (CRR, art.63)	Tier 2 - (CRR, art.63)
8	Amount recognised in regulatory capital or eligible liabilities (Currency in million, as of most recent reporting date)	199	300
9	Nominal amount of instrument	200	300
EU-9°	Issue price	100	100
EU-9b	Redemption price	100	100
10	Accounting classification	Liabilities - amortized cost	Liabilities - amortized cost
11	Original date of issuance	30/07/2019	25/11/2021
12	Perpetual or dated	Dated	Dated
13	Original maturity date	30/07/2029	25/02/2032
14	Issuer call subject to prior supervisory approval	No	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A

Table 24 - Template EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments (4 of 4) – part 2

		d	e
Coupons / dividends			
17	Fixed or floating dividend/coupon	Fixed	Fixed
18	Coupon rate and any related index	6.25%	3.875%
19	Existence of a dividend stopper	no	no
EU-20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory
EU-20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	no	no
22	Noncumulative or cumulative	Non cumulative	Non cumulative
23	Convertible or non-convertible	Non convertible	Non convertible
24	If convertible, conversion trigger(s)	N/A	N/A
25	If convertible, fully or partially	N/A	N/A
26	If convertible, conversion rate	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A
30	Write-down features	no	no
31	If write-down, write-down trigger(s)	N/A	N/A
32	If write-down, full or partial	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A
34a	Type of subordination (only for eligible liabilities)	Contractual	Contractual
EU-34b	Ranking of the instrument in normal insolvency proceedings	Rank 2	Rank 2
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior	Senior
36	Non-compliant transitioned features	no	no
37	If yes, specify non-compliant features	N/A	N/A
37a	Link to the full term and conditions of the instrument (signposting)	https://istituzionale.popso.it/it/investor-relations/operazioni-finanziarie	https://istituzionale.popso.it/it/investor-relations/operazioni-finanziarie

Section 5 - Disclosure of capital buffers (art. 440 CRR/CRR II)

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

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 enough Common Equity Tier 1 capital to absorb losses in a downturn cycle.

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 (in terms of risk weighted assets) multiplied by a specific countercyclical coefficient. The European legislation on the countercyclical buffer was implemented in Italy with Bank of Italy Circular no. 285/2013.

Like the other national authorities designated by individual member states of the Single Supervisory Mechanism, Bank of Italy has the obligation to determine quarterly the countercyclical coefficient applicable for the Italian banking system regulations and to monitor the congruity of the analogous coefficients applied by 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 by national intermediaries to the exposures held with Italian counterparties at 31 December 2021, the same as for the previous quarters of the year 2021.

The tables below show the geographical distribution of credit exposures relevant for the purposes of determining the Group's specific countercyclical capital buffer and the main elements used to calculate the amount of the buffer at the reporting date.

Table 25 - Template EU CCyB1: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (1 of 2)

	a	b	c	d	e	f
	<i>Exposures in the banking book</i>		<i>Exposures in the trading book</i>		<i>Exposures in securitisation</i>	<i>Total exposure value</i>
	<i>Exposure value under SA approach</i>	<i>Exposure value under AIRB approach</i>	<i>Sum of long and short positions</i>	<i>Exposure value under internal models</i>		
Italy	5,831,267	25,555,599	17,954	-	749,238	32,154,058
Bulgaria	383	794	-	-	-	1,177
Czech Republic	2,371	-	-	-	-	2,371
Hong Kong	1,428	353	-	-	-	1,781
Luxembourg	2,678	491	-	-	-	3,169
Norway	1,945	348	-	-	-	2,293
Slovakia	3,201	1,366	-	-	-	4,567
Other countries	5,946,751	576,451	-	-	-	6,523,201
TOTAL	11,790,023	26,135,402	17,954	-	749,238	38,692,617

Source: COREP reporting framework - Breakdown of credit exposures relevant for the calculation of the countercyclical buffer by country: Template C 09.04

Table 26 - Template EU CCyB1: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (2 of 2)

	g	h	i	j	k	l	m
	<i>Own funds requirement</i>						
	<i>of which: generic credit exposures</i>	<i>of which: credit exposures of the trading book</i>	<i>of which: securitisation positions in the banking book</i>	<i>Total</i>	<i>Risk-weighted exposure amounts</i>	<i>Weighting factors of own fund requirement</i>	<i>Countercyclical coefficient t</i>
Italy	993,592	1,436	16,038	1,011,066	12,638,326	79.9875 %	0.0000%
Bulgaria	47	-	-	47	582	0.0037 %	0.5000 %
Czech Republic	190	-	-	190	2,370	0.0150 %	0.5000 %
Hong Kong	118	-	-	118	1,478	0.0094 %	1.0000 %
Luxembourg	493	-	-	493	6,165	0.0390 %	0.5000 %
Norway	158	-	-	158	1,979	0.0125 %	1.0000 %
Slovakia	289	-	-	289	3,606	0.0228 %	1.0000 %
Other countries	251,670	-	-	251,670	3,145,877	19.9102 %	0.0000%
TOTAL	1,246,556	1,436	16,038	1,264,031	15,800,383	100.0000%	

Source: COREP reporting framework - Breakdown of credit exposures relevant for the calculation of the countercyclical buffer by country: Template C 09.04

Table 27 - Template EU CCyB2: Amount of institution-specific countercyclical capital buffer

		a
1	Total risk exposure amount (RWA)	20,042,635
2	Specific countercyclical coefficient of the institution	0.0007 %
3	SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER REQUIREMENT OF THE INSTITUTION	147

Source: COREP reporting framework - Amount of exposure to risk: Template C 02.00 and Memorandum Items: Template C 04.00

Compared with the previous Pillar 3 disclosure, as at 31 December 2021, the Group's specific countercyclical coefficient decreased resulting in a lower reserve requirement.

Section 6 - Disclosure of leverage ratio (art. 451 CRR/CRR II)

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

This requirement, 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 in which capital ratios are determined.

The Leverage Ratio is calculated quarterly 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 items; the latter, which are calculated by applying defined “credit conversion factors” to the relevant notional amount of each OBS item, mainly consist of credit commitments (e.g. disbursements related to undrawn portions of credit lines available to customers), guarantees and exposures in derivative instruments.

To cope with the risk of excessive leverage, banks must have company policies and procedures aimed at identifying, managing and adequately monitoring the exposure.

The Group, in order to manage and contain the risk of excessive leverage, has included the Leverage Ratio among the capital indicators of the Risk Appetite Framework. The governance of the RAF provides appropriate escalation mechanisms to ensure an adequate and timely response to the exceeding of established limits and trigger levels. In addition, the Group, with a view to conservative risk management, pays special attention to the dynamics of assets and the potential erosion of the capital base due to the recognition of expected or realised losses.

Regulation (EU) no. 876/2019 (“CRR II”) of the European Parliament and of the Council of 20 May 2019, in amending the disposals of the “CRR”, introduced from 28 June 2021 a minimum Pillar 1 leverage requirement of 3% that all banks operating within the EU are required to meet on an ongoing basis.

In consideration of the prolonged effects of the crisis following the spread of the COVID-19 pandemic, the European Central Bank has issued a new Decision¹³, aimed at extending until 31

¹³ Decision ECB/2021/27 on the temporary exclusion of certain exposures to central banks from the total exposure measure in view of the COVID-19 pandemic and repealing Decision (EU) 2020/1306.

March 2022 the option, already granted to significant institutions under its direct supervision, to exclude certain exposures to central banks from their Leverage Ratio¹⁴.

If a bank elected to use this option, it should meet an additional Adjusted Leverage Ratio for the entire duration of the exclusion. By adhering to the temporary exclusion regime for exposures to central banks, the BPS Group is thus required to observe an Adjusted Leverage Ratio requirement above the minimum limit defined by the CRR. This requirement is set equal to 3.274%.

The tables below summarise the main information on the Group's Leverage Ratio as at 31 December 2021 specifically concerning:

- reconciliation of the measure of overall exposure to the denominator of the ratio and the accounting assets as per the latest published consolidated financial statement;
- breakdown of the components of the overall exposure measure, as well as information on the value assumed by the ratio and the minimum leverage requirements applicable;
- breakdown of on-balance sheet exposures that constitute the ratio overall exposure measure.

Table 28 - Template EU LR1 - LRSum - Summary reconciliation of accounting assets and leverage ratio exposures

		12/31/2021	06/30/2021
		a	b
		Applicable amount	Applicable amount
1	Total assets as per published financial statements	55,016,149	52,947,405
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	(2,059)	(1)
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	-	-
4	(Adjustment for temporary exemption of exposures to central bank (if applicable))	(5,661,365)	(4,968,202)
5	(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 point (i) of Article 429a(1) CRR)	-	-
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	-	-
7	Adjustment for eligible cash pooling transactions	-	-
8	Adjustments for derivative financial instruments	78,281	105,536
9	Adjustment for securities financing transactions (SFTs)	196,209	6,960
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	4,806,038	4,595,690
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	-	-
EU-11a	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-	-
EU-11b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with point (j) of Article 429a(1) CRR)	-	-
12	Other adjustments	(71,127)	(35,387)
13	TOTAL EXPOSURE MEASURE	54,362,126	52,652,000

Source: COREP reporting framework - Capital Adequacy: Templates C 01.00 - C 40.00 - C 47.00 and FINREP reporting framework - Balance sheet: Template F 01.00

¹⁴ Having overcome the extraordinary needs related to the pandemic, on 10 February 2022, the ECB announced the withdrawal of the exclusion option as of 1 April 2022.

Table 29 - Template EU LR2 - LRCOM: Leverage Ratio common disclosure (1 of 3)

		CRR leverage ratio exposures	
		12/31/2021	06/30/2021
		a	b
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	49,175,323	47,075,933
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-	-
4	Adjustment for securities received under securities financing transactions that are recognised as an asset	-	-
5	(General credit risk adjustments to on-balance sheet items)	-	-
6	(Asset amounts deducted in determining Tier 1 capital)	-	-
7	TOTAL ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES AND SFTS)	49,175,323	47,075,933
Derivative exposures			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	34,653	52,004
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	4,655	28,235
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	68,287	87,452
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	76,960	83,444
EU-9b	Exposure determined under Original Exposure Method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	-	-
EU-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-
EU-10b	(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	-	-
11	Adjusted effective notional amount of written credit derivatives	-	-
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-
13	TOTAL DERIVATIVES EXPOSURES	184,556	251,134
Securities financing transaction (SFT) exposures			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	-	722,284
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	(21,075)
16	Counterparty credit risk exposure for SFT assets	196,209	28,035
EU-16a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	-	-
17	Agent transaction exposures	-	-
EU-17a	(Exempted CCP leg of client-cleared SFT exposure)	-	-
18	TOTAL SECURITIES FINANCING TRANSACTION EXPOSURES	196,209	729,244

Source: COREP reporting framework - Calculation of the Leverage Ratio: Templates C 47.00 - C 40.00 - C 48.00 - C 48.01 - C 48.02

Table 30 - Template EU LR2 - LRCom: Leverage Ratio common disclosure (2 of 3)

		<i>CRR leverage ratio exposures</i>	
		12/31/2021	06/30/2021
		a	b
Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	20,399,632	18,455,845
20	(Adjustments for conversion to credit equivalent amounts)	(15,593,594)	(13,860,156)
21	(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	-	-
22	OFF-BALANCE SHEET EXPOSURES	4,806,038	4,595,690
Excluded exposures			
EU-22a	(Exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-	-
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a (1) CRR (on and off balance sheet))	-	-
EU-22c	(Excluded exposures of public development banks (or units) - Public sector investments)	-	-
EU-22d	(Excluded exposures of public development banks (or units) - Promotional loans:		
	- Promotional loans granted by a public development credit institution		
	- Promotional loans granted by an entity directly set up by the central government, regional governments or local authorities of a Member State	-	-
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units):		
	- Promotional loans granted by a public development credit institution		
	- Promotional loans granted by an entity directly set up by the central government, regional governments or local authorities of a Member State	-	-
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	-	-
EU-22g	(Excluded excess collateral deposited at triparty agents)	-	-
EU-22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a(1) CRR)	-	-
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	-	-
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	-	-
EU-22k	(TOTAL EXEMPTED EXPOSURES)	-	-
Capital and total exposure measure			
23	TIER 1 CAPITAL	3,173,556	3,074,806
24	TOTAL EXPOSURE MEASURE	54,362,126	52,652,000
Leverage ratio			
25	Leverage ratio	5.8378 %	5.8399 %
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	5.8378 %	5.8399 %
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	5.2872 %	5.3363 %
26	Regulatory minimum leverage ratio requirement (%)	3.2740 %	3.2860 %
EU-26a	Additional own funds requirements to address the risk of excessive leverage (%)	-	-
EU-26b	of which: to be made up of CET1 capital	-	-
27	Leverage ratio buffer requirement (%)	-	-
EU-27a	Overall leverage ratio requirement (%)	3.2740 %	3.2860 %
Choice on transitional arrangements and relevant exposures			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	Transitional arrangements	Transitional arrangements

Source: COREP reporting framework - Calculation of the Leverage Ratio: Templates C 47.00 - C 40.00 - C 48.00 - C 48.01 - C 48.02

Table 31 - Template EU LR2 - LRCom: Leverage Ratio common disclosure (3 of 3)

		CRR leverage ratio exposures	
		12/31/2021	06/30/2021
		a	a
Disclosure of mean values			
28	Mean value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	472,846	395,582
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	-	701,208
30	Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	54,834,972	52,346,374
30a	Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	60,496,337	57,314,576
31	Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	5.7875 %	5.8740 %
31a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	5.2459 %	5.3648 %

Source: COREP reporting framework - Calculation of the Leverage Ratio: Templates C 47.00 - C 40.00 - C 48.00 - C 48.01 - C 48.02

Table 32 - Template EU LR3 - LRSpl: Split-up of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

		12/31/2021	06/30/2021
		a	b
		CRR leverage ratio exposures	CRR leverage ratio exposures
EU-1	TOTAL ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS, AND EXEMPTED EXPOSURES), OF WHICH:	49,175,323	47,075,933
EU-2	Trading book exposures	174,990	121,855
EU-3	Banking book exposures, of which:	49,000,333	46,954,078
EU-4	Covered bonds	228,699	216,411
EU-5	Exposures treated as sovereigns	12,405,660	11,432,222
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	454,478	474,225
EU-7	Institutions	2,986,107	2,863,714
EU-8	Secured by mortgages of immovable properties	11,599,135	10,655,756
EU-9	Retail exposures	4,657,413	4,255,561
EU-10	Corporates	11,869,862	12,227,878
EU-11	Exposures in default	836,449	1,021,383
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	3,962,531	3,806,928

Source: COREP reporting framework - Exposures by Leverage Ratio: Template C 43.00

In the last quarter the Group's Leverage Ratio, calculated by applying the transitional regime (phased-in) in force for the current year, strengthened by about 11 bps, reaching 5.84% at the end of December. This positive change was mainly related to the increase in the amount of Tier 1 Capital, which more than offset the increase in total exposure assets at the denominator of the ratio.

Having adhered to the temporary exclusion regime for exposures to central banks, the Group is required to observe an Adjusted Leverage Ratio requirement above the minimum limit defined by the CRR (3%). This additional requirement, amounting to 3.274%, was fully complied with at the reference date.

Section 7 - Disclosure of liquidity requirements (art. 451 bis CRR/CRR II)

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, according to the procedures described in greater detail in the previous Section 2, 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 a 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.

In compliance with the provisions dictated by EU regulations, Banca Popolare di Sondrio calculates and monitors at a consolidated level the synthetic liquidity indicators Liquidity Coverage Ratio and Net Stable Funding Ratio.

The Liquidity Coverage Ratio (LCR) represents the short-term liquidity coverage requirement determined in accordance with Part Six of the “CRR” Regulation, as subsequently supplemented by Delegated Regulation (EU) 2015/61 of 10 October 2014, which in turn was partially amended by Delegated Regulation (EU) 2018/1620 of 13 July 2018. It is the ratio of the stock of high-quality liquid assets to the total amount of net cash outflows (algebraic sum of inflows and expected cash outflows) over the next 30 calendar days. The benchmark aims to ensure the ability of banking firms to survive a severe, short-term shock by ensuring that they maintain an adequate level of high-quality liquid assets that can be readily converted into cash to meet the very short-term needs that could arise under a particularly acute liquidity stress scenario. This ratio is subject to a minimum regulatory requirement of 100%.

The Net Stable Funding Ratio (NSFR) represents the net stable medium to long-term funding ratio determined in accordance with Part Six of the “CRR” Regulations, as amended by the “CRR II” Regulations dated 20 May 2019, the application of which started with effect from the reporting date of 30 June 2021. This is the ratio of the available amount of stable funding to the required amount of stable funding. It is intended as an additional mechanism of the LCR index with a view to favouring more stable and longer-term financing of company assets, offsetting the incentives that banking institutions would have to finance their stock of liquid assets with short-term funds due to expire immediately after the 30-day horizon. In particular, the NSFR requirement, which should always be kept equal to or greater than 100%, is such 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.

On the whole, the liquidity conditions of the Group are adequate both in the short term (“operational liquidity”) and in the long term (“structural liquidity”), with broad compliance with the minimum levels imposed by regulations for LCR and NSFR ratios.

The tables below show the quarterly trend of the average monthly values of the Liquidity Coverage Ratio (LCR) of the Group and of the main aggregates making up the ratio (liquidity reserve, liquidity outflows and inflows, high quality liquid assets).

Table 33 - Template EU LIQ1: Quantitative information of LCR (1 of 2)

		a	b	c	d
		<i>Total unweighted value (average)</i>			
EU 1a	Quarter ending on 12/31/2021	12/31/2021	09/30/2021	06/30/2021	03/31/2021
EU 1b	Number of data points used in the calculation of averages	12	12	12	12
HIGH-QUALITY LIQUID ASSETS					
1	Total high-quality liquid assets (HQLA)				
CASH - OUTFLOWS					
2	Retail deposits and deposits from small business customers, of which:	15,958,136	15,521,761	15,036,628	14,563,948
3	Stable deposits	10,199,895	9,976,252	9,718,932	9,460,669
4	Less stable deposits	5,712,544	5,493,901	5,260,300	5,041,960
5	Unsecured wholesale funding	18,663,569	18,246,095	17,500,432	16,647,769
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	4,197,096	4,247,218	4,060,250	3,797,877
7	Non-operational deposits (all counterparties)	14,442,061	13,980,403	13,418,915	12,830,660
8	Unsecured debt	24,412	18,474	21,267	19,232
9	Secured wholesale funding				
10	Additional requirements	600,211	562,432	559,847	559,632
11	Outflows related to derivative exposures and other collateral requirements	8,543	7,525	8,165	9,969
12	Outflows related to loss of funding on debt products	-	-	-	-
13	Credit and liquidity facilities	591,668	554,907	551,683	549,663
14	Other contractual funding	3,600	3,615	3,653	45,607
15	Other contingent funding obligations	12,443,043	12,273,176	12,149,638	12,424,779
16	TOTAL CASH OUTFLOWS				
CASH - INFLOWS					
17	Secured lending (e.g. reverse repos)	672,160	686,775	756,573	744,261
18	Inflows from fully performing exposures	5,812,900	6,141,092	5,737,763	5,043,542
19	Other cash inflows	3,782,548	3,683,615	3,707,352	3,817,143
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)				
EU-19b	(Excess inflows from a related specialised credit institution)				
20	TOTAL CASH INFLOWS	10,267,608	10,511,482	10,201,689	9,604,946
EU-20a	Fully exempt inflows	-	-	-	-
EU-20b	Inflows subject to 90% cap	-	-	-	-
EU-20c	Inflows subject to 75% cap	10,267,608	10,511,482	10,201,689	9,604,946
TOTAL ADJUSTED VALUE					
EU-21	LIQUIDITY BUFFER				
22	TOTAL NET CASH OUTFLOWS				
23	LIQUIDITY COVERAGE RATIO (%)				

Source: COREP reporting framework - Liquidity coverage: Templates C 72.00 - C 73.00 - C 74.00 - C 76.00

NOTE: The figures in the table are calculated as a simple (unweighted) average of the end-of-month observations over the twelve months preceding the end of each quarter

Table 34 - Template EU LIQ1: Quantitative information of LCR (2 of 2)

		e	f	g	h
		<i>Total weighted value (average)</i>			
EU 1a	Quarter ending on 12/31/2021	12/31/2021	09/30/2021	06/30/2021	03/31/2021
EU 1b	Number of data points used in the calculation of averages	12	12	12	12
HIGH-QUALITY LIQUID ASSETS					
1	Total high-quality liquid assets (HQLA)	9,561,024	8,757,262	8,396,953	8,178,818
CASH - OUTFLOWS					
2	Retail deposits and deposits from small business customers, of which:	1,261,053	1,221,366	1,177,670	1,136,091
3	Stable deposits	509,995	498,813	485,947	473,033
4	Less stable deposits	751,059	722,553	691,724	663,057
5	Unsecured wholesale funding	8,482,791	8,241,018	7,877,930	7,543,904
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	1,006,999	1,020,826	975,685	911,576
7	Non-operational deposits (all counterparties)	7,451,380	7,201,718	6,880,978	6,613,096
8	Unsecured debt	24,412	18,474	21,267	19,232
9	Secured wholesale funding	313	313	313	313
10	Additional requirements	121,820	113,716	109,629	113,123
11	Outflows related to derivative exposures and other collateral requirements	8,543	7,525	8,165	9,969
12	Outflows related to loss of funding on debt products	-	-	-	-
13	Credit and liquidity facilities	113,276	106,191	101,465	103,154
14	Other contractual funding	1,607	1,600	1,623	43,563
15	Other contingent funding obligations	477,001	462,410	448,576	443,178
16	TOTAL CASH OUTFLOWS	10,344,584	10,040,423	9,615,741	9,280,172
CASH - INFLOWS					
17	Secured lending (e.g. reverse repos)	-	-	-	-
18	Inflows from fully performing exposures	5,328,717	5,654,369	5,269,848	4,580,153
19	Other cash inflows	777,378	757,811	761,733	783,703
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)	-	-	-	-
EU-19b	(Excess inflows from a related specialised credit institution)	-	-	-	-
20	TOTAL CASH INFLOWS	6,106,095	6,412,180	6,031,582	5,363,856
EU-20a	Fully exempt inflows	-	-	-	-
20b	Inflows subject to 90% cap	-	-	-	-
EU-20c	Inflows subject to 75% cap	6,106,095	6,412,180	6,031,582	5,363,856
TOTAL ADJUSTED VALUE					
EU-21	LIQUIDITY BUFFER	9,561,024	8,757,262	8,396,953	8,178,818
22	TOTAL NET CASH OUTFLOWS	4,238,489	3,628,243	3,584,159	3,916,315
23	LIQUIDITY COVERAGE RATIO (%)	234.2043 %	245.0845 %	238.5352 %	217.9816 %

Source: COREP reporting framework - Liquidity coverage: Templates C 72.00 - C 73.00 - C 74.00 - C 76.00

NOTE: The figures in the table are calculated as a simple (unweighted) average of the end-of-month observations over the twelve months preceding the end of each quarter

From the evidence reported in the previous templates, it is possible to observe a downward trend in the last twelve months of the average levels of the index, which, in any case, is positioned at values well above the minimum regulatory requirement (100%) throughout the period.

A significant contribution to the LCR coefficient trend was made by the progressive increase in on-demand funding volumes, with significant growth attributable, in particular, to deposits from retail customers. A further boost to funding trends came from the Group's participation in the Targeted Longer-Term Refinancing Operations (TLTRO) promoted by the European Central Bank: as at 31 December 2021, the Group had TLTRO funds totalling 8.874 billion Euro (an amount up by approximately 800 million Euro compared to the previous publication as at 31 December 2020), of which 4.4 billion Euro maturing in June 2023, 0.8 billion Euro maturing in March 2024 and the remainder maturing in September 2024. A minor contribution, although significant, refers to bond issues placed in the second half of 2021.

The funds raised were partly reallocated in support of the real economy through different types of loans, with a preference for mortgages to retail customers. A further portion was allocated to the purchase of high-quality securities, in particular government bonds. The remaining amounts were placed with the Central Bank in the form of a deposit and reserve.

The dynamics underlying the evolution of the indicator were reflected in a gradual reduction of average cash outflows and inflows. With regard to inflows, in particular, there was a significant contraction at the 31 December 2021 reference date as a result of the shift, as requested by the Supervisory Authority, of the deposit facility (overnight deposit with ECB) into the liquidity buffer with consequent negative impacts on the value of the ratio.

Net cash outflows are determined by applying the liquidity outflow and inflow adjustment factors envisaged by the prudential provisions to all the demand liabilities and assets or those with maturity within 30 days, so as to incorporate stress effects of both a systemic and idiosyncratic nature in the calculation of the coefficient.

The high quality liquid assets ("HQLA"), representing the liquidity reserves that can be computed in the numerator of the index, are held by the Group mainly in Euro currency, to cover any financial need in this currency; they remain predominantly made up of instruments issued by eligible sovereign entities classified in the "EHQLA" category (Level 1)¹⁵, recognised as being of extremely high liquidity and credit quality pursuant to Delegated Regulation (EU) 2015/61. These are mainly securities issued by the Italian State. However, the proportion of investments in bonds issued by other sovereign states (particularly Spain and France), supranational organisations, credit institutions and financial companies has increased over time. The Swiss subsidiary Banca Popolare di Sondrio (SUISSE), in turn, holds its own 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.

Risks associated with the concentration of funding sources are mitigated by the Group by maintaining a consistent retail funding base, which is by definition adequately diversified; further significant sources of funding are represented by national and international private entities and

¹⁵ The rules for calculating the LCR split 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.

companies, from which the Group has never had problems in raising money at market conditions, given its high reputation.

Liquidity risks related to derivative exposures prove to be limited overall, given the risk strategy pursued by the Group which provides for a “back-to-back” hedging of all open positions related to transactions with customers.

The table below shows the value of the Net Stable Funding Ratio (NSFR) at the reference date and details its main components (AFS - available stable funding and RSF- required stable funding).

Table 35 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 31/12/2021

		12/31/2021				
		a	B	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
Available stable funding (ASF) Items						
1	Capital items and instruments:	3,242,266	9,748	44,440	560,193	3,802,460
2	Own funds	3,242,266	9,748	44,440	560,193	3,802,460
3	Other capital instruments		-	-	-	-
4	Retail deposits:		17,150,104	327,680	554,874	16,817,652
5	Stable deposits		10,651,016	4,430	518	10,123,192
6	Less stable deposits		6,499,088	323,249	554,356	6,694,460
7	Wholesale funding:		12,575,821	86,561	11,570,043	16,042,734
8	Operational deposits		4,773,925	-	-	2,386,963
9	Other wholesale funding		7,801,896	86,561	11,570,043	13,655,771
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	84,260	3,055,470	10,284	1,626,397	1,631,539
12	NSFR derivative liabilities	84,260				
13	All other liabilities and capital instruments not included in the above categories		3,055,470	10,284	1,626,397	1,631,539
14	TOTAL AVAILABLE STABLE FUNDING (ASF)					40,681,347

Source: COREP reporting framework - Net Stable Funding Ratio: Templates C 80.00 - C 84.00

Table 36 - Template EU LIQ2: Net Stable Funding Ratio (2 of 2) - 31/12/2021

		12/31/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					4,439,577
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		46,660	54,823	1,167,410	1,078,559
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		10,962,159	1,569,279	19,261,697	22,168,509
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		-	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		2,493,600	87,014	554,814	847,681
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		7,039,312	1,193,302	9,389,910	18,531,616
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		185,940	233,736	2,474,310	7,510,592
22	Performing residential mortgages, of which:		183,744	216,843	6,270,262	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		182,475	215,465	6,242,717	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		1,245,504	72,120	3,046,711	2,789,212
25	Interdependent assets		-	-	-	-
26	Other assets:		281,331	76,379	2,827,851	2,965,117
27	Physical traded commodities				-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		-	-	39,200	33,320
29	NSFR derivative assets		-			-
30	NSFR derivative liabilities before deduction of variation margin posted		92,502			4,625
31	All other assets not included in the above categories		188,828	76,379	2,788,651	2,927,172
32	Off-balance sheet items		4,075,234	73,000	646,221	241,189
33	TOTAL REQUIRED STABLE FUNDING (RSF)					30,892,952
34	NET STABLE FUNDING RATIO (%)					131.6849 %

Source: COREP reporting framework - Net Stable Funding Ratio: Templates C 80.00 - C 84.00

The table shows that the NSFR ratio of the Group as at 31 December was higher than the minimum regulatory requirement (100%). The available amount of stable funding (AFS) – consisting mainly of retail deposits and, secondarily, of balances of funds received from the European Central Bank

– exceeded the level of the mandatory amount of stable funding (RSF) deriving primarily from the volumes of loans granted to customers.

Table 37 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 30/09/2021

		09/30/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
		Available stable funding (ASF) Items				
1	Capital items and instruments:	3,144,080	19,825	-	309,143	3,453,223
2	Own funds	3,144,080	19,825	-	309,143	3,453,223
3	Other capital instruments		-	-	-	-
4	Retail deposits:		16,479,192	177,857	780,293	16,288,019
5	Stable deposits		10,322,677	4,982	1,347	9,812,624
6	Less stable deposits		6,156,515	172,874	778,945	6,475,395
7	Wholesale funding:		16,483,779	163,067	11,290,947	17,865,600
8	Operational deposits		3,758,494	-	-	1,879,247
9	Other wholesale funding		12,725,284	163,067	11,290,947	15,986,353
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	7,760	3,061,591	10,958	1,965,375	1,970,854
12	NSFR derivative liabilities	7,760				
13	All other liabilities and capital instruments not included in the above categories		3,061,591	10,958	1,965,375	1,970,854
14	TOTAL AVAILABLE STABLE FUNDING (ASF)					39,577,697

Source: COREP reporting framework - Net Stable Funding Ratio: Templates C 81.00 - C 86.00

Table 38 - Template EU LIQ2: Net Stable Funding Ratio (2 of 2) - 30/09/2021

		09/30/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					4,385,169
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		52,754	56,306	1,225,073	1,134,012
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		11,632,216	1,327,391	18,288,497	21,311,933
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		729,439	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		2,747,200	51,634	338,208	638,745
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		7,073,613	1,003,986	9,208,803	18,089,810
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		151,514	217,874	2,437,524	7,090,956
22	Performing residential mortgages, of which:		201,150	172,108	5,895,092	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		198,208	168,934	5,835,686	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		880,814	99,663	2,846,393	2,583,378
25	Interdependent assets		-	-	-	-
26	Other assets:		3,927,438	54,619	2,690,942	2,834,476
27	Physical traded commodities				-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		-	-	39,200	33,320
29	NSFR derivative assets		-			-
30	NSFR derivative liabilities before deduction of variation margin posted		27,579			1,379
31	All other assets not included in the above categories		3,899,858	54,619	2,651,742	2,799,777
32	Off-balance sheet items		3,942,334	73,000	588,265	231,252
33	TOTAL REQUIRED STABLE FUNDING (RSF)					29,896,843
34	NET STABLE FUNDING RATIO (%)					132.3809 %

Source: COREP reporting framework - Net Stable Funding Ratio: Templates C 81.00 - C 86.00

Table 39 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 30/06/2021

		06/30/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
Available stable funding (ASF) Items						
1	Capital items and instruments:	3,158,493	-	29,901	325,658	3,484,151
2	Own funds	3,158,493	-	29,901	325,658	3,484,151
3	Other capital instruments		-	-	-	-
4	Retail deposits:		15,964,623	354,012	869,328	16,067,466
5	Stable deposits		10,223,648	3,686	3,318	9,719,286
6	Less stable deposits		5,740,975	350,326	866,010	6,348,180
7	Wholesale funding:		16,662,329	179,802	10,806,826	17,438,452
8	Operational deposits		3,483,358	-	-	1,741,679
9	Other wholesale funding		13,178,971	179,802	10,806,826	15,696,773
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	-	3,371,807	10,966	1,889,467	1,894,951
12	NSFR derivative liabilities	-				
13	All other liabilities and capital instruments not included in the above categories		3,371,807	10,966	1,889,467	1,894,951
14	TOTAL AVAILABLE STABLE FUNDING (ASF)					38,885,020

Source: COREP reporting framework - Net Stable Funding Ratio: Templates C 81.00 - C 86.00

Table 40 - Template EU LIQ2: Net Stable Funding Ratio (2 of 2) - 30/06/2021

		06/30/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					4,343,729
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		47,960	57,130	1,275,631	1,173,613
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		11,474,831	1,439,893	18,878,406	21,744,045
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		701,223	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		2,477,510	145,605	332,388	652,942
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		7,230,352	1,019,412	9,334,291	17,966,269
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		102,983	191,767	2,428,727	6,831,826
22	Performing residential mortgages, of which:		119,996	157,994	5,738,816	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		117,973	155,743	5,692,209	-
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		945,750	116,882	3,472,912	3,124,834
25	Interdependent assets		-	-	-	-
26	Other assets:		4,104,716	64,860	2,597,369	2,741,587
27	Physical traded commodities				-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		-	-	39,200	33,320
29	NSFR derivative assets		18,068			18,068
30	NSFR derivative liabilities before deduction of variation margin posted		22,974			1,149
31	All other assets not included in the above categories		4,063,674	64,860	2,558,169	2,689,050
32	Off-balance sheet items		3,996,015	-	528,713	227,261
33	TOTAL REQUIRED STABLE FUNDING (RSF)					30,230,235
34	NET STABLE FUNDING RATIO (%)					128.6296 %

Source: COREP reporting framework - Net Stable Funding Ratio: Templates C 81.00 - C 86.00

Section 8 - Disclosure of exposures to credit risk (442 CRR/CRR II)

Definition of non-performing exposures

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 for which there are particularly serious signs of stress are classified as «non-performing» (Non-Performing Exposures).

As of 1 January 2021, the new European rules on the classification of counterparties to default for prudential purposes are applied. The new discipline, introduced by the European Banking Authority (EBA) and implemented at national level by the Bank of Italy, establishes more restrictive criteria and methods for classifying a credit exposure as default compared to those adopted to date by Italian intermediaries, with the aim of harmonising the approaches for applying the notion of insolvency and identifying the conditions of unlikely fulfilment among financial institutions and the various jurisdictions of EU countries. On the basis of the regulatory framework in force, the Bank classifies non-performing exposures, depending on the type and severity of the impairment, into three categories, corresponding to the administrative statuses of the loan:

- *Bad loans*: on- and off-balance sheet exposures towards 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 guarantee received in support of such exposures.
- *Unlikely to pay (UTP) 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*: exposures other than non-performing or unlikely to pay loans, which, at the reference date, are past due and/or overdrawn continuously for more than 90 days and which exceed set materiality thresholds established by the regulations. Non-performing past due exposures may be determined with reference to the position of the individual debtor or, alternatively, solely for exposures towards retail customers, with reference to a single transaction; the Group identifies all of these exposures according to the “counterparty” approach.

Loans are classified as Past due exposures when the following conditions are met:

- at the reporting date the customer has a past due and/or overdrawn portion of the entire exposure at Group level that exceeds both of the following materiality thresholds:
 - *Relative Materiality Threshold*: the relative component is represented by a percentage calculated as the ratio between the amount of the credit obligation in arrears and the total amount of all exposures towards the same debtor recorded on the institution's financial statement; this threshold is set at one percent (1%) for both retail and non-retail exposures;

- *Absolute Materiality Threshold*: the absolute component is the maximum amount that the sum of all overdue amounts owed by a debtor to the institution can reach; the maximum amount does not exceed 100 Euro for retail exposures or 500 Euro for non-retail exposures.
- the customer evidences overdrawn and/or past-due credit exposures as defined above for 90 days continuously.

Unlikely to pay include credit exposures for which the Bank considers it improbable that the debtor will fulfil its obligations in full, in terms of principal and/or interest, without actions being taken to preserve the credit reasons such as, for example, the enforcement of accessory guarantees.

Finally, bad loans include on- and off-balance sheet exposures towards 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 guarantee received in support of such exposures. The loans not allocated to the above categories are deemed to be performing exposures.

Loans are classified as non-performing exposures, depending on the case, either automatically or on the basis of expert proposals and assessments. More specifically, the classification of non-performing past-due exposures takes place automatically when the conditions provided for by the regulations occur. The classification as unlikely to pay, on the other hand, is based on a system of triggers which may, depending on the case, generate an automatic classification or an assessment by the reference manager. Finally, the classification as non-performing takes place on the proposal of the manager, as part of the continuous monitoring of the counterparty. The return to a performing status of non-performing exposures, governed by the Supervisory Authority as well as by specific internal regulations, takes place after verifying that the critical conditions and the state of insolvency have ceased to exist.

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

- *Bad loans*, suitable procedures are implemented to recover the loans; under the right circumstances, recovery plans are drawn up and/or kind settlements are proposed in order to terminate the relationship;
- *Unlikely to pay (UTP) 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 Bad Loans category. For Unlikely to pay loans subject to restructuring agreements, controls are made continuously to ensure that the agreed conditions are met;
- *Past due*, the related exposures are carefully monitored and timely attempts are made to get the situation back to normal; if the borrower really is in financial difficulty, necessary steps are taken to transfer the loan to Unlikely to pay or Bad loans, depending on the circumstances.

Description of the methodologies adopted to determine credit adjustments

Adjustments are made in strict compliance with both primary and secondary regulations and on a highly prudent basis. In particular, having regard for bad loans and unlikely-to-pay loans, the bank carries out an analysis of each position, which also takes into account the discounting effects of expected recovery. Overall assessments are made solely with reference to smaller individual loans, being not more than 10,000 euro for bad loans and 350,000 euro for unlikely to pay loans. The objective is to adopt a prudent approach to the control of these non-performing assets that, given their intrinsic characteristics (large number of non-significant amounts), can be processed rapidly and at low cost on primarily an automated basis, thus ensuring the uniformity of the assessments made. With reference to non-performing past due and/or overdrawn exposures, the adjustment is determined with reference to the historical experience of losses on loans with that type of anomaly.

Cash loans as a whole 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 asset's impairment.

In fact, for accounting purposes, 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 (SICR) 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" statuses listed above at the reference date.

The classification in one of the impaired statuses for Stage 3 exposures takes place in accordance with the definitions of "Non-Performing Exposures" provided for by the Implementing Technical Standards (ITS) issued by the EBA and implemented in the EU legislation, according to which impaired financial assets are divided into the categories of bad loans, unlikely to pay and impaired past due and/or overdue exposures.

At each balance sheet date, the possibility to observe 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 (SICR) 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 IFRS 9 rationale which allows 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).

- *Number of days of continuous past due/overdrawn (Past due 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, considering the sign of impairment of that relationship.
- *State of forbearance.* Forborne exposures comprise loans towards 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 deemed 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 related to the disbursement of new finance directly by the Group, and 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.
- *Positions originated in the month prior to the reporting date.* These are those positions that originated or entered the portfolio of exposures during the month prior to the reporting date for which none of the absolute criteria entailing classification in Stage 2 exists, and which are therefore classified in Stage 1.

Using the relative “staging criteria”, it is possible to evaluate, through the analysis of an appropriate PD-based metric, the change in the riskiness of the position over the time horizon equal to the residual life of the same between the analysis/reporting date and the origination date. For the construction thereof, probability of default term structures (i.e. lifetime PD curves, which differ according to appropriate granularity) are used, constructed starting with an internal rating system, where available, or assigned by an external rating agency, and by also taking into consideration elements of a predictive-evolutionary nature and specific to the macroeconomic scenario deemed to be most plausible at the analysis/reporting date in compliance with the rationales of the IFRS 9 accounting standard. In this case, a transfer between Stages is envisaged: the model is in fact symmetrical, with the possibility for activities to move between the different accounting Stages. In particular consistent with the prudent principles of forbearance, an observation period of at least two years is applied before returning the position to a better Stage.

The valuation of financial assets recognised at amortised cost takes place on the basis of the calculation of the expected credit loss (ECL), defined as an estimate of credit losses over the

expected life of the financial instrument weighted by their probabilities of occurrence. It is calculated according to the Stage classifications defined above; in particular, there can be:

- 12-month expected credit losses, for assets classified in Stage 1. 12-month expected credit losses are those resulting from default events that are possible within 12 months (or within a shorter period if the expected life of the exposure is less than 12 months), weighted for the probability of occurrence of the default event.
- Lifetime expected credit losses, for assets classified in stage 2 and Stage 3. Lifetime expected credit losses are those resulting from all possible default events over the expected life of the financial instrument, weighted for the probability of occurrence of the default event. For Stage 2 positions, the provisions relating to each counterparty may be amended manually to a level considered appropriate by the competent business functions, based on the results of applying the statistical methodology defined by the Bank and specific operational information, if the theoretical expected loss does not accurately reflect the level of risk identified. As regards performing positions, measurement is carried out 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 regards credit-impaired positions, measurement may be performed on an overall or detailed basis.

Impairment of individual assets measured at amortised cost is the extent to which their recoverable value is lower than their amortised cost. In case of a detailed analysis, the 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 collaterals or personal guarantee assisting the loan;
- expected timing of recoveries, considering the progress made by recovery procedures;
- internal return rate.

Bad loans are assessed on either a detailed or an overall basis. The specific analysis of non-performing financial assets measured at amortised cost takes the following parameters into account:

- recoveries forecast by the relationship managers;
- expected timing of recoveries based on historical-statistical data;
- original discounting rates or the actual contractual rates applying at the time of classifying as bad loans.

Overall assessments are made of positions with limited total exposures that do not exceed given “threshold values”. These thresholds are determined from time to time, using simple processes that mainly involve the automatic application of specific coefficients defined internally with reference to detailed 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 involved;
- 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.

Overall write-downs are made using similar methodology to that applied in relation to the overall write-down of bad loans for which no specific estimate of the loss attributable to each individual relationship has been made.

These financial assets are adjusted on an overall basis with reference to specific historical/statistical analyses of related losses incurred in the past.

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.

For the positions in question, it is not possible to quantify expected losses on a detailed basis at single name level. The measurement of the level of impairment thereof – and, thus, of the adjustments to be applied on an overall basis – is performed by taking account of the possibility of return to performing of the positions or of a further deterioration of default and, accordingly, of the amount of the estimated expected losses arising from the established work-out process. Measurement is also performed based on the availability of appropriate information of a macro-economic and prospective nature that is deemed significant for the estimation of the adjustments.

It should be noted that the impairment model relating to impaired loans (Stage 3) envisaged by IFRS 9 accounting standard is based on an estimate of the difference between the original contractual flows and the expected cash flows. So, in determining the expected flows, it is necessary to include estimates at the reporting date of the various expected scenarios, including any loan disposal programmes and/or settlement agreements. If the entity expects to recover a portion of the cash flow of the exposures through sales procedures or settlement agreements, these can be included in the calculation of the Expected Credit Losses verified under certain conditions.

The Bank incorporates the various recovery strategies considering the different probabilities that they will take place according to the IFRS 9 impairment model. In the context of calculating the ECL, internal regulations require the expected loss and the recoverable value of impaired loans to be estimated in disposal scenarios in accordance with a specific procedure that starts with the identification of the reference scenarios and comprises several phases. In general, accounting rules require the estimate of the loss on non-performing loans to reflect a range of possible outcomes for different scenarios, each associated with a specific probability of occurrence.

Currently, the following possible scenarios have been identified, each with different models and estimated outcomes:

- internal management of credit recovery activities;
- adoption of settlement agreements for a selected number of impaired positions;
- disposal of impaired exposures to third parties.

The next phase consists in identifying the portfolio of non-performing exposures to be sold, based on the knowledge of the characteristics thereof, the existence of any internal and/or external constraints, the monitoring of market conditions and any more complex strategic and operational objectives. The aggregate is defined with reference to the specific factors attributed to each position, such as their contractual characteristics (e.g. type of guarantee, ageing, size of the exposure etc.) or relevant operational information (e.g. type of recovery procedures already in progress, geographical location of the counterparty, any impediment or obstacle to disposal, etc.) and the strategic orientation of the Bank, the conditions existing from time to time in the market for the disposal of loans, the strategies adopted by competitors, and any other internal and/or external factor that can be explained appropriately.

A specific probability of occurrence is attributed to each identified management scenario, determined on both qualitative and quantitative bases; the latter takes into account the correlation between the “target portfolio” and the “extended portfolio” selected for each scenario.

The next phase involves estimating the expected loss for each scenario. The estimate on non-performing loans must reflect reasonable and well-founded information, available without excessive cost or effort, including details of past events, current conditions and the future economic situation. In line with the internal regulations for quantifying the expected loss on non-performing exposures, an estimate of the cash flows expected from each operational scenario identified is made.

Without prejudice to specific regulatory instructions, the estimate of cash flows from internal credit management scenarios takes account of macro-economic and sector information, the situation faced by the debtor, the cash flows expected from the restructuring of unlikely-to-pay exposures, any collaterals or personal guarantee, the period during which the position has been impaired and the expected time to obtain recovery.

The estimate of cash flow from loan disposal scenarios takes account of similar transactions carried out in the past by the bank, as well as specific information available about the underlying (situation faced by the borrower and any loan guarantee obtained) and the market for the disposal of non-performing loans (e.g. prices of similar transactions carried out by other intermediaries and historical and forecast market curves).

The expected loss on each impaired position is therefore determined using the following formula:

Expected loss		Expected loss Disposal Scenario*		Expected loss Internal Management
Individual position	=	Probability of occurrence	+	Scenario* Probability of occurrence
		of Disposal		of Internal Management

The process of determining the expected loss in case of proactive credit management scenarios through settlement agreements follows the same steps as for the disposal scenarios outlined above. The expected loss in these specific scenarios, through the relative probability of occurrence, is included in the final quantification of the expected loss of the individual position.

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 “credit conversion factors” (CCF) are taken into consideration. These are statistically based parameters that reflects the ratio between the undrawn portion of a credit line, which it is presumed will be drawn close to the insolvency of the counterparty, and the amount of the line currently undrawn, estimated on the basis of experience or identified by the regulations currently in force from time to time.

Exposures subject to commercial renegotiations

Renegotiations that include changes to the original contractual conditions applied for purely commercial reasons to credit exposures towards 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 six months.

Commercial renegotiations are principally agreed in order to maintain the commercial relationship with the customer (retention of loans).

Amid a market context characterised by persistently low interest rates, not least in view of the strategies adopted by similar competitors in the Italian banking system (especially with regard to lending to businesses and households), the Bank has received many requests to review the economic conditions applied to loans. These were considered with reference to the rating of the counterparty and its prospective profitability, with a view to maintaining and developing the relationship and, therefore, retaining the lending business.

Unlike forbearance measures, renegotiations for commercial reasons relate to debtors without financial difficulties and include all operations designed to align their cost of borrowing with market conditions. Commercial renegotiations involve changing the original contractual conditions at the request of the debtor, considering the cost of borrowing or the duration of the loan, with a resulting benefit for the customer. In general, whenever the Bank agrees to renegotiate in order to avoid losing the customer, the transaction is considered substantial because, without it, the customer would obtain funding from other sources and the Bank would experience a reduction in the expected future revenue streams. From an accounting point of view, these transactions are comparable with an early repayment of the original debt and the opening a new contract.

Forborne Exposures

Forborne exposures are defined as credit exposures - in the form of loans, debt securities and revocable or irrevocable commitments to provide financing (excluding exposures held for trading purposes) - for which amendments to contractual conditions or refinancing have been granted due to the debtor's financial difficulties. The attribute forborne 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 towards counterparties to which forbearance or concessions are granted because the debtor is experiencing, or is about to experience, difficulties in meeting its financial

commitments. A concession 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 towards a debtor classified as non-performing, or who would be if the exercise of these clauses were not to be approved;
- when disbursing a new credit to a counterparty, it pays on a pre-existing relationship classified as non-performing or which would have become soon non-performing, if the Group had not granted it a 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 pre-existing contractual terms granted to a counterparty who is no longer able to comply with due to its 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 objectively verified in the case of a counterparty classified as non-performing while it is presumed, and must therefore be assessed following in-depth analyses, for customers in a performing state with a rating at the counterparty level that is identifying a high level of risk, which has expired or would have expired for at least 30 days during the three months prior to the contractual amendment or which has had a deterioration in the internal rating that identifies a rapid increase in risk. During 2021, the presumptive hardship criteria temporarily introduced for the duration of the COVID-19 pandemic designed to identify locations potentially impacted by the public health emergency were further identified.

In order to guarantee the quality of credit exposures and effectively monitor their trends, the Group 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. According 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 the support of 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 customer assets 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 for classifying the relationship as forborne exist 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 the concession approval 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 general monitoring of the position.

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

The profit / loss on non-substantial changes to forborne relationships is calculated as the difference between the present value of the new contractual cash flows following renegotiation or amendment, discounted using the original effective interest rate (rate before the renegotiation or amendment of the loan contract), and the present value of the original contractual cash flows, also discounted using the original effective interest rate.

Furthermore, in compliance with the “Guidelines on the application of the definition of default pursuant to article 178 of Regulation (EU) no. 575/2013”, this calculation (Delta Net Present Value) is carried out for a position subject to a credit concession. In accordance with regulatory requirements, where the NPV delta is more than 1%, the company is identified as being in financial difficulty and classified as being in default.

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 the loss of the forborne attribute.

Purchased or originated credit impaired (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 for the entire duration of the relationship and the assets concerned are written down to reflect any losses expected over their residual lifetime until settlement.

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 in the “Current Accounts” and “Foreign” compartments and non-standard contracts originating from Corporate Finance*: for these relationships, the unit responsible for monitoring and managing anomalous credit manually proposes the assignment of the “POCI” attribute, subject to approval by the competent body.

Regardless of how assigned (manually or automatically), the “POCI” attribute must always be confirmed by the competent internal decision-making body and, once approved, remains valid for the entire duration of the business 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 mortgages or personal guarantees, the unsuccessful completion of enforcement/court-supervised proceedings, the start of bankruptcy procedures, the removal from the register of the business name of the debtor legal entity, the lack of traceability or advanced age of the customer.

The procedures to identify the absence of any reasonable prospects of recovery are focused on the counterparties within the bad loans portfolios and differ depending on the existence of mortgage guarantees, the ageing of the position, the progress made with recovery actions and the economic convenience associated with it, the inclusion of a position within a portfolio being sold and the risk of forfeiture of credit rights.

* * *

Below please find a broad set of quantitative information on the credit quality of the Group's exposures, as required by CRR Part Eight. For further information, please refer to the Notes to the Financial Statements - Part E of the Consolidated Financial Statements.

Table 41 - Template EU CR1: Performing and non-performing exposures and related provisions (1 of 3)

	a	b	c	d	e	f
	Gross carrying amount/nominal amount					
	Performing exposures			Non-performing exposures		
		of which STAGE 1	of which STAGE 2		of which STAGE 2	of which STAGE 3
005	Cash balances at central banks and other demand deposits	7,737,453	7,736,990	463	-	-
010	Loans and advances	29,853,927	27,310,771	2,109,939	1,875,969	-
020	Central banks	10,001	10,001	-	-	-
030	General governments	392,411	372,434	19,910	427	-
040	Credit institutions	247,581	247,236	345	-	-
050	Other financial corporations	2,625,390	2,574,996	38,385	31,029	-
060	Non-financial corporations	15,935,249	14,269,183	1,390,824	1,381,806	-
070	Of which SMEs	9,095,419	7,791,174	1,069,855	1,013,713	-
080	Households	10,643,295	9,836,921	660,475	462,707	-
090	Debt securities	13,403,352	13,292,618	40,130	-	-
100	Central banks	-	-	-	-	-
110	General governments	10,759,736	10,728,214	-	-	-
120	Credit institutions	1,133,059	1,086,497	40,130	-	-
130	Other financial corporations	1,169,473	1,139,983	-	-	-
140	Non-financial corporations	341,084	337,925	-	-	-
150	Off-balance-sheet exposures	20,561,673	13,374,243	385,892	215,166	-
160	Central banks	-	-	-	-	-
170	General governments	727,345	625,615	3,151	3	-
180	Credit institutions	472,982	80,960	270	-	-
190	Other financial corporations	1,318,448	1,217,301	2,539	15,419	-
200	Non-financial corporations	16,222,390	9,950,485	311,341	190,741	-
210	Households	1,820,509	1,499,882	68,591	9,004	-
220	TOTAL AS AT 12/31/2021	71,556,405	61,714,622	2,536,423	2,091,136	-
	TOTAL AS AT 12/31/2020	65,823,690	54,675,546	4,628,340	2,534,975	-

Source: FINREP reporting framework - Breakdown of financial assets by instrument and counterparty: Templates F 04.03.1 - F 04.04.1 - F 04.09 - F 04.10 - F 18.00

Table 42 - Template EU CR1: Performing and non-performing exposures and related provisions (2 of 3)

	g	h	i	j	k	l
	<i>Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions</i>					
	<i>Performing exposures – accumulated impairment and provisions</i>			<i>Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions</i>		
	<i>of which STAGE 1</i>	<i>of which STAGE 2</i>		<i>of which STAGE 2</i>	<i>of which STAGE 3</i>	
005 Cash balances at central banks and other demand deposits	(166)	(157)	(8)	-	-	-
010 Loans and advances	(118,173)	(56,230)	(59,489)	(1,039,163)	-	(920,520)
020 Central banks	(3)	(3)	-	-	-	-
030 General governments	(1,171)	(911)	(261)	(408)	-	(408)
040 Credit institutions	(158)	(156)	(2)	-	-	-
050 Other financial corporations	(18,929)	(17,935)	(993)	(19,331)	-	(16,831)
060 Non-financial corporations	(60,257)	(22,307)	(37,195)	(785,082)	-	(683,410)
070 Of which SMEs	(44,371)	(13,072)	(30,678)	(543,734)	-	(456,497)
080 Households	(37,656)	(14,918)	(21,038)	(234,341)	-	(219,870)
090 Debt securities	(8,750)	(4,279)	(4,471)	-	-	-
100 Central banks	-	-	-	-	-	-
110 General governments	(2,782)	(2,782)	-	-	-	-
120 Credit institutions	(5,358)	(887)	(4,471)	-	-	-
130 Other financial corporations	(452)	(452)	-	-	-	-
140 Non-financial corporations	(158)	(158)	-	-	-	-
150 Off-balance-sheet exposures	(18,325)	(13,681)	(4,616)	(24,900)	-	(10,044)
160 Central banks	-	-	-	-	-	-
170 General governments	(320)	(315)	(5)	-	-	-
180 Credit institutions	(191)	(188)	(3)	-	-	-
190 Other financial corporations	(3,178)	(3,174)	(4)	(402)	-	(210)
200 Non-financial corporations	(11,032)	(7,143)	(3,861)	(23,483)	-	(9,314)
210 Households	(3,604)	(2,860)	(742)	(1,015)	-	(520)
220 TOTAL AS AT 12/31/2021	(145,414)	(74,347)	(68,584)	(1,064,063)	-	(930,563)
TOTAL AS AT 12/31/2020	(219,387)	(88,923)	(130,237)	(1,228,182)	-	(1,195,681)

Source: FINREP reporting framework - Breakdown of financial assets by instrument and counterparty: Templates F 04.03.1 - F 04.04.1 - F 04.09 - F 04.10 - F 18.00

Table 43 - Template EU CR1: Performing and non-performing exposures and related provisions (3 of 3)

		<i>m</i>	<i>n</i>	<i>o</i>
		<i>Accumulated partial write-off</i>	<i>Collateral and financial guarantees received</i>	
			<i>On performing exposures</i>	<i>On non- performing exposures</i>
005	Cash balances at central banks and other demand deposits	-	88	-
010	Loans and advances	(136,526)	20,612,767	758,125
020	Central banks	-	-	-
030	General governments	-	179,632	-
040	Credit institutions	-	39,412	-
050	Other financial corporations	-	774,150	7,125
060	Non-financial corporations	(136,138)	10,085,212	540,422
070	Of which SMEs	(4,254)	7,044,383	435,272
080	Households	(389)	9,534,361	210,578
090	Debt securities	-	-	-
100	Central banks	-	-	-
110	General governments	-	-	-
120	Credit institutions	-	-	-
130	Other financial corporations	-	-	-
140	Non-financial corporations	-	-	-
150	Off-balance-sheet exposures		3,228,950	72,912
160	Central banks		-	-
170	General governments		639	-
180	Credit institutions		17,024	-
190	Other financial corporations		129,065	0
200	Non-financial corporations		2,730,234	69,867
210	Households		351,989	3,045
220	TOTAL AS AT 12/31/2021	(136,526)	23,841,805	831,037
	TOTAL AS AT 12/31/2020	(195,711)	22,144,761	1,044,588

Source: FINREP reporting framework - Breakdown of financial assets by instrument and counterparty: Templates F 04.03.1 - F 04.04.1 - F 04.09 - F 04.10 - F 18.00

During the 2021 financial year, the Bank continued to finalise securitisation transactions through the bulk sale of non-performing loans in line with the corporate objectives of de-risking and improving asset quality. In particular, in the last quarter of the year, it concluded a securitisation transaction named "POP NPLS 2021," which involved the sale of a portfolio of non-performing loans with a gross value of 420.9 million euro.

Table 44 - Template EU CR1-A: Maturity of exposures

		a	b	c	d	e	f
		Net exposure value					
		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1	Loans and advances	3,751,394	7,277,126	7,383,838	11,369,931	13,093,895	42,876,184
2	Debt securities	1,111	1,944,208	6,937,195	4,512,087	-	13,394,602
3	TOTAL AS AT 12/31/2021	3,752,505	9,221,334	14,321,033	15,882,018	13,093,895	56,270,786

Source: processing of accounting and reporting data

NOTE: The net value of undated exposures associated with 'Loans and advances' includes the amount of endorsement credits and loan commitments outstanding at the reporting date

The table above shows the exposures as at 31 December 2021 of loans and advances and debt securities by maturity. These exposures are mainly concentrated in the category with maturities between 1 and 5 years and over 5 years.

Table 45 - Template EU CR2: Changes in the stock of non-performing loans and advances

		12/31/2021
		a
		Gross carrying amount
010	INITIAL STOCK OF NON-PERFORMING LOANS AND ADVANCES	2,292,787
020	Inflows to non-performing portfolios	461,016
030	Outflows from non-performing portfolios	(877,834)
040	Outflow due to write-off	(83,882)
050	Outflow due to other situations	(793,952)
060	FINAL STOCK OF NON-PERFORMING LOANS AND ADVANCES	1,875,969

Source: FINREP reporting framework - Incoming and outgoing non-performing exposures: Template F 24.01

Outflows include the “POP NPLS 2021” disposal mentioned above.

Table 46 - Template EU CR2a: Changes in the stock of non-performing loans and advances and related net accumulated recoveries

		12/31/2021	
		a	b
		Gross carrying amount	Related net accumulated recoveries
010	INITIAL STOCK	2,292,787	
020	Inflows to non-performing portfolios	461,016	
030	Outflows from non-performing portfolios	(877,834)	
040	Outflow to performing portfolio	(63,131)	
050	Outflow due to loan repayment, partial or total	(263,828)	
060	Outflow due to collateral liquidation	(36,380)	32,671
070	Outflow due to taking possession of collateral	-	-
080	Outflow due to sale of instruments	(25,338)	3,977
090	Outflow due to risk transfer	(392,413)	98,560
100	Outflow due to write-off	(83,882)	
110	Outflow due to other situations	(12,861)	
120	Outflow due to reclassification as held for sale	-	
130	FINAL STOCK	1,875,969	

Source: FINREP reporting framework - Incoming and outgoing non-performing exposures: Template F 24.01

The quality of the Group's credit assets improved further. At 31 December 2021, both the stock of non-performing exposures, which also incorporates the penalising effect of the new European regulations on the classification of customers as “defaulted”, and their incidence on total loans fell. Coverage of non-performing loans, based on prudent provisioning policies, increased further.

Table 47 - Template EU CQ1: Credit quality of forborne exposures (1 of 2)

		a	b	C	d
		<i>Gross carrying amount/nominal amount of exposures with forbearance measures</i>			
		<i>Performing forborne</i>	<i>Non-performing forborne</i>		
			<i>Of which defaulted</i>		<i>Of which impaired</i>
005	Cash balances at central banks and other demand deposits	-	-	-	-
010	Loans and advances	697,280	853,717	853,717	835,057
020	Central banks	-	-	-	-
030	General governments	19,909	-	-	-
040	Credit institutions	-	-	-	-
050	Other financial corporations	646	14,841	14,841	14,841
060	Non-financial corporations	446,010	622,027	622,027	606,144
070	Households	230,715	216,849	216,849	214,072
080	Debt securities	-	-	-	-
090	Loan commitments given	19,611	14,790	14,790	14,790
100	TOTAL AS AT 12/31/2021	716,892	868,507	868,507	849,848
	TOTAL AS AT 12/31/2020	744,244	945,235	945,235	919,082

Source: FINREP reporting framework - Information on forborne exposures: Template F 19.00

Table 48 - Template EU CQ1: Credit quality of forborne exposures (2 of 2)

		e	f	g	h
		<i>Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions</i>		<i>Collateral received and financial guarantees received on forborne exposures</i>	
		<i>On performing forborne exposures</i>	<i>On non-performing forborne exposures</i>	<i>Of which collateral and financial guarantees received on non-performing exposures with forbearance measures</i>	
005	Cash balances at central banks and other demand deposits	-	-	-	-
010	Loans and advances	(27,423)	(424,563)	992,785	401,780
020	Central banks	-	-	-	-
030	General governments	(261)	-	-	-
040	Credit institutions	-	-	-	-
050	Other financial corporations	(27)	(10,878)	441	77
060	Non-financial corporations	(17,511)	(314,739)	673,636	289,847
070	Households	(9,625)	(98,946)	318,708	111,856
080	Debt securities	-	-	-	-
090	Loan commitments given	(305)	0	14,192	8,454
100	TOTAL AS AT 12/31/2021	(27,728)	(424,563)	1,006,976	410,234
	TOTAL AS AT 12/31/2020	(27,219)	(418,237)	1,061,438	470,111

Source: FINREP reporting framework - Information on forborne exposures: Template F 19.00

Forborne exposures showed a moderate decrease compared with 31 December 2020, both in the performing and in the non-performing part of the loan portfolio.

Table 49 - Template EU CQ2: Quality of forbearance

		12/31/2021	12/31/2020
		a	b
		<i>Gross carrying amount of forborne exposures</i>	<i>Gross carrying amount of forborne exposures</i>
010	Loans and advances that have been forborne more than twice	190,737	182,341
020	Non-performing forborne loans and advances that failed to meet the nonperforming exit criteria	475,901	568,977

Source: FINREP reporting framework- Forbearance management and forbearance quality: Template F 26.00

At 31 December 2021, exposures that have been subject to forbearance measures more than twice represented approximately one quarter of the total forbearance measures arranged by the Group. With regard to forbearance measures related to non-performing loans to customers, more than a half are positions that did not meet the criteria to shift from the impaired status despite the end of the cure period.

Table 50 - Template EU CQ3: Credit quality of performing and non-performing exposures by past due days (1 of 2)

		a	b	c	d	e	f
		<i>Gross carrying amount/nominal amount</i>					
		<i>Performing exposures</i>			<i>Non-performing exposures</i>		
			<i>Not past due or past due ≤ 30 days</i>	<i>Past due > 30 days ≤ 90 days</i>		<i>Unlikely to pay that are not past due or are past due ≤ 90 days</i>	<i>Past due > 90 days ≤ 180 days</i>
005	Cash balances at central banks and other demand deposits	7,737,453	7,737,453	-	-	-	-
010	Loans and advances	29,853,927	29,829,107	24,820	1,875,969	674,339	73,432
020	Central banks	10,001	10,001	-	-	-	-
030	General governments	392,411	392,411	-	427	27	-
040	Credit institutions	247,581	247,236	345	-	-	-
050	Other financial corporations	2,625,390	2,625,389	1	31,029	9,115	-
060	Non-financial corporations	15,935,249	15,929,851	5,398	1,381,806	457,291	54,535
070	Of which SMEs	9,095,419	9,090,539	4,880	1,013,713	408,608	42,396
080	Households	10,643,295	10,624,219	19,076	462,707	207,906	18,896
090	Debt securities	13,403,352	13,403,352	-	-	-	-
100	Central banks	-	-	-	-	-	-
110	General governments	10,759,736	10,759,736	-	-	-	-
120	Credit institutions	1,133,059	1,133,059	-	-	-	-
130	Other financial corporations	1,169,473	1,169,473	-	-	-	-
140	Non-financial corporations	341,084	341,084	-	-	-	-
150	Off-balance-sheet exposures	20,561,673			215,166		
160	Central banks	-			-		
170	General governments	727,345			3		
180	Credit institutions	472,982			-		
190	Other financial corporations	1,318,448			15,419		
200	Non-financial corporations	16,222,390			190,741		
210	Households	1,820,509			9,004		
220	TOTAL AS AT 12/31/2021	71,556,405	50,969,912	24,820	2,091,136	674,339	73,432
	TOTAL AS AT 12/31/2020	65,823,690	46,082,903	55,837	2,534,975	618,877	55,830

Source: FINREP reporting framework - Information on performing and impaired exposures: Template F 18.00

Table 51 - Template EU CQ3: Credit quality of performing and non-performing exposures by past due days (2 of 2)

		g	h	i	j	k	l
		<i>Gross carrying amount/nominal amount</i>					
		<i>Non-performing exposures</i>					
		<i>Past due > 180 days ≤ 1 year</i>	<i>Past due > 1 year ≤ 2 years</i>	<i>Past due > 2 years ≤ 5 years</i>	<i>Past due > 5 years ≤ 7 years</i>	<i>Past due > 7 years</i>	<i>Of which defaulted</i>
005	Cash balances at central banks and other demand deposits	-	-	-	-	-	-
010	Loans and advances	155,245	185,386	294,638	200,636	292,293	1,875,969
020	Central banks	-	-	-	-	-	-
030	General governments	0	398	0	-	2	427
040	Credit institutions	-	-	-	-	-	-
050	Other financial corporations	15,457	1,558	53	4,784	62	31,029
060	Non-financial corporations	108,733	131,658	261,447	133,197	234,944	1,381,806
070	Of which SMEs	78,136	103,514	184,969	95,846	100,245	1,013,713
080	Households	31,055	51,772	33,138	62,655	57,285	462,707
090	Debt securities	-	-	-	-	-	-
100	Central banks	-	-	-	-	-	-
110	General governments	-	-	-	-	-	-
120	Credit institutions	-	-	-	-	-	-
130	Other financial corporations	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	-
150	Off-balance-sheet exposures						215,166
160	Central banks						-
170	General governments						3
180	Credit institutions						-
190	Other financial corporations						15,419
200	Non-financial corporations						190,741
210	Households						9,004
220	TOTAL AS AT 12/31/2021	155,245	185,386	294,638	200,636	292,293	2,091,136
	TOTAL AS AT 12/31/2020	140,174	233,282	503,426	306,264	435,207	2,534,975

Source: FINREP reporting framework - Information on performing and impaired exposures: Template F 18.00

Table 52 - Template EU CQ4: Quality of non-performing exposures by geography (1 of 2)

	a	b	c	d
	<i>Gross carrying/nominal amount</i>			
	<i>Of which: non-performing</i>		<i>Of which: subject to impairment</i>	
	<i>Of which: defaulted</i>			
ON-BALANCE-SHEET EXPOSURES	45,133,248	1,875,969	1,875,969	44,646,119
Italy	36,905,196	1,781,256	1,781,256	36,456,323
Switzerland	4,405,811	79,620	79,620	4,405,810
Spain	1,778,590	366	366	1,778,590
France	635,481	81	81	634,596
Monaco	194,613	1,217	1,217	194,613
United states	137,060	-	-	137,060
Germany	87,971	10,163	10,163	76,430
Luxembourg	14,102	-	-	2,816
Others	974,424	3,266	3,266	959,882
OFF-BALANCE-SHEET EXPOSURES	20,776,840	215,166	215,166	
Italy	19,255,462	215,141	215,141	
Switzerland	534,221	0	0	
Spain	20,815	-	-	
France	104,606	3	3	
Monaco	413,807	-	-	
United states	17,899	-	-	
Germany	44,615	22	22	
Luxembourg	150,060	-	-	
Others	235,355	0	0	
TOTAL	65,910,088	2,091,136	2,091,136	44,646,119

Source: FINREP reporting framework - Geographical breakdown of activities: Templates F 20.04 - F 20.05

Table 53 - Template EU CQ4: Quality of non-performing exposures by geography (2 of 2)

	e	f	g
	<i>Accumulated impairment</i>	<i>Provisions on off-balance sheet commitments and financial guarantees given</i>	<i>Accumulated negative changes in fair value due to credit risk on nonperforming exposures</i>
ON-BALANCE-SHEET EXPOSURES	(1,153,675)		(12,411)
Italy	(1,105,759)		(12,411)
Switzerland	(33,564)		-
Spain	(713)		-
France	(201)		-
Monaco	(768)		-
United states	(75)		-
Germany	(9,529)		-
Luxembourg	(8)		-
Others	(3,057)		-
OFF-BALANCE-SHEET EXPOSURES		43,226	
Italy		42,577	
Switzerland		367	
Spain		9	
France		3	
Monaco		219	
United states		4	
Germany		3	
Luxembourg		-	
Others		43	
TOTAL	(1,153,675)	43,226	(12,411)

Source: FINREP reporting framework - Geographical breakdown of activities: Templates F 20.04 - F 20.05

The table shows the countries to which the Group's total cash and off-balance sheet exposures exceed the 0.2% threshold.

At 31 December 2021, the major part of the Group's exposures (both on- and off-balance sheet items) related to counterparties resident in Italy. They account for more than 82% of total on-balance sheet exposures and about 93% of off-balance sheet exposures. The concentration of domestic exposures on the sub-set of non-performing loans is even more marked: 95% and 99.9%, respectively, are the percentages of incidence calculated on the impaired segment alone.

In order to provide a comprehensive picture of the Group's risk profile as a result of the military conflict between Russian Federation and Ukraine that started on 24 February 2022, it should be noted that direct exposures towards these two countries are scarcely material (0.1% of gross balance sheet exposure).

Table 54 - Template EU CQ5: Credit quality of loans and advances by industry

		a	b	c	d	e	f
		<i>Gross carrying amount</i>				<i>Accumulated impairment</i>	<i>Accumulated negative changes in fair value due to credit risk on non-performing exposures</i>
		<i>Of which: non-performing</i>			<i>Of which: loans and advances subject to impairment</i>		
				<i>Of which: defaulted</i>			
010	Agriculture, forestry and fishing	285,181	6,200	6,200	269,643	(3,357)	(5)
020	Mining and quarrying	164,167	7,905	7,905	164,167	(4,589)	-
030	Manufacturing	4,662,276	166,376	166,376	4,637,249	(110,774)	(1,651)
040	Electricity, gas, steam and air conditioning supply	578,903	6,804	6,804	564,281	(5,456)	-
050	Water supply	194,539	5,381	5,381	194,539	(2,726)	-
060	Construction	1,807,292	375,680	375,680	1,749,129	(229,048)	(2,558)
070	Wholesale and retail trade	2,730,688	164,626	164,626	2,694,486	(107,290)	(237)
080	Transport and storage	813,687	21,876	21,876	811,215	(15,558)	(96)
090	Accommodation and food service activities	966,303	84,668	84,668	944,333	(44,700)	(466)
100	Information and communication	326,177	40,232	40,232	325,522	(31,345)	(21)
110	Financial and insurance activities	211,370	32,974	32,974	207,905	(16,400)	-
120	Real estate activities	2,490,302	367,127	367,127	2,413,181	(190,587)	(4,780)
130	Professional, scientific and technical activities	939,290	53,532	53,532	928,824	(39,731)	(1,174)
140	Administrative and support service activities	300,555	17,637	17,637	297,745	(9,772)	(23)
150	Public administration and defence, compulsory social security	51,194	-	-	51,194	(33)	-
160	Education	24,393	661	661	24,173	(430)	-
170	Human health services and social work activities	282,425	2,289	2,289	279,614	(3,233)	-
180	Arts, entertainment and recreation	175,725	15,302	15,302	174,833	(9,446)	(56)
190	Other services	312,588	12,535	12,535	310,943	(9,797)	-
200	TOTAL AS AT 12/31/2021	17,317,055	1,381,806	1,381,806	17,042,976	(834,272)	(11,067)
	TOTAL AS AT 12/31/2020	17,249,460	1,624,520	1,624,520	17,013,570	(953,857)	(12,569)

Source: FINREP reporting framework - Breakdown by NACE codes of loans and advances: Template F 06.01

At 31 December 2021, the business sectors where the exposures were most concentrated were: Manufacturing (26.92% of total exposure), Wholesale and Retail Trade (15.77% of total exposure) and Real Estate (14.38% of total exposure). With reference to the impaired segment only, the

prevailing segments were: Real Estate (29% of total impaired exposures), Construction (27% of total impaired exposures) and Wholesale and Retail Trade (12% of total impaired exposures).

Table 55 - Template EU CQ6: Collateral valuation - loans and advances (1 of 2)

		a	b	c	d	e
		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
010	Gross carrying amount	31,729,897	29,853,927	24,820	1,875,969	674,339
020	Of which secured	19,113,699	17,656,059	18,727	1,457,640	586,632
030	Of which secured with immovable property	12,758,232	11,651,968	8,764	1,106,264	409,625
040	Of which instruments with LTV higher than 60% and lower or equal to 80%	4,270,907	4,085,936		184,971	90,065
050	Of which instruments with LTV higher than 80% and lower or equal to 100%	431,811	318,826		112,986	33,042
060	Of which instruments with LTV higher than 100%	497,818	203,593		294,225	33,965
070	Accumulated impairment for secured assets	(779,236)	(87,145)	(702)	(692,091)	(189,938)
080	Collateral					
090	Of which value capped at the value of exposure	16,047,798	15,412,894	14,366	634,904	319,194
100	Of which immovable property	13,182,252	12,564,623	8,220	617,628	309,129
110	Of which value above the cap	21,615,758	19,444,655	14,403	2,171,103	1,002,110
120	Of which immovable property	20,657,064	18,530,273	14,402	2,126,791	978,636
130	Financial guarantees received	5,323,094	5,199,873	2,992	123,221	75,194
140	Accumulated partial write-off	(136,526)	(2)	-	(136,525)	(20,024)

Source: FINREP reporting framework - Loans and advances: Templates F 23.02 - F 23.03 - F 23.04 - F 23.05 - F23.06

Table 56 - Template EU CQ6: Collateral valuation - loans and advances (2 of 2)

		f	g	h	i	j	k	l
		Loans and advances						
		Non performing						
		Past due > 90 days						
			<i>Of which past due >90 days <= 180 days</i>	<i>Of which: past due > 180 days <= 1 year</i>	<i>Of which: past due > 1 year <= 2 years</i>	<i>Of which: past due > 2 years <= 5 years</i>	<i>Of which: past due > 5 years <= 7 years</i>	<i>Of which : past due > 7 years</i>
010	Gross carrying amount	1,201,631	73,432	155,245	185,386	294,638	200,636	292,293
020	Of which secured	871,008	63,305	97,270	127,167	212,629	142,638	227,999
030	Of which secured with immovable property	696,639	50,660	73,043	112,087	163,476	117,500	179,872
040	Of which instruments with LTV higher than 60% and lower or equal to 80%	94,905						
050	Of which instruments with LTV higher than 80% and lower or equal to 100%	79,943						
060	Of which instruments with LTV higher than 100%	260,260						
070	Accumulated impairment for secured assets	(502,153)	(26,701)	(47,939)	(54,915)	(121,944)	(92,571)	(158,082)
080	Collateral							
090	Of which value capped at the value of exposure	315,710	28,978	36,500	66,737	79,745	44,036	59,714
100	Of which immovable property	308,500	28,502	35,357	65,604	75,951	43,430	59,656
110	Of which value above the cap	1,168,992						
120	Of which immovable property	1,148,155						
130	Financial guarantees received	48,027	7,441	12,493	5,416	7,232	5,606	9,839
140	Accumulated partial write-off	(116,501)	-	-	(9,484)	(72,321)	(138)	(34,558)

Source: FINREP reporting framework - Loans and advances: Templates F 23.02 - F 23.03 - F 23.04 - F 23.05 - F23.06

At 31 December 2021, guaranteed exposures represented more than a half of total loans and advances disbursed by the Group (about 60%); guaranteed exposure rose to over 70% for the impaired segment stand-alone. It should also be noted that, for the portion of the portfolio guaranteed by real estate assets (about 40% in terms of total exposure) only a fraction equal to 13.5% had an LTV ratio (loan/guarantee value) higher than 60%.

Table 57 - Template EU CQ7: Collateral obtained by taking possession and execution processes

		12/31/2021		12/31/2020	
		a	b	a	b
		Collateral obtained by taking possession		Collateral obtained by taking possession	
		Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes
010	Property, plant and equipment (PP&E)	-	-	-	-
020	Other than PP&E	41,620	(3,396)	70,004	(2,789)
030	Residential immovable property	8,927	(3,396)	8,745	(2,789)
040	Commercial Immovable property	-	-	-	-
050	Movable property (auto, shipping, etc.)	-	-	-	-
060	Equity and debt instruments	-	-	-	-
070	Other	32,694	-	61,259	-
080	TOTAL	41,620	(3,396)	70,004	(2,789)

Source: FINREP reporting framework - Guarantees obtained by taking possession accumulated: Template F 13.03.1

Similar to as observed at 31 December 2020, the main contributions to the figures above came from the enforcement of collaterals (real guarantees) obtained by the Group on a voluntary basis or in the context of legal proceedings.

Table 58 - Template EU CQ8: Collateral obtained by taking possession and execution processes - vintage breakdown (1 of 2)

		a	b	c	d	e	f
		Debt balance reduction		Total collateral obtained by taking possessions			
				Foreclosed <= 2 years			
		Gross carrying amount	Accumulated negative changes	Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes
010	Collateral obtained by taking possession classified as PP&E	-	-	-	-		
020	Collateral obtained by taking possession other than that classified as PP&E	41,620	(3,396)	41,620	(3,396)	40,831	(3,189)
030	Residential immovable property	8,927	(3,396)	8,927	(3,396)	8,137	(3,189)
040	Commercial immovable property	-	-	-	-	-	-
050	Movable property (auto, shipping, etc.)	-	-	-	-	-	-
060	Equity and debt instruments	-	-	-	-	-	-
070	Other	32,694	-	32,694	-	32,694	-
080	TOTAL AS AT 12/31/2021	41,620	(3,396)	41,620	(3,396)	40,831	(3,189)
	TOTAL AS AT 12/31/2020	8,745	(2,789)	70,004	(2,789)	65,101	(1,203)

Source: FINREP reporting framework - Incoming and outgoing guarantees obtained by taking possession: Templates F 25.03 - F 25.02

Table 59 - Template EU CQ8: Collateral obtained by taking possession and execution processes - vintage breakdown (2 of 2)

		g	h	i	j	k	l
		<i>Total collateral obtained by taking possessions</i>					
		<i>Foreclosed > 2 years <= 5 years</i>		<i>Foreclosed > 5 years</i>		<i>Of which non-current assets held-for-sale</i>	
		<i>Value at initial recognition</i>	<i>Accumulated negative changes</i>	<i>Value at initial recognition</i>	<i>Accumulated negative changes</i>	<i>Value at initial recognition</i>	<i>Accumulated negative changes</i>
010	Collateral obtained by taking possession classified as PP&E						
020	Collateral obtained by taking possession other than that classified as PP&E	790	(206)	-	-	-	-
030	<i>Residential immovable property</i>	790	(206)	-	-	-	-
040	<i>Commercial immovable property</i>	-	-	-	-	-	-
050	<i>Movable property (auto, shipping, etc.)</i>	-	-	-	-	-	-
060	<i>Equity and debt instruments</i>	-	-	-	-	-	-
070	<i>Other</i>	-	-	-	-	-	-
080	TOTAL AS AT 12/31/2021	790	(206)	-	-	-	-
	TOTAL AS AT 12/31/2020	4,903	(1,586)	-	-	-	-

Source: FINREP reporting framework - Incoming and outgoing guarantees obtained by taking possession: Templates F 25.03 - F 25.02

At 31 December 2021, collaterals obtained by taking possession and through execution processes were marginal in terms of numbers. The activity focuses almost entirely on residential properties with foreclosure date no later than two years with respect to the possession of the property.

Information on exposures subject to measures applied as a result of the COVID-19 crisis

Banca Popolare di Sondrio Group has welcomed all of the initiatives implemented by the Italian Government and the EU to support customers during the pandemic period and reduce the negative effects of the crisis as much as possible. All concessions are defined to respond to the disadvantage deriving from the temporary slowdown in the economic cycle and the related impacts on liquidity. The potential impact on the Group's risk profile is mitigated:

- with the acquisition of public guarantees in line with the relief mechanisms put in place by the various national Governments;
- with an ex-ante/ex-post assessment of the customer's risk profile.

In this regard, Banca Popolare di Sondrio has established guidelines for the disbursement, monitoring and management of moratoria, in order to promptly identify any potential sign of deterioration in asset quality. With specific reference to the moratorium measures, and in order to limit the effects of the restrictions implemented to contain the spread of the Covid-19 pandemic, the Bank has made available to customers a series of initiatives that generally allow the deferral of instalment payments and an extension of the residual duration of credit exposures. Specific guidelines were also introduced for assigning the internal rating with the request to adopt a forward-looking approach with the aim of anticipating future significant macro-economic changes.

On the subject of a significant increase in credit risk (SICR), Authorities have specified that IFRS 9 rules must not be mechanically applied, but that the assessment of SICR should differentiate debtors whose credit quality is significantly affected by the current situation in the long term, from those who will probably restore their creditworthiness, also considering the mitigating interventions in the form of government guarantees. Therefore, the generated moratoria do not necessarily entail, for accounting purposes, a reclassification of related loans to Stage 2.

During 2021, most of the moratoria related to COVID-19 expired automatically. For the most significant positions still in place, the Bank conducted an activity aimed at assessing the adequacy of the borrower's cash and cash equivalents and the consequent prospective ability of the same to generate cash flows to support the debt. The positions for which signs of anomaly were found were, prudently, classified as Stage 2 together with those of smaller amounts for which the "single file" analysis was not carried out. In addition to the above activity, the Chief Risk Officer Area carried out specific second-level controls to ensure an effective monitoring of the risk related to the COVID-19 moratoria and the repercussions on the processes of reclassification and prudential provisions.

The tables below contain information, as at 31 December 2021, regarding the Group's risk exposures subject to measures applied to face the economic consequences of the COVID-19 pandemic, i.e. legislative and non-legislative moratoria for loan repayments and public guarantees on new loans granted.

The formats of the tables comply with the uniform schemes provided for by the EBA/GL/2020/07 "*Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis*" of 2 June 2020. In particular, the following are included:

- exposures benefiting from payment moratoria complying with the characteristics defined in the "*EBA/GL/2020/02 guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis*" ("general payment moratoria"), granted on the basis of laws, decrees, regulatory measures, agreements and memoranda of understanding, however named, related to the pandemic emergency;
- new loans to customers backed by guarantee schemes provided by the state or other public entity or, in any case, backed by disbursements of state funds in order to deal with the negative economic consequences of the pandemic.

Table 60 - Template 1 EBA/GL/2020/07: Information on loans and advances subject to legislative and non-legislative moratoria (1 of 2)

	a	b	c	d	e	f	g
	Gross carrying amount						
	Performing			Non-Performing			
			<i>Of which: exposures with forbearance measures</i>	<i>Of which: Instruments with significant increase in credit risk since initial recognition but not credit- impaired (Stage 2)</i>		<i>Of which: exposures with forbearance measures</i>	<i>Of which: Unlikely to pay that are not past-due or past-due <= 90 days</i>
1	Loans and advances subject to moratorium	793	793	-	-	-	-
2	of which: Households	793	793	-	-	-	-
3	of which: Collateralised by residential immovable property	749	749	-	-	-	-
4	of which: Non-financial corporations	-	-	-	-	-	-
5	of which: Small and Medium-sized Enterprises	-	-	-	-	-	-
6	of which: Collateralised by commercial immovable property	-	-	-	-	-	-

Source: ECB COVID-19 reporting package - COVID-19 Moratoria and State Guarantees template (EBA)

Table 61 - Template 1 EBA/GL/2020/07: Information on loans and advances subject to legislative and non-legislative moratoria (2 of 2)

	h	i	j	k	l	m	n	o
	<i>Accumulated impairment, accumulated negative changes in fair value due to credit risk</i>							<i>Gross carrying amount</i>
	<i>Performing</i>			<i>Non-performing</i>				
			<i>Of which: exposures with forbearance measures</i>	<i>Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)</i>		<i>Of which: exposures with forbearance measures</i>	<i>Of which: Unlikely to pay that are not past-due or past-due <= 90 days</i>	<i>Inflows to non-performing exposures</i>
1 Loans and advances subject to moratorium	(0.2)	(0.2)	-	-	-	-	-	-
2 of which: Households	(0.2)	(0.2)	-	-	-	-	-	-
3 of which: Collateralised by residential immovable property	(0.1)	(0.1)	-	-	-	-	-	-
4 of which: Non-financial corporations	-	-	-	-	-	-	-	-
5 of which: Small and Medium-sized Enterprises	-	-	-	-	-	-	-	-
6 of which: Collateralised by commercial immovable property	-	-	-	-	-	-	-	-

Source: ECB COVID-19 reporting package - COVID-19 Moratoria and State Guarantees template (EBA)

Table 62 - Template 2 EBA/GL/2020/07: Breakdown of loans and advance subject to legislative and non-legislative moratoria by residual maturity of moratoria (1 of 2)

	a	b	c	d
	<i>Number of obligors</i>	<i>Gross carrying amount</i>		
			<i>Of which: legislative moratoria</i>	<i>Of which: expired</i>
1 Loans and advances for which moratorium was offered	18,628	3,927,537		
2 Loans and advances subject to moratorium (granted)	18,577	3,910,560	2,549,406	3,909,767
3 of which: Households		-	341,102	1,152,378
4 of which: Collateralised by residential immovable property		-	101,867	689,650
5 of which: Non-financial corporations		-	2,175,926	2,664,830
6 of which: Small and Medium-sized Enterprises		-	1,934,402	2,197,722
7 of which: Collateralised by commercial immovable property		-	1,274,858	1,427,089

Source: ECB COVID-19 reporting package - COVID-19 Moratoria and State Guarantees template (EBA)

Table 63 - Template 2 EBA/GL/2020/07: Breakdown of loans and advance subject to legislative and non-legislative moratoria by residual maturity of moratoria (2 of 2)

	E	f	g	h	i
	<i>Gross carrying amount</i>				
	<i>Residual maturity of moratoria</i>				
	<i><= 3 months</i>	<i>> 3 months <= 6 months</i>	<i>> 6 months <= 9 months</i>	<i>> 9 months <= 12 months</i>	<i>> 1 year</i>
1 Loans and advances for which moratorium was offered					
2 Loans and advances subject to moratorium (granted)	793	-	-	-	-
3 of which: Households	793	-	-	-	-
4 of which: Collateralised by residential immovable property	749	-	-	-	-
5 of which: Non-financial corporations	-	-	-	-	-
6 of which: Small and Medium-sized Enterprises	-	-	-	-	-
7 of which: Collateralised by commercial immovable property	-	-	-	-	-

Source: ECB COVID-19 reporting package - COVID-19 Moratoria and State Guarantees template (EBA)

At 31 December 2021, the Group granted moratoria on loans for a total exposure of 3.9 billion euro, of which 0.8 million euro with suspension still under way. More in detail, the Group granted:

- legislative moratoria for a total exposure of 2.5 billion euro;
- moratoria promoted by trade associations for a total exposure of 1.4 billion euro;
- moratoria granted on the initiative of a Group company (non-legislative and non-associational) for a total exposure of 428 million euro, of which about 142 million euro of exposure referring to retail customers and the rest, about 286 million euro of exposure, to non-financial corporations.

The economic sectors that have submitted more requests for moratoria include, in addition to households, industries such as Food and Accommodation, Construction, Manufacturing, Transport and Warehousing, Retail Trade.

At 31 December 2021, the moratoria granted by the Group were concentrated in the residual maturity time range of less than 3 months, mainly represented by legislative suspensions under the Italian “Cura Italia” Decree.

Table 64 - Template 3 EBA/GL/2020/07: Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis

	a	b	c	d
	<i>Gross carrying amount</i>		<i>Maximum amount of the guarantee that can be considered</i>	<i>Gross carrying amount</i>
		<i>of which: forbore</i>	<i>Public guarantees received</i>	<i>Inflows to non-performing exposures</i>
1 Newly originated loans and advances subject to public guarantee schemes	2,634,342	28,726	2,214,706	16,342
2 <i>of which: Households</i>	241,113			-
3 <i>of which: Collateralised by residential immovable property</i>	-			-
4 <i>of which: Non-financial corporations</i>	2,378,054	22,855	1,978,286	10,792
5 <i>of which: Small and Medium-sized Enterprises</i>	-			-
6 <i>of which: Collateralised by commercial immovable property</i>	-			-

Source: ECB COVID-19 reporting package - COVID-19 Moratoria and State Guarantees template (EBA)

At 31 December 2021, new loans and advances secured by public guarantee schemes disbursed by the Group amounted to a total of 2.6 billion euro, of which euro 2.4 billion to non-financial corporations and the remaining to households. Almost all the disbursements were performing exposures at the reference date.

Section 9 - Disclosure of the use of credit risk mitigation techniques (art. 453 CRR/CRR II)

For the purposes of credit risk mitigation, the Group acquires the guarantees typical of banking operations: mainly of a real nature, on real estate and financial instruments, and of a personal nature. 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 assets (residential and commercial) or registered movable properties;
- pledge on money and securities deposited with the Group or with third parties;
- pledge on goods and other movable properties, a “universality” of property, credits and other rights concerning movable properties (patents, trademarks, intangible rights, corporate investments, insurance policies, etc.);
- assignment of loans and receivables;
- special lien;
- salary or pension backed loans (“cessione del quinto”).

The main forms of personal guarantees acquired by the Group include:

- surety;
- endorsement;
- letter of patronage;
- 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 collateral or personal guarantee in relation to their characteristics.

It is fundamental with regard to personal 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 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 collaterals 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, the position is examined by the managers on a timely basis.

Collaterals and personal 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. In particular, it is standard practice to provide loans secured by real estate or financial guarantees: more than 80% of the loans to customers granted by the subsidiary have a mortgage component, almost exclusively relating to residential building.

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.

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.

The concentration of credit risk mitigation instruments is related to the type of credit operations of the Group. The collateral portfolio is primarily composed of collateral, mostly consisting of mortgages on real estate that expose to the risk factor represented by price trends in the real estate market in the Group's settlement areas. Personal guarantees constitute a secondary share of the overall portfolio. The main type of guarantor is the "Sovereign" category (roughly 60%), followed by guarantors classified as "Retail" and "Corporate" (accounting for about 25% and 10%, respectively). The "Sovereign" category also notes the Italian state for the regulatory measures put in place to counter the economic effects of the COVID-19 pandemic. With reference to guarantors, it is shown that most (about 60%) are in the best rating classes.

Summarised below are the Group's exposures as at 31 December 2021 in the form of loans and advances disbursed and debt securities held for investment purposes, covered and uncovered by guarantees - collateral or financial - acquired as credit risk mitigation (CRM) instruments recognised under applicable accounting rules, regardless of whether such techniques are deemed to be permissible forms of credit protection under current prudential regulations.

Table 65 - Template EU CR3 - CRM techniques overview: Disclosure of the use of credit risk mitigation techniques

		Secured carrying amount				
		Unsecured carrying amount		Of which secured by collateral	Of which secured by financial guarantees	
						Of which secured by credit derivatives
		a	b	c	d	e
1	Loans and advances	18,096,458	21,370,892	16,047,798	5,323,094	-
2	Debt securities	13,403,352	-	-	-	
3	TOTAL AS AT 12/31/2021	31,499,810	21,370,892	16,047,798	5,323,094	-
4	Of which non-performing exposures	1,117,845	758,125	634,904	123,221	-
EU-5	Of which defaulted	1,117,845	758,125	634,904	123,221	-
	TOTAL AS AT 12/31/2020	28,710,248	19,721,553	15,253,225	4,468,328	-

Source: FINREP reporting framework - Breakdown of loans and advances, collateral for loans and advances: Templates F 05.01 - F 13.01 - F 18.00

Despite the increase in the volume of business observed during the year, at 31 December 2021 there were no significant changes compared with last year in the proportions of unsecured exposures (around 60% of the total at 31/12/21) and exposures secured by CRM techniques (around 40% of the total at 31/12/21) and, within the latter part of the credit portfolio, between exposures secured by collateral (around 75% of the total secured at 31/12/21) and by financial guarantees (around 25% of the total secured at 31/12/21).

No risk hedging transactions in 2021 were made using credit derivatives.

Section 10 - Disclosure of the use of the standardised approach to credit risk (art. 444 and 453 CRR/CRR II)

External institutions used

For the purpose of calculating risk-weighted credit and counterparty assets according to the supervisory “Standardised Approach”, the Group has chosen to use the following external institutions for the assessment of the counterparty creditworthiness (ECAI - External Credit Assessment Institutions).

List of ECAIs used for the weighting of credit risk exposures and positions towards securitisation - 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	FitchRatings Standard & Poor's Rating Services	<i>Solicited</i>
Exposure to international organisations	FitchRatings 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>
Securitisation exposures	DBRS Ratings Limited Moody's Investors Service Scope Ratings	<i>Solicited</i>
Covered bonds	FitchRatings 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.

Process for extending issuer or issue-related credit assessments to comparable assets not included in the regulatory trading book

In compliance with Regulation (EU) 575/2013 (CRR), the criteria, summarised below, regarding the use of issue and issuer ratings for the purpose of risk assessment of exposures and mitigation of guarantees have been defined.

To assess the risk weighting factor to be assigned to exposures, the Group primarily uses the following rules:

1. issuer ratings are attributed to comparable financial assets, regardless of the allocation portfolio (banking or trading). the issuer ratings of companies belonging to an economic and/or legal group are not extended to other legal entities belonging to the same group;
2. issue ratings are used in the case of financial instrument exposures.

With reference to point (2), the Group has implemented the prevalence rule of prioritising the use of the issue rating and, if not available where the conditions dictated by the CRR exist, the issuer rating. It should be noted that the rating used is always the long-term rating.

To assess the eligibility of guarantees, as well as the regulatory volatility adjustments attributed as part of the regulatory formulas for calculating the capital requirements, in general the same prevalence as above was set for all regulatory portfolios (prevalence of issue rating and, in its absence, use of issuer rating).

* * *

The table below shows, for each of the Group's exposure classes as at 31 December 2021, the effect of the CRM techniques recognised as part of the quantification of capital requirements for credit risk under the "Standardised Approach". The relative RWA density is also measured for each regulatory class, as a concise indicator of the riskiness of each portfolio of exposures.

Table 66 - Template EU CR4 - Standardised approach: Credit risk exposure and CRM effects

Exposures class	Exposures before CCF and CRM		Exposures post CCF and post CRM		RWAs and RWA density	
	On-balance-sheet exposures	Off-balance-sheet exposures	On-balance-sheet exposures	Off-balance-sheet exposures	RWAs	RWA density
	A	b	C	d	e	f
1 Central governments or central banks	17,669,509	1,407	20,683,445	19,348	192	0.0009 %
2 Regional governments or local authorities	56,482	91,246	56,733	10,618	15,567	23.1132 %
3 Public sector entities	397,996	469,702	397,787	16,880	293,768	70.8443 %
4 Multilateral development banks	150,196	-	183,972	933	-	-
5 International organizations	137,086	15,557	137,086	279	-	-
6 Institutions	2,983,287	798,791	3,037,109	313,918	1,293,400	38.5971 %
7 Corporates	3,071,385	867,384	2,947,156	287,062	3,009,749	93.0596 %
8 Retail	886,588	408,636	600,271	29,483	358,454	56.9198 %
9 Secured by mortgages on immovable property	4,273,212	4,676	4,273,212	1,811	1,783,950	41.7296 %
10 Exposures in default	60,164	173	59,997	2	61,969	103.2827 %
11 Higher-risk categories	77,436	-	77,436	-	116,154	150.0000 %
12 Covered bonds	228,699	-	228,699	-	41,337	18.0747 %
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14 Collective investments undertakings	886,234	351,376	886,234	15,591	678,223	75.2056 %
15 Equity	543,486	-	543,486	-	883,642	162.5878 %
16 Other items	1,800,635	13,174	1,800,635	6,587	884,721	48.9548 %
17 TOTAL AS AT 12/31/2021	33,222,395	3,022,123	35,913,258	702,511	9,421,127	25.7297 %
TOTAL AS AT 12/31/2020	29,284,475	3,595,201	31,060,286	589,617	8,919,560	28,1820%

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07.00

Key:

- *Pre-CCF and pre-CRM exposure*: the value of the on-balance sheet or off-balance sheet exposure calculated after the application of loan impairments, deductions and write-offs defined in the Framework but before the application of credit conversion factors (CCF) and the effect of CRM techniques
- *Post-CCF and post-CRM exposure*: the value of the on-balance sheet or off-balance sheet exposure calculated after the application of the loan impairments, deductions and write-offs defined in the Framework as well as after the application of credit conversion factors (CCF) and the effect of CRM techniques
- *RWA density*: an indicator measuring the average weighting of credit risk assets, given by the ratio of the weighted exposure amount (RWA) to the amount of on-balance sheet/off-balance sheet exposures calculated after taking into account the effects of credit risk mitigation techniques (CRM) and the application of credit conversion factors (CCF)

The following templates show the breakdown by asset class and risk weight of the Group's exposures being part of the calculation of capital requirements for credit risk at 31 December 2021 under the "Standardised Approach".

Table 67 - Template EU CR5: Standardised approach (1 of 3)

Exposures classes		Classes of credit worthiness (Weighting Factors)					
		0%	2%	4%	10%	20%	35%
		a	b	c	d	e	f
1	Central governments or central banks	20,701,878	-	-	-	885	-
2	Regional governments or local authorities	-	-	-	-	64,730	-
3	Public sector entities	-	-	-	-	151,124	-
4	Multilateral development banks	184,906	-	-	-	-	-
5	International organizations	137,365	-	-	-	-	-
6	Institutions	-	-	-	-	1,954,809	-
7	Corporates	-	-	-	-	27,478	51,564
8	Retail	-	-	-	-	-	211,315
9	Secured by mortgages on immovable property	-	-	-	-	-	3,773,075
10	Exposures in default	-	-	-	-	-	-
11	Higher-risk categories	-	-	-	-	-	-
12	Covered bonds	-	-	-	134,823	63,612	-
13	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14	Collective investment undertakings	363,020	-	-	471	12,636	-
15	Equity	-	-	-	-	-	-
16	Other items	961,632	-	-	-	26,303	-
17	TOTAL AS AT 12/31/2021	22,348,801	-	-	135,294	2,301,577	4,035,954
	TOTAL AS AT 12/31/2020	17,803,960	-	-	99,190	2,308,529	3,663,753

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07.00

Table 68 - Template EU CR5: Standardised approach (2 of 3)

Exposures classes	Classes of credit worthiness (Weighting Factors)					
	50%	70%	75%	100%	150%	250%
	g	h	i	j	k	l
1 Central governments or central banks	29	-	-	-	-	-
2 Regional governments or local authorities	-	-	-	2,621	-	-
3 Public sector entities	-	-	-	263,543	-	-
4 Multilateral development banks	-	-	-	-	-	-
5 International organizations	-	-	-	-	-	-
6 Institutions	987,610	-	-	408,557	51	-
7 Corporates	137,812	81,004	-	2,923,266	13,095	-
8 Retail	-	-	418,438	-	-	-
9 Secured by mortgages on immovable property	6,964	-	137,994	356,990	-	-
10 Exposures in default	-	-	-	56,061	3,939	-
11 Higher-risk categories	-	-	-	-	77,436	-
12 Covered bonds	30,264	-	-	-	-	-
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14 Collective investment undertakings	56,301	-	-	386,546	70,028	421
15 Equity	-	-	-	316,715	-	226,771
16 Other items	-	-	-	779,171	-	40,116
17 TOTAL AS AT 12/31/2021	1,218,981	81,004	556,432	5,493,469	164,549	267,308
TOTAL AS AT 12/31/2020	1,175,391	108,858	333,193	5,207,601	142,233	270,482

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07.00

Table 69 - Template EU CR5: Standardised approach (3 of 3)

Exposures classes	Classes of credit worthiness (Weighting Factors)			Total	Without rating
	370%	1250%	Others		
	m	n	o	p	q
1 Central governments or central banks	-	-	-	20,702,793	521,336
2 Regional governments or local authorities	-	-	-	67,351	67,351
3 Public sector entities	-	-	-	414,667	334,042
4 Multilateral development banks	-	-	-	184,906	-
5 International organizations	-	-	-	137,365	-
6 Institutions	-	-	-	3,351,027	964,655
7 Corporates	-	-	-	3,234,218	2,365,549
8 Retail	-	-	-	629,753	629,753
9 Secured by mortgages on immovable property	-	-	-	4,275,022	4,275,022
10 Exposures in default	-	-	-	60,000	60,000
11 Higher-risk categories	-	-	-	77,436	77,436
12 Covered bonds	-	-	-	228,699	89,356
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-
14 Collective investment undertakings	-	12,402	-	901,825	702,910
15 Equity	-	-	-	543,486	543,486
16 Other items	-	-	-	1,807,222	1,807,222
17 TOTAL AS AT 12/31/2021	-	12,402	-	36,615,769	12,438,118
TOTAL AS AT 12/31/2020	-	-	536,714	31,649,903	25,002,641

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07.00

Section 11 - Disclosure of the use of the IRB approach to credit risk (art. 438, 452 and 453 CRR/CRR II)

Permission of the competent Authority to use the IRB approach or to apply the transition process

On 27 May 2019, the European Central Bank authorised the Banca Popolare di Sondrio Group to adopt its internal rating models for the purpose of determining the amount of capital requirements for credit risk (Advanced IRB Approach - A-IRB) relating to “Corporate” and “Retail” regulatory portfolios, with effects starting from the supervisory reporting at 30 June 2019.

The initial model validation scope included exclusively the Parent Company Banca Popolare di Sondrio Spa. The subsidiaries Factorit Spa and Banca Popolare di Sondrio (SUISSE) SA are included in a multi-year roll-out program for IRB models, which also envisages the extension of advanced risk metrics for exposures in the “Institutions - Intermediaries” regulatory portfolio.

More specifically, the Group has been authorised by ECB to make use of its own internal rating models to estimate the following credit 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 default¹⁶.

On the other hand, not included in the extension plan are some other exposures, which are the subject of a request for authorisation for Permanent Partial Use of the Standardised Approach (PPU perimeter). These are specifically included in the following regulatory portfolios:

- “Equity instruments and securitisations”, “Governments and central banks”, “Public sector and territorial entities” and “Enterprises - residual exposures” (including specialised loans) related to the entire Group;
- “Enterprises”, “SME - Enterprises” related to the corporate scope of the subsidiary Banca Popolare di Sondrio (SUISSE) SA;
- All portfolios falling within the corporate scope of the subsidiaries Sinergia Seconda Srl and Banca della Nuova Terra Spa.

On 19 October 2021, the European Central Bank authorised the Group to use modified A-IRB parameters in order to implement EBA guidelines on the application of the new harmonised definition of default under article 178 of Regulation (EU) no. 575/2013. The main changes included:

¹⁶ 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 updating of the default definition for the purpose of model calibration;
- the updating of time series for the purpose of model calibration.

In addition, on 17 September 2021, the Group formulated application for “model change” according to the roll-out plan authorised by the Supervisor. Having completed the related supervisory assessment, the Group is awaiting formal authorisation for the release of the new models.

The rating system and the roll-out plan for internal models are monitored by the Bank, which produces a quarterly report on the coverage of the rating system and the monitoring of the roll-out plan and PPU portfolios. The outcomes are presented to the Board of Directors at least annually.

Illustration of the general structure, use, management processes and control mechanisms of internal rating systems

Structure of internal rating systems: PD models

The models used for the calculation of counterparty PDs are differentiated according to the risk segment to which each 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”).

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”¹⁷ follows the general scheme for determining the counterparty rating envisaged in the “internal behavioural model” calculation, except for the absence of the “Internal 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 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

¹⁷ 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.

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.

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 A-IRB 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 twelve 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”.

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 classified in a Bad Loans, Unlikely to pay or Past Due administrative status).

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 chart 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”¹⁸ segment in the “Retail” sector (where the reconciliation is not clear, a range of values is given).

Risk	Creditworthiness	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

¹⁸ For details on the management segmentation of exposures, please refer to the following paragraph entitled “Risk Segmentation”.

Structure of internal rating systems: LGD models

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”¹⁹ component - relating to the loss rate of non-performing positions - is then derived. For exposures other than Bad Loans, an adjustment factor, known as the “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.

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;
- a Danger Rate component, a coefficient that, for exposures other than Bad Loans, estimates the probability to be reclassified as Bad Loans²⁰, 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.

Lastly, in order 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.

Uses of the rating system (PD, LGD, EAD)

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 the decision-making powers
- Credit monitoring

¹⁹Acronym of “Loss Given Sofferenza”

²⁰ This component only detects counterparties that are not in a default; for borrowers who are already classified as non-performing, the danger rate can only be 1.

- Asset quality targets
- Management and branch network reporting
- Risk-adjusted pricing
- ICAAP and Risk Appetite Framework (RAF)
- Credit policies
- Impairment.

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 processes, 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.

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 the appraisal phase, prior to disbursement of a new loan) 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 framework 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 guidelines 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 loans²¹ 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). On the other hand, positions in a state of probable default or non-performing status are subject to analytical valuation, unless their amount is small: benchmark impairment coefficients based on specific clustering of positions are applied to these positions²².

In the impairment calculation process, IRB-based parameters (PD, LGD, EAD) are appropriately adjusted to satisfy the requirements indicated by the IFRS 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 A-IRB framework - net of regulatory floors. To this end, specific econometric models (“satellite models”) have been set up to estimate the possible evolutionary dynamics of the customers' credit risk factors in correspondence with different macro-economic scenarios.

Development of internal rating models

The process of developing, validating and implementing rating systems consists of the following main stages:

- a) definition of general methodological principles of model building, with particular reference to the customer segments to which modelling is to be applied, the default definition adopted, the transposition of models into business processes, and the configuration of technological solutions to support the models;
- b) estimation of internal credit measurement models by defining data requirements, building the data set, identifying the catalogue of indicators, and defining the expert components;
- c) conducting proficiency checks on the basis of design and development documentation by the internal validation function, which is responsible for classifying the materiality (substantive or otherwise) of the intervention carried out on the model in accordance with Delegated Regulation (EU) no. 529/2014;
- d) the internal validation function performs an activity to assess the adequacy of the system against regulatory requirements and the overall performance of the system. The analyses conducted can lead to the identification of possible critical issues and areas for improvement;

²¹ 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.

²² 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.

- e) the internal audit function carries out a review activity aimed at verifying the development activities and performance of the model, its effective use in relevant processes of business management, and the activities carried out by the validation function;
- f) in the case of “material change,” presentation of the facility first to the Risk Committee for a preliminary opinion, then presentation by the validation function of the results of evaluation carried out, and finally reporting to the Board of Directors, which is called for final approval; in the case of “non-material” type of change to the model, presentation to the Risk Committee, production of information to the validation function and internal audit, and finally reporting to the Board of Directors;
- g) the relevant IT function puts in place the model, processes and information systems that constitute the architecture of the rating system.

The submission of the application for authorisation to the ECB takes place according to the process indicated by the Authority itself, which provides, in the case of a “substantial change” to internal models, for the submission of a documentary package in support of the request for change (Application Package), following which an inspection process begins that results in the ECB sending the final decision, which may require the satisfaction of corrective measures. On the other hand, in the case of “non-material change” to the models, there is a mere notification (*ex-ante* or *ex-post*) to the Supervisory Authority depending on what is stipulated in the regulations.

Controls and review of the 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, with particular regard to the aspects of calibration and stability of the models and their dynamic characteristics. These checks are conducted quarterly or more frequently, where necessary, by the Credit Model Development Office within the Chief Risk Officer (CRO) Area.

The Validation Office - an organisational unit that is separate and 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. This evidence is represented periodically in the Validation Office Annual Report and, in the case of substantial changes to the A-IRB models (model changes), in the overall reporting submitted to the Board.

The Internal Audit Department, as an independent audit function, also reviews internal rating systems at least once a year, ensuring that they function properly (third-level controls), in compliance with the provisions of Regulation (EU) 575/2013. 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 (A-

IRB) system with applicable regulatory requirements. The results of the audits carried out are summarised in a specific report submitted annually to the Board of Directors.

Lastly, the rating systems are managed through a specific organisational 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 requirements set by Regulation (EU) no. 529/2014.

Description of internal rating systems by segment

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 (SAE code), exposure size, individual revenues 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 Business
	Retail non-profit institutions
Corporate	SMEs
	Corporate non-profit institutions
	Large enterprises
	Public enterprises
	Non-resident non-financial corporations
Other segments	Other intermediaries and financial businesses
	Banks and stockbrokers
	Governments
	Public administrations (not part of Governments)
	Other ²³

The regulatory segmentation of exposures adopted for IRB purposes is linked to internal segmentation according to specific correspondences, summarised in the following chart.

²³ This aggregate includes three residual classes.

Regulatory segment	Internal segment
Administrations and central banks	
Multilateral development banks weighted at 0%	Governments
International organisations weighted at 0%	
Public sector bodies	
Local authorities	Public administrations (not part of Governments)
Supervised intermediaries	Other intermediaries and financial businesses Banks and stockbrokers
Individuals	Individuals
	Small Economic Operators
Small and medium-sized retail enterprises	Small Business Retail non-profit institutions
Small and medium-sized corporate enterprises	SMEs
	Large enterprises
Other corporate businesses	Public enterprises Non-resident non-financial corporations Corporate non-profit institutions

PD models

The Bank has developed four models for estimating PD, differentiated by macro-segment:

- 1 Corporate PD model;
- 3 Retail PD models, given by:
 - o Small Business PD model;
 - o Private PD model;
 - o POE (Small Economic Operators) PD model.

The Corporate PD model is applied to exposures to counterparties other than individuals with turnover greater than 1.5 million euro or exposure greater than 1 million euro. The framework involves a first level of elementary econometric models to estimate the target variable (the probability of default entry) through a logistic regression between the observed values of it and a set of potentially discriminating independent variables from different information areas (financial statements, internal trend, external trend, qualitative questionnaire). To complete the individual “statistical” assessment of the counterparty, the second level provides for the adjustment of the score derived from the integrated models on the basis of any anomalies (internal “management” anomalous states of the Institution), so-called prejudicial events, detected in the entrusted party or one of the connected parties.

Discretising the PD into bands then defines rating classes, which are then (possibly) worsened in “expert” mode through a matrix of notch down rules that takes into account the presence of a number of categories of detrimental events transposed from external information sources, as well as the riskiness of the industry in which the counterparty operates. Finally, the score is (possibly) adjusted through an expert assessment of the impact produced by legal and/or economic relationships.

As previously mentioned, the rating thus determined can be modified by the appointed operators through an experiential derogation mechanism (override), the proposal of which provides for confirmation or denial by a specific central rating desk.

The PD models for Retail segments are instead three (Small Business PD Model; Private PD Model; POE PD Model); they are estimated separately by management segment with the exception of Retail Non-profit Institutions which are associated, given the reduced cardinality, with the Small Business PD Model. Retail segments accommodate consumer households (Individuals), producer households (POE), and counterparties other than individuals with less than 1.5 million in turnover and less than 1 million in exposure.

Also for Retail PD models, the first step is represented by econometric models that allow the target variable to be estimated through a logistic regression between the observed values of the target variable and a set of independent variables from different information areas (financial statements, internal tendency, external trend, qualitative questionnaire). The second level always provides for the adjustment of the score derived from the integrated models on the basis of any anomalies (internal “managerial anomalous states”), so-called prejudicial events, detected in the entrusted party or one of the connected parties. Discretising the PD into bands then defines rating classes, which are (eventually) modified in “expert” mode through a matrix of notching rules that takes into account evidence from CRIF credit bureau, the presence of a number of categories of detrimental events transposed from external information sources, and, finally, the riskiness of the industry in which the counterparty operates. This is not the case for counterparties belonging to Private segment.

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 Business
	Retail non-profit institutions
	SMEs
	Corporate non-profit institutions
	Large enterprises
	Non-resident non-financial corporations
	Public enterprises
Households	Individuals
	Small Economic Operators

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 on doubtful loans will occur to recover whatever possible and avoid litigation or a claw-back action is taken on Bad Loans.

EAD models

The models for calculating the EAD provide for estimates of so-called “credit conversion factors” (CCF) to be applied to loan positions with undrawn margins²⁴ compared with the credit facility 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”).

It should be noted that the Group during 2021 formalised application for first validation for the Corporate EAD model.

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 withdrawal 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.

* * *

The tables below show, for each exposure class envisaged at regulatory level, the values as at 31 December 2021 of the main parameters used by the Group to calculate capital requirements for credit risk under the “Advanced IRB Approach” (A-IRB). In particular, the following are specified per individual counterparty PD value range:

- information on the value of the nominal exposure (on- and off-balance sheet) and EAD;
- information on the number of debtors corresponding to each PD range;

²⁴ “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.

- information on the weighted average PD, weighted average LGD, weighted average credit conversion factor (CCF) and weighted average maturity of exposures;
- information on risk-weighted exposure amounts (RWA) and the RWA density associated with the exposures;
- information on the expected loss quantified on the exposures based on the risk parameters produced by the rating system;
- information on the specific impairment and provisions made in the balance sheet in respect of exposures.

Table 70 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
Total as exposure						
0.00 to <0.15	624,880	1,367,610	3.1000 %	1,054,252	0.1080 %	27,676
0.00 to <0.10	109,454	346,970	5.1000 %	285,783	0.0590 %	12,027
0.10 to <0.15	515,427	1,020,640	2.5000 %	768,469	0.1260 %	15,649
0.15 to <0.25	2,981,203	4,956,021	1.5000 %	3,711,503	0.1820 %	21,383
0.25 to <0.50	3,348,718	3,578,070	2.3000 %	4,161,575	0.4040 %	28,017
0.50 to <0.75	2,358,555	2,145,102	2.6000 %	2,914,949	0.6410 %	15,046
0.75 to <2.50	4,835,269	3,444,440	3.5000 %	6,025,078	1.5900 %	31,385
0.75 to <1.75	2,825,961	1,901,195	3.1000 %	3,422,038	1.1820 %	18,996
1.75 to <2.50	2,009,308	1,543,245	3.8000 %	2,603,040	2.1260 %	12,389
2.50 to <10.00	2,336,298	1,308,187	3.5000 %	2,797,606	4.5850 %	18,349
2.50 to <5.00	1,579,764	909,149	3.4000 %	1,892,627	3.5620 %	12,597
5.00 to <10.00	756,534	399,038	3.7000 %	904,979	6.7230 %	5,752
10.00 to <100.00	785,217	305,193	3.7000 %	898,291	18.7140 %	7,740
10.00 to <20.00	522,066	253,598	3.7000 %	615,376	12.7290 %	4,148
20.00 to <30.00	126,132	24,065	3.2000 %	133,900	23.4560 %	1,057
30.00 to <100.00	137,019	27,530	4.3000 %	149,015	39.1650 %	2,535
100.00 (default)	1,733,345	214,881	1.8000 %	1,771,163	100.0000 %	6,455
TOTAL AS AT 12/31/2021	19,003,486	17,319,504	22.0000 %	23,334,417	9.4570 %	156,051

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Key:

- *On-balance-sheet exposure*: original value of the on-balance sheet exposure without taking into account loan impairments and the application of credit conversion factors (CCF)
- *Pre-CCF off-balance sheet exposure*: original value of the off-balance sheet exposure without taking into account loan impairments and the application of credit conversion factors (CCF). Off-balance sheet exposures include all committed but undrawn amounts and all off-balance sheet items listed in Annex I of the CRR
- *Post-CCF and post-CRM exposure*: the value of the on-balance sheet or off-balance sheet exposure calculated in accordance with the CRR provisions governing the use of the IRB approach after application of credit conversion factors (CCF)

Table 71 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Total as exposure						
0.00 to <0.15	19.3310 %	2	64,515	6.1195 %	216	(435)
0.00 to <0.10	21.0040 %	2	8,756	3.0640 %	39	(78)
0.10 to <0.15	18.7090 %	2	55,759	7.2558 %	177	(358)
0.15 to <0.25	23.1200 %	2	685,192	18.4613 %	1,556	(3,227)
0.25 to <0.50	18.8140 %	2	871,219	20.9348 %	3,074	(3,663)
0.50 to <0.75	20.2630 %	2	884,668	30.3493 %	3,661	(5,805)
0.75 to <2.50	20.0910 %	3	2,728,760	45.2900 %	19,408	(23,840)
0.75 to <1.75	19.6890 %	2	1,313,672	38.3886 %	8,014	(10,100)
1.75 to <2.50	20.6190 %	3	1,415,088	54.3629 %	11,394	(13,740)
2.50 to <10.00	18.5180 %	3	1,446,127	51.6916 %	22,212	(29,103)
2.50 to <5.00	19.6280 %	2	1,012,133	53.4777 %	12,808	(18,262)
5.00 to <10.00	16.1950 %	3	433,994	47.9562 %	9,404	(10,842)
10.00 to <100.00	15.3300 %	3	547,804	60.9829 %	24,971	(35,788)
10.00 to <20.00	15.6990 %	3	383,745	62.3594 %	11,719	(17,007)
20.00 to <30.00	15.1030 %	3	79,571	59.4261 %	4,817	(6,692)
30.00 to <100.00	14.0120 %	3	84,487	56.6973 %	8,436	(12,089)
100.00 (default)	43.1080 %	2	524,183	29.5954 %	728,834	(1,015,766)
TOTAL AS AT 12/31/2021	21.7074 %	2	7,752,467	33.2233 %	803,931	(1,117,627)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Key:

- *RWA density*: indicator that measures the average risk weighting of credit risk assets, given by the ratio of the weighted exposure amount (RWA) after application of the supporting factors to the value of post-CCF and post-CRM exposures
- *Expected loss amount*: expected credit loss on on-balance sheet or off-balance sheet exposures calculated in accordance with article 158 of the CRR based on actual risk parameters used in the internal rating system
- *Impairment and provisions*: the sum of general and specific loan impairments, provisions, and further reductions in own funds related to exposures assigned to each category of PD range

Table 72 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Central governments or central banks

The template is not published due to the absence of significant exposures treated with the IRB approach in the specific counterparty segment.

Table 73 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range (2 of 2)

The template is not published due to the absence of significant exposures treated with the IRB approach in the specific counterparty segment.

Table 74 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - SME (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
Corporates - SME						
0.00 to <0.15	94,807	421,557	0.6000 %	121,445	0.1180 %	543
0.00 to <0.10	3,182	15,392	0.7000 %	4,264	0.0700 %	75
0.10 to <0.15	91,625	406,165	0.6000 %	117,181	0.1200 %	468
0.15 to <0.25	1,099,712	1,861,749	0.8000 %	1,244,783	0.1800 %	1,916
0.25 to <0.50	809,279	835,264	0.8000 %	876,394	0.3870 %	990
0.50 to <0.75	625,561	580,078	1.3000 %	698,441	0.5930 %	823
0.75 to <2.50	1,635,037	728,239	1.9000 %	1,776,708	1.6590 %	1,415
0.75 to <1.75	797,986	442,539	2.0000 %	886,757	1.1870 %	766
1.75 to <2.50	837,050	285,700	1.9000 %	889,951	2.1300 %	649
2.50 to <10.00	793,047	319,218	2.3000 %	865,119	4.2740 %	711
2.50 to <5.00	526,264	210,279	2.2000 %	571,856	3.3230 %	436
5.00 to <10.00	266,783	108,939	2.4000 %	293,262	6.1280 %	275
10.00 to <100.00	282,220	160,396	3.8000 %	343,377	16.3640 %	229
10.00 to <20.00	208,728	145,352	4.0000 %	267,232	11.8600 %	147
20.00 to <30.00	54,817	6,796	1.0000 %	55,485	26.6010 %	34
30.00 to <100.00	18,675	8,248	2.4000 %	20,660	47.1210 %	48
100.00 (default)	845,437	96,301	1.4000 %	858,563	100.0000 %	448
TOTAL AS AT 12/31/2021	6,185,100	5,002,803	12.9000 %	6,784,828	14.6079 %	7,075

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 75 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - SME (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Corporates - SME						
0.00 to <0.15	23.8910 %	2	15,461	12.7307 %	34	(85)
0.00 to <0.10	27.0060 %	2	346	8.1047 %	1	(3)
0.10 to <0.15	23.7780 %	2	15,115	12.8990 %	33	(82)
0.15 to <0.25	23.5590 %	2	222,173	17.8483 %	529	(861)
0.25 to <0.50	22.5430 %	3	243,039	27.7317 %	772	(1,210)
0.50 to <0.75	21.6930 %	3	226,036	32.3630 %	899	(1,476)
0.75 to <2.50	18.8520 %	3	748,114	42.1068 %	5,577	(10,178)
0.75 to <1.75	19.2400 %	3	338,145	38.1328 %	2,040	(4,113)
1.75 to <2.50	18.4660 %	4	409,969	46.0665 %	3,537	(6,066)
2.50 to <10.00	18.4510 %	3	427,123	49.3716 %	6,737	(9,381)
2.50 to <5.00	19.0020 %	3	275,789	48.2270 %	3,615	(5,764)
5.00 to <10.00	17.3760 %	3	151,334	51.6035 %	3,122	(3,616)
10.00 to <100.00	16.7920 %	3	239,273	69.6823 %	9,315	(12,464)
10.00 to <20.00	16.8070 %	3	179,781	67.2755 %	5,193	(7,166)
20.00 to <30.00	16.8240 %	3	46,079	83.0472 %	2,483	(3,004)
30.00 to <100.00	16.5150 %	3	13,413	64.9200 %	1,639	(2,294)
100.00 (default)	40.8820 %	2	229,355	26.7138 %	336,144	(487,767)
TOTAL AS AT 12/31/2021	23.2073 %	3	2,350,573	34.6446 %	360,006	(523,421)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 76 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Companies - Specialised Loans

The template is not published due to the absence of significant exposures treated with the IRB approach in the specific counterparty segment.

Table 77 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Companies - others (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
Corporates - Others						
0.00 to <0.15	77,383	220,704	0.7000 %	92,154	0.1200 %	78
0.00 to <0.10	0	5	-	0	0.0700 %	2
0.10 to <0.15	77,383	220,699	0.7000 %	92,154	0.1200 %	76
0.15 to <0.25	1,141,771	2,588,426	1.2000 %	1,463,418	0.1830 %	404
0.25 to <0.50	834,658	2,120,199	1.5000 %	1,145,413	0.3900 %	184
0.50 to <0.75	673,770	1,126,712	2.1000 %	906,460	0.5900 %	126
0.75 to <2.50	1,247,392	2,045,309	3.2000 %	1,908,966	1.6120 %	203
0.75 to <1.75	821,747	1,037,441	2.5000 %	1,083,228	1.1990 %	117
1.75 to <2.50	425,645	1,007,868	4.0000 %	825,738	2.1540 %	86
2.50 to <10.00	573,200	670,045	3.4000 %	802,248	3.9770 %	133
2.50 to <5.00	452,465	498,407	3.4000 %	620,027	3.3530 %	96
5.00 to <10.00	120,735	171,638	3.6000 %	182,221	6.0990 %	37
10.00 to <100.00	70,563	55,058	2.4000 %	83,677	11.6790 %	36
10.00 to <20.00	68,596	54,981	2.4000 %	81,695	11.4370 %	25
20.00 to <30.00	1,897	47	-	1,897	20.9030 %	6
30.00 to <100.00	70	30	4.9000 %	85	37.9960 %	5
100.00 (default)	259,943	59,384	1.1000 %	266,225	100.0000 %	190
TOTAL AS AT 12/31/2021	4,878,680	8,885,836	15.6000 %	6,668,560	5.2677 %	1,354

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 78 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Companies - others (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Corporates - Others						
0.00 to <0.15	26.7410 %	2	17,306	18.7793 %	30	(27)
0.00 to <0.10	24.8970 %	5	0	21.8750 %	-	-
0.10 to <0.15	26.7410 %	2	17,306	18.7793 %	30	(27)
0.15 to <0.25	27.3420 %	2	405,714	27.7238 %	732	(1,627)
0.25 to <0.50	27.9580 %	2	458,176	40.0010 %	1,249	(928)
0.50 to <0.75	26.9570 %	2	488,958	53.9415 %	1,462	(1,981)
0.75 to <2.50	28.2600 %	2	1,556,882	81.5563 %	8,795	(4,745)
0.75 to <1.75	27.4660 %	2	741,360	68.4399 %	3,581	(1,793)
1.75 to <2.50	29.3010 %	3	815,523	98.7629 %	5,214	(2,952)
2.50 to <10.00	25.0690 %	2	703,940	87.7460 %	7,642	(7,717)
2.50 to <5.00	27.0920 %	2	561,750	90.6009 %	5,624	(6,423)
5.00 to <10.00	18.1850 %	2	142,190	78.0319 %	2,018	(1,294)
10.00 to <100.00	22.2130 %	2	102,194	122.1296 %	2,107	(2,878)
10.00 to <20.00	22.5370 %	2	101,112	123.7677 %	2,067	(2,759)
20.00 to <30.00	8.2600 %	3	979	51.6341 %	33	(115)
30.00 to <100.00	21.4850 %	1	103	120.8452 %	7	(3)
100.00 (default)	55.3060 %	1	95,315	35.8024 %	142,139	(180,531)
TOTAL AS AT 12/31/2021	28.4285 %	2	3,828,487	57.4110 %	164,155	(200,434)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 79 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - Real estate guarantees SME (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
<i>Retail - Secured by immovable property SME</i>						
0.00 to <0.15	136,239	4,030	3.7000 %	137,744	0.1200 %	1,508
0.00 to <0.10	7,849	1,267	3.0000 %	8,226	0.0700 %	89
0.10 to <0.15	128,389	2,763	4.1000 %	129,518	0.1240 %	1,419
0.15 to <0.25	439,251	5,190	4.3000 %	441,478	0.1810 %	4,122
0.25 to <0.50	121,990	6,933	4.0000 %	124,773	0.3120 %	1,057
0.50 to <0.75	73,405	2,481	4.2000 %	74,457	0.6520 %	385
0.75 to <2.50	361,476	8,862	5.1000 %	365,968	1.3830 %	2,452
0.75 to <1.75	210,423	5,752	5.4000 %	213,527	1.0480 %	1,502
1.75 to <2.50	151,053	3,110	4.5000 %	152,441	1.8520 %	950
2.50 to <10.00	184,203	5,932	3.0000 %	185,960	4.1250 %	1,234
2.50 to <5.00	141,558	3,471	4.7000 %	143,186	3.4910 %	1,033
5.00 to <10.00	42,645	2,461	0.5000 %	42,774	6.2460 %	201
10.00 to <100.00	132,278	755	4.4000 %	132,620	18.4220 %	1,065
10.00 to <20.00	75,489	465	4.8000 %	75,710	11.4690 %	615
20.00 to <30.00	33,417	272	3.8000 %	33,522	20.8830 %	254
30.00 to <100.00	23,372	18	6.5000 %	23,388	37.4030 %	196
100.00 (default)	124,220	290	-	124,220	100.0000 %	694
TOTAL AS AT 12/31/2021	1,573,062	34,474	28.7000 %	1,587,220	10.2836 %	12,517

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 80 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - Real estate guarantees SME (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
<i>Retail - Secured by immovable property SME</i>						
0.00 to <0.15	11.8930 %	-	3,823	2.7756 %	19	(91)
0.00 to <0.10	18.5380 %	-	222	2.6986 %	1	(8)
0.10 to <0.15	11.4710 %	-	3,601	2.7805 %	18	(82)
0.15 to <0.25	10.5680 %	-	15,477	3.5058 %	84	(377)
0.25 to <0.50	15.0610 %	-	9,306	7.4582 %	60	(277)
0.50 to <0.75	18.6060 %	-	10,931	14.6806 %	90	(540)
0.75 to <2.50	13.8800 %	-	69,022	18.8602 %	724	(2,302)
0.75 to <1.75	13.4390 %	-	32,777	15.3502 %	310	(1,169)
1.75 to <2.50	14.4970 %	-	36,245	23.7766 %	415	(1,132)
2.50 to <10.00	13.7190 %	-	64,878	34.8880 %	1,105	(2,592)
2.50 to <5.00	12.3220 %	-	40,893	28.5596 %	614	(1,783)
5.00 to <10.00	18.3960 %	-	23,984	56.0724 %	492	(809)
10.00 to <100.00	11.5540 %	-	68,934	51.9782 %	2,891	(6,051)
10.00 to <20.00	11.3230 %	-	36,034	47.5942 %	993	(2,308)
20.00 to <30.00	11.5100 %	-	18,965	56.5751 %	805	(1,722)
30.00 to <100.00	12.3670 %	-	13,935	59.5810 %	1,093	(2,021)
100.00 (default)	31.9950 %	-	69,530	55.9732 %	34,501	(50,009)
TOTAL AS AT 12/31/2021	14.3054 %	-	311,901	19.6508 %	39,475	(62,238)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 81 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - Real estate guarantees non-SME (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
Retail - Secured by immovable property non-SME						
0.00 to <0.15	127,559	3,901	4.5000 %	129,305	0.1100 %	1,677
0.00 to <0.10	42,233	529	4.8000 %	42,486	0.0490 %	667
0.10 to <0.15	85,325	3,372	4.4000 %	86,819	0.1400 %	1,010
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	1,126,400	10,457	7.4000 %	1,134,166	0.4480 %	10,330
0.50 to <0.75	645,670	7,760	6.7000 %	650,889	0.7400 %	5,785
0.75 to <2.50	820,025	7,837	7.4000 %	825,810	1.6050 %	6,885
0.75 to <1.75	552,639	5,920	6.8000 %	556,670	1.2200 %	4,762
1.75 to <2.50	267,387	1,917	9.2000 %	269,141	2.4000 %	2,123
2.50 to <10.00	315,917	2,313	7.4000 %	317,640	6.7080 %	2,782
2.50 to <5.00	176,958	936	6.7000 %	177,581	4.8100 %	1,489
5.00 to <10.00	138,959	1,377	8.0000 %	140,059	9.1150 %	1,293
10.00 to <100.00	120,996	118	3.6000 %	121,041	27.1370 %	1,034
10.00 to <20.00	66,064	115	3.5000 %	66,104	18.9900 %	670
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	54,933	4	9.8000 %	54,937	36.9400 %	364
100.00 (default)	125,675	1,559	-	125,675	100.0000 %	711
TOTAL AS AT 12/31/2021	3,282,242	33,945	37.0000 %	3,304,526	6.1468 %	29,204

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 82 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - Real estate guarantees non-SME (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Retail - Secured by immovable property non-SME						
0.00 to <0.15	8.7910 %	-	3,167	2.4494 %	13	(16)
0.00 to <0.10	8.8270 %	-	564	1.3277 %	2	(5)
0.10 to <0.15	8.7740 %	-	2,603	2.9984 %	11	(11)
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	8.7490 %	-	79,659	7.0236 %	445	(541)
0.50 to <0.75	8.7410 %	-	64,790	9.9541 %	421	(643)
0.75 to <2.50	8.7540 %	-	134,681	16.3090 %	1,159	(2,148)
0.75 to <1.75	8.7610 %	-	77,550	13.9310 %	595	(893)
1.75 to <2.50	8.7380 %	-	57,132	21.2275 %	564	(1,255)
2.50 to <10.00	8.7660 %	-	115,657	36.4114 %	1,869	(2,929)
2.50 to <5.00	8.7520 %	-	55,841	31.4456 %	748	(1,192)
5.00 to <10.00	8.7840 %	-	59,816	42.7077 %	1,121	(1,738)
10.00 to <100.00	9.5940 %	-	72,818	60.1596 %	3,251	(5,786)
10.00 to <20.00	8.7540 %	-	35,846	54.2262 %	1,099	(1,579)
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	10.6060 %	-	36,972	67.2993 %	2,152	(4,208)
100.00 (default)	22.8440 %	-	51,313	40.8302 %	24,799	(49,868)
TOTAL AS AT 12/31/2021	9.3190 %	-	522,086	15.7991 %	31,957	(61,931)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 83 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - qualifying revolving (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
<i>Retail - Qualifying revolving</i>						
0.00 to <0.15	8,742	89,649	6.0000 %	62,337	0.0840 %	10,091
0.00 to <0.10	3,162	56,266	6.0000 %	36,711	0.0450 %	6,745
0.10 to <0.15	5,580	33,382	6.0000 %	25,626	0.1400 %	3,346
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	38,767	64,688	6.2000 %	78,905	0.4380 %	6,434
0.50 to <0.75	12,297	12,619	5.6000 %	19,509	0.7400 %	1,182
0.75 to <2.50	29,690	25,818	5.4000 %	44,148	1.6290 %	2,839
0.75 to <1.75	18,777	18,508	5.3000 %	28,859	1.2200 %	1,733
1.75 to <2.50	10,914	7,310	5.7000 %	15,289	2.4000 %	1,106
2.50 to <10.00	10,467	5,021	6.3000 %	13,954	6.7260 %	1,137
2.50 to <5.00	5,618	2,988	6.2000 %	7,642	4.8100 %	609
5.00 to <10.00	4,848	2,033	6.4000 %	6,312	9.0450 %	528
10.00 to <100.00	2,573	574	8.8000 %	3,206	26.0120 %	331
10.00 to <20.00	1,520	407	8.9000 %	1,952	18.9900 %	193
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	1,052	167	8.6000 %	1,254	36.9400 %	138
100.00 (default)	2,163	304	-	2,163	100.0000 %	211
TOTAL AS AT 12/31/2021	104,699	198,674	38.3000 %	224,222	2.3176 %	22,225

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 84 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - qualifying revolving (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Retail - Qualifying revolving						
0.00 to <0.15	13.7980 %	-	489	0.7840 %	7	(13)
0.00 to <0.10	13.6910 %	-	172	0.4687 %	2	(4)
0.10 to <0.15	13.9530 %	-	317	1.2358 %	5	(9)
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	14.1480 %	-	2,496	3.1634 %	49	(80)
0.50 to <0.75	14.2200 %	-	937	4.8029 %	21	(32)
0.75 to <2.50	14.1980 %	-	3,802	8.6110 %	102	(162)
0.75 to <1.75	14.2030 %	-	2,031	7.0382 %	50	(79)
1.75 to <2.50	14.1870 %	-	1,770	11.5798 %	52	(83)
2.50 to <10.00	14.1920 %	-	3,184	22.8202 %	133	(209)
2.50 to <5.00	14.1950 %	-	1,432	18.7356 %	52	(91)
5.00 to <10.00	14.1880 %	-	1,752	27.7657 %	81	(119)
10.00 to <100.00	14.0910 %	-	1,387	43.2532 %	117	(175)
10.00 to <20.00	14.2090 %	-	793	40.6010 %	53	(69)
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	13.9080 %	-	594	47.3802 %	64	(107)
100.00 (default)	25.5730 %	-	34	1.5653 %	550	(1,091)
TOTAL AS AT 12/31/2021	14.1789 %	-	12,328	5.4983 %	980	(1,762)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 85 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - other SME (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
Retail - Other SME						
0.00 to <0.15	132,035	576,229	4.6000 %	396,974	0.1030 %	12,722
0.00 to <0.10	32,249	249,323	4.3000 %	140,179	0.0700 %	3,192
0.10 to <0.15	99,786	326,906	4.8000 %	256,796	0.1210 %	9,530
0.15 to <0.25	300,469	500,656	5.2000 %	561,824	0.1810 %	16,161
0.25 to <0.50	168,668	353,770	5.2000 %	351,653	0.3310 %	5,283
0.50 to <0.75	221,152	365,509	5.1000 %	408,866	0.6320 %	4,132
0.75 to <2.50	572,951	487,924	5.0000 %	816,134	1.4580 %	12,834
0.75 to <1.75	312,045	291,787	5.1000 %	459,877	1.1300 %	7,074
1.75 to <2.50	260,907	196,138	4.8000 %	356,257	1.8810 %	5,760
2.50 to <10.00	383,303	269,823	4.5000 %	505,583	4.4790 %	7,823
2.50 to <5.00	230,701	171,027	4.3000 %	304,691	3.4470 %	5,614
5.00 to <10.00	152,602	98,796	4.9000 %	200,892	6.0440 %	2,209
10.00 to <100.00	156,833	85,701	4.1000 %	192,474	20.0080 %	4,133
10.00 to <20.00	88,583	50,860	3.8000 %	108,371	11.9690 %	2,207
20.00 to <30.00	36,001	16,950	4.0000 %	42,995	21.5170 %	887
30.00 to <100.00	32,250	17,892	4.9000 %	41,108	39.6250 %	1,039
100.00 (default)	276,100	54,910	3.3000 %	294,356	100.0000 %	3,570
TOTAL AS AT 12/31/2021	2,211,513	2,694,522	37.0000 %	3,527,865	10.5612 %	66,658

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 86 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - other SME (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Retail - Other SME						
0.00 to <0.15	25.5680 %	-	20,997	5.2892 %	101	(194)
0.00 to <0.10	30.4160 %	-	6,555	4.6760 %	30	(55)
0.10 to <0.15	22.9220 %	-	14,442	5.6240 %	71	(139)
0.15 to <0.25	21.0160 %	-	41,828	7.4450 %	211	(362)
0.25 to <0.50	26.7350 %	-	47,091	13.3912 %	313	(431)
0.50 to <0.75	25.9650 %	-	77,068	18.8493 %	657	(980)
0.75 to <2.50	21.6840 %	-	176,691	21.6497 %	2,574	(3,798)
0.75 to <1.75	22.5720 %	-	96,687	21.0245 %	1,190	(1,807)
1.75 to <2.50	20.5370 %	-	80,004	22.4569 %	1,384	(1,991)
2.50 to <10.00	18.1940 %	-	114,174	22.5825 %	4,120	(5,498)
2.50 to <5.00	17.7660 %	-	65,781	21.5894 %	1,855	(2,657)
5.00 to <10.00	18.8420 %	-	48,393	24.0888 %	2,265	(2,841)
10.00 to <100.00	16.7950 %	-	58,660	30.4770 %	6,859	(7,720)
10.00 to <20.00	16.1060 %	-	27,284	25.1761 %	2,088	(2,767)
20.00 to <30.00	15.9840 %	-	13,548	31.5097 %	1,496	(1,850)
30.00 to <100.00	19.4590 %	-	17,829	43.3715 %	3,274	(3,103)
100.00 (default)	51.8850 %	-	72,804	24.7332 %	147,423	(182,357)
TOTAL AS AT 12/31/2021	24.7673 %	-	609,312	17.2714 %	162,258	(201,341)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 87 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - other non-SME (1 of 2)

<i>PD scale</i>	<i>On-balance sheet exposures</i>	<i>Off-balance-sheet exposures pre-CCF</i>	<i>Exposure weighted average CCF</i>	<i>Exposure post CCF and post CRM</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
a	b	c	d	e	f	g
Retail - Other non-SME						
0.00 to <0.15	48,115	51,540	12.8000 %	114,294	0.0950 %	4,111
0.00 to <0.10	20,778	24,187	13.7000 %	53,917	0.0460 %	2,499
0.10 to <0.15	27,338	27,353	12.1000 %	60,377	0.1400 %	1,612
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	248,956	186,759	10.8000 %	450,272	0.4410 %	8,051
0.50 to <0.75	106,701	49,942	9.9000 %	156,327	0.7400 %	3,953
0.75 to <2.50	168,698	140,449	8.4000 %	287,344	1.6070 %	7,845
0.75 to <1.75	112,344	99,248	8.1000 %	193,121	1.2200 %	4,864
1.75 to <2.50	56,353	41,201	9.2000 %	94,223	2.4000 %	2,981
2.50 to <10.00	76,161	35,836	8.6000 %	107,102	6.3690 %	6,210
2.50 to <5.00	46,200	22,041	9.7000 %	67,643	4.7460 %	4,370
5.00 to <10.00	29,961	13,794	6.8000 %	39,459	9.1510 %	1,840
10.00 to <100.00	19,754	2,591	7.9000 %	21,895	25.2070 %	1,905
10.00 to <20.00	13,087	1,418	8.3000 %	14,312	18.9900 %	876
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	6,667	1,172	7.5000 %	7,583	36.9400 %	1,029
100.00 (default)	99,807	2,133	0.7000 %	99,962	100.0000 %	1,401
TOTAL AS AT 12/31/2021	768,192	469,250	59.1000 %	1,237,197	9.7132 %	33,476

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 88 - Template EU CR6 - IRB approach: Credit risk exposures by exposure class and PD range - Retail - other non-SME (2 of 2)

<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity (years)</i>	<i>Risk weighted exposure amount after supporting factors</i>	<i>Density of risk weighted exposure amount</i>	<i>Expected loss amount</i>	<i>Value adjustments and provisions</i>
a	h	i	j	k	l	m
Retail - Other non-SME						
0.00 to <0.15	10.7530 %	-	3,272	2.8632 %	12	(10)
0.00 to <0.10	11.0120 %	-	898	1.6653 %	3	(3)
0.10 to <0.15	10.5210 %	-	2,375	3.9329 %	9	(7)
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	9.3190 %	-	31,452	6.9851 %	187	(195)
0.50 to <0.75	9.6560 %	-	15,947	10.2013 %	112	(153)
0.75 to <2.50	10.3540 %	-	39,567	13.7698 %	476	(506)
0.75 to <1.75	10.4880 %	-	25,122	13.0087 %	248	(245)
1.75 to <2.50	10.0790 %	-	14,444	15.3299 %	227	(261)
2.50 to <10.00	9.3280 %	-	17,171	16.0327 %	607	(777)
2.50 to <5.00	9.5190 %	-	10,647	15.7399 %	301	(352)
5.00 to <10.00	9.0000 %	-	6,524	16.5346 %	306	(425)
10.00 to <100.00	7.9840 %	-	4,538	20.7247 %	432	(713)
10.00 to <20.00	8.3260 %	-	2,896	20.2315 %	226	(360)
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	7.3400 %	-	1,642	21.6556 %	205	(354)
100.00 (default)	43.5640 %	-	5,832	5.8342 %	43,277	(64,144)
TOTAL AS AT 12/31/2021	12.4785 %	-	117,780	9.5199 %	45,101	(66,492)

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03

Table 89 - Template EU CR6-A: Scope of the use of IRB and SA approaches

		<i>Exposure value as defined in Article 166 CRR for exposures subject to IRB approach</i>	<i>Total exposure value for exposures subject to the Standardised approach and to the IRB approach</i>	<i>Percentage of total exposure value subject to the permanent partial use of the SA (%)</i>	<i>Percentage of total exposure value subject to a roll-out plan (%)</i>	<i>Percentage of total exposure value subject to IRB approach (%)</i>
		a	b	c	d	E
1	Central governments or central banks	18,220,138	18,219,995	100.0000 %	-	-
1,1	Of which Regional governments or local authorities		-	-	-	-
1,2	Of which Public sector entities		-	-	-	-
2	Institutions	4,008,042	4,091,964	5.8630 %	94.1370 %	-
3	Corporates	18,947,457	19,084,814	0.7680 %	6.9090 %	92.3230 %
3,1	Of which Corporates - Specialised lending, excluding slotting approach		-	-	-	-
3,2	Of which Corporates - Specialised lending under slotting approach		10,457	-	100.0000 %	-
4	Retail	11,250,756	9,619,312	0.9410 %	0.1620 %	98.8970 %
4,1	of which Retail – Secured by real estate SMEs		1,517,787	-	0.0100 %	99.9900 %
4,2	of which Retail – Secured by real estate non-SMEs		3,231,546	-	-	100.0000 %
4,3	of which Retail – Qualifying revolving		123,079	-	0.0290 %	99.9710 %
4,4	of which Retail – Other SMEs		3,794,503	2.3440 %	0.2660 %	97.3900 %
4,5	of which Retail – Other non-SMEs		952,397	-	0.6420 %	99.3580 %
5	Equity	530,595	527,522	100.0000 %	-	-
6	Other non-credit obligation assets	636,626	636,626	100.0000 %	-	-
7	TOTAL AS AT 12/31/2021	50,416,969	49,015,693	40.3730 %	9.5010 %	50.1260 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, scope of the use of IRB and SA approaches: Template C 08.07

The following template shows the impact of credit derivatives recognised as credit risk mitigation (CRM) techniques on the values at 31 December 2021 of risk-weighted assets (RWA) and credit risk capital requirements calculated by the Group under the “Advanced IRB approach”, broken down by category of relevant exposure at regulatory level.

Table 90 - Template EU CR7 - IRB approach - Effect on the RWEAs of credit derivatives used as CRM techniques

		12/31/2021		12/31/2020	
		<i>Pre-credit derivatives risk weighted exposure amount</i>	<i>Actual risk weighted exposure amount</i>	<i>Pre-credit derivatives risk weighted exposure amount</i>	<i>Actual risk weighted exposure amount</i>
		a	b	a	b
1	Exposures under FIRB	-	-	-	-
2	Central governments and central banks	-	-	-	-
3	Institutions	-	-	-	-
4	Corporates	-	-	-	-
4,1	of which - Corporates SMEs	-	-	-	-
4,2	of which - Corporates Specialised lending	-	-	-	-
5	Exposures under AIRB	7,752,467	7,752,467	7,173,360	7,173,360
6	Central governments and central banks	-	-	-	-
7	Institutions	-	-	-	-
8	of which - Corporates	6,179,060	6,179,060	5,233,971	5,233,971
8,1	of which - Corporates SMEs	2,350,573	2,350,573	2,266,817	2,266,817
8,2	of which Corporates - Specialised lending	-	-	-	-
9	Retail	1,573,407	1,573,407	1,939,389	1,939,389
9,1	of which Retail – SMEs - Secured by immovable property collateral	311,901	311,901	407,284	407,284
9,2	of which Retail – non-SMEs - Secured by immovable property collateral	522,086	522,086	550,723	550,723
9,3	of which Retail – Qualifying revolving	12,328	12,328	21,980	21,980
9,4	of which Retail – SMEs - Other	609,312	609,312	833,870	833,870
9,5	of which Retail – Non-SMEs- Other	117,780	117,780	125,532	125,532
10	TOTAL (including FIRB and AIRB exposures)	7,752,467	7,752,467	7,173,360	7,173,360

Source: COREP reporting framework - Credit and counterparty risks, IRB approach to capital requirements: Template C 08.01

As can be seen from the data represented in the table, as at 31 December 2021, there were no risk hedging transactions through credit derivatives.

The table below shows, for each class of exposures relevant to the calculation of the capital requirement for credit risk under the “Advanced IRB Approach”, the portion of the Group's exposures at 31 December 2021 covered by real and personal credit risk mitigation (CRM) techniques. It also displays the amounts of risk-weighted exposures (RWA), including any reduction due to the existence of credit protection, with and without the application of the “substitution approach”²⁵.

²⁵ Under the Advanced IRB Approach, banks may recognise the effects of personal guarantees and, more generally, personal credit protection instruments by adjusting the risk parameters associated with the guaranteed exposure, provided certain minimum requirements for such guarantees are met. Specifically, it is possible to replace the PD or risk weight of the principal debtor with those of the guarantor, or to change the LGD of the covered credit exposure (so-called “substitution approach”).

Table 91 - Template EU CR7-A - IRB approach: Disclosure of the extent of the use of CRM techniques (1 of 3)

A-IRB		Total exposures	Credit Risk Mitigation techniques				
			Funded Credit Protection (FCP)				
			Part of exposures covered by Financial collaterals (%)	Part of exposures covered by Other eligible collaterals (%)			
				Part of exposures covered by Immovable property collaterals (%)	Part of exposures covered by Receivables (%)	Part of exposures covered by Other physical collateral (%)	
		a	B	c	d	e	f
1	Central governments and central banks	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-
3	Corporates	13,453,388	2.1183 %	87.3262 %	26.0995 %	-	61.2267 %
3,1	Of which Corporates – SMEs	6,784,828	2.7992 %	155.7813 %	46.2521 %	-	109.5291 %
3,2	Of which Corporates – Specialised lending	-	-	-	-	-	-
3,3	Of which Corporates – Other	6,668,560	1.4254 %	17.6777 %	5.5956 %	-	12.0821 %
4	Retail	9,881,029	2.7981 %	59.8409 %	56.9013 %	-	2.9396 %
4,1	Of which Retail – Immovable property SMEs	1,587,220	0.0082 %	100.5971 %	100.4604 %	-	0.1367 %
4,2	Of which Retail – Immovable property non-SMEs	3,304,526	0.0032 %	99.2974 %	99.2974 %	-	-
4,3	Of which Retail – Qualifying revolving	224,222	-	-	-	-	-
4,4	Of which Retail – Other SMEs	3,527,865	4.2046 %	25.6870 %	17.5152 %	-	8.1718 %
4,5	Of which Retail – Other non-SMEs	1,237,197	10.3387 %	10.4015 %	10.4015 %	-	-
5	TOTAL	23,334,417	2.4061 %	75.6875 %	39.1426 %	-	36.5448 %

Source: COREP reporting framework - Credit and counterparty risks, IRB approach to capital requirements: Template C 08.01

Table 92 - Template EU CR7-A - IRB approach: Disclosure of the extent of the use of CRM techniques (2 of 3)

A-IRB		Credit Risk Mitigation techniques					
		Funded Credit Protection (FCP)			Unfunded Credit Protection (UFCP)		
		Part of exposures covered by Other Funded Credit Protection (%)			Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	
		Part of exposures covered by Cash on deposit (%)	Part of exposures covered by Life insurance policies (%)	Part of exposures covered by Instruments held by a third party (%)			
		g	h	i	j	k	l
1	Central governments and central banks	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-
3	Corporates	-	-	-	-	11.4075 %	-
3,1	Of which Corporates – SMEs	-	-	-	-	15.1055 %	-
3,2	Of which Corporates – Specialised lending	-	-	-	-	-	-
3,3	Of which Corporates – Other	-	-	-	-	7.6450 %	-
4	Retail	0.0005 %	-	0.0005 %	-	8.7309 %	-
4,1	Of which Retail – Immovable property SMEs	-	-	-	-	0.3927 %	-
4,2	Of which Retail – Immovable property non-SMEs	-	-	-	-	0.0627 %	-
4,3	Of which Retail – Qualifying revolving	-	-	-	-	-	-
4,4	Of which Retail – Other SMEs	0.0014 %	-	0.0014 %	-	21.4875 %	-
4,5	Of which Retail – Other non-SMEs	-	-	-	-	7.7879 %	-
5	TOTAL	0.0002 %	-	0.0002 %	-	10.2741 %	-

Source: COREP reporting framework - Credit and counterparty risks, IRB approach to capital requirements: Template C 08.01

Table 93 - Template EU CR7-A - IRB approach: Disclosure of the extent of the use of CRM techniques (3 of 3)

A-IRB		Credit Risk Mitigation methods in the calculation of RWEAs	
		RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and substitution effects)
		m	n
1	Central governments and central banks	-	-
2	Institutions	-	-
3	Corporates	7,141,018	6,179,060
3,1	Of which Corporates – SMEs	3,148,577	2,350,573
3,2	Of which Corporates – Specialised lending	-	-
3,3	Of which Corporates – Other	3,992,441	3,828,487
4	Retail	1,826,173	1,573,407
4,1	Of which Retail – Immovable property SMEs	363,901	311,901
4,2	Of which Retail – Immovable property non-SMEs	605,585	522,086
4,3	Of which Retail – Qualifying revolving	12,394	12,328
4,4	Of which Retail – Other SMEs	716,051	609,312
4,5	Of which Retail – Other non-SMEs	128,244	117,780
5	TOTAL	8,967,191	7,752,467

Source: COREP reporting framework - Credit and counterparty risks, IRB approach to capital requirements: Template C 08.01

The template below shows the changes compared to the previous quarter in the amounts of risk-weighted exposure (RWA) calculated on the basis of the “Advanced IRB Approach”, with details of the key factors that contributed significantly to the changes.

Table 94 - Template EU CR8: RWEA flow statements of credit risk exposures under the IRB approach

		RWA
		a
1	RISK WEIGHTED EXPOSURE AMOUNT AS AT THE END OF THE PREVIOUS REPORTING PERIOD	6,824,707
2	Asset size	86,519
3	Asset quality	(128,335)
4	Model updates	1,098,655
5	Methodology and policy	-
6	Acquisitions and disposals	(101,136)
7	Foreign exchange movements	(7,904)
8	Other	-
9	RISK WEIGHTED EXPOSURE AMOUNT AS AT THE END OF THE REPORTING PERIOD	7,772,506

Source: COREP reporting framework - Flow statements for credit risk, IRB approach to capital requirements: Template C 08.04

As at 31 December 2021, the value of the aggregate of risk-weighted assets subject to credit risk assessed using the “Advanced IRB” approach shows an increase from the value at the beginning of the quarter. The change is mainly attributable to the start of production of new internal models recalibrated in order to implement EBA guidelines on the application of the new harmonised definition of default under article 178 of Regulation (EU) no. 575/2013 and authorised by ECB Decision of 19 October 2021. Further effects are related to an increase in the volumes of operations

in the portfolios treated with the A-IRB Approach (Retail and Corporate segments), an overall improvement in the credit quality of the related exposures as well as the completion of the new NPL disposal transaction “POP NPLS 2021.”

Table 95 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Total

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	14,023	12	0.0860 %	0.1080 %	0.0880 %	0.0570 %
0.00 to <0.10	9,163	9	0.0980 %	0.0590 %	0.0670 %	0.0470 %
0.10 to <0.15	4,860	3	0.0620 %	0.1260 %	0.1280 %	0.0760 %
0.15 to <0.25	15,522	18	0.1160 %	0.1820 %	0.1770 %	0.0970 %
0.25 to <0.50	11,450	35	0.3060 %	0.4040 %	0.3270 %	0.2770 %
0.50 to <0.75	20,548	48	0.2340 %	0.6410 %	0.5780 %	0.2430 %
0.75 to <2.50	32,245	247	0.7660 %	1.5900 %	1.4020 %	0.6060 %
0.75 to <1.75	25,362	158	0.6230 %	1.1820 %	1.2280 %	0.4720 %
1.75 to <2.50	6,883	89	1.2930 %	2.1260 %	2.0460 %	1.0960 %
2.50 to <10.00	20,389	397	1.9470 %	4.5850 %	4.6470 %	2.3240 %
2.50 to <5.00	10,666	149	1.3970 %	3.5620 %	3.2050 %	1.5840 %
5.00 to <10.00	9,723	248	2.5510 %	6.7230 %	6.2280 %	3.1360 %
10.00 to <100.00	23,045	1,373	5.9580 %	18.7140 %	29.2030 %	14.7550 %
10.00 to <20.00	8,263	336	4.0660 %	12.7290 %	12.4040 %	6.5230 %
20.00 to <30.00	3,361	273	8.1230 %	23.4560 %	23.1840 %	11.0930 %
30.00 to <100.00	11,421	764	6.6890 %	39.1650 %	43.1290 %	21.7890 %
100.00 (default)	10,000	10,000	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 96 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Central governments or central banks

The template is not published due to the absence of significant exposures treated with the IRB approach in the specific counterparty segment.

Table 97 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Entities

The template is not published due to the absence of significant exposures treated with the IRB approach in the specific counterparty segment.

Table 98 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - SME

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	1,062	-	-	0.1180 %	0.1140 %	0.0650 %
0.00 to <0.10	44	-	-	0.0700 %	0.0800 %	0.0810 %
0.10 to <0.15	1,018	-	-	0.1200 %	0.1160 %	0.0640 %
0.15 to <0.25	829	2	0.2410 %	0.1800 %	0.1630 %	0.1270 %
0.25 to <0.50	1,549	9	0.5810 %	0.3870 %	0.3880 %	0.4310 %
0.50 to <0.75	93	1	1.0750 %	0.5930 %	0.7300 %	0.5060 %
0.75 to <2.50	1,412	16	1.1330 %	1.6590 %	1.4060 %	1.3220 %
0.75 to <1.75	764	10	1.3090 %	1.1870 %	1.0380 %	1.0390 %
1.75 to <2.50	648	6	0.9260 %	2.1300 %	1.8410 %	1.6560 %
2.50 to <10.00	933	22	2.3580 %	4.2740 %	4.9290 %	4.1850 %
2.50 to <5.00	432	8	1.8520 %	3.3230 %	3.1020 %	2.8360 %
5.00 to <10.00	501	14	2.7940 %	6.1280 %	6.5040 %	5.3480 %
10.00 to <100.00	511	38	7.4360 %	16.3640 %	31.0950 %	20.8880 %
10.00 to <20.00	166	5	3.0120 %	11.8600 %	13.2800 %	9.5770 %
20.00 to <30.00	86	7	8.1390 %	26.6010 %	23.0890 %	17.1680 %
30.00 to <100.00	259	26	10.0390 %	47.1210 %	45.1710 %	29.3720 %
100.00 (Default)	516	516	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 99 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Specialised Loans

The template is not published due to the absence of significant exposures treated with the IRB approach in the specific counterparty segment.

Table 100 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Others

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	182	-	-	0.1200 %	0.1160 %	0.0650 %
0.00 to <0.10	1	-	-	0.0700 %	0.0800 %	0.0810 %
0.10 to <0.15	181	-	-	0.1200 %	0.1160 %	0.0650 %
0.15 to <0.25	194	-	-	0.1830 %	0.1640 %	0.1270 %
0.25 to <0.50	321	-	-	0.3900 %	0.3890 %	0.4330 %
0.50 to <0.75	4	-	-	0.5900 %	0.7300 %	0.5060 %
0.75 to <2.50	221	3	1.3570 %	1.6120 %	1.4180 %	1.3690 %
0.75 to <1.75	114	1	0.8770 %	1.1990 %	1.0350 %	1.0450 %
1.75 to <2.50	107	2	1.8690 %	2.1540 %	1.8260 %	1.7150 %
2.50 to <10.00	126	5	3.9680 %	3.9770 %	4.6880 %	4.1980 %
2.50 to <5.00	63	-	-	3.3530 %	2.9390 %	3.0510 %
5.00 to <10.00	63	5	7.9360 %	6.0990 %	6.4370 %	5.3450 %
10.00 to <100.00	62	5	8.0640 %	11.6790 %	33.9550 %	21.8110 %
10.00 to <20.00	18	2	11.1110 %	11.4370 %	12.8530 %	9.1350 %
20.00 to <30.00	6	-	-	20.9030 %	23.6950 %	16.5590 %
30.00 to <100.00	38	3	7.8950 %	37.9960 %	45.5700 %	28.6450 %
100.00 (Default)	157	157	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 101 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Retail - SME real estate guarantees

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	248	-	-	0.1200 %	0.1310 %	0.0550 %
0.00 to <0.10	28	-	-	0.0700 %	0.0800 %	0.0810 %
0.10 to <0.15	220	-	-	0.1240 %	0.1370 %	0.0520 %
0.15 to <0.25	1,526	-	-	0.1810 %	0.1820 %	0.0820 %
0.25 to <0.50	1,795	3	0.1670 %	0.3120 %	0.3080 %	0.2190 %
0.50 to <0.75	129	-	-	0.6520 %	0.7300 %	0.5060 %
0.75 to <2.50	1,636	7	0.4580 %	1.3830 %	1.5950 %	0.7560 %
0.75 to <1.75	959	4	0.4170 %	1.0480 %	1.2190 %	0.6360 %
1.75 to <2.50	677	3	0.5170 %	1.8520 %	2.1260 %	0.9250 %
2.50 to <10.00	1,131	15	1.3700 %	4.1250 %	4.7380 %	2.2020 %
2.50 to <5.00	602	4	0.7470 %	3.4910 %	3.3490 %	1.6090 %
5.00 to <10.00	529	11	2.0790 %	6.2460 %	6.3200 %	2.8770 %
10.00 to <100.00	2,642	109	4.1620 %	18.4220 %	33.7240 %	15.8410 %
10.00 to <20.00	630	28	4.4410 %	11.4690 %	13.8350 %	6.1820 %
20.00 to <30.00	284	23	8.2750 %	20.8830 %	24.4130 %	11.0110 %
30.00 to <100.00	1,728	58	3.3840 %	37.4030 %	42.5090 %	20.1580 %
100.00 (Default)	618	618	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 102 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Retail - Non-SME real estate guarantees

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	398	-	-	0.1100 %	0.0640 %	0.0380 %
0.00 to <0.10	398	-	-	0.0490 %	0.0640 %	0.0380 %
0.10 to <0.15	-	-	-	0.1400 %	-	-
0.15 to <0.25	521	-	-	-	0.1700 %	0.1230 %
0.25 to <0.50	-	-	-	0.4480 %	-	-
0.50 to <0.75	7,114	7	0.1010 %	0.7400 %	0.5590 %	0.1950 %
0.75 to <2.50	8,199	16	0.2010 %	1.6050 %	1.2130 %	0.3620 %
0.75 to <1.75	8,199	16	0.2010 %	1.2200 %	1.2130 %	0.3620 %
1.75 to <2.50	-	-	-	2.4000 %	-	-
2.50 to <10.00	3,116	35	1.1130 %	6.7080 %	4.4030 %	1.7110 %
2.50 to <5.00	1,628	10	0.6140 %	4.8100 %	2.9900 %	1.2490 %
5.00 to <10.00	1,488	25	1.6580 %	9.1150 %	5.9500 %	2.2170 %
10.00 to <100.00	3,880	140	3.6170 %	27.1370 %	27.5360 %	13.5540 %
10.00 to <20.00	1,475	35	2.3840 %	18.9900 %	11.1930 %	6.5290 %
20.00 to <30.00	580	38	6.5540 %	-	22.6700 %	9.8600 %
30.00 to <100.00	1,825	67	3.6810 %	36.9400 %	42.2900 %	20.4070 %
100.00 (Default)	729	729	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 103 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Retail - Qualifying revolving

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	-	-	-	0.0840 %	-	-
0.00 to <0.10	-	-	-	0.0450 %	-	-
0.10 to <0.15	-	-	-	0.1400 %	-	-
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	-	-	-	0.4380 %	-	-
0.50 to <0.75	-	-	-	0.7400 %	-	-
0.75 to <2.50	-	-	-	1.6290 %	-	-
0.75 to <1.75	-	-	-	1.2200 %	-	-
1.75 to <2.50	-	-	-	2.4000 %	-	-
2.50 to <10.00	-	-	-	6.7260 %	-	-
2.50 to <5.00	-	-	-	4.8100 %	-	-
5.00 to <10.00	-	-	-	9.0450 %	-	-
10.00 to <100.00	-	-	-	26.0120 %	-	-
10.00 to <20.00	-	-	-	18.9900 %	-	-
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	-	-	-	36.9400 %	-	-
100.00 (Default)	-	-	-	100.0000 %	-	-

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 104 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Retail - Other SME

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	5,343	6	0.1120 %	0.1030 %	0.1130 %	0.0810 %
0.00 to <0.10	1,903	3	0.1580 %	0.0700 %	0.0800 %	0.0810 %
0.10 to <0.15	3,440	3	0.0870 %	0.1210 %	0.1310 %	0.0810 %
0.15 to <0.25	8,825	12	0.1360 %	0.1810 %	0.1800 %	0.0840 %
0.25 to <0.50	7,784	23	0.2950 %	0.3310 %	0.3170 %	0.2540 %
0.50 to <0.75	2,526	16	0.6330 %	0.6320 %	0.7300 %	0.5060 %
0.75 to <2.50	11,330	149	1.3190 %	1.4580 %	1.6250 %	0.8380 %
0.75 to <1.75	5,880	72	1.2240 %	1.1300 %	1.2180 %	0.6520 %
1.75 to <2.50	5,450	77	1.4220 %	1.8810 %	2.0640 %	1.0390 %
2.50 to <10.00	8,692	205	2.3640 %	4.4790 %	4.9730 %	2.8170 %
2.50 to <5.00	4,299	66	1.5470 %	3.4470 %	3.4630 %	1.8430 %
5.00 to <10.00	4,393	139	3.1640 %	6.0440 %	6.4510 %	3.7700 %
10.00 to <100.00	9,232	607	6.5850 %	20.0080 %	31.2210 %	16.1980 %
10.00 to <20.00	3,039	143	4.7050 %	11.9690 %	13.7380 %	6.5280 %
20.00 to <30.00	1,271	109	8.6150 %	21.5170 %	23.6070 %	12.3380 %
30.00 to <100.00	4,922	355	7.2220 %	39.6250 %	43.9820 %	23.1670 %
100.00 (Default)	5,097	5,097	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 105 - Template CR9 - IRB approach: Back-testing of PD per exposure class (fixed PD scale) - Retail - Other non-SME

PD scale	Number of obligors at the end of the year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
		of which: number of obligors which defaulted during the year				
b	c	d	e	f	g	h
0.00 to <0.15	1,698	2	0.1470 %	0.0950 %	0.0650 %	0.0390 %
0.00 to <0.10	1,698	2	0.1470 %	0.0460 %	0.0650 %	0.0390 %
0.10 to <0.15	-	-	-	0.1400 %	-	-
0.15 to <0.25	1,076	1	0.0930 %	-	0.1700 %	0.1230 %
0.25 to <0.50	-	-	-	0.4410 %	-	-
0.50 to <0.75	6,021	10	0.1610 %	0.7400 %	0.5540 %	0.2020 %
0.75 to <2.50	7,267	37	0.5090 %	1.6070 %	1.2600 %	0.3850 %
0.75 to <1.75	7,267	37	0.5090 %	1.2200 %	1.2600 %	0.3850 %
1.75 to <2.50	-	-	-	2.4000 %	-	-
2.50 to <10.00	4,752	88	1.8550 %	6.3690 %	4.2890 %	1.6740 %
2.50 to <5.00	2,666	40	1.5190 %	4.7460 %	2.9900 %	1.2490 %
5.00 to <10.00	2,086	48	2.2850 %	9.1510 %	5.9500 %	2.2170 %
10.00 to <100.00	4,904	373	7.6210 %	25.2070 %	24.5200 %	12.0560 %
10.00 to <20.00	2,271	93	4.1020 %	18.9900 %	11.3040 %	6.3450 %
20.00 to <30.00	855	72	8.4760 %	-	22.6700 %	9.8600 %
30.00 to <100.00	1,778	208	11.7060 %	36.9400 %	42.2900 %	20.4070 %
100.00 (Default)	2,746	2,746	100.0000 %	100.0000 %	100.0000 %	100.0000 %

Source: COREP reporting framework - Credit risk, IRB approach to capital requirements, PD back-testing: Template C 08.05 - Credit risk, IRB approach to capital requirements breakdown by PD range: Template C 08.03.

Table 106 - Model CR9.1 - IRB approach: Back-testing of PD per exposure class (only for PD estimates according to point (f) of Article 180(1) CRR)

The template is not published because the specific requirements for estimating PD set forth in art. 180, paragraph 1, point f) of the CRR.

Section 12 - Disclosure on specialised finance and equity exposures under the simple risk-weighted approach (art. 438 CRR/CRR II)

This section provides quantitative information on specialised finance exposures and equity exposures calculated under the “Simple risk-weighted approach” held by the Group as at 31 December 2021.

Table 107 - Template EU CR10: Specialised lending and equity exposures under the simple risk-weighted approach

Template EU CR10.1 - Specialised lending: Project Finance

The template is not published due to the absence of significant exposures related to the provision of specialised lending.

Template EU CR10.2 - Specialised lending: Income-producing real estate and high volatility non-residential real estate

The template is not published due to the absence of significant exposures related to the provision of specialised lending.

Template EU CR10.3 - Specialised lending: object finance

The template is not published due to the absence of significant exposures related to the provision of specialised lending.

Template EU CR10.4 - Specialised lending: commodities finance

The template is not published due to the absence of significant exposures related to the provision of specialised lending.

Template EU CR10.5 - Equity exposures under the simple risk-weighted approach

The template is not published due to the absence of material exposures in equity instruments treated under the “Simple risk-weighted approach”.

Section 13 - Disclosure on exposures to counterparty risk (art. 438 and 439 CRR/CRR II)

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;
- Securities Financing Transactions (SFT), 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).

Risk management and hedging policies

The Parent Company enters into derivative instruments with specific counterparties, governed by dedicated framework contracts, so-called “ISDA Master Agreement” (ISDA, International Swaps and Derivatives Association). The possibility of making bilateral offsets between opposite-sign derivative transactions is guaranteed by close-out netting clauses, present both in the framework contracts stipulated with customers, and in the general 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 2021, 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”²⁶, suitably weighted by risk coefficients 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”).

With regard to the monitoring activity carried out on the limits issued for derivative transactions, the relative use is determined as 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.

Wrong-way risk arises when there is a positive correlation between future exposure to a counterparty and a deterioration in its creditworthiness. This risk can be generic, when the probability of counterparty default depends on market factors, or specific, where there are legal or economic links between the risk factors of the exposure and the counterparty.

With regard to OTC derivative exposures, the deterioration of the overall mark-to-market for counterparties that have not signed CSA agreements is monitored on a daily basis by the relevant trading desk through appropriate reports. If the negative mark-to-market approaches the amount of the operating line granted, the relevant branch structure is urged to consider an increase in the counterparty ceiling where the customer's creditworthiness conditions are ascertained or upon presentation of collateral by the customer. In case of failure to apply for an increase in the ceiling, or failure to obtain the request, if the negative mark-to-market exceeds the amount of the line granted, early settlement of the outstanding derivatives with the counterparty will be carried out ex officio, as stipulated in the Framework Agreement in place.

* * *

The tables below show the Group's exposure profile to Counterparty Credit Risk (CCR) as at 31 December 2021, including:

²⁶ 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.

- an overview of the approaches adopted by the Group to quantify its capital requirements for counterparty risk and the main parameters used in each method;
- all derivative transactions subject to the capital requirement on credit valuation adjustment (CVA) risk;
- a breakdown of exposures to counterparty risk by type of regulatory portfolio and risk weight;
- information on any parameters used to calculate capital requirements for counterparty risk under the IRB approach;
- the composition of collateral (cash, sovereign debt, corporate bonds, etc.) provided or received by the Group as collateral for the purpose of supporting or reducing exposures to counterparty risk arising from derivative transactions or SFT (Securities Financing Transactions), including transactions cleared through a central counterparty (CCP);
- the total exposure for any credit derivative transactions (purchased or sold);
- the dynamics of change in the risk-weighted exposure amounts to counterparty risk (RWA) determined according to the “Internal Models approach”;
- an account of exposures to central counterparties due to transactions, margins and contributions to collateral funds and the associated capital requirements.

Table 108 - Template EU CCR1: Analysis of CCR exposure by approach (1 of 2)

		a	b	c	d
		<i>Replacement cost (RC)</i>	<i>Potential future exposure (PFE)</i>	<i>EEPE</i>	<i>Alpha used for computing regulatory exposure value</i>
EU-1	EU - Original Exposure Method (for derivatives)	-	-		1.4
EU-2	EU - Simplified SA-CCR (for derivatives)	4,655	53,362		1.4
1	SA-CCR (for derivatives)	22,602	40,792		1.4
2	IMM (for derivatives and SFTs)			-	-
2a	Of which securities financing transactions netting sets			-	
2b	Of which derivatives and long settlement transactions netting sets			-	
2c	Of which from contractual cross-product netting sets			-	
3	Financial collateral simple method (for SFTs)				
4	Financial collateral comprehensive method (for SFTs)				
5	VaR for SFTs				
6	TOTAL				

Source: COREP reporting framework - Size of the derivatives business: Template C34.02

Key:

- *SA-CCR simplified*: Simplified Standardised Approach (applicable to derivatives)
- *SA-CCR*: Standardised Approach (applicable to derivatives)
- *IMM*: Internal Model Method (applicable to derivatives and SFT)
- *Replacement Cost (RC) and Potential Future Exposure (PFE)*: amounts calculated: a) in accordance with article 282(3) and (4) of part three, title II, chapter 6, section 5 of the CRR in the case of the original exposure method; b) in accordance with article 281 of part three, title II, chapter 6, section 5 of the CRR in the case of the simplified SA-CCR method; c) in accordance with articles 275 and 278 of part three, title II, chapter 6, sections 4 and 5 of the CRR in the case of the SA-CCR Method.
- *Effective expected positive exposure (Effective EPE)*: a technique for estimating the future credit exposure of transactions exposed to counterparty risk as a weighted average - over a defined time period - of the expected values of credit exposures, where the

weights are represented by the ratio of the fraction of the predefined time period relevant to the individual expected exposure with respect to the entire time period considered. Effective EPE for a set of assets subject to netting is defined in article 272(22) of the CRR and calculated in accordance with article 284(6) of the CRR. The Effective EPE shown in the table is that applied for the determination of own funds requirements in accordance with article 284(3) of the CRR, i.e. Effective EPE calculated using current market data or Effective EPE calculated using a stress calibration, whichever results in a higher own funds requirement.

Table 109 - Template EU CCR1: Analysis of CCR exposure by approach (2 of 2)

		e	f	g	h
		Exposure value pre-CRM	Exposure value post-CRM	Exposure value	RWEA
EU-1	EU - Original Exposure Method (for derivatives)	-	-	-	-
EU-2	EU - Simplified SA-CCR (for derivatives)	81,616	81,616	81,616	26,357
1	SA-CCR (for derivatives)	88,752	88,486	88,527	42,231
2	IMM (for derivatives and SFTs)	-	-	-	-
2a	Of which securities financing transactions netting sets	-	-	-	-
2b	Of which derivatives and long settlement transactions netting sets	-	-	-	-
2c	Of which from contractual cross-product netting sets	-	-	-	-
3	Financial collateral simple method (for SFTs)	-	-	-	-
4	Financial collateral comprehensive method (for SFTs)	196,209	201,758	201,758	70,776
5	VaR for SFTs	-	-	-	-
6	TOTAL	366,577	371,860	371,900	139,364

Source: COREP reporting framework - Size of the derivatives business: Template C34.02

Key:

- *SA-CCR simplified*: Simplified Standardised Approach (applicable to derivatives)
- *SA-CCR*: Standardised Approach (applicable to derivatives)
- *IMM*: Internal Model Method (applicable to derivatives and SFT)
- *Pre-CRM exposure value*: the exposure value for assets subject to the CCR calculated taking into account the effect of netting, but excluding any other credit risk mitigation techniques (e.g. collateral posted as margin). In the case of SFT, the securities component is not taken into account in determining the value of the pre-CRM exposure if collateral is received and therefore does not reduce the value of the exposure. Conversely, the securities component of SFT is taken into account in determining the value of the pre-CRM exposure on a regular basis if collateral is provided. In addition, collateralised transactions are treated as unsecured, i.e. no margining effects are applied. The pre-CRM exposure value does not take into account the deduction for any CVA loss incurred.
- *Post-CRM exposure value*: the exposure value for assets subject to the CCR calculated taking into account applicable credit risk mitigation techniques in accordance with part three, title II, chapters 4 and 6 of the CRR. In accordance with article 273(6) of the CRR, any CVA loss incurred is not deducted from the value of the post-CRM exposure.
- *Exposure value*: the exposure value for assets subject to the CCR used for the purposes of calculating the related capital requirement, determined by applying the effects of credit risk mitigation techniques in accordance with part three, title II, chapters 4 and 6 of the CRR and considering the deduction of any CVA loss incurred. The exposure value for transactions for which a specific unfavourable correlation risk has been identified shall be determined in accordance with article 291 of the CRR. In cases where more than one CCR method is used for an individual counterparty, the incurred CVA loss, deducted at the counterparty level, shall be allocated to the exposure value of the different netting sets of assets in each CCR method reflecting the proportion of the post-CRM exposure value of the respective netting sets of assets to the counterparty's total post-CRM exposure value.

Table 110 - Template EU CCR2: Transactions subject to own funds requirements for CVA risk

		12/31/2021		12/31/2020	
		a	b		
		Exposure value	RWAs	Exposure value	RWAs
1	TOTAL PORTFOLIOS SUBJECT TO THE ADVANCED METHOD	-	-	-	-
2	(i) VaR component (including the 3x multiplier)		-		-
3	(ii) SVaR component (including the 3x multiplier)		-		-
4	ALL PORTFOLIOS SUBJECT TO THE STANDARDISED METHOD	142,192	11,835	154,877	22,488
EU-4	Based on the original exposure method	-	-	-	-
5	TOTAL SUBJECT TO THE CVA CAPITAL CHARGE	142,192	11,835	154,877	22,488

Source: COREP reporting framework - Credit assessment adjustment risk (CVA risk): Template C25.00

Table 111 - Template EU CCR3 - Standardised approach: CCR exposures by regulatory exposure class and risk weights (1 of 2)

		Classes of credit worthiness (Weighting Factors)					
Exposure classes		a	b	c	d	e	f
		0%	2%	4%	10%	20%	50%
1	Central governments or central banks	-	-	-	-	-	-
2	Regional governments or local authorities	-	-	-	-	-	-
3	Public sector entities	-	-	-	-	-	-
4	Multilateral development banks	-	-	-	-	-	-
5	International organisations	-	-	-	-	-	-
6	Institutions	-	-	-	-	172,758	160,452
7	Corporates	-	-	-	-	-	39
8	Retail	-	-	-	-	-	-
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
10	Other items	-	-	-	-	-	-
11	TOTAL AS AT 12/31/2021	-	-	-	-	172,758	160,491
	TOTAL AS AT 12/31/2020	-	3,470	-	-	83,478	58,178

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07.00

Table 112 - Template EU CCR3 - Standardised approach: CCR exposures by regulatory exposure class and risk weights (2 of 2)

Exposure classes	Classes of credit worthiness (Weighting Factors)					
	g	h	i	j	k	l
	70%	75%	100%	150%	Others	Total exposure value
1 Central governments or central banks	-	-	6,840	-	-	6,840
2 Regional governments or local authorities	-	-	-	-	-	-
3 Public sector entities	-	-	-	-	-	-
4 Multilateral development banks	-	-	-	-	-	-
5 International organisations	-	-	-	-	-	-
6 Institutions	-	-	234	-	-	333,444
7 Corporates	-	-	1,804	-	-	1,842
8 Retail	-	1,973	-	-	-	1,973
9 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
10 Other items	-	-	-	-	-	-
11 TOTAL AS AT 12/31/2021	-	1,973	8,877	-	-	344,099
TOTAL AS AT 12/31/2020	-	2,005	12,479	-	-	159,609

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07

Table 113 - Template EU CCR4 - IRB approach: CCR exposures by exposure class and PD scale - Central governments or central banks

The template is not published due to the absence of significant exposures subject to counterparty risk in the specific segment.

Table 114 - Template EU CCR4 - IRB approach: CCR exposures by exposure class and PD scale - Institutions

The template is not published due to the absence of significant exposures subject to counterparty risk in the specific segment.

Table 115 - Template EU CCR4 - IRB approach: CCR exposures by exposure class and PD scale - Corporates (1 of 2)

	a	b	c
<i>PD scale</i>	<i>Exposure value</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
0.00 to <0.15	947	0.1200 %	7
0.15 to <0.25	7,178	0.1570 %	35
0.25 to <0.50	2,495	0.3900 %	11
0.50 to <0.75	1,508	0.5900 %	12
0.75 to <2.50	8,480	1.5411 %	18
2.50 to <10.00	6,086	5.4397 %	6
10.00 to <100.00	153	10.6918 %	2
100.00 (Default)	299	100.0000 %	2
SUBTOTAL (Exposure classes CORPORATES)	27,146	2.9790 %	93

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 116 - Template EU CCR4 - IRB approach: exposures subject to CCR by exposure class and PD range - Corporates (2 of 2)

	d	e	f	g
<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity</i>	<i>RWEA</i>	<i>Density of risk weighted exposure amount</i>
0.00 to <0.15	24.8970 %	1	140	14.7712 %
0.15 to <0.25	25.0313 %	1	1,114	15.5231 %
0.25 to <0.50	24.8970 %	1	843	33.7986 %
0.50 to <0.75	24.9747 %	4	877	58.1805 %
0.75 to <2.50	23.1713 %	2	5,119	60.3649 %
2.50 to <10.00	24.9552 %	1	5,791	95.1631 %
10.00 to <100.00	25.7427 %	1	199	130.0145 %
100.00 (Default)	38.8600 %	3	56	18.6677 %
SUBTOTAL (Exposure classes CORPORATES)	24.5691 %	2	14,140	52.0883 %

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 117 - Template EU CCR4 - IRB approach: CCR exposures by exposure class and PD scale - Retail (1 of 2)

	a	b	c
<i>PD scale</i>	<i>Exposure value</i>	<i>Exposure weighted average PD (%)</i>	<i>Number of obligors</i>
0.00 to <0.15	29	0.1087 %	25
0.15 to <0.25	83	0.1750 %	12
0.25 to <0.50	464	0.4270 %	30
0.50 to <0.75	6	0.6907 %	5
0.75 to <2.50	27	1.1557 %	10
2.50 to <10.00	15	3.3100 %	6
10.00 to <100.00	23	16.2939 %	3
100.00 (Default)	9	100.0000 %	4
SUBTOTAL (Exposure classes RETAIL)	655	2.3954 %	95
TOTAL AS AT 12/31/2021	27,801	2.9650 %	188

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 118 - Template EU CCR4 - IRB approach: CCR exposures by exposure class and PD scale - Retail (2 of 2)

	d	e	f	g
<i>PD scale</i>	<i>Exposure weighted average LGD (%)</i>	<i>Exposure weighted average maturity</i>	<i>RWEA</i>	<i>Density of risk weighted exposure amount</i>
0.00 to <0.15	15.6148 %	-	1	3.6988 %
0.15 to <0.25	20.8310 %	-	6	7.0776 %
0.25 to <0.50	15.9824 %	-	49	10.5401 %
0.50 to <0.75	19.2365 %	-	1	14.1745 %
0.75 to <2.50	18.0811 %	-	4	16.3470 %
2.50 to <10.00	13.9332 %	-	3	17.3195 %
10.00 to <100.00	15.0005 %	-	6	25.6841 %
100.00 (Default)	25.5745 %	-	1	11.5035 %
SUBTOTAL (Exposure classes RETAIL)	16.7498 %	-	70	10.7529 %
TOTAL AS AT 12/31/2021	24.3850 %	2	14,210	51.1140 %

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 119 - Template EU CCR5: Composition of collateral for CCR exposures (1 of 2)

		a	b	c	d
		<i>Collateral used in derivative transactions</i>			
COLLATERAL TYPE		<i>Fair value of collateral received</i>		<i>Fair value of posted collateral</i>	
		<i>Segregated</i>	<i>Unsegregated</i>	<i>Segregated</i>	<i>Unsegregated</i>
1	Cash – domestic currency	-	1,900	56,398	32,785
2	Cash – other currencies	-	-	-	51,566
3	Domestic sovereign debt	-	-	-	-
4	Other sovereign debt	-	-	-	-
5	Government agency debt	-	-	-	-
6	Corporate bonds	-	-	-	-
7	Equity securities	-	-	-	-
8	Other collateral	-	-	-	-
9	TOTAL AS AT 12/31/2021	-	1,900	56,398	84,351

Source: COREP reporting framework - Composition of guarantees for counterparty risk: Template C 34.08

Table 120 - Template EU CCR5: Composition of collateral for CCR exposures (2 of 2)

		e	f	g	h
		<i>Collateral used in SFTs</i>			
COLLATERAL TYPE		<i>Fair value of collateral received</i>		<i>Fair value of posted collateral</i>	
		<i>Segregated</i>	<i>Unsegregated</i>	<i>Segregated</i>	<i>Unsegregated</i>
1	Cash – domestic currency	-	-	-	-
2	Cash – other currencies	-	-	-	-
3	Domestic sovereign debt	-	-	-	196,209
4	Other sovereign debt	-	-	-	-
5	Government agency debt	-	-	-	-
6	Corporate bonds	-	-	-	-
7	Equity securities	-	-	-	-
8	Other collateral	-	-	-	-
9	TOTAL AS AT 12/31/2021	-	-	-	196,209

Source: COREP reporting framework - Composition of guarantees for counterparty risk: Template C 34.08

Table 121 - Template EU CCR6: Credit derivative exposures

The template is not published due to the absence of exposures related to credit derivative transactions.

Table 122 - Template EU CCR7: RWEA flow statements of CCR exposures under the IMM

The template is not published due to the absence of counterparty risk exposures treated according to the “Internal Model Method” (IMM).

Table 123 - Template EU CCR8: Exposures to CCPs

		12/31/2021	
		a	b
		Exposure value	RWEA
1	EXPOSURES TO QCCPS (TOTAL)		56
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	-	-
3	(i) OTC derivatives	-	-
4	(ii) Exchange-traded derivatives	-	-
5	(iii) SFTs	-	-
6	(iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	-	
8	Non-segregated initial margin	-	-
9	Prefunded default fund contributions	2,849	56
10	Unfunded default fund contributions	-	-
11	EXPOSURES TO NON-QCCPS (TOTAL)		-
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-
13	(i) OTC derivatives	-	-
14	(ii) Exchange-traded derivatives	-	-
15	(iii) SFTs	-	-
16	(iv) Netting sets where cross-product netting has been approved	-	-
17	Segregated initial margin	-	
18	Non-segregated initial margin	-	-
19	Prefunded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

Source: COREP reporting framework - Exposures to central counterparties: Template C 34.10

Key:

- **QCCP:** Qualifying Central Counterparty. Entity licensed to act as a central counterparty (including by way of derogation) and authorised by the relevant regulatory and/or supervisory body to act as such for the products it offers. QCCP status requires that the CCP be established and supervised in a jurisdiction where the relevant regulatory and/or supervisory body has determined and publicly notified that it will apply to the CCP, on an ongoing basis, national standards and rules that comply with the Principles for Financial Market Infrastructures jointly issued by the Committee on Payment and Settlement Systems (CPSS) and the International Organisation of Securities Commissions (IOSCO).

Section 14 - Disclosure on exposure to securitisation positions (art. 449 CRR/CRR II)

Own securitisations

As part of a broader programme of interventions on impaired loans, in 2020, Banca Popolare di Sondrio completed two securitisation transactions of non-performing loans.

With regard to the first transaction, named “Diana”, a portfolio of non-performing loans with a gross value of 999.7 million euro (74% of which are secured loans) was sold on a massive scale, with economic effect from 1 April 2019, to the securitisation vehicle called “DIANA” set up pursuant to Law 130/99, which in turn issued three tranches of ABS notes for a total of 274 million euro (27.4% of the gross value of the loans disposed):

- a senior tranche, rated BBB/Baa2/BBB by the agencies DBRS Morningstar, Moody's and Scope Ratings, respectively, for 235 million euro, corresponding to 23.5% of the gross value of the loans sold. This tranche has structural characteristics of eligibility for the GACS State guarantee;
- a mezzanine tranche of 35 million euro, equal to 3.5% of the gross value of the loans disposed;
- a junior tranche of 4 million euro.

All the notes issued were underwritten by Banca Popolare di Sondrio at the closing of the transaction, and most of them were then offered for subscription on the market. The senior securities were entirely retained by the bank; for the same, coverage by the Italian State through the GACS scheme was requested and obtained. In order to obtain the deconsolidation for accounting purposes of the loans sold in accordance with the applicable sector regulations, 95% of the mezzanine and junior tranches were placed with institutional investors.

The second securitisation, named “POP NPLS 2020”, was completed by Banca Popolare di Sondrio together with 14 other participating banks, as part of a multi-originator initiative coordinated by Luzzatti S.c.p.a., a company for the management of extraordinary transactions set up by a pool of participating cooperative banks. In particular, a portfolio of non-performing loans with a gross value of 371.8 million euro (71% of which are secured loans) was sold, effective from 1 January 2020, to the securitisation vehicle called “POP NPLs 2020 S.r.l.”, which in turn issued three tranches of ABS for a total of 125.69 million euro (33.8% of the gross value of the loans disposed), of which:

- a senior tranche, rated BBB by the agencies DBRS Morningstar and Scope Ratings, amounting to 109.78 million euro, corresponding to 29.5% of the gross value of the loans sold. The tranche in question, kept in the portfolio by Banca Popolare di Sondrio, has structural characteristics that make it eligible for the GACS state guarantee;
- a mezzanine tranche of 11.36 million euro, rated CCC by DBRS Morningstar and CC by Scope Ratings, corresponding to 3.1% of the gross value of the loans disposed;
- a junior tranche of 4.55 million euro, equal to 1.2% of the gross value of the loans disposed.

95% of the mezzanine and junior tranches were placed with institutional investors, while the remaining 5% was retained by the selling bank, in line with regulatory obligations. For the senior notes, coverage from the Italian State was requested and obtained through the GACS scheme.

As a continuation of the de-risking and asset quality improvement strategy pursued, on 23 December 2021, the Bank concluded, together with 11 other participating institutions, an additional securitisation transaction of non-performing loans named “POP NPLS 2021.”

The transaction entailed the sale, with economic effect as of 1 January 2021, of a portfolio with a gross value of 420.9 million euro (consisting of 57% secured loans) to the securitisation vehicle named “Luzzatti POP NPLs 2021 S.r.l.” established pursuant to Law no. 130/1999, which, in turn, issued relative to Banca Popolare di Sondrio three tranches of ABS notes totalling 115.62 million euro (27.47% of the gross value of the transferred loans), of which:

- a senior tranche, which was assigned a rating of BBB by the agencies DBRS Morningstar and ARC Ratings, for an amount of 97.71 million euro, corresponding to 23.21% of the gross value of the loans disposed. The tranche in question, retained by the Bank, has structural features of GACS eligibility;
- a mezzanine tranche of 12.79 million euro, equal to 3.04% of the gross value of the loans sold;
- a junior tranche of 5.12 million euro, equal to 1.21% of the gross value of the loans sold.

In order to obtain the deconsolidation of the loans sold, in accordance with the provisions of the applicable sector regulations, 95%, respectively, of the mezzanine and junior tranches were placed with institutional investors, while the remaining 5% was withheld by the selling bank. Banca Popolare di Sondrio can therefore achieve derecognition of the portfolio of non-performing loans disposed. For the senior notes, the coverage from the Italian State was requested through the GACS scheme.

Third-party securitisations

The Group holds, as an investor, exposures in ABS securities related to traditional (not synthetic) securitisations, all of the “senior” type, not STS (Simple, Transparent and Standardised)²⁷ and arising from third-party transactions. Such investments, held entirely for purposes other than trading on the market, are classified for accounting purposes as “Financial assets measured at fair value” and “Financial assets measured at amortised cost”. No guarantees or credit lines are provided on these transactions.

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 in application of the SEC-SA standardised methodology (art. 261 of Regulation (EU) 2401/2017).

Since the ABS securities held in portfolio do not have an external credit rating (ECAI rating) but given full knowledge of the underlying assets in which they are invested, the aforementioned SEC-SA methodology is applicable, which is largely based on the availability of information on the

²⁷ Regulation (EU) 2401/2017 represents the general framework on the prudential treatment of securitisation transactions. In this context, a specific framework is established for Simple, Transparent and Standardised securitisations, so-called STS securitisations, which meet particular requirements.

riskiness of the underlying assets from which the related capital requirement derives. This latter element, together with the presence of other information related to the securitisation (such as, for example, attachment/detachment points), allows the application of the calculation algorithm foreseen by the SEC-SA approach.

* * *

The tables below show the Group's exposure to securities deriving from its own and third-party securitisations as at 31 December 2021.

Table 124 - Template EU SEC1: Securitisation exposures in the non-trading book (1 of 3)

	a	b	c	d	e
	<i>Institution acts as originator</i>				
	<i>Traditional</i>				<i>Synthetic</i>
	<i>STS</i>	<i>Non-STS</i>			
	<i>of which SRT</i>	<i>of which SRT</i>			
1 TOTAL EXPOSURES	-	-	98,535	98,535	-
2 Retail (total)	-	-	98,535	98,535	-
3 residential mortgage	-	-	-	-	-
4 credit card	-	-	-	-	-
5 other retail exposures	-	-	98,535	98,535	-
6 re-securitisation	-	-	-	-	-
7 Wholesale (total)	-	-	-	-	-
8 loans to corporates	-	-	-	-	-
9 commercial mortgage	-	-	-	-	-
10 lease and receivables	-	-	-	-	-
11 other wholesale	-	-	-	-	-
12 re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 125 - Template EU SEC1: Securitisation exposures in the non-trading book (2 of 3)

	f	g	h	i	j
	<i>Institution acts as originator</i>		<i>Institution acts as sponsor</i>		
	<i>Synthetic</i>	<i>Sub-total</i>	<i>Traditional</i>		<i>Synthetic</i>
	<i>of which SRT</i>		<i>STS</i>	<i>Non-STS</i>	
1 TOTAL EXPOSURES	-	98,535	-	-	-
2 Retail (total)	-	98,535	-	-	-
3 residential mortgage	-	-	-	-	-
4 credit card	-	-	-	-	-
5 other retail exposures	-	98,535	-	-	-
6 re-securitisation	-	-	-	-	-
7 Wholesale (total)	-	-	-	-	-
8 loans to corporates	-	-	-	-	-
9 commercial mortgage	-	-	-	-	-
10 lease and receivables	-	-	-	-	-
11 other wholesale	-	-	-	-	-
12 re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 126 - Template EU SEC1: Securitisation exposures in the non-trading book (3 of 3)

		k	l	m	n	o
		<i>Institution acts as sponsor</i>	<i>Institution acts as investor</i>			
		<i>Sub-total</i>	<i>Traditional</i>		<i>Synthetic</i>	<i>Sub-total</i>
			<i>STS</i>	<i>Non-STS</i>		
1	TOTAL EXPOSURES	-	-	428,604	-	428,604
2	Retail (total)	-	-	28,652	-	28,652
3	residential mortgage	-	-	-	-	-
4	credit card	-	-	-	-	-
5	other retail exposures	-	-	28,652	-	28,652
6	re-securitisation	-	-	-	-	-
7	Wholesale (total)	-	-	399,952	-	399,952
8	loans to corporates	-	-	-	-	-
9	commercial mortgage	-	-	-	-	-
10	lease and receivables	-	-	399,952	-	399,952
11	other wholesale	-	-	-	-	-
12	re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Investments in traditional securitisations in the portfolio do not include Asset-Backed Commercial Paper (ABCP) programs²⁸.

Table 127 - Template EU SEC2: Securitisation exposures in the trading book

The template is not subject to publication given the absence of exposures to securitisation included in the trading book.

Table 128 - Template EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements: institution acting as originator or as sponsor (1 of 3)

		a	b	c	d	e
		<i>Exposure values (by RW bands/deductions)</i>				
		<i>RW ≤20%</i>	<i>RW >20% to 50%</i>	<i>RW >50% to 100%</i>	<i>RW >100% to <1250%</i>	<i>1250% RW/ deductions</i>
1	TOTAL EXPOSURES	-	-	-	97,776	839
2	Traditional transactions	-	-	-	97,776	839
3	Securitisation	-	-	-	97,776	839
4	Retail underlying	-	-	-	97,776	839
5	Of which STS	-	-	-	-	-
6	Wholesale	-	-	-	-	-
7	Of which STS	-	-	-	-	-
8	Re-securitisation	-	-	-	-	-
9	Synthetic transactions	-	-	-	-	-
10	Securitisation	-	-	-	-	-
11	Retail underlying	-	-	-	-	-
12	Wholesale	-	-	-	-	-
13	Re-securitisation	-	-	-	-	-

²⁸ An Asset-Backed Commercial Paper (ABCP) is a short-term money market debt instrument secured by a package of loans. ABCP are issued by a vehicle (SPV) and are sold through placement agents.

Table 129 - Template EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements: institution acting as originator or as sponsor (2 of 3)

	f	g	h	i	j	k
	<i>Exposure values (by regulatory approach)</i>				<i>RWEA (by regulatory approach)</i>	
	<i>SEC-IRBA</i>	<i>SEC-ERBA (including IAA)</i>	<i>SEC-SA</i>	<i>1250% RW /deductions</i>	<i>SEC-IRBA</i>	<i>SEC-ERBA (including IAA)</i>
1 TOTAL EXPOSURES	-	97,696	-	839	-	102,581
2 Traditional transactions	-	97,696	-	839	-	102,581
3 Securitisation	-	97,696	-	839	-	102,581
4 Retail underlying	-	97,696	-	839	-	102,581
5 Of which STS	-	-	-	-	-	-
6 Wholesale	-	-	-	-	-	-
7 Of which STS	-	-	-	-	-	-
8 Re-securitisation	-	-	-	-	-	-
9 Synthetic transactions	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-
11 Retail underlying	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 130 - Template EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements: institution acting as originator or as sponsor (3 of 3)

	l	m	n	o	EU-p	EU-q
	<i>RWEA (by regulatory approach)</i>		<i>Capital charge after cap</i>			
	<i>SEC-SA</i>	<i>1250 % RW / deductions</i>	<i>SEC-IRBA</i>	<i>SEC-ERBA (compreso IAA)</i>	<i>SEC-SA</i>	<i>1250 % RW / deductions</i>
1 TOTAL EXPOSURES	-	10,484	-	8,207	-	839
2 Traditional transactions	-	10,484	-	8,207	-	839
3 Securitisation	-	10,484	-	8,207	-	839
4 Retail underlying	-	10,484	-	8,207	-	839
5 Of which STS	-	-	-	-	-	-
6 Wholesale	-	-	-	-	-	-
7 Of which STS	-	-	-	-	-	-
8 Re-securitisation	-	-	-	-	-	-
9 Synthetic transactions	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-
11 Retail underlying	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 131 - Template EU SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements: institution acting as investor (1 of 3)

	a	b	c	d	e	f
	<i>Exposure values (by RW bands/deductions)</i>					<i>Exposure values (by regulatory approach)</i>
	<i>RW ≤20%</i>	<i>RW >20% to 50%</i>	<i>RW >50% to 100%</i>	<i>RW >100% to <1250%</i>	<i>1250% RW/ deductions</i>	<i>SEC-IRBA</i>
1 TOTAL EXPOSURES	399,952	-	-	28,652	-	-
2 Traditional transactions	399,952	-	-	28,652	-	-
3 Securitisation	399,952	-	-	28,652	-	-
4 Retail underlying	-	-	-	28,652	-	-
5 Of which STS	-	-	-	-	-	-
6 Wholesale	399,952	-	-	-	-	-
7 Of which STS	-	-	-	-	-	-
8 Re-securitisation	-	-	-	-	-	-
9 Synthetic transactions	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-
11 Retail underlying	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 132 - Template EU SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements: institution acting as investor (2 of 3)

	g	h	i	j	k
	<i>Exposure values (by regulatory approach)</i>			<i>RWEA (by regulatory approach)</i>	
	<i>SEC-ERBA (including IAA)</i>	<i>SEC-SA</i>	<i>1250% RW/ deductions</i>	<i>SEC-IRBA</i>	<i>SEC-ERBA (including IAA)</i>
1 TOTAL EXPOSURES	-	428,604	-	-	-
2 Traditional transactions	-	428,604	-	-	-
3 Securitisation	-	428,604	-	-	-
4 Retail underlying	-	28,652	-	-	-
5 Of which STS	-	-	-	-	-
6 Wholesale	-	399,952	-	-	-
7 Of which STS	-	-	-	-	-
8 Re-securitisation	-	-	-	-	-
9 Synthetic transactions	-	-	-	-	-
10 Securitisation	-	-	-	-	-
11 Retail underlying	-	-	-	-	-
12 Wholesale	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 133 - Template EU SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements: institution acting as investor (3 of 3)

		l	m	n	o	EU-p	EU-q
		RWEA (by regulatory approach)		Capital charge after cap			
		SEC-SA	1250% RW/ deductions	SEC- IRBA	SEC- ERBA (including IAA)	SEC- SA	1250% RW/ deductions
1	TOTAL EXPOSURES	328,280	-	-	-	6,993	-
2	Traditional transactions	328,280	-	-	-	6,993	-
3	Securitisation	328,280	-	-	-	6,993	-
4	Retail underlying	268,288	-	-	-	2,194	-
5	Of which STS	-	-	-	-	-	-
6	Wholesale	59,993	-	-	-	4,799	-
7	Of which STS	-	-	-	-	-	-
8	Re-securitisation	-	-	-	-	-	-
9	Synthetic transactions	-	-	-	-	-	-
10	Securitisation	-	-	-	-	-	-
11	Retail underlying	-	-	-	-	-	-
12	Wholesale	-	-	-	-	-	-
13	Re-securitisation	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 134 - Template EU SEC5 - Exposures securitised by the institution: exposures in default and specific credit risk adjustments

		a	b	c
		<i>Exposures securitised by the institution - Institution acts as originator or as sponsor</i>		
		<i>Total outstanding nominal amount</i>		<i>Total amount of specific credit risk adjustments made during the period</i>
		<i>Of which exposures in default</i>		
1	TOTAL EXPOSURES	1,792,422	-	-
2	Retail (total)	1,792,422	-	-
3	residential mortgage	-	-	-
4	credit card	-	-	-
5	other retail exposures	1,792,422	-	-
6	re-securitisation	-	-	-
7	Wholesale (total)	-	-	-
8	loans to corporates	-	-	-
9	commercial mortgage	-	-	-
10	lease and receivables	-	-	-
11	other wholesale	-	-	-
12	re-securitisation	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Template C 14.00

Key:

- **SEC-SA (Standardised Approach):** basic approach to determining the capital requirement for credit risk on securitisation exposures under Regulation (EU) 2401/2017.
- **SEC-IRBA (Internal Rating Based Approach):** an approach to determining the capital requirement for credit risk on securitisation exposures required by Regulation (EU) 2401/2017 based on the use of internal ratings.
- **SEC-ERBA (External Rating Based Approach):** basic approach to determining the capital requirement for credit risk on securitisation exposures under Regulation (EU) 2401/2017.
- **IAA (Internal Assessment Approach):** an approach used to calculate the weight of exposures arising from Asset-Backed Commercial Paper (ABCP) programs without an external rating. The weighting factors depend on the "equivalent external rating".

Section 15 - Disclosure of operational risk management (446 CRR/CRR II)

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,” appropriately classified into the regulatory business lines applicable to the company's operations and weighted according to specific multiplier coefficients defined in article 317 of Regulation (EU) no. 575/2013.

Line of activities	List of activities (not exhaustive)	Coefficient
Corporate finance services	<ul style="list-style-type: none"> - Underwriting of financial instruments or placement of financial instruments on the basis of irrevocable commitment - Services related to retained employment - Investment consulting - Advice to companies on capital structure, business strategy and related matters as well as advice and services concerning mergers and purchase of companies - Investment research and financial analysis and other general advice concerning financial instrument transactions 	18%
Trading and sales	<ul style="list-style-type: none"> - Own account trading - Receiving and sending orders for one or more financial instruments - Execution of orders on behalf of customers - Placement of financial instruments without irrevocable commitment - Management of multilateral trading systems 	18%
Retail brokerage	<ul style="list-style-type: none"> - Receiving and sending orders for one or more financial instruments - Execution of orders on behalf of customers - Placement of financial instruments without irrevocable commitment 	12%
Commercial banking	<ul style="list-style-type: none"> - Collection of deposits or other repayable funds - Loan transactions - Finance leases - Issuance of guarantees and signing commitments 	15%
Retail banking	<ul style="list-style-type: none"> - Collection of deposits or other repayable funds - Loan transactions - Finance leases - Issuance of guarantees and signing commitments 	12%
Payment and settlement	<ul style="list-style-type: none"> - Payment services - Issuing and managing means of payment 	18%
Agency services	<ul style="list-style-type: none"> - Custody and administration of financial instruments on behalf of customers, including custody and related services such as cash/collateral management 	15%
Asset management	<ul style="list-style-type: none"> - Portfolio management - Management of UCITS - Other forms of asset management 	12%

The following principles set forth in art. 318 of Regulation (EU) no. 575/2013 are also complied with:

- all activities are mapped into the business lines exclusively and comprehensively, with a view to preventing the components of profitability attributable to the same business line from being attributed to more than one business line;
- any activity that cannot be readily allocated or that is ancillary to a main activity attributable to a specific business line follows the allocation criteria provided for the main activity;
- an objective criterion for classifying ancillary activities that fall under more than one line of business is used;
- where an activity cannot be mapped into a specific business line, the business line and any ancillary activities are allocated to the business line with the highest regulatory ratio, with a view to ensuring greater prudence in capital requirement calculation activities;
- internal pricing methods may be used for the purpose of attributing the Relevant Indicator to different business lines, in order to re-attribute costs produced in one business line that are attributable to a different business area and appreciate the actual contribution of business activities;
- the allocation of assets to different business lines must be consistent with the classifications adopted for credit and market risks, with particular reference to customer segmentation criteria.

Table 135 - Template EU OR1: Operational risk own funds requirements and risk-weighted exposure amounts

BANKING ACTIVITIES	a	b	c	d	e
	Relevant indicator			Own funds requirements	Risk exposure amount
	Year-3	Year-2	Last year		
1 Banking activities subject to basic indicator approach (BIA)	-	-	-	-	-
2 Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	914,938	873,399	1,010,364	128,641	1,608,016
3 Subject to TSA:	914,938	873,399	1,010,364		
4 Subject to ASA:	-	-	-		
5 Banking activities subject to advanced measurement approaches (AMA)	-	-	-	-	-

Source: COREP reporting framework - Operational Risk: Template C 16.00

* * *

For a description of the strategies, processes, and governance structure for managing operational risk, as well as the measurement systems adopted, see Section 2 above.

Section 16 - Disclosure of the use of the standardised approach to market risk (art. 445 CRR/CRR II)

This section provides quantitative evidence on the components of the market risk capital requirement based on the use of the supervisory “Standardised Approach” to which the Group is subject as at 31 December 2021.

Table 136 - Template EU MR1: Market risk under the standardised approach

	12/31/2021	12/31/2020
	a	b
	RWEAs	RWEAs
Outright products		
1 Interest rate risk (general and specific)	230,894	10,678
2 Equity risk (general and specific)	472,280	299,280
3 Foreign exchange risk	202,120	-
4 Commodity risk	2,569	2,472
Options		
5 Simplified approach	-	-
6 Delta-plus approach	1,431	984
7 Scenario approach	-	-
8 Securitisation (specific risk)	-	-
9 TOTAL	909,293	313,413

Source: COREP reporting framework - Capital Adequacy: Template C 02.00 and Market risk: Templates C 18.00 - C 21.00 - C 22.00 - C 23.00

The Group does not adopt the “Internal Model Approach” (IMA) for measuring its exposures to market risk for the purposes of determining capital requirements. Therefore, the following Pillar 3 template to which the Group would be subject pursuant to article 438, point h), of the CRR is not subject to publication:

Template EU MR2-B: RWEA flow statements of market risk exposures under the IMA

* * *

For a description of the strategies, processes, and governance structure for managing market risk, as well as the measurement systems adopted, see Section 2 above.

Section 17 - Disclosure of exposures to interest rate risk on positions not held in the trading book (art. 448 CRR/CRR II)

The interest rate risk on the banking portfolio 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 profitability.

As described in further detail in Section 2 above, the Asset & Liability Management (ALM) system in use at the Parent supports the adoption of two complementary models for measuring interest rate risk: the "Sensitivity Analysis in Full Evaluation" model, for the analysis of equity sensitivity, and the "Interactive Simulation" model for interest margin sensitivity analysis; both methods are applied to balance sheet assets and liabilities not belonging to the trading portfolio. The profit sensitivity analysis integrates the results of the "Interactive Simulation" model applied to all assets and liabilities in the scope with those of the "Sensitivity Analysis in Full Evaluation" model obtained on a specific portion of operations valued at "fair value".

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 and quarterly calculation of specific indicators envisaged at regulatory level.

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 Banca Popolare di Sondrio. In such transactions, as a rule, the borrower has the option of pre-repayment with respect to the contractual maturity of the loan, as well as the option to renegotiate the type of interest rate applicable (from fixed to variable or vice versa) or the level of rate/spread/cap/floor established by the credit contract, both of which may be exercised at the discretion of the borrower at any time.

Furthermore, some specific methodological treatments are reserved for: a) securities indexed to Italian inflation (BTP Italia) and European inflation (BTP €i), for which the principal and interest flows are considered, including the related revaluation component; b) Banca Popolare di Sondrio credit exposures classified as non-performing and likely to default, already included in the measurements provided for at regulatory level, but also considered in those of a managerial nature with a value net of write-downs and with estimated financial characteristics. The scope of recognition for both managerial and regulatory purposes is also integrated with the expected use of irrevocable fixed-rate credit lines and the related hypothetical funding component.

* * *

Summarised below is the Group's exposure to interest rate risk on non-trading book positions ("banking book") in the last twelve months from the reference date of 31 December 2021.

With regard to all the assets and liabilities generating interest income other than debt securities in the supervisory trading book, repurchase agreements and reverse repurchase agreements (with debt securities in the supervisory trading book as underlying assets), forward foreign exchange contracts, interest rate options and interest rate swaps in the supervisory trading book, the effects of a change in interest rates on both net interest income and future profit over twelve months and on the value of equity are shown.

It is specified that the results of the measurements shown in the tables below refer to hypothetical scenarios of interest rate movements, which include:

- parallel changes in interest rates of +/-200 basis points;
- the alternative scenarios defined in "*Annex III - Standardised interest rate shock scenarios*" of the "*Guidelines EBA/GL/2018/02 on the management of interest rate risk arising from non-trading activities*" published on 19 July 2018 by the European Banking Authority (EBA);
- two new hypothetical scenarios for the shift of rates, introduced on the survey at the end of 2021, aimed respectively at capturing future market expectations ("ongoing") and specific particularly adverse situations that have occurred in the past ("historical").

It should also be noted that, starting from the end of December 2021, the interest rate risk measurement systems were affected by methodological changes²⁹.

The following charts show the effects of the various scenarios for changes in interest rates on future profits and net interest income, as well as on the economic value of the Group's equity.

²⁹ As of December 2021, the scope of measurement of risk has been expanded to include all repurchase and reverse repurchase agreements regardless of the accounting classification of the debt securities used as underlying. An updated version of the behavioural models relating to all on-demand items receivable and payable was also adopted.

Effects of a change in interest rates over a twelve-month period on the future net interest income

Table 137 - Interest rate risk exposure: change in net interest income (December 2020 - December 2021)

RISK EXPOSURE	Changes of the net interest income				
	12/31/2021				12/31/2020
	at the end of the period	average	minimum	maximum	at the beginning of the period
Parallel up	85,602	136,182	85,602	158,474	150,904
Parallel down	18,763	23,744	18,176	29,431	21,774
Parallel shock up	64,805	119,429	64,805	142,064	135,922
Parallel shock down	18,754	23,747	18,175	29,433	21,774
Steeper shock	27,638	29,923	24,760	35,013	24,367
Flattener shock	16,833	60,261	16,833	78,808	71,993
Short shock up	41,752	99,698	41,752	123,955	117,347
Short shock down	19,481	24,716	19,006	30,098	21,844
On going	3,021	3,021	3,021	3,021	n.d.
Historical	16,365	16,365	16,365	16,365	n.d.
Worst case scenario	3,021	3,021	3,021	3,021	21,774

Source: internal information

NOTE: The "future net interest income" is understood as being the difference between the future interest revenues 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 over a twelve-month period on future earnings

Table 138 - Interest rate risk exposure: change in profit (December 2020 - December 2021)

RISK EXPOSURE	Changes of the net income				
	12/31/2021				12/31/2020
	at the end of the period	average	minimum	maximum	at the beginning of the period
Parallel up	(4,473)	9,318	(39,512)	63,259	29,947
Parallel down	69,123	73,206	63,269	89,776	51,434
Parallel shock up	(25,263)	(7,428)	(55,400)	46,711	14,978
Parallel shock down	69,114	73,209	63,269	89,784	51,434
Steeper shock	42,158	37,519	20,519	50,526	26,855
Flattener shock	(9,334)	40,092	(9,334)	65,173	58,792
Short shock up	(10,065)	39,253	(10,065)	75,442	61,864
Short shock down	67,718	72,124	63,139	87,201	51,435
On going	(8,846)	(8,846)	(8,846)	(8,846)	n.d.
Historical	60,738	60,738	60,738	60,738	n.d.
Worst case scenario	(25,263)	(8,846)	(55,400)	(8,846)	14,978

Source: internal information

NOTE: The "future earnings" are understood as being the difference between the future total revenues and costs, based solely on transactions outstanding at the reference date, possibly renewed with the same volumes.

Effects of a change in interest rates on the economic net equity value

Table 139 - Interest rate risk exposure: change in equity (December 2020 - December 2021)

RISK EXPOSURE	Changes of the economic value of equity				
	12/31/2021				12/31/2020
	at the end of the period	average	minimum	maximum	at the beginning of the period
Parallel up	(398,529)	(409,957)	(479,271)	(344,017)	(277,216)
Parallel down	196,415	177,204	110,151	240,604	76,276
Parallel shock up	(363,415)	(358,314)	(434,173)	(296,619)	(216,988)
Parallel shock down	196,416	177,195	110,143	240,591	76,272
Steepener shock	29,394	21,185	(11,163)	42,627	16,372
Flattener shock	(36,522)	2,987	(39,366)	39,177	(2,231)
Short shock up	(150,024)	(124,350)	(168,748)	(94,300)	(89,127)
Short shock down	179,386	175,940	124,876	220,049	92,834
On going	(54,153)	(54,153)	(54,153)	(54,153)	n.d.
Historical	202,378	202,378	202,378	202,378	n.d.
Worst case scenario	(398,529)	(409,957)	(479,271)	(344,017)	(277,216)

Source: internal information

NOTE: "Net equity value" is defined as the difference between the present value of total assets and liabilities, computed only for transactions outstanding on the reference date, assuming inertial volumes.

The interest rate risk exposure magnitudes shown in the tables above are not impacted as at 31/12/2021 by the expansion of the risk measurement scope because there were no repo transactions in the banking book on that date.

Updating the behavioural models produced an increase in the estimated stable share of liabilities contributing to a reduction in the metric related to the change in the value of equity under the assumption of an upward shift in the level of market rates; in the opposite direction, albeit to a lesser extent, there was an increase in exposure under the assumption of a downward shift in the rate curve. In contrast, the update did not result in major changes to the outcomes produced by the analysis of the change in net interest income and profit.

Focusing the analysis on the evolution of the exposure to risk in terms of change in the value of shareholders' equity, in the last 12 months, there has been an increase in values in the event of a positive interest rate shock and a simultaneous decrease in exposure to a fall in interest rates. The increase in exposure in rising rate scenarios can be attributed to the expansion of fixed-rate mortgages and the re-composition in favour of a higher duration of fixed-rate securities that resulted in longer repricing dates for assets, although there was also an increase in volumes of floating-rate loans as well as the purchase of Italian Treasury Certificates of Credit (CCTs) during the period. In addition, liabilities were negatively affected by the shortening of the window of validity of the favourable terms of TLTRO-III operations, although partly offset by the increase in the share of fixed-rate bond funding and the aforementioned re-estimation of the "on-demand items" model.

The increase in earnings under the scenarios involving falling interest rates can be attributed to the same factors enunciated for the rising rate scenarios to which is added the contribution from the growth in the level of the risk-free curves of the two main currencies - Euro and Swiss franc - resulting in an increase in the downward shock to rates, albeit constrained by the linear floor defined in the reference guidelines.

The slight increase in risk exposure measured through the change in earnings in the scenarios involving rising rates is mainly attributable to the erosion of net interest income in the same market scenarios, largely related to the reduction in the window of validity of the favourable terms applied to TLTRO-III, only partially offset by the increase in the floating-rate component on the asset side.

Section 18 - Disclosure of encumbered and unencumbered assets (art. 443 CRR/CRR II)

At 31 December 2021, the transactions for which the Group encumbers a part of its financial assets or assets 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 (42.6% of the total);
- securities pledged to guarantee refinancing operations with the European Central Bank (30.7% of the total);
- mortgage loans pledged to obtain advances (10.6% of the total);
- residential mortgage loans included in cover pools to guarantee outstanding covered bond issues (8.7% of the total);
- securities pledged to associated/subsidiary companies (2.1% of the total);
- securities pledged in securities lending transactions (1.4% of the total);
- securities pledged to the retirement and pension/assistance fund (1% of the total);
- securities pledged to obtain mortgage loans from the European Investment Bank (EIB) (0.8% of the total);
- securities pledged for trading in derivatives on regulated markets (0.4% of the total);
- own securities pledged for the issue of cashier's cheques (0.3% of the total);
- monetary guarantee deposits set up as collateral against changes in the market value of OTC derivative transactions (0.1% of the total);
- other securities and assets pledged (1.3% of the total).

At 31 December 2021, sources of liabilities obtained by the Group for the assets subject to encumbrance are mainly composed of:

- refinancing obtained from the European Central Bank (87.6% of the total);
- funding from repurchase agreements and other advance payments (5.5% of the total);
- covered bond issues (5% of the total);
- cashier's cheques in circulation (1.3% of the total);
- mortgage loans from the European Investment Bank (EIB) (0.7% of the total).

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 pledged portfolio will be kept to cover the bonds issued, in order to preserve a stated level of over-collateralisation.

At 31 December 2021, the amount of the “cover pool” (residential mortgages) bound to guarantee the outstanding issues exceeds by 995 million euro (equal to 78% of the value of the cover pool at 31 December 2021) the minimum coverage requirement of the regulatory regime for maintaining the current rating by the appointed agency, and by 718.2 million euro (equal to 56% of the value of the cover pool as at 31 December 2021) the highest minimum amount to maintain the rating established on a voluntary basis under the Programme.

The Group monitors with specific management indicators the share of financial assets committed under its contingency and recovery plans. Appropriate attention and early warning thresholds are established in order to promote timely action in the event of an excessive increase in the risk associated with the proportion of captive assets, i.e. resulting from the unavailability of assets that can be readily liquidated through sale, repurchase, disposal under guarantee or securitisation. The performance of these asset encumbrance indicators is reported to the Management and Governing Bodies through production of regular disclosures.

Operations that originate encumbered assets are mainly placed by the Parent Company (about 81%). The subsidiary BPS (SUISSE) contributes to the Group's total encumbered assets to a secondary extent (about 11%). The portion of encumbered assets pertaining to the Swiss investee 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.

At the intragroup level, we note the establishment by Banca Popolare di Sondrio in favour of its Swiss subsidiary of a security deposit in securities with the Swiss Clearing House aimed at ensuring the adequate development of the subsidiary's operations, in adherence to the prudential orientation of the local Financial Markets Supervisory Authority (FINMA) aimed at protecting Swiss institutions from any negative performance of the parent companies.

The quantitative information shown in the tables below is based on the median values of the quarterly records for 2021. The exposure values considered in the statements are in accordance with the recognition criteria for assets and liabilities disclosed in the financial statements.

It is also specified that the scope of consolidation considered for the purposes of this disclosure on encumbered assets and that used for the application of liquidity requirements on a consolidated basis in accordance with Part Two, Title I, Chapter 2, of the CRR with reference to the definition of the eligibility of EHQLA and HQLA assets are given, for both disclosures, by the entire perimeter of companies belonging to the Banking Group.

Table 140 - Template EU AE1: Encumbered and unencumbered assets (1 of 2)

		Carrying amount of encumbered assets		Fair value of encumbered assets	
		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA	
		010	030	040	050
010	ASSETS OF THE REPORTING INSTITUTION	14,607,697	5,347,530		
030	Equity instruments	19,478	-	19,478	-
040	Debt securities	5,475,790	5,347,136	5,530,987	5,386,342
050	of which: covered bonds	43,178	38,515	43,000	38,346
060	of which: asset-backed securities	-	-	-	-
070	of which: issued by general governments	5,273,483	5,211,900	5,323,751	5,250,542
080	of which: issued by financial corporations	177,378	128,466	180,242	129,066
090	of which: issued by non-financial corporations	24,877	6,770	27,051	6,735
120	Other assets	9,132,970	-		

Source: FINREP - Asset Encumbrance: Template F 32.01 Assets of the reporting entity - liquid assets

Table 141 - Template EU AE1: Encumbered and unencumbered assets (2 of 2)

		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which EHQLA and HQLA		of which EHQLA and HQLA	
		060	080	090	100
010	ASSETS OF THE REPORTING INSTITUTION	38,587,288	8,239,612		
030	Equity instruments	898,523	14,215	1,305,558	14,215
040	Debt securities	7,393,802	5,589,277	7,396,095	5,598,435
050	of which: covered bonds	179,367	162,230	181,611	163,785
060	of which: asset-backed securities	693,137	-	693,137	-
070	of which: issued by general governments	5,051,063	4,943,247	5,038,808	4,948,011
080	of which: issued by financial corporations	2,068,390	488,301	2,082,368	491,732
090	of which: issued by non-financial corporations	262,742	189,103	265,036	190,054
120	Other assets	30,420,694	2,315,626		

Source: FINREP - Asset Encumbrance: Template F 32.01 Assets of the reporting entity - liquid assets

The amounts of encumbered assets shown in column 010 of the above table consist mainly of debt securities, particularly issued by government (5.4 billion euro as at 31 December 2021), and loans included in "Other assets" (9.1 billion euro as at 31 December 2021), of which they are the predominant component.

The amounts of unencumbered assets shown in column 060 of the table above consist mainly of loans (29.2 billion euro as at 31 December 2021 included under "Other assets," of which they are the largest component), debt securities (7.9 billion euro as at 31 December 2021) and equity securities (1.1 billion euro as at 31 December 2021). These types of assets appear to be potentially usable within the main areas of operation listed above. The other unencumbered assets, amounting to approximately 2.2 billion euro at 31 December 2021, 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.

Unencumbered assets also include assets (notes) issued as part of the securitisations of impaired loans promoted by Banca Popolare di Sondrio in 2020 and 2021, corresponding to the retained portion of the junior and mezzanine tranches that make up these transactions. The book value of the instruments amounted to 0.8 million euro as at 31 December 2021; the underlying credit ratios, commensurate with the percentage of junior and mezzanine securities retained by the Bank (5%), are not subject to derecognition.

Table 142 - Template EU AE2: Collateral received and own debt securities issued

		<i>Fair value of encumbered collateral received or own debt securities issued</i>		<i>Unencumbered</i>	
				<i>Fair value of collateral received or own debt securities issued available for encumbrance</i>	
		<i>of which notionally eligible EHQLA and HQLA</i>		<i>of which EHQLA and HQLA</i>	
		010	030	040	060
130	Collateral received by the reporting institution	-	-	646,918	296,104
140	Loans on demand	-	-	-	-
150	Equity instruments	-	-	-	-
160	Debt securities	-	-	646,918	296,104
170	of which: covered bonds	-	-	-	-
180	of which: asset-backed securities	-	-	-	-
190	of which: issued by general governments	-	-	646,918	296,104
200	of which: issued by financial corporations	-	-	-	-
210	of which: issued by non-financial corporations	-	-	-	-
220	Loans and advances other than loans on demand	-	-	-	-
230	Other collateral received	-	-	-	-
240	Own debt securities issued other than own covered bonds or asset-backed securities	-	-	4,066	-
241	Own covered bonds and asset-backed securities issued and not yet pledged			-	-
250	TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED 12/31/2021	-	-		
	TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED 12/31/2020	14,607,697	5,275,818		

Source: FINREP - Asset Encumbrance: Model F 32.02 Guarantees received

Table 143 - Template EU AE3: Sources of encumbrance

		12/31/2021		12/31/2020	
		<i>Matching liabilities, contingent liabilities or securities lent</i>	<i>Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered</i>	<i>Matching liabilities, contingent liabilities or securities lent</i>	<i>Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered</i>
		010	030		
010	Carrying amount of selected financial liabilities	10,103,669	13,763,978	-	-

Source: FINREP - Asset Encumbrance: Template F 32.04 Source of encumbrance

Liabilities associated with encumbered assets and collateral received correspond, as at 31 December 2021, to deposits of 9.6 billion euro (including 8.9 billion euro with Central Banks) and debt securities of 0.5 billion euro.

NOTE: Assets with a very high liquidity and credit quality (EHQLA) are the "Level 1 assets" referred to in Art. 416 (Reporting on liquid assets), paragraph 1, second 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

Section 19 - Disclosure of remuneration policy (art. 450 CRR/CRR II)

The qualitative and quantitative disclosures required by article 450 of Regulation (EU) no. 575/2013 on remuneration and incentive policies and practices, to be published in accordance with the technical standards set forth in Implementing Regulation (EU) 2021/637, are fulfilled under the dedicated *“Public disclosure required by supervisory regulations on remuneration and incentive policies and practices - March 2022”*.

This document, with which the disclosure requirements under the regulatory provisions with respect to 2021 are met, is made available in the 'Corporate Documents' section of the Bank's institutional website (<https://istituzionale.popso.it/it/governance/documenti-societari> - Regulations and Corporate Disclosures). Specific reference is therefore made to this documentation.

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 <https://istituzionale.popso.it/it/investor-relations/assemblea-dei-soci> (2022 Shareholders' Meeting, Meeting Documents).

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 no. 58 of 24 February 1998, certifies that the accounting information contained in this document agrees with the underlying accounting entries, records and documentation.

Sondrio, 11 May 2022

Signed Maurizio Bertoletti

Manager responsible for preparing
the Company's accounting documents



Declaration pursuant to art. 435, paragraph 1, letters e) and f) of Regulation (EU) no. 575/2013

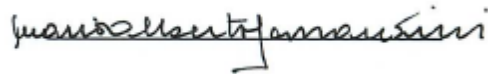
Managing Director Mario Alberto Pedranzini, under a mandate granted by the Board of Directors by resolution dated 31 March 2022, declares pursuant to article 435(1) e) and f) of Regulation (EU) no. 575/2013 ("CRR") that:

- a) the risk management systems put in place by the Group and described in the document "*Pillar 3 Report - Public Disclosures as at 31 December 2021*" are in line with the profile and strategy of the Banca Popolare di Sondrio Group;
- b) section 2, paragraph "*Consistency between the overall risk profile and the Group's strategies*" of the aforementioned document briefly describes the Banca Popolare di Sondrio Group's overall risk profile in relation to the adopted business strategy.

Sondrio, 12 May 2022

Signed Mario Alberto Pedranzini

Managing Director



Glossary

ABS – Asset Backed Securities

Debt securities generally issued in securitisation transactions by a Special Purpose Vehicle (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.

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.

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).

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. 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 for the assessment of creditworthiness recognised by the Supervisory Authorities, specialised in providing rating service to banks that adopt the Standardised Approach for measuring the capital requirement against credit risk.

Fair value

Fair value. Value for which an asset could be exchanged or a liability settled in an orderly market transaction between knowledgeable and independent parties.

GACS

Securitisation guarantee on non-performing loans. Italian state guarantee scheme to facilitate the disposal of non-performing bank loans through securitisation transactions. Admission to the GACS, granted by decree of the Ministry of Economy and Finance, is envisaged only for tranches of senior ABS (securities with the lowest degree of subordination) issued as part of the securitisation.

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).

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.

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.

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.

IRB - Internal Rating Based Approach

Methods Based on Internal Ratings. They can be distinguished between a “basic” (F-IRB, Foundation Internal Rating-Based Approach) and an “advanced” approach (A-IRB, 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

Short-term liquidity coverage indicator determined according to Part 6 of Regulation (EU) no. 575/2013 of 26 June 2013 (“CRR”). 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.

General payment moratorium

Measure to suspend payment obligations connected to a credit agreement, applied to a debtor in financial difficulty in compliance with the following characteristics defined by the EBA/GL/2020/02 Guidelines:

- a moratorium is based on the applicable national legislation (“legislative moratorium”) or on a non-legislative initiative that provides for the reduction of payments promoted by an institution within the framework of an industrial or sector moratorium scheme agreed or coordinated within the banking sector or a significant part of it, possibly in agreement with the public authorities, so that participation in this type of scheme is open and that in this context the credit institutions concerned adopt similar payment reduction measures (“non-legislative moratorium”);
- a moratorium applies to a large group of debtors pre-defined on the basis of broad criteria, where a criterion to determine the scope of the moratorium should allow a debtor to take advantage of the moratorium without its

creditworthiness being subjected to rating. Such criteria include, for example, exposure class and subclass, industry sector, product ranges or geographical location. While, on the one hand, the scope of the moratorium may be limited only to non-performing debtors who did not encounter payment difficulties prior to the application of the moratorium, on the other hand it should not be limited solely to debtors in financial difficulties before the outbreak of the COVID-19 pandemic;

- c) the moratorium only provides for changes to the payment plan, in particular by suspending, postponing or reducing payments of principal, interest or entire instalments, for a predefined and limited period of time; there are no changes to any other terms and conditions of the loans, such as the interest rate;
- d) the moratorium is offered to all exposures that are subject to the same conditions for the modification of the payment plan, even if the moratorium is not mandatory for debtors;
- e) the moratorium does not apply to new loan agreements granted after the date of its announcement;
- f) the moratorium was initiated to address the COVID-19 pandemic and applied before 30 September 2020; however, this deadline may be revised depending on how the current situation of the pandemic evolves.

Separate general payment moratoria can be applied to broad and diverse segments of borrowers or exposures.

NSFR – Net Stable Funding Ratio

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

Specific attribute of transactions in derivative instruments traded “over the counter”, i.e. concluded directly between parties without recourse to an organised market.

PD – Probability of Default

Probability that a counterparty becomes insolvent within a given time horizon.

ECL – Expected Credit Loss

Losses that on average are expected to be incurred on a financial instrument, a loan or a portfolio; it represents the average value of the statistical distribution of losses, resulting from the product 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.

Subordinated loan

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.

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.

RWA – Risk-Weighted Assets

RWEA – Risk-Weighted Exposure Amounts

TREA – Total Risk Exposure Amount

Risk-Weighted Assets (RWA) On-balance sheet and off-balance sheet assets classified and weighted for their associated risks, established in accordance with the regulations issued by supervisory authorities in relation to calculation of capital ratios of banks.

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.

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 (RWA).