



Pillar 3 Report Public Disclosures Banca Popolare di Sondrio Group

Reporting date: 31/12/2022

Date of publication: 11/05/2023

This document is an English translation of the original Italian document "Terzo Pilastro Informativa al pubblico – Gruppo Banca Popolare di Sondrio – data di riferimento: 31/12/2022", prepared only for the convenience of the international readers. In cases of any conflict between the English and the Italian versions, the Italian language document prevails.



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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: € 1,361,824,778

(Figures approved at the Shareholders' meeting of 29 April 2023)

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 2019/876 of the European Parliament and Council of 20 May 2019, which amends Regulation (EU) No 575/2013 relating to prudential requirements for credit institutions and investment firms, with regard to the leverage ratio, the net stable funding ratio, the own funds requirements and eligible liabilities, counterparty risk, market risk, exposures to central counterparties, exposures to undertakings for the collective investment of transferable securities, large exposures, reporting and disclosure obligations and Regulation (EU) No 648/2012 (“CRR II”) 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 the typical banking and finance risks, providing for alternative

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.

calculation methods, characterised by different levels of complexity. This is integrated by the imposition of 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 of intermediaries as determining factors for the stability of the individual institutions as well as of the financial system as a whole.

“Pillar 3” (*Market discipline*) establishes 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 at the same time 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.

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 forbearance measures.

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.

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 by entities 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.

Regulation (EU) 2022/631 of 13 April 2022 has also taken force, amending the Implementing Technical Standards laid down by the Implementing Regulation (EU) No 637/2021 on disclosure of information on exposures to interest rate risk on positions not held in the trading book in accordance with article 448 of CRR II (paragraph 1, points a) and b)).

On 24 January 2022, the EBA published the final draft of specific technical standards (EBA/ITS/2022/01 - Final draft implementing technical standards on prudential disclosures on ESG risks in accordance with Article 449bis of CRR II), applicable to large listed institutions, for the disclosure of environmental, social and governance (ESG) risks. The reporting standards proposed by the EBA were subsequently transposed into the EU regulatory framework through the issuance of Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022. The new disclosure on ESG risks, to be fulfilled on a half-yearly basis, is subject to a phase-in period, whereby a limited number of quantitative tables are displayed for the first publication of the disclosure.

Within the context created by the spread of the COVID-19 pandemic, the following additional regulations of “Pillar 3” 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.

- EBA/GL/2020/12 Guidelines amending the EBA/GL/2018/01 Guidelines 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 pandemic³.
- the EBA/GL/2020/07 Guidelines on reporting and disclosure of exposures subject to measures applied in response to Covid-19 crisis, which were repealed as of 1 January 2023 in response to the reduced relevance of government support measures and the decrease in loans subject to payment moratoria and government guarantees.

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

This document has been prepared by Banca Popolare di Sondrio S.p.A., 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’s website (<https://istituzionale.popso.it>), sub-section “Pillar 3”. It is accompanied by the Certification of the Manager responsible for preparing the Company’s accounting documents of the Parent Company Banca Popolare di Sondrio S.p.A., pursuant to Article 154-bis, paragraph 2, of Legislative Decree 58/98 (Consolidated Law on Finance, “TUF”).

In compliance with article 434 of the CRR/CRR II (“Means of disclosure”), if similar information has 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 various 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.

³ 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 2022.

Art. CRR/ CRR II	Article description	Frequency of publication	Section Public Disclosures as at 31 December 2022
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 small and non-complex entities	-	
Art. 433-quater	Disclosure by other institutions	-	
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 (Disclosure obligation in force 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>	13 - Disclosure of exposures to counterparty risk
Art. 439	Disclosure of exposures to counterparty risk	Half-yearly <i>lett. e) to l)</i>	



Art. CRR/ CRR II	Article description	Frequency of publication	Section Public Disclosures as at 31 December 2022
		Annual <i>Full art. 439</i>	13 - Disclosure of exposures to counterparty risk
Art. 440	Disclosure of countercyclical capital buffers	Half-yearly/Annual	5 - Disclosure of capital buffers
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 of 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/Annual	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 in 2022, Half-yearly from 2023	12 - Environmental, social and governance risks (ESG)
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 <i>Full art. 451-bis</i>	
Art. 452		Half-yearly <i>lett. g)</i>	



Art. CRR/ CRR II	Article description	Frequency of publication	Section Public Disclosures as at 31 December 2022
	Disclosure of the use of the IRB Approach to credit risk	Annual <i>Full art. 452</i>	11 - Disclosure of the use of the IRB approach to credit risk
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 SpA	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) – wholly-owned	Milano	Milano
4	Sinergia Seconda S.r.l.	Real estate company – wholly-owned	Milano	Milano
5	Popso Covered Bond S.r.l.	SPV for the issue of covered bonds – 60% held	Conegliano Veneto (TV)	Conegliano Veneto (TV)
6	BNT Banca SpA	Bank – Wholly-owned	Sondrio	Milano
7	PrestiNuova S.r.l. - Agenzia in Attività Finanziaria	Agenzia in Attività Finanziaria – Wholly owned (100%) by BNT 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 (1 of 2)

	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</i>	
			<i>Subject to the credit risk framework</i>	<i>Subject to the CCR framework</i>
ASSETS				
Cash and cash equivalents	6,991	6,979	6,979	-
Financial assets held for trading	180	180	-	63
Financial assets designated at fair value	-	-	-	-
Other financial assets mandatorily designated at fair value	1,074	1,144	1,119	-
Financial assets at fair value through other comprehensive income	2,556	2,556	2,556	-
Loans to banks	1,865	1,865	1,865	-
Loans to customers	42,005	42,087	40,495	-
Hedging derivatives	-	-	-	-
Change in value of macro-hedged financial assets	-	-	-	-
Equity investments	323	387	387	-
Reinsurers' share of technical reserves	-	-	-	-
Property, plant, and equipment	651	457	457	-
Intangible assets	37	31	-	-
Tax assets	343	343	338	-
Non-current assets and disposal groups classified as held for sale	-	-	-	-
Other assets	1,830	1,810	1,810	-
TOTAL ASSETS	57,854	57,839	56,006	63
LIABILITIES				
Amounts owed to banks	11,382	11,382	-	-
Amounts owed to customers	38,122	38,122	-	-
Securities issued	3,649	3,649	-	-
Financial liabilities held for trading	116	116	-	116
Financial liabilities designated at fair value	-	-	-	-
Hedging derivatives	-	-	-	-
Change in value of macro-hedged financial liabilities	-	-	-	-
Tax liabilities	32	32	-	-
Liabilities included in disposal groups classified as held for sale	-	-	-	-
Other liabilities	835	819	-	-
Provision for employee severance pay	36	35	-	-
Provisions for risks and charges	296	293	-	-
Technical reserves	-	-	-	-
Valuation reserves	(68)	(68)	-	-
Redeemable shares	-	-	-	-
Equity	-	-	-	-
Interim dividends	-	-	-	-
Reserves	1,790	1,789	-	-
Share premium accounts	79	79	-	-
Share capital	1,360	1,360	-	-
Treasury shares (-)	(25)	(25)	-	-
Minority shareholders' equity	0	0	-	-
Profit (Loss) for the period	251	256	-	-
TOTAL LIABILITIES	57,854	57,839	-	116

Source: Consolidated balance sheet, FINREP/COREP reporting bases



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

	e	f	g
	<i>Carrying values of items</i>		<i>Not subject to own funds requirements or subject to deduction from own funds</i>
	<i>Subject to the securitisation framework</i>	<i>Subject to the market risk framework</i>	
ASSETS			
Cash and cash equivalents	-	-	-
Financial assets held for trading	-	116	-
Financial assets designated at fair value	-	-	-
Other financial assets mandatorily designated at fair value	25	-	-
Financial assets at fair value through other comprehensive income	-	-	-
Loans to banks	-	-	-
Loans to customers	1,592	-	-
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	-	-	5
Non-current assets and disposal groups classified as held for sale	-	-	-
Other assets	-	-	-
TOTAL ASSETS	1,618	116	36
LIABILITIES			
Amounts owed to banks	-	-	11,382
Amounts owed to customers	-	-	38,122
Securities issued	-	-	3,649
Financial liabilities held for trading	-	-	-
Financial liabilities designated at fair value	-	-	-
Hedging derivatives	-	-	-
Change in value of macro-hedged financial liabilities	-	-	-
Tax liabilities	-	-	32
Liabilities included in disposal groups classified as held for sale	-	-	-
Other liabilities	-	-	819
Provision for employee severance pay	-	-	35
Provisions for risks and charges	-	-	293
Technical reserves	-	-	-
Valuation reserves	-	-	(68)
Redeemable shares	-	-	-
Equity	-	-	-
Interim dividends	-	-	-
Reserves	-	-	1,789
Share premium accounts	-	-	79
Share capital	-	-	1,360
Treasury shares (-)	-	-	(25)
Minority shareholders' equity	-	-	-
Profit (Loss) for the period	-	-	256
TOTAL LIABILITIES	-	-	57,723

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
		<i>Items subject to</i>				
		<i>Total</i>	<i>Credit risk framework</i>	<i>Securitisation framework</i>	<i>CCR framework</i>	<i>Market risk framework</i>
1	Assets carrying value amount under the scope of regulatory consolidation (as per template LI1)	57,803	56,006	1,618	63	116
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template LI1)	116	-	-	116	-
3	Total net amount under the regulatory scope of consolidation	57,687	56,006	1,618	(53)	116
4	Off-balance-sheet amounts	22,612	22,612	-	-	
5	<i>Differences in valuations</i>	53	-	-	53	
6	<i>Differences due to different netting rules, other than those already included in row 2</i>	-	-	-	-	
7	<i>Differences due to consideration of provisions</i>	978	978	-	-	
8	<i>Differences due to the use of credit risk mitigation techniques (CRMs)</i>	(2,720)	(2,423)	(297)	-	
9	<i>Differences due to credit conversion factors</i>	(17,558)	(17,558)	-	-	
10	<i>Differences due to Securitisation with risk transfer</i>	-	-	-	-	
11	<i>Other differences</i>	2,594	2,222	-	403	
12	Exposure amounts considered for regulatory purposes	63,645	61,836	1,320	403	

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
BNT Banca 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
Prima S.r.l.	Full consolidation				X		Real estate company
Rent2Go S.r.l.	Full consolidation				X		Non-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

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

The template 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 placed at the basis of the “Next Step” 2022-2025 Business Plan, approved in June 2022.

Below are the values, as at 31 December 2022, 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 2022

Summary indicator	Value at 31/12/2022	Value at 31/12/2021
Common Equity Tier 1 ratio (fully phased)	15.30%	15.67%
Tier 1 ratio (fully phased)	15.30%	15.72%
Total Capital ratio (fully phased)	17.86%	18.77%
Leverage ratio (fully phased)	5.12%	5.25%
Liquidity Coverage ratio (LCR)	161%	164%
Net Stable Funding ratio (NSFR)	128%	132%
Counterbalancing Capacity (CBC)	11,982 million euro	9,765 million euro
Loans to customers/direct customer deposits (Loan-to-Deposit ratio)	79.05%	79.02%

Summary indicator	Value at 31/12/2022	Value at 31/12/2021
NPL ratio	4.3%	5.8%
Texas ratio	18.2%	25.8%
Cost of credit	0.51%	0.43%
Return on Equity (ROE)	8.0%	8.9%
Cost Income ratio *	49.1%	54.1%

* values including stabilisation charges for the banking system

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 2022, the Group's overall risk profile was found to be consistent with the internal objectives and business strategy adopted by the management body.

With reference to transactions and activities of particular economic, financial and equity importance carried out during 2022 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 2022, please refer to the 2022 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 2022
- 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 to foster lending and investment in financial assets commensurate with the actual funding inputs and the diversification of funding sources, capable of ensuring a stable trend of short and long-term liquidity measures;
 - 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.
- 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: i) on exposure to larger counterparties and economic sectors with a more evident risk profile; ii) towards counterparties that present a negative climate-environmental risk assessment.
- 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 "financial intermediary", to be contained within sustainable levels through the promotion of stabilisation policies that provide for the balancing of the financial structure, supported by intervention plans that can be activated in the event of the need to mitigate exposure.

- Composition of the portfolio of financial assets held for purposes other than trading, responding to the investment objectives of available liquidity with a medium to long-term horizon, combining objectives of mitigating the impact on the income statement of the volatility present in the financial markets with expectations of fair risk remuneration.
- 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 supervisory 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 the corporate bodies, providing for the appointment and revocation of their heads;
- defines and approves: i) the Risk Appetite Framework (RAF), overseeing the Group's adherence to it, as well as the remedial actions to be activated where necessary to bring the risks back down to levels consistent with the RAF limits/objectives; ii) the general framework of the Group's Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP), ensuring their consistency with the RAF;
- approves: i) the draft of annual financial statements and interim reports, both for consolidated and individual balance sheets; ii) the results of the ICAAP and ILAAP processes and related reporting; iii) the key internal 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 Management Body 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, assisted by members of Top Management and the Heads of Governance Areas:

- 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.

The General Manager exercises the powers conferred making 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, it oversees the general operation and administrative processes of the company, as well as the supervision of the bank's territorial network, verifying the effective application of the provisions issued and ensuring the concrete and correct exercise of the delegated powers.

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 and interchange 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 exposure measurements and evaluations; they are also intended to verify that risk limits assigned to the various 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 control activities 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, validation and management of systems, methodologies and procedures for the identification, measurement, evaluation and control of material risks. 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 related to company activities, 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 the relative reports;
- with regard to credit risk, verifies that credit exposures are monitored properly, especially impaired exposures, and assesses the consistency of classifications, the adequacy of provisions and the adequacy of recovery processes; it also performs assessment and control activities on the most significant positions and checks on the overall riskiness of the loan portfolio;

- supervises and coordinates the Group's internal capital adequacy (ICAAP) and liquidity (ILAAP) assessment processes, the periodic preparation of the Public Disclosure of the entities in application of the Pillar 3 discipline as well as the annual update of the Group Recovery Plan;
- executes supervisory systemic stress tests promoted by Supervisory Bodies;
- analyses, on a precautionary basis, the risk profiles 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;
- 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 conditions and to monitor risk profiles not monitored by other specialist units, including environmental, social and governance (ESG) risks (*Integrated Risks Office*);
- 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, counterparty and 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 synergically 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*).

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), operating in close liaison with the structure of the CRO Area assigned to the supervision and management of risks of an operational and reputational nature (*Integrated Risk Office*), to which IT risks by nature pertain.

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

- the *Compliance and DPO Function*, a unit placed 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 issues already 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; 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 reporting hierarchically and functionally to the CEO, which is responsible for implementing a stable control to oversee the prevention of and fight the risks arising from involvement in money laundering and terrorist financing operations, through:
 - a) supervising the controls on the persons, relationships and transactions carried out on a daily basis by the operational areas, towards which the MD directs an intense action of stimulation and awareness;
 - b) continuously verifying the suitability of the processes and procedures

adopted in order to ensure adequate supervision of the risks connected to the violation of the legislation in force from time to time on money laundering and terrorist financing;

- 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 for the formation of the annual financial statements and consolidated financial statements 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, 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, 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 an 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 as well as governance and management of financial activities, the following permanent committees with policy and control functions are worthy of note:

- Risk Committee⁴
- ALM and Investment Committee
- Scenario Committee
- Outsourcing Committee
- Financial Products Governance Committee
- Sustainability Committee

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

⁴ From June 2021, the Risk Committee will have a new *Risk Methodology Committee* in charge of providing technical and operational support in the definition, implementation, maintenance and updating of the specific methodological, procedural and modelling frameworks adopted by the Bank in the area of risk management and measurement. The new Committee plays an advisory, propositional and decision-making role preparatory to the activities falling within the remit of the Risk Committee, carrying out technical analyses and assessments and making determinations to ensure optimal management of the risk models and methodologies in use.

- 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. 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 and disciplined together with coordination mechanisms aimed at allowing the integration of risk appetite into management processes.

The framework for determining risk objectives and the related tolerance levels 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;
- an interest rate risk management 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* (Level 1): Set of main aggregate metrics representative of: i) the comprehensive risk appetite, pertaining to areas for which strategic objectives are pursued and/or where there are regulatory requirements and/or additional prudential constraints imposed by the Supervisory Authorities; ii) all major risk exposures strictly related to the Group's typical business.
- 2) *Complementary indicators* (Level 2): specific metrics for each type of risk, representative of the factors that cause material changes in the Level 1 indicators, identified in accordance with the most important risk profiles for the Group; they can be supplemented by qualitative objectives and statement, which drive the assumption, control and mitigation of risks to which they pertain.

3) *Operational indicators* (Level 3): 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
- Credit risk and asset quality
- Other major risks.

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

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

The quantities summarised by the primary indicators are broken down, for the risk categories deemed relevant, into quantitative parameters and/or qualitative statements aimed at guiding risk-taking and risk control (*complementary indicators*).

All second-stage parameters adopted as notable Level 2 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 serve as early warning signals aimed at catching negative developments in strategic variables for the Group at an early stage; they also aim to ensure the desired strategic, reputation and regulatory compliance profiles. Complementary metrics cover those cases of risk considered “material” as a result of the internal process of identification, mapping and analysis of the significance of risks, supplemented by those risk profiles whose assumption, regardless of the relative degree of materiality, may not be eliminated insofar as related to the nature and characteristics of the activity performed.

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 or granular 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.

In line with the described system of metrics underpinning the risk objectives of the RAF, additional systems of operational limits assigned by top management to the various internal organisational levels may be adopted. The risk control Function of each Group component ensures consistency with the set of RAF parameters set to monitor the assumption of the relevant types of risk.

The Risk Appetite Statement (RAS) is the written expression of the Group's risk appetite. This statement, made annually by the Board of Directors of the Parent Company, explains the following points according to an integrated and overall vision:

- 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 alert 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 Level 3 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, usually 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 acts as limits on the formulation of the economic and financial forecasts outlined in the strategic planning;
- the formalisation and approval of risk objectives and related tolerance levels by the Board through the Risk Appetite Statement (RAS).

The RAF is continuously implemented by:

- monitoring the risk parameters defined and managing any breaches of “critical” targets/thresholds, with the consequent adoption of mitigating measures in case of deviation from them;
- the periodic reporting on both 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
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 from exposures to shadow banking entities
Step-in risk	

Level 1	Level 2
	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; it 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 Valuation 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);
- **Italian sovereign risk (banking book):** risk to which Italian government securities held in banking books are exposed, consisting alternatively: a) for securities measured at fair value, in the possibility of suffering a reduction in economic or market value that may originate from various risk factors, among which are adverse trends in risk-free interest rates, inflation and credit risk-related yield spreads; the latter includes credit spread risk in the banking book, given the risk of negative effects on the economic or market value of securities determined by possible changes in market perception of the quantification in the yield spread of the risk components of financial instruments not correlated to manifestations of interest rate risk; b) for securities

measured at amortised cost, in the exposure to risks of insolvency, recovery and migration associated with the Italian State's inability or unwillingness to honour its payment commitments in the time and manner originally foreseen. Risks associated with possible cash and unsecured credit exposures to central and local government entities of the Italian State are excluded;

- *Other securities risk (banking book)*: risk to which financial assets other than Italian government bonds in banking books are exposed, consisting alternatively: a) for securities measured at fair value, in the possibility of suffering a reduction in economic or market value that may originate from various risk factors, among which are adverse trends in risk-free interest rates, inflation and credit risk-related yield spreads; the latter includes *credit spread risk in the banking book*, given by the risk of negative effects on the economic or market value of securities determined by possible changes in market perception of the quantification in the yield spread of the risk components of financial instruments not correlated to manifestations of interest rate risk; b) for securities measured at amortised cost, in the exposure to risks of insolvency, recovery and migration associated with the issuer's inability or unwillingness to honour its payment commitments in the time and manner originally foreseen;
- *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 arising 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 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 lending towards SMEs and small businesses are favoured 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. The needs of larger counterparties, whether belonging to the “productive” sector or the “institutional” and “public” sectors, aren’t neglected 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 offices, covering the quality of the portfolio, as well as its growth and profitability. These objectives must be achieved while respecting the capital adequacy requirements 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 credit 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 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 (Credit 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' financial support 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 of acquisition and the possible loss of value of the credit protection 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 or deterioration of credit quality 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 the 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 to 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 deriving from 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 eleven risk classes. This methodology is 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 an internal 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 the use of guarantees, 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

or 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 the right professional skills and independent from the proposal, resolution and loan pay-out processes. In order to ensure timely alignment with developments in the real estate market, 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 control activities 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 the 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.

With regard to the exposures to Italian and foreign banks, Banca Popolare di Sondrio uses the ratings given by leading agencies, wherever available, for valuation purposes. Otherwise, an internal rating, based on the application of a simplified model, is used. This model involves the examination of a series of quantitative and qualitative indicators and information, which produce values for the determination of a final score. This score is positioned on a scale of ten classes, 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 rating 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”⁵ 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.

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.

⁵ 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.

In addition to the previously described monitoring system, a methodological and procedural framework aimed at quantifying and monitoring “counterparty risk” properly referred to according to both a regulatory and management perspective is in place.

Within the Chief Risk Officer Area, a dedicated office provides periodic risk exposure measurement with reference to specific types of financial transactions carried out by the Bank and other Group entities, namely over-the-counter (OTC) derivatives trading, Security Financing Transactions (SFT) and Long Settlement Transactions (LST).

In particular, a monthly calculation of the estimated capital requirement is carried out for regulatory purposes in accordance with the current standardised supervisory approach (SA-CCR), which is also used in reporting. For transactions in OTC derivatives that have a positive mark-to-market, an independent calculation of CVA (Credit Valuation Adjustment) and DVA (Debt Valuation Adjustment) metrics is also performed, respectively expressing the risk component of loss and/or “gain” linked to the default by and/or towards the counterparty in determining the fair value of the instruments, applying an alternative methodology to that adopted for accounting purposes⁶.

The control of exposure to risk related to possible changes in the creditworthiness of the counterparty of derivative transactions envisages a framework, also managerial, of measurement and monitoring that is based on the calculation of effective positive expected exposure metrics (EffEPE) aligned to industry best practices in this area. The analyses conducted feed into the production of periodic reports for internal reporting of the main findings.

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 guarantee assets is recalculated periodically based 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).

Sovereign risk on banking book (Italy)

Strategy

⁶ The methodology based on positive expected effective exposure (effective EPE or EffEPE) also prescribed by the prudential supervisory framework is used in the estimation.

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.

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 duly take risk into account, steps were taken to contain the modified duration of the sovereign portfolio, which is slightly less than a year, a further reduction compared to the end of the previous year thanks to the operations carried out during the year, which further favoured the purchase of floating-rate Italian government bonds, amounting at the end of 2022 to approximately 77% of the segment under analysis (from 59% last year).

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 22% 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 BNT Banca has marginal exposures 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 following the guidelines received, and also monitor any operational limit 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, exposure reviews are based on the risk metric known as “Stressed Expected Credit Loss” (sECL), a measure that aims to quantify the degree of risk associated with the specific portion of the portfolio, focusing specifically on the credit risk profile: this, in fact, represents the estimated expected loss in the event of 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 to 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 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 the changes in market value the next day for the same positions on which the VaR measurements were calculated (theoretical losses), 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 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 purpose 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” (MAL) limit; exceeding it leads to more intense controls over the risk exposure.

The measure of “Maximum Acceptable Loss” compares with an aggregate equal to the sum of the “Effective Cumulative Loss” (ECL), which reflects any negative result of 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 risk profile to the identified VaRhp limit.

This second level limit is in turn 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 to the metrics system described, a maximum limit is set on the proportion of domestic sovereign debt securities to the overall market value of the banking book, considered in the RAF as complementary 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, thus taking the most appropriate steps to mitigate the risk. For example, management measures that can be implemented to bring risk exposure back within set limits may include: reshaping financial investment strategies; re-composition of proprietary portfolios by investment size and/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 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 the monitoring processes described, adequate internal reporting 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 capital 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, France and Germany) and debt securities of corporate issuers, mainly senior preferred, green and social financials, with good credit quality. During 2022, further growth was observed in HTC, which was also a prudent choice. The share of securitisations in the portfolio increased further, stemming mainly from the repurchase of part of the ABS securities issued against the transfers of NPL made by the Bank during the year.

The overall modified duration of the banking bond book, net of the aforementioned securitisations, decreased slightly year-on-year at the end of 2022, returning to 3.9 years (same level as at the end of 2020) after having reached 4.2 years last year.

The main source of exposure to "price risk" 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, with a predominant share in bond UCITS; the weight of ethical and environmental investments is increasing. AIF also increased, however by a small amount, as a result of the sale of our non-performing loans. Equity securities do not show significant changes.

Finally, the source of exposure to optionality risk stems from the few bonds with implicit optionality in the portfolio.

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

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

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, controls on exposures are based, similarly to what has been exposed for "Italy sovereign risk," on the metric of "Stressed Expected Credit Loss" (sECL - stressed ECL). 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 both an individual and consolidated basis, is configured as a complementary RAF parameter and is accompanied by an attention threshold aimed at reporting any tightening of risk as it approaches the threshold-limit.

With reference to banking book instruments measured at fair value, the overall 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) statistical 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” (VaRhp) translate into more specific daily VaR thresholds (early warnings), 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 reporting 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 customers, 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" (Lombardy 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 the 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 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 of risk is monitored through the periodic determination of the exposure to risk against the credit lines granted towards financial counterparties or issuers of debt securities in portfolio, calculated using the “amount effectively granted”⁷ 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”).

⁷ 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.

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 is in turn 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 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 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*, given by the risk of potential losses due to adverse changes in foreign currency exchange rates on exposures arising from the Group's commercial operations and strategic investment choices, with potential negative consequences on equity reserves for financial assets measured at historical cost or at fair value with an impact on comprehensive income;
- *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 however are not identical in terms of maturity, composition or both.

Strategy

The objectives and strategies underlying proprietary trading, designed to manage the portfolio of securities held for trading purposes, are aimed at maximising its profitability, seizing any investment opportunities that may arise due to the market context, as part of an approach inspired by the containment and rigorous assessment of the risk profile. The Parent Company's role in trading activities essentially consists of arbitrage in securities to benefit from short-term trading opportunities, rather than taking long-term risk positions.

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 source of exposure to interest rate risk (risk-free) mainly consists of fixed-yield securities classified as “financial assets held for trading”; there is also a marginal contribution from derivative instruments, both in the strict sense (options on interest rates and exchange rates, options on shares and indices, interest rate swaps) and forward exchange rate contracts. With regard to the trading of derivative instruments in the strict sense, the Bank's competent offices carry out trading at the request of customers, which is then hedged with other financial counterparties, with the exception of trading in options on listed shares and indices, which is carried out for trading purposes. Activities with other innovative or complex instruments are almost irrelevant.

Still in relation to the bond component, exposure to credit spread risk consists exclusively of fixed-yield securities classified for accounting purposes as “financial assets held for trading” (FVTPLT - Fair Value Through Profit or Loss Trading).

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, financial and otherwise. Also for the non-bond sector, the trading activity put in place by the Parent Company focuses on exploiting short-term trading opportunities and operations are particularly focused on Italian and European equities; however, units in UCITs (ETF) sharply

raised in 2022 in an effort to increase investment diversification. With regard to derivative instruments, reference is made to the already mentioned equity option and index option trading.

Exposure to commodities risk, recognised on all items in the financial statements, arises from: forward commodities and commodity transactions, executed to meet specific customer operating requirements and then balanced with mirror contracts signed with leading financial counterparties; loans in precious metals; current accounts receivable and payable in precious metals; and residual balances also in precious metals. The resulting overall risk exposure is, however, insignificant.

The subsidiaries Factorit, Sinergia Seconda and BNT Banca 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 exposures referred to with reference to the Parent Company Banca Popolare di Sondrio, albeit only minimally. For Banca Popolare di Sondrio (SUISSE), the interest rate risk arising from the trading portfolio is attributable to the underwriting of forward exchange rate contracts; commodity risk originates from occasional trading in commodity options on behalf of customers, which are readily settled, and from limited trading in precious metals (coins, loans, forward transactions); the exposure to price risk arises from the marginal share of funds held in the portfolio of “financial assets held for trading”.

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. These imbalances stem essentially 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' operating needs.

For the subsidiary Factorit, the exposure to exchange rate risk is marginal, given the company's policy of systematically hedging items in foreign currencies: it exists mainly, but for limited volumes, with regard to accrued interest and interest income not offset by interest expense expressed in currencies other than the euro, as well as with regard to guarantees denominated in foreign currencies against transactions in euro. For the Swiss subsidiary Banca Popolare di Sondrio (SUISSE), excluding the positions in securities held on own account, operations in foreign currency are carried out to meet the needs of its customers, except for transitory treasury phases, which would still comply with the prudent limits set internally. The remaining components of the Group have no material exposures, as they have no assets or liabilities denominated in foreign currencies.

Lastly, the exposure to optionality risk derives from the trading of assets with optional elements, including implicit ones; however, it is limited in scope given the substantial back-to-back balancing of derivative transactions 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 statements:
 - *settlement risk*
 - *foreign exchange risk*
 - *commodity risk*.

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 however identical in terms of maturity, composition or both.

During 2022, the determination of the alternative standard capital requirement to cover market risks continued, albeit for information purposes only through dedicated COREP reporting, based on the dictates of the FRTB (Fundamental Review of the Trading Book) discipline. This new capital requirement, recognised on a quarterly basis, is equivalent to 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 instruments 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 global exposure to market risk (combination of position risks in trading, exchange rate and position in commodities) managed by the offices of the Chief Risk Officer Area of the Parent Company - 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 – is based on an internal method for determining the Value at Risk (VaR), applied to the financial instruments subject to measurement in relation to the

fluctuations of market variables observed on historical bases. The figure resulting from the statistical model indicates, at both a consolidated and individual level, the estimate of the maximum loss potentially achievable on a portfolio of financial instruments, in a defined period of time and with a pre-established degree of probability.

Similarly to as described in the paragraphs dedicated to “Italian sovereign risk” and “other securities risk” of the banking book, the VaR model adopted in the management measurement processes of exposure to market risks is a historical simulation model. The aggregation of the VaR at portfolio level occurs by taking into account implicit correlations between the various risk profiles covered by the measurement, by virtue of which the overall VaR value is normally lower than the sum of the individual VaRs.

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

VaR measurements 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” in turn 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 the 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 the 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 reporting 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 damage resulting from the inadequacy or malfunction of procedures, human resources and internal systems, or from the occurrence of external events; this category also includes losses caused by fraud, human error, operational interruptions, system downtime, contractual non-performance and natural catastrophes. This definition includes:
 - *Legal risk*: the risk of incurring economic losses and/or procedural and legal costs due to violations of laws or regulations, procedures deriving from contractual or extra-contractual liability or other disputes, especially originating from inadequate or incorrect contracts or legal documents or containing clauses which prove particularly onerous; it also includes losses or damage resulting from 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 damage 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 damage 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 adopts 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 continuing basis, to operational 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 opportunity is assessed 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 (ICT) 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 was further strengthened in 2022 through the development of an empirically-based approach to assessing the impact on the general level of risk exposure potentially arising from acute physical risk threats, as well as through the definition of more structured operating procedures to support both the analysis of the effectiveness of insurance policies taken out by Group companies for the purpose of transferring risk to third parties, and the identification of new risks of this kind that could potentially be insured.

Specifically, the operational risk management system envisages:

- a quarterly 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 that Group companies can incur 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 the enhancement of Key Risk Indicators (KRI) and risk appetite parameters, the latter enriched at the end of 2022 with a new primary level RAF metric.

Evidences of the above-mentioned processes form the subject of dedicated information flows (reporting) destined for the competent corporate Bodies and Functions, in order to ensure full 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 the 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 of a structured set of quantitative indicators of managerial utility (Key Risk Indicator, KRI), also having the status of risk appetite metrics, signals any criticality profile and/or anomalous trend that can be found with reference to the technological solutions identified as critical for the conduct of the corporate business.

All 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 the prevention and containment of operational risks within the Group, in the case of events or circumstances that lead to an interruption of operations; in this regard, the definition of Business Continuity Plans is of particular importance, as is the provision of

disaster recovery measures as part of these plans to 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 provisions of 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 and in a specialised manner, 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 regulatory 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 exclusion of certain areas of competence of dedicated second level functions/control bodies (e.g. 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, the handling of conflicts of interest (activity with related parties/associated persons, interlocking ban, compensation and incentive policies), transparency towards customers and, more generally, consumer protection regulations, the Compliance Function is directly responsible for monitoring non-compliance;
- specialised resources belonging to other business units (known as “Compliance Contacts”) with suitable skills and professionalism are entrusted with additional issues for which the Compliance Function maintains direct responsibility, such as ICT compliance and the rules on mortgage loans;
- dedicated company structures (“Specialist Supervision”) have a direct responsibility on issues on which, thanks to their skills, they are able to ensure effective management of non-compliance (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 reference regulatory framework and the assessment of the possible impact of the applicable regulations on the company's operations: in this phase, the 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 the regulations.
- Identification of risks and mitigation actions: following the analyses carried out, specific risks and safeguards aimed at ensuring compliance with the regulations are identified and assessed; the interventions to be implemented in order to overcome the anomalies detected or, in any case, to improve compliance levels are therefore communicated to the structures concerned.
- Monitoring: the effectiveness of the 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 the competent corporate bodies; b) issuing compliance opinions and reviews to the 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 in 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 financing of terrorist activities. It therefore ensures particular attention to the effectiveness of the internal

safeguards adopted for the 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 boast 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 of the Group companies subject to obligations to combat money laundering and terrorist financing are performed on the basis of two distinct organisational models, designed to take account of 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 central 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, under the guidance and supervision of the Parent Company's Anti-Money Laundering Function, has developed a system of controls involving various levels and sectors of the company 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 payment transactions initiated by customers (such as, for example, those related to the anomalous use of cash; intense and recurring movement with countries “at risk” as they are embargoed or characterised by “non-equivalent” anti-money laundering regimes as identified from authoritative sources such as FATF, EU, etc.);
- assignment of a money-laundering risk profile to customers, leading to periodic verifications 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 procedures;
- diagnostic checks on the quality and reliability of the feed and recording systems in specific 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.

The evolutions underway in the entire chain of controls - both first and second level - with the introduction of a new control system based on predictive logic through the use of AI (Artificial Intelligence) and ML (Machine Learning) technologies, are of particular note.

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 all the contexts described above, the Anti-Money Laundering Function set up at the Parent Company periodically monitors the degree of exposure to risk and the suitability of the controls in place within the Banking Group, which can be estimated:

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

The self-assessment of exposure to the risks of money laundering and terrorist financing is conducted at Group level, in compliance with the criteria and methodologies established by law by the Bank of Italy. The exercise is carried out by each Group company under the coordination of the Parent Company; its results, which are updated internally on a half-yearly basis, are presented annually to the Parent Company's Board of Directors; they are also checked for consistency with the risk propensity parameters set in the Risk Appetite Framework (RAF).

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

Attention is also paid to 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 and updated 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.

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, activities aimed at strengthening the monitoring of reputational risks arising from perceived lack of or apparent adherence to ESG requirements continued in 2022; in this regard, analytical studies were launched to identify selected management indicators concerning the Group's ESG sustainability profile, starting from negative references appearing in the mass/social media, opinions gathered through surveys conducted among various Group stakeholders or evidence from the operational management processes of complaints/appeals made by customers.

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 signals on the image perceived externally as well as important indications on the quality of the services provided.

More generally, the conduct of current affairs in compliance with ethical principles of correctness, transparency, integrity and professionalism, as well as the punctual observance of codes of conduct,

regulations and laws is a fundamental “form of protection” against the assumption of risks connected to implementation of unlawful conduct by internal personnel, thus preventing and/or mitigating the consequent impacts on the corporate reputation. Among them, specific attention is traditionally paid to overseeing risks related to fraudulent behaviour aimed at corruption and personal gain through a constant surveillance of operations, aimed at 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.

Again with a view to mitigating reputational risks, Banca Popolare di Sondrio has for some time now 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 residual maturities (tenor basis risk), changes in interest rates with identical residual maturities but which are linked to different currencies (currency basis risk), changes in interest rates with identical residual maturity and relative currency but with different recognition methods (indexation basis risk), changes in interest rates with residual maturity, currency and identification methods identical but different in their nature (related rate basis risk);
- *Option risk*: the risk of suffering losses in income or decreases in economic value deriving from the exercise of options implicitly (behavioural option risk) or explicitly (automatic option risk) applied to certain banking book items.

Strategy

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

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 generally pursued by containing the differences between the maturities and the time lags in the instants of the rate review between assets, liabilities and off-balance sheet instruments. In ensuring this balance, 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.

Starting in 2022, the Parent Company also launched initiatives to hedge the interest rate risk arising from the disbursement of fixed-rate mortgages (so-called Macro Fair Value Hedging) through the signing with market counterparties of dedicated Interest Rate Swap contracts with specific characteristics of duration, amount and rate aligned to the pools of loans being hedged.

In order to allow effective management of interest rate risk, the Group adopts systems, methods and tools aimed at identifying, assessing and managing the risks deriving from potential changes in the level of market rates, aimed at favouring an integrated vision of the assets and liabilities sensitive to changes in reference rates, thus making it possible to establish, in a forward-looking perspective, adequate development strategies, as well as, in the event of deviation from the established risk appetite, to promptly identify the most appropriate mitigating interventions. In 2022 the preparation of a specific "Interest Rate Risk Management Plan", a policy document for managing, monitoring and, if necessary, mitigating risk exposure through a set of potential and alternative actions to be implemented in the event of exceeding established limits, contributed to the strengthening of the mitigation and control measures.

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 BNT Banca, there are exposures to interest rate risk linked to operations of lending to customers and, albeit limited to investment in fixed-yield 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, allows risk exposure to be measured through two fundamental approaches:

- 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).

Under the first approach, monthly equity sensitivity analyses are conducted (Sensitivity Analysis in Full Evaluation), assuming inertial volumes. The second approach takes the form of sensitivity analyses of net interest income and profit, with simulations carried out under the assumption of constant volumes. The profit sensitivity analysis integrates the results of the margin sensitivity analyses, applied to the assets and liabilities in the perimeter, with those of the "Sensitivity Analysis in Full Evaluation" model obtained on a specific portion of company operations measured 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 liability⁸.

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 the 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 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

⁸ 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 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 the reference curves equal to +/- 200 bps, are then expressed as ratios of the total own funds to calculate two separate risk indicators, to be compared with the 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 the market rate curves in order to measure the sensitivity of the net interest income generated by the banking book assets and liabilities, according to the positioning of the capital flows on the date when the transactions begin to be sensitive to changes in market interest rates.

Ideally the banking book, composed of asset and liability items generating the net interest income, can be divided into areas of operations partially and totally sensitive to changes in interest rates. The first type, 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 the 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 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.

Consistently with the “Sensitivity Analysis in Full Evaluation” and “Interactive Simulation” methods described above, 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 conditions, the trend of the rate risk profile. The main objective of these 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. The analyses are carried out both in terms of fair value interest rate risk and cash flow interest rate risk.

Interest rate risk governance strategies envisage that, as part of the annual stress testing on the main equity, income and financial variables carried out within the ICAAP framework, simulations are carried out, depending on volume and scenario assumptions, to determine: a) the impacts of shocks on the economic value of banking book assets; b) the effects on the performance of the interest margin, referred overall to the items of the banking book and the trading book.

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 sub-types of risk:

- *Funding Liquidity risk*: the risk arising from the inability to raise funds or to obtain funds at 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 for growth in loans and investment in financial assets commensurate with the actual funding inputs and the diversification of funding sources, capable of ensuring a stable trend of short and long-term liquidity measures;
- 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 (subject to specific internal limit) as well as the amount and the time sequence of payments throughout a day. Special synthetic metrics 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 2022, 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 the maturity imbalances between assets and liabilities, concentration of funding, cash reserves or readily marketable assets (so-called “Counterbalancing Capacity”), as well as the cost of funding and the Group's capacity for funding renewal.

As explained above, the results of liquidity risk monitoring are made available to 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 submits to the Supervisory Authority the key results of the internal verification process on the adequacy of the liquidity position and related exposure to risk (ILAAP, Internal Liquidity Adequacy Assessment Process), accompanied by the founding elements of the latter. The figures communicated through this reporting, 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 March 2023 with reference to the end of 2022.

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 the 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 customer 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 annual 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 main areas of Group 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 by the Business Plan, in multi-year plans and annual budgets. 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.

At the Parent Company, this verification and supervision activity, regularly carried out by the top management with the support of the relevant offices, makes it possible to monitor the ability to convert strategic settings into coherent interventions on the organisational system and to put in place measures aimed at remedying any critical issues or correct deviations from the set goals. At least once a year, the medium-term strategic guidelines are also subjected to a dedicated sustainability check, in light of the evolution of the company's business and the external context, making it possible to assess the advisability of initiating, in the event of significant changes in external conditions or company strategies, the definition of a new development Plan or confirming the current one.

The implementation and translation at management level of the strategic guidelines are ensured by the provision of vertical operational plans for outlining the development guidelines defined by the Business Plan, the progress of which is subject to a specific monitoring and reporting system to the top Bodies. Individual internal projects aimed at implementing commercial, organisational and operational initiatives are also subject to dedicated monitoring in order to verify compliance with objectives, spending budgets and deadlines. In this regard, of note is the analysis, on a precautionary basis, of the risk profiles 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 "strategic" corporate projects.

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 within 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 credit institution, 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.

SUSTAINABILITY, ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS (ESG)

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 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.

Please refer to Section 12 of this document for information on the subject.

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 2022", 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 spa", 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> (2023 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> - 2023 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 the various areas pertaining to bank management be present in the Body, including:

- knowledge of banking;
- knowledge of the dynamics of the economic and financial system;
- knowledge of credit, finance and market regulation;
- knowledge of the governance of listed companies;
- knowledge of sustainability issues applicable to a bank;
- 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 2022”, paragraph 5.2 (<https://istituzionale.popso.it/it/governance/relazioni-sul-governo-societario>), which illustrates the composition, competences and functioning of the Committee. During 2022, the Control and Risks Committee met 17 times, with each meeting lasting an average of 3 hours and twenty minutes.

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 interchanges of information to allow effective monitoring and control of risks within the Group.

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 specific 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 Management Body 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	Area <i>Chief Risk Officer</i>	Annual



	Flow name	Responsible unit	Frequency
2	Report of the Risk Management Function pursuant to art. 23 Commission Delegated Regulation (EU) 565/2017 on investment services	Area <i>Chief Risk Officer</i>	Annual
3	Reporting of the Group's internal capital adequacy assessment process (ICAAP Report)	Area <i>Chief Risk Officer</i>	Annual
4	Reporting of the Group's internal liquidity adequacy assessment process (ILAAP Report)	Area <i>Chief Risk Officer</i>	Annual
5	Public Disclosures (Pillar 3 Report)	Area <i>Chief Risk Officer</i>	Quarterly
6	Tableau de Bord – Risk Dashboard	Area <i>Chief Risk Officer</i>	Quarterly
7	Reporting on ESG risk factors	Area <i>Chief Risk Officer</i>	Quarterly
8	Report of the Validation Function on the activities carried out during the year n and Activity Plan for the year n+1	Area <i>Chief Risk Officer</i> - Validation Office	Annual
9	Validation Office Notes on Updates to Model A-IRB (model change)	Area <i>Chief Risk Officer</i> - Validation Office	According to the periodicity and in the circumstances established by internal regulations
10	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)
11	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
12	Report on internal infringement reporting systems (“whistleblowing”)	Compliance Function and Data Protection Officer (DPO)	Annual
13	Report on transparency of banking and financial transactions and services	Compliance Function and Data Protection Officer (DPO)	Annual
14	DPO report on the processing of personal data (privacy)	Compliance Function and Data Protection Officer (DPO)	Annual
15	Periodic reporting on transactions with related parties/associated persons	Compliance Function and Data Protection Officer (DPO)	Quarterly



	Flow name	Responsible unit	Frequency
16	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
17	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)
18	Report of the Manager responsible for preparing the Company's accounting documents on the activities carried out during the year n and Activity Programme for the year n+1	Manager responsible for preparing the Company's accounting documents	Annual (half-yearly update)
19	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
20	Report of the Internal Audit Department on the activities carried out in the year n and Audit plan	Internal Audit Department	Annual
21	Report on the checks carried out on important operational or outsourced control functions	Internal Audit Department	Annual
22	Report of the Internal Audit Department pursuant to art. 24 Commission Delegated Regulation (EU) 565/2017 on investment services	Internal Audit Department	Annual
23	Periodic information on audit activities and reports on specific areas of verification (e.g. ICAAP / ILAAP, A-IRB internal rating systems, etc.)	Internal Audit Department	According to the periodicity and in the circumstances established by internal regulations
24	Report on investment services, ancillary activities and distribution of financial products issued by insurance companies or banks	Governance Area <i>Chief Financial Officer</i> - Finance Service	Annual
25	Self-assessment of the persistence of the eligibility requirements in the exercise of the activity of custodian bank of UCITS and pension funds	Governance Area <i>Chief Financial Officer</i> - Finance Service	Annual
26	Annual plan of business continuity controls	Area <i>Chief Information & Operations Officer</i> - Business Continuity Function	Annual
27	Summary report on the ICT risk situation	Area <i>Chief Information & Operations Officer</i>	Annual



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

Section 3 - Disclosure of key metrics and overview of risk-weighted exposure amounts (articles 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, also 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 available 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 template (1 of 2)

		a	b
		31/12/2022	30/09/2022
Available own funds (amounts)			
1	Common Equity Tier 1 (CET1) capital	3,239,887	3,182,253
2	Tier 1 capital	3,239,887	3,182,253
3	Total capital	3,779,302	3,727,758
Risk-weighted exposure (amounts)			
4	Total risk-weighted exposure amount	21,049,013	20,726,040
Capital ratios (as a percentage of risk-weighted exposure amount)			
5	Common Equity Tier 1 ratio (%)	15.3921 %	15.3539 %
6	Tier 1 ratio (%)	15.3921 %	15.3539 %
7	Total capital ratio (%)	17.9548 %	17.9859 %
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 (%)	2.7700 %	2.7700 %
EU 7b	<i>of which: to be made up of CET1 capital (percentage points)</i>	1.5581 %	1.5581 %
EU 7c	<i>of which: to be made up of Tier 1 capital (percentage points)</i>	2.0775 %	2.0775 %
EU 7d	Total SREP own funds requirements (%)	10.7700 %	10.7700 %
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 (%)	0.0045 %	0.0042 %
EU 9a	Systemic risk buffer (%)	-	-
10	Global Systemically Important Institution buffer (%)	-	-
EU 10a	Other Systemically Important Institution buffer	-	-
11	Combined buffer requirement (%)	2.5045 %	2.5042 %
EU 11a	Overall capital requirements (%)	13.2745 %	13.2742 %
12	CET1 available after meeting the total SREP own funds requirements (%)	9.3340 %	9.2958 %
Leverage ratio			
13	Leverage ratio total exposure measure	62,953,892	61,797,002
14	Leverage ratio	5.1464 %	5.1495 %
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	<i>of which: to be made up of CET1 capital (percentage points)</i>	-	-
EU 14c	Total SREP leverage ratio requirements (%)	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 (%)	3.0000 %	3.0000 %
Liquidity Coverage Ratio			
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	11,115,038	11,081,710
EU 16a	Cash outflows - Total weighted value	10,099,736	10,289,265
EU 16b	Cash inflows - Total weighted value	2,775,370	3,369,826
16	Total net cash outflows (adjusted value)	7,324,366	6,919,439
17	Liquidity coverage ratio (%)	151.8126 %	166.3570 %
Net Stable Funding Ratio			
18	Total available stable funding	37,245,000	39,367,605
19	Total required stable funding	28,984,542	30,661,713
20	NSFR ratio (%)	128.4995 %	128.3934 %

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 template (2 of 2)

		c	d	e
		30/06/2022	31/03/2022	31/12/2021
Available own funds (amounts)				
1	Common Equity Tier 1 (CET1) capital	3,164,186	3,099,270	3,163,255
2	Tier 1 capital	3,164,186	3,099,270	3,173,556
3	Total capital	3,722,275	3,656,357	3,784,789
Risk-weighted exposure (amounts)				
4	Total risk-weighted exposure amount	20,849,490	20,225,929	20,042,635
Capital ratios (as a percentage of risk-weighted exposure amount)				
5	Common Equity Tier 1 ratio (%)	15.1763 %	15.3233 %	15.7826 %
6	Tier 1 ratio (%)	15.1763 %	15.3233 %	15.8340 %
7	Total capital ratio (%)	17.8531 %	18.0776 %	18.8837 %
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 (%)	2.7700 %	2.7700 %	3.0000 %
EU 7b	<i>of which: to be made up of CET1 capital (percentage points)</i>	1.5581 %	1.5581 %	1.6875 %
EU 7c	<i>of which: to be made up of Tier 1 capital (percentage points)</i>	2.0775 %	2.0775 %	2.2500 %
EU 7d	Total SREP own funds requirements (%)	10.7700 %	10.7700 %	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 (%)	0.0026 %	0.0018 %	0.0007 %
EU 9a	Systemic risk buffer (%)	-	-	-
10	Global Systemically Important Institution buffer (%)	-	-	-
EU 10a	Other Systemically Important Institution buffer	-	-	-
11	Combined buffer requirement (%)	2.5026 %	2.5018 %	2.5007 %
EU 11a	Overall capital requirements (%)	13.2726 %	13.2718 %	13.5007 %
12	CET1 available after meeting the total SREP own funds requirements (%)	9.1182 %	9.2651 %	9.5951 %
Leverage ratio				
13	Leverage ratio total exposure measure	59,793,592	55,997,252	54,362,126
14	Leverage ratio	5.2919 %	5.5347 %	5.8378 %
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	<i>of which: to be made up of CET1 capital (percentage points)</i>	-	-	-
EU 14c	Total SREP leverage ratio requirements (%)	3.0000 %	3.2790 %	3.2740 %
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 (%)	3.0000 %	3.2790 %	3.2740 %
Liquidity Coverage Ratio				
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	10,905,487	10,445,425	9,561,024
EU 16a	Cash outflows - Total weighted value	10,361,286	10,396,268	10,344,584
EU 16b	Cash inflows - Total weighted value	4,217,353	5,163,806	6,106,095
16	Total net cash outflows (adjusted value)	6,143,933	5,232,462	4,238,489
17	Liquidity coverage ratio (%)	188.5102 %	212.5557 %	234.2043 %
Net Stable Funding Ratio				
18	Total available stable funding	38,526,715	40,129,572	40,681,347
19	Total required stable funding	30,430,150	32,424,465	30,892,952
20	NSFR ratio (%)	126.6071 %	123.7632 %	131.6849 %

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 local level.

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

- *Capital Conservation Buffer*: made up of Common Equity Tier 1 Capital, equivalent to an additional operating requirement equal to 2.5% of weighted assets, intended to safeguard the minimum level of regulatory capital even in times of particularly adverse market.
- *Countercyclical Capital Buffer*: this is also made up of Tier 1 Capital to protect the banking sector at times of excessive lending growth; following measures by the competent Supervisory Bodies, it could be set up during periods of economic expansion to cope with any losses that might arise during the downward phases of the cycle, based on a specific coefficient established at a national level. The countercyclical coefficient relating to exposures to Italian counterparties, reviewed quarterly by the Bank of Italy, remained unchanged at 0% throughout 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 stability of the financial system. The buffer for G-SIIs can vary between a minimum of 1% and a maximum of 3.5%, whereas for O-SIIs a non-binding maximum threshold of 2% is foreseen.
- *Systemic Risk Buffer*: additional reserve of an amount equal to at least 1% of the risk exposures, established by each individual EU Member State in order to mitigate long-term non-cyclical macro-prudential risks and, in this way, cope with the negative effects of unexpected systemic crises.

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

On 2 February 2022, on the basis of the review activity conducted in the annual SREP (Supervisory Review and Evaluation Process), the European Central Bank, abandoning the previous pragmatic approach linked to the COVID-19 crisis, announced the new minimum capital ratios applicable to Banca Popolare di Sondrio Group as from 1 March 2022. The additional Pillar 2 Requirement (“P2R”) 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% and includes a share of 0.02% as an increase in the Pillar 2 requirement for impaired exposures. Accordingly, the minimum capital levels to be met by the Group⁹ for 2022¹⁰ include:

- a minimum requirement for Common Equity Tier 1 Ratio equal to 8.56%, made up of the sum of the Pillar 1 regulatory requirement (4.50%), the amount of Capital Conservation Buffer (2.50%) and the additional Pillar 2 Requirement - P2R (1.56%);
- a minimum requirement for Tier 1 Ratio of 10.58%, being the sum of the Pillar 1 regulatory requirement (6.0%), the amount of Capital Conservation Buffer (2.50%) and the additional Pillar 2 Requirement (2.08%);
- a minimum requirement for Total Capital Ratio of 13.27%, being the sum of the Pillar 1 regulatory requirement (8.0%), the amount of Capital Conservation Buffer (2.50%) and the additional Pillar 2 Requirement (2.77%).

In addition to these minimum ratios, a “Pillar 2 Guidance” (P2G) is also set, 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 2022, the Group's capital ratios are confirmed to be at high values with a wide margin over regulatory requirements. Phased-in, the CET1 Ratio and Tier 1 Ratio stand at 15.39%, while the Total Capital Ratio stands at 17.96%.

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

⁹ The minimum requirements are calculated net of the contribution from the Group's specific countercyclical capital buffer.

¹⁰ Effective as of 1 January 2023, the new supervisory decision on prudential requirements resulting from the SREP process conducted in 2022 is in force, under which the additional Pillar 2 Requirement (P2R) imposed on Banca Popolare di Sondrio Group is 2.66%, down from the previous 2.77%. The new minimum ratio, to be held in the form of Tier 1 (CET 1) capital for at least 56.25% and Tier 1 capital for at least 75%, includes a quota of 0.01% as an increase in the Pillar 2 requirement for non-performing exposures. As a result, the minimum level of Common Equity Tier 1 Ratio required for 2023 is 8.50%, from the previous 8.56%, and is determined as the sum of the minimum Pillar I regulatory requirement (4.5%), the additional Pillar II requirement (1.50%) and the capital conservation buffer (2.5%). The required Tier 1 Ratio is 10.50%, down from the previous 10.58%. The minimum Total Capital Ratio is 13.16%, down from the previous 13.27%.

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 tables below provide the values of the Group's regulatory own funds, risk-weighted assets (RWA), capital ratios and leverage ratio, calculated as at 31 December 2022 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 amounts calculated in case transitional provisions or applicable temporary treatments are missing/absent.

Table 8 - Template EU IFRS9 - FL - Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs, and with and without the application of the temporary treatment in accordance with Article 468 of the CRR (1 of 2)

		31/12/2022	30/09/2022	30/06/2022	31/03/2022	31/12/2021
Available capital (amounts)						
1	Common Equity Tier 1 (CET1) capital	3,239,887	3,182,253	3,164,186	3,099,270	3,163,255
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,220,153	3,166,125	3,150,635	3,077,438	3,138,875
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	3,239,887	3,182,253	3,164,186	3,099,270	3,163,255
3	Tier 1 capital	3,239,887	3,182,253	3,164,186	3,099,270	3,173,556
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,220,153	3,166,125	3,150,635	3,077,438	3,149,177
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	3,239,887	3,182,253	3,164,186	3,099,270	3,173,556
5	Total capital	3,779,302	3,727,758	3,722,275	3,656,357	3,784,789
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,759,569	3,711,630	3,708,724	3,634,526	3,760,409
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	3,779,302	3,727,758	3,722,275	3,656,357	3,784,789
Risk-weighted assets (amounts)						
7	Total risk-weighted assets	21,049,013	20,726,040	20,849,490	20,225,929	20,042,635
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	21,046,458	20,717,686	20,842,406	20,218,490	20,035,857

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

Table 9 - Template EU IFRS9 - FL - Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs, and with and without the application of the temporary treatment in accordance with Article 468 of the CRR (2 of 2)

		31/12/2022	30/09/2022	30/06/2022	31/03/2022	31/12/2021
Capital ratios						
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	15.3921 %	15.3539 %	15.1763 %	15.3233 %	15.7826 %
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	15.3002 %	15.2822 %	15.1165%	15.2209 %	15.6663 %
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	15.3921 %	15.3539 %	15.1763 %	15.3233 %	15.7826 %
11	Tier 1 (as a percentage of risk exposure amount)	15.3921 %	15.3539 %	15.1763 %	15.3233 %	15.8340 %
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.3002 %	15.2822 %	15.1165%	15.2209 %	15.7177 %
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	15.3921 %	15.3539 %	15.1763 %	15.3233 %	15.8340 %
13	Total capital (as a percentage of risk exposure amount)	17.9548 %	17.9859 %	17.8531 %	18.0776 %	18.8837 %
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	17.8632 %	17.9153 %	17.7941%	17.9762 %	18.7684 %
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	17.9548 %	17.9859 %	17.8531 %	18.0776 %	18.8837 %
Leverage ratio						
15	Leverage ratio total exposure measure	62,953,892	61,797,002	59,793,592	55,997,252	54,362,126
16	Leverage ratio	5.1464 %	5.1495 %	5.2919 %	5.5347 %	5.8378 %
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	5.1151 %	5.1234 %	5.2692 %	5.4957 %	5.7930 %
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	5.1464 %	5.1495 %	5.2919 %	5.5347 %	5.8378 %

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 2022 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")¹¹, aimed at containing the capital impacts of the adoption, effective 1 January 2018, of the new IFRS 9

¹¹ 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.

accounting standard, appropriately amending and supplementing Regulation (EU) No. 575/2013 (“CRR”). The 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 are applicable from 1/1/2018 to 31/12/2024 and allow intermediaries to temporarily include in the calculation of their Common Equity Tier 1 (CET1) Capital an additional amount in order to “neutralize” 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 accounting 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 and 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 1/1/2018 (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 chose to adhere to the aforementioned transitional provisions according to a percentage of eligibility (so-called “adjustment percentage”) progressively decreasing over time.

The amount of the 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 European Central Bank 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. However, Banca Popolare di Sondrio Group has decided not to take advantage of this further temporary treatment.

The figures reported in the tables above demonstrate how the impacts on the Group's capital adequacy in the event of immediate and full recognition of the effects of the accounting standard would remain fully limited also as at 31 December 2022. 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.

The table below provides an overview of the Group's risk-weighted exposures (RWA or TREA) and capital absorption as at 31 December 2022, broken down by type of exposure and calculation method required by prudential regulations.

Table 10 - Template EU OV1 - Overview on risk-weighted exposures (RWA)

		RWA		Capital requirements
		a	b	a
		31/12/2022	30/09/2022	31/12/2022
1	Credit risk (excluding CCR)	18,035,333	17,780,545	1,442,827
2	<i>Of which the standardised approach</i>	10,423,760	9,728,750	833,901
3	<i>Of which the foundation IRB (FIRB) approach</i>	-	-	-
4	<i>Of which: slotting approach</i>	-	-	-
EU 4a	<i>Of which: equities under the simple riskweighted approach</i>	-	-	-
5	<i>Of which the advanced IRB (AIRB) approach</i>	7,611,573	8,051,795	608,926
6	Counterparty credit risk - CCR	189,078	212,512	15,126
7	<i>Of which the standardised approach</i>	57,476	52,825	4,598
8	<i>Of which internal model method (IMM)</i>	-	-	-
EU 8a	<i>Of which exposures to a CCP</i>	963	448	77
EU 8b	<i>Of which credit valuation adjustment - CVA</i>	24,999	29,584	2,000
9	<i>Of which other CCR</i>	105,640	129,655	8,451
15	Settlement risk	-	-	-
16	Securitisation exposures in the non-trading book (after the cap)	271,744	228,536	21,739
17	<i>Of which SEC-IRBA approach</i>	118,104	127,160	9,448
18	<i>Of which SEC-ERBA (including IAA)</i>	50,409	182	4,033
19	<i>Of which SEC-SA approach</i>	91,044	89,435	7,284
EU 19a	<i>Of which 1250%</i>	12,187	11,760	975
20	Position, foreign exchange and commodities risks (Market risk)	769,882	896,431	61,591
21	<i>Of which the standardised approach</i>	769,882	896,431	61,591
22	<i>Of which IMA</i>	-	-	-
EU 22a	Large exposures	-	-	-
23	Operational risk	1,782,976	1,608,016	142,638
EU 23a	<i>Of which basic indicator approach</i>	-	-	-
EU 23b	<i>Of which standardised approach</i>	1,782,976	1,608,016	142,638
EU 23c	<i>Of which advanced measurement approach</i>	-	-	-
24	Amounts below the thresholds for deduction (subject to 250% risk weight) (For information)	774,604	801,700	61,968
29	Total	21,049,013	20,726,040	1,683,921

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 exposures have raised. The capital requirement for credit risks increased mainly as a result of higher total lending volumes; the requirement for market risks, on the other hand, decreased, in particular due to a reduction in trading positions in equities. Operational risk requirements, updated at the end of the year as per the regulatory provision, increased due to the inclusion in the prudential formula of the final results of 2022 characterised by positive profitability margins. Lastly, CVA risks on OTC derivative transactions have 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 a bank's 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 risk parameters calculated using internal models over total net impairment losses recognised in the financial statements (shortfall), referring to the regulatory portfolios for which the Supervisory Authorities have approved the use of the Advanced Internal Rating Based Approach (IRB) to estimate the capital requirement for credit risk (the Corporate and Retail portfolios).

Additional significant deductions from CET1 are:

- deferred tax assets (DTA) that rely on future profitability;

- deferred tax assets that rely on future profitability and arise from temporary differences (deducted for the amount that exceeds the thresholds provided for in the regulations);
- 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 2022, 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 2022 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 2022, 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)

		31/12/2022		31/12/2021	
		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	1,439,135	160. SHARE PREMIUM ACCOUNTS 170. SHARE CAPITAL	1,439,162	160. SHARE PREMIUM ACCOUNTS 170. SHARE CAPITAL
	<i>Of which: ordinary shares</i>	1,439,135		1,439,162	
2	Retained earnings	-		-	
3	Accumulated other comprehensive income (and other reserves)	1,744,185	150. RESERVES 120. VALUATION RESERVES	1,580,280	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)	-	190. MINORITY SHAREHOLDERS' EQUITY (+/-)	48,236	190. MINORITY SHAREHOLDERS' EQUITY (+/-)
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	128,924	200. PROFIT (LOSS) FOR THE PERIOD	176,146	200. PROFIT (LOSS) FOR THE PERIOD
6	COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	3,312,243		3,243,824	

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)

	31/12/2022		31/12/2021	
	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)	(3,996)	(4,711)	
8	Intangible assets (net of related tax liability) (negative amount)	(30,925)	100. INTANGIBLE ASSETS	(31,013) 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)	(4,596)	110. TAX ASSETS	(6,299) 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)	(36,878)	180. TREASURY SHARES (-)	(36,147) 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)	-	70. EQUITY INVESTMENTS	(15,597) 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)

	31/12/2022		31/12/2021	
	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		<i>of which: qualifying holdings outside the financial sector (negative amount)</i>	-	-
EU-20c		<i>of which: securitisation positions (negative amount)</i>	-	-
EU-20d		<i>of which: free deliveries (negative amount)</i>	-	-
21		Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	-	-
22		Amount exceeding the 17,65% threshold (negative amount)	-	-
23		<i>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</i>	-	-
25		<i>of which: deferred tax assets arising from temporary differences</i>	-	-
EU-25a		Losses for the current financial year (negative amount)	-	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	4,039	13,199
28		TOTAL REGULATORY ADJUSTMENTS TO COMMON EQUITY TIER 1 (CET1)	(72,356)	(80,569)
29		COMMON EQUITY TIER 1 (CET1) CAPITAL	3,239,887	3,163,255

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)

		31/12/2022		31/12/2021	
		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	
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	-	190. MINORITY SHAREHOLDERS' EQUITY (+/-)	10,301	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	
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	
45	TIER 1 CAPITAL (T1 = CET1 + AT1)	3,239,887		3,173,556	

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)

		31/12/2022		31/12/2021	
		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	500,000	10. FINANCIAL LIABILITIES AT AMORTISED COST	554,188	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	-	190. MINORITY SHAREHOLDERS' EQUITY (+/-)	13,735	190. MINORITY SHAREHOLDERS' EQUITY (+/-)
49	of which: instruments issued by subsidiaries subject to phase out	-		-	
50	Credit risk adjustments	45,732		46,600	
51	TIER 2 (T2) CAPITAL BEFORE REGULATORY ADJUSTMENTS	545,732		614,524	
Tier 2 (T2) capital: regulatory adjustments					
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(6,199)		(3,149)	
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	(117)		(142)	
57	TOTAL REGULATORY ADJUSTMENTS TO TIER 2 (T2) CAPITAL	(6,317)		(3,291)	
58	TIER 2 (T2) CAPITAL	539,416		611,232	
59	TOTAL CAPITAL (TC = T1 + T2)	3,779,302		3,784,789	
60	TOTAL RISK EXPOSURE AMOUNT	21,049,013		20,042,635	

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)

	31/12/2022		31/12/2021	
	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)	15.3921 %	15.7826 %	
62	Tier 1 (as a percentage of total risk exposure amount)	15.3921 %	15.8340 %	
63	Total capital (as a percentage of total risk exposure amount)	17.9548 %	18.8837 %	
64	Institution CET1 overall capital requirements	8.5627 %	8.6882 %	
65	<i>of which: capital conservation buffer requirement</i>	2.5000 %	2.5000 %	
66	<i>of which: countercyclical buffer requirement</i>	0.0045 %	0.0007 %	
67	<i>of which: systemic risk buffer requirement</i>	-	-	
EU-67a	<i>of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer</i>	-	-	
EU-67b	<i>of which: additional own funds requirements to address the risks other than the risk of excessive leverage</i>	1.5581 %	1.6875 %	
68	COMMON EQUITY TIER 1 AVAILABLE TO MEET BUFFER (AS A PERCENTAGE OF RISK EXPOSURE AMOUNT)	9.3340 %	9.5951 %	
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)	288,008	307,691	
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)	321,523	315,452	
75	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)	83,652	40,116	

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)

		31/12/2022		31/12/2021	
		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)	306,569		313,546	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	45,732		46,600	
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 table below 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

		31/12/2022			31/12/2021		
		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	322,632	387,186	19	339,333	388,276	19
100.	INTANGIBLE ASSETS	36,669	30,925	8	31,013	31,013	8
	- Goodwill	16,997	12,632	8	12,632	12,632	8
	- Other intangible assets	19,672	18,293	8	18,381	18,381	8
110.	TAX ASSETS	342,647	342,522	10	330,343	330,304	10
b)	Advanced	324,993	324,979	10	321,685	321,681	10
TOTAL ASSETS		701,948	760,633		700,689	749,593	
Liabilities - Breakdown by liability classes according to the balance sheet in the published financial statements							
10.	FINANCIAL LIABILITIES AT AMORTISED COST	53,152,710	53,152,732	32,46	50,178,641	50,178,641	32,46
c)	Securities issued	3,648,761	3,648,761	32,46	3,700,303	3,700,303	32,46
120.	VALUATION RESERVES	(68,086)	(68,281)	3	32,437	32,243	3
150.	RESERVES	1,790,468	1,789,291	3	1,555,718	1,555,216	3
160.	SHARE PREMIUM ACCOUNTS	78,978	78,978	1	79,005	79,005	1
170.	SHARE CAPITAL	1,360,157	1,360,147	1	1,360,157	1,360,157	1
180.	TREASURY SHARES (-)	(25,402)	(25,401)	16	(25,457)	(25,456)	16
190.	MINORITY SHAREHOLDERS' EQUITY (+/-)	4	5	5, 34, 48	104,583	104,573	5, 34, 48
Shareholders' Equity							
200.	PROFIT (LOSS) FOR THE PERIOD	251,321	255,691	5a	268,634	267,122	5a
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		56,540,150	56,543,161		53,553,718	53,551,501	

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 2022. The portion of period profits calculated by the Group 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.

There was a strengthening of the Group's availability of better-quality capital resources in 2022, thanks above all to the positive effect of the generation of profits allocated to self-financing; the reduced amount of additional tier 1 capital was cancelled due to the elimination of Factorit third-party share capital that could be counted as equity for supervisory purposes, following the acquisition of full control over the factoring company in the first quarter of the year; finally, the component of additional tier 2 capital declined during the period.

The simultaneous significant growth in the total amount of exposure to risk, driven by an expansion in business volumes for all Group companies, means that as at 31 December 2022, in a phase-in regime, the CET1 Ratio and the Tier 1 Ratio, both at 15.39%, and the Total Capital Ratio, at 17.95%, will show a moderate decline compared to the values recorded at the end of the previous year.

Table 21 - Template EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments (1 of 2)

		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	XS2034847637	XS2411537033
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	199	300
9	Nominal amount of instrument	1,360	200	300
EU-9a	Issue price	N/A	100	100
EU-9b	Redemption price	N/A	100	100
10	Accounting classification	Equity	Liabilities - amortized cost	Liabilities - amortized cost
11	Original date of issuance	N/A	30/07/2019	25/11/2021
12	Perpetual or dated	Perpetual	Dated	Dated
13	Original maturity date	Without expiration	30/07/2029	25/02/2032
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 2)

	a	b	c
Coupons / dividends			
17 Fixed or floating dividend/coupon	Floating	Fixed	Fixed
18 Coupon rate and any related index	N/A	6.25%	3.875%
19 Existence of a dividend stopper	no	no	no
EU- Fully discretionary, partially discretionary or mandatory 20a (in terms of timing)	Fully discretionary	Mandatory	Mandatory
EU- Fully discretionary, partially discretionary or mandatory 20b (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- Ranking of the instrument in normal insolvency 34b 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://istituzionale.popso.it/it/investor-relations/operazioni-finanziarie (sezione Programma EMTN)	https://istituzionale.popso.it/it/investor-relations/operazioni-finanziarie (sezione Programma EMTN)

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 equivalent to the weighted average of the coefficients applied in the countries where it has its 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 as at 31 December 2022, the same as for the previous quarters of the reference year.

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 23 - 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	6,456,316	25,831,013	11,576	-	1,617,594	33,916,499
United Kingdom	54,474	17,297	-	-	-	71,770
Luxembourg	4,069	749	-	-	-	4,818
Denmark	7,563	149	-	-	-	7,712
Romania	6,402	203	-	-	-	6,604
Czech Republic	5,892	9	-	-	-	5,900
Sweden	1,788	1,519	-	-	-	3,307
Slovakia	971	1,322	-	-	-	2,293
Hong Kong	1,415	300	-	-	-	1,716
Norway	160	896	-	-	-	1,055
Bulgaria	30	426	-	-	-	456
Estonia	-	50	-	-	-	50
Iceland	1	-	-	-	-	1
Other countries	6,511,824	318,866	-	-	-	6,830,689
TOTAL	13,050,903	26,172,797	11,576	-	1,617,594	40,852,870

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

Table 24 - 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>Risk-weighted exposure amounts</i>	<i>Weighting factors of own fund requirement</i>	<i>Countercyclical coefficient t</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>			
Italy	1,059,284	926	21,739	1,081,949	13,524,364	81.4790 %	0.0000 %
United Kingdom	2,241	-	-	2,241	28,008	0.1687 %	1.0000 %
Luxembourg	3,179	-	-	3,179	39,743	0.2394 %	0.5000 %
Denmark	608	-	-	608	7,594	0.0458 %	2.0000 %
Romania	512	-	-	512	6,399	0.0386 %	0.5000 %
Czech Republic	471	-	-	471	5,892	0.0355 %	1.5000 %
Sweden	191	-	-	191	2,393	0.0144 %	1.0000 %
Slovakia	110	-	-	110	1,376	0.0083 %	1.0000 %
Hong Kong	115	-	-	115	1,435	0.0087 %	1.0000 %
Norway	38	-	-	38	469	0.0028 %	2.0000 %
Bulgaria	9	-	-	9	106	0.0006 %	1.0000 %
Estonia	-	-	-	-	5	0.0000 %	1.0000 %
Iceland	-	-	-	-	1	0.0000 %	2.0000 %
Other countries	238,464	-	-	238,464	2,980,795	17.9581 %	0.0000 %
TOTAL	1,305,221	926	21,739	1,327,886	16,598,581	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 25 - Template EU CCyB2 - Amount of institution-specific countercyclical capital buffer

		a
1	Total risk exposure amount (RWA)	21,049,013
2	Specific countercyclical coefficient of the institution	0.0049%
3	SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER REQUIREMENT OF THE INSTITUTION	1,032

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

Compared with the previous year's disclosure, as at 31 December 2022, the Group-specific countercyclical coefficient increased from 0.0007% to 0.0049% resulting in an increase of the reserve requirement value from 147 thousand euro to 1.032 million euro.

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 the requirement for supervised entities to calculate a specific Leverage Ratio in order to limit the build-up of an excessive leverage, namely a particularly high level of indebtedness compared with Own Funds which can make a bank vulnerable.

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

- prevent unsustainable leverage accumulation and, hence, mitigate the impact of sudden deleveraging processes, as experienced during the last global crisis;
- act as a constraint against model risk and measurement errors related to current systems to calculate risk-weighted assets, underlying the way 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 key indicators of its Risk Appetite Framework (RAF). The governance rules of the RAF provide 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.

The tables below summarise the main information on the Group's Leverage Ratio as at 31 December 2022 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 26 - Template EU LR1 - LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

		31/12/2022	30/06/2022
		a	b
		<i>Applicable amount</i>	
1	Total assets as per published financial statements	57,854,361	54,660,518
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	(15,613)	(14,109)
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	(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	78,252	94,880
9	Adjustment for securities financing transactions (SFTs)	78,590	259,495
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	5,001,327	4,836,482
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	(43,024)	(43,674)
13	TOTAL EXPOSURE MEASURE	62,953,892	59,793,592

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

Table 27 - Template EU LR2 - LRCom: Leverage ratio common disclosure (1 of 3)

		<i>CRR leverage ratio exposures</i>	
		31/12/2022	30/06/2022
		a	b
<i>On-balance sheet exposures (excluding derivatives and SFTs)</i>			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	57,643,409	54,431,207
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)	57,643,409	54,431,207
<i>Derivative exposures</i>			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	71,262	78,183
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	12,739	13,026
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	57,893	72,470

EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	80,640	105,134
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	222,534	268,812
Securities financing transaction (SFT) exposures			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	8,293	-
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-
16	Counterparty credit risk exposure for SFT assets	78,590	259,495
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	86,883	259,495

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 28 - Template EU LR2 - LRCom: Leverage ratio common disclosure (2 of 3)

		CRR leverage ratio exposures	
		31/12/2022	30/06/2022
		a	b
Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	22,611,575	20,638,040
20	(Adjustments for conversion to credit equivalent amounts)	(17,610,509)	(15,803,961)
21	(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	-	-
22	OFF-BALANCE SHEET EXPOSURES	5,001,066	4,834,079
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)	-	-
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))	-	-
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	3,239,887	3,164,186
24	TOTAL EXPOSURE MEASURE	62,953,892	59,793,592
Leverage ratio			
25	Leverage ratio	5.1464 %	5.2919 %
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	5.1464 %	5.2919 %
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	5.1464 %	5.2919 %
26	Regulatory minimum leverage ratio requirement (%)	3.0000 %	3.0000 %
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 (%)	3.0000 %	3.0000 %
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 29 - Template EU LR2 - LRCOM: Leverage ratio common disclosure (3 of 3)

		CRR leverage ratio exposures	
		31/12/2022	30/06/2022
		a	b
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	429	7,940
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	8,293	-
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)	62,946,028	59,801,532
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)	62,946,028	59,801,532
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)	5.1471 %	5.2911 %
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)	5.1471 %	5.2911 %

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

		31/12/2022	30/06/2022
		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:	57,643,409	54,431,207
EU-2	Trading book exposures	113,874	140,851
EU-3	Banking book exposures, of which:	57,529,536	54,290,356
EU-4	Covered bonds	218,642	221,260
EU-5	Exposures treated as sovereigns	18,466,473	15,109,455
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	637,249	931,732
EU-7	Institutions	2,993,132	3,161,215
EU-8	Secured by mortgages of immovable properties	12,333,784	11,533,688
EU-9	Retail exposures	4,819,238	4,721,300
EU-10	Corporates	12,464,027	12,830,011
EU-11	Exposures in default	611,465	763,304
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	4,985,525	5,018,391

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

The Group's Leverage Ratio, calculated by applying the transitional criteria in force for the 2022 financial year (phased-in), fell by approximately 15 basis points in the second half, settling at 5.15% at the end of December (from 5.29% end of June). The change in the ratio is linked to the significant increase in the total exposure amounts placed in the denominator, which more than offset the increase in Tier 1 capital amounts over the same period.

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 concise 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 a 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.

Overall, 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 31 - Template EU LIQ1 – Liquidity Coverage Ratio (1 of 2)

		a	b	c	d
		<i>Total unweighted value (average)</i>			
EU 1a	Quarter ending on 31/12/2022	31/12/2022	30/09/2022	30/06/2022	31/03/2022
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:	17,342,465	17,162,422	16,825,935	16,390,119
3	<i>Stable deposits</i>	10,942,979	10,823,052	10,644,258	10,420,676
4	<i>Less stable deposits</i>	6,360,518	6,307,252	6,147,191	5,929,928
5	Unsecured wholesale funding	17,990,991	18,305,831	18,457,338	18,592,979
6	<i>Operational deposits (all counterparties) and deposits in networks of cooperative banks</i>	3,829,629	3,989,548	4,076,964	4,104,526
7	<i>Non-operational deposits (all counterparties)</i>	14,098,867	14,245,067	14,339,708	14,446,201
8	<i>Unsecured debt</i>	62,496	71,217	40,667	42,252
9	Secured wholesale funding				
10	Additional requirements	660,207	650,510	649,290	632,081
11	<i>Outflows related to derivative exposures and other collateral requirements</i>	19,061	18,413	13,704	10,845
12	<i>Outflows related to loss of funding on debt products</i>	70	-	-	-
13	<i>Credit and liquidity facilities</i>	641,076	632,097	635,586	621,236
14	Other contractual funding	8,737	7,620	3,465	3,557
15	Other contingent funding obligations	13,371,513	12,994,100	12,873,222	12,674,577
16	TOTAL CASH OUTFLOWS				
CASH - INFLOWS					
17	Secured lending (e.g. reverse repos)	50,656	178,666	346,580	532,837
18	Inflows from fully performing exposures	2,372,614	3,005,495	3,880,743	4,847,318
19	Other cash inflows	4,410,415	4,247,978	4,030,585	3,899,076
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	6,833,685	7,432,140	8,257,909	9,279,232
EU-20a	Fully exempt inflows	-	-	-	-
EU-20b	Inflows subject to 90% cap	-	-	-	-
EU-20c	Inflows subject to 75% cap	6,833,685	7,432,140	8,257,909	9,279,232
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 32 - Template EU LIQ1 – Liquidity Coverage Ratio (2 of 2)

		e	f	g	h
		<i>Total weighted value (average)</i>			
EU 1a	Quarter ending on 31/12/2022	31/12/2022	30/09/2022	30/06/2022	31/03/2022
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)	11,115,038	11,081,710	10,905,487	10,445,425
CASH - OUTFLOWS					
2	Retail deposits and deposits from small business customers, of which:	1,379,015	1,368,255	1,338,367	1,299,691
3	<i>Stable deposits</i>	547,149	541,153	532,213	521,034
4	<i>Less stable deposits</i>	831,866	827,102	806,154	778,657
5	Unsecured wholesale funding	8,048,814	8,265,426	8,384,752	8,475,396
6	<i>Operational deposits (all counterparties) and deposits in networks of cooperative banks</i>	909,662	950,805	973,925	982,476
7	<i>Non-operational deposits (all counterparties)</i>	7,076,657	7,243,404	7,370,161	7,450,668
8	Unsecured debt	62,496	71,217	40,667	42,252
9	Secured wholesale funding	313	313	313	313
10	Additional requirements	140,901	140,242	134,771	126,434
11	<i>Outflows related to derivative exposures and other collateral requirements</i>	19,061	18,413	13,704	10,845
12	<i>Outflows related to loss of funding on debt products</i>	70	-	-	-
13	<i>Credit and liquidity facilities</i>	121,770	121,829	121,066	115,589
14	Other contractual funding	6,705	5,605	1,469	1,562
15	Other contingent funding obligations	523,989	509,426	501,616	492,872
16	TOTAL CASH OUTFLOWS	10,099,736	10,289,265	10,361,286	10,396,268
CASH – INFLOWS					
17	Secured lending (e.g. reverse repos)	-	-	-	-
18	Inflows from fully performing exposures	1,857,833	2,494,084	3,388,547	4,362,921
19	Other cash inflows	917,536	875,742	828,805	800,885
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	2,775,370	3,369,826	4,217,353	5,163,806
EU-20a	Fully exempt inflows	-	-	-	-
20b	Inflows subject to 90% cap	-	-	-	-
EU-20c	Inflows subject to 75% cap	2,775,370	3,369,826	4,217,353	5,163,806
TOTAL ADJUSTED VALUE					
EU-21	LIQUIDITY BUFFER	11,115,038	11,081,710	10,905,487	10,445,425
22	TOTAL NET CASH OUTFLOWS	7,324,366	6,919,439	6,143,933	5,232,462
23	LIQUIDITY COVERAGE RATIO (%)	151.8126 %	166.3570 %	188.5102 %	212.5557 %

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 average levels of the index in the last twelve months, which, in any case, remained positioned at values well above the minimum regulatory requirement (100%) throughout the period.

The gradual decline in the volume of shorter-term loans, in the form of current account loans and advance transactions, contributed to the development of the index; loans in the form of mortgages and instalment loans, on the other hand, continued their upward trend overall, as did factoring, which increased compared to September levels. On the liabilities side, there was a decrease in the levels of on-demand funding, while there was a significant boost in term funding from customers and interbank deposits, accompanied by a limited recovery in bonds. Added to this was a particularly significant recourse to repo transactions in the last quarter. The dynamics described above led to a positive development in overall funding, resulting in an increase in the volume of deposits with central banks compared to September levels.

This is all reflected in a progressive increase in average cash outflows net of the denominator, 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. Specifically, the change compared to the previous quarter originates from the contraction in average liquidity inflows, effect, among other things, of the aforementioned evolution of loans.

The level of high-quality liquid assets counted in the liquidity buffer in the numerator benefited from the increased volume of deposits with central banks, partly offset by higher commitments of securities as collateral in repo transactions.

The high-quality liquid assets (“HQLA”) are held by the Group mainly in Euro currency, to cover any financial needs in this currency; they remain predominantly made up of instruments issued by eligible sovereign entities classified in the “EHQLA” category (Level 1)¹², 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, accompanied by investments in bonds issued by other sovereign states (particularly Spain, France and Germany), supranational organisations, credit institutions and non-financial companies. The subsidiary Banca Popolare di Sondrio (SUISSE), in turn, holds its own bond portfolio, which is mainly composed of national Central Bank eligible securities, integrated by cash amounts in CHF deposited with it, aimed at coping with 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 sources of funding are represented by national and international private entities and companies as well as from banking counterparties, 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.

¹² 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.

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

Table 33 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 31/12/2022

		31/12/2022				
		a	b	c	d	e
		<i>Unweighted value by residual maturity</i>				<i>Weighted value</i>
		<i>No maturity</i>	<i>< 6 months</i>	<i>6 months to < 1yr</i>	<i>≥ 1yr</i>	
		<i>Available stable funding (ASF) Items</i>				
1	Capital items and instruments	3,296,887	-	-	545,615	3,842,502
2	Own funds	3,296,887	-	-	545,615	3,842,502
3	Other capital instruments		-	-	-	-
4	Retail deposits		17,450,955	190,475	967,850	17,400,511
5	Stable deposits		11,103,596	3,874	4,732	10,556,829
6	Less stable deposits		6,347,359	186,601	963,118	6,843,682
7	Wholesale funding:		23,322,945	1,213,026	6,944,218	14,508,695
8	Operational deposits		3,927,999	-	-	1,963,999
9	Other wholesale funding		19,394,946	1,213,026	6,944,218	12,544,696
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	53,211	3,010,386	10,456	1,488,064	1,493,292
12	NSFR derivative liabilities	53,211				
13	All other liabilities and capital instruments not included in the above categories		3,010,386	10,456	1,488,064	1,493,292
14	TOTAL AVAILABLE STABLE FUNDING (ASF) AS AT 31/12/2022					37,245,000

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

Table 34 - Template EU LIQ2: Net Stable Funding Ratio (2 of 2) - 31/12/2022

		31/12/2022				
		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)					782,431
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		-	-	-	-
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		11,643,926	1,870,497	21,726,114	24,145,076
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		8,293	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		2,451,898	147,467	614,073	932,997
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		7,881,247	1,335,553	10,179,735	20,581,441
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		292,165	329,348	2,546,382	8,825,648
22	Performing residential mortgages, of which:		209,916	220,605	8,087,996	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		207,789	218,310	8,027,321	-
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		1,092,573	166,871	2,844,310	2,630,638
25	Interdependent assets		-	-	-	-
26	Other assets:		560,261	27,637	3,686,976	3,792,983
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		91,776			4,589
31	All other assets not included in the above categories		468,485	27,637	3,647,776	3,755,075
32	Off-balance sheet items		4,519,444	5,000	756,533	264,051
33	TOTAL RSF AS AT 31/12/2022					28,984,542
34	NET STABLE FUNDING RATIO (%) AS AT 31/12/2022					128.4995 %

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 35 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 30/09/2022

		30/09/2022				
		a	b	c	d	e
		<i>Unweighted value by residual maturity</i>				<i>Weighted value</i>
		<i>No maturity</i>	<i>< 6 months</i>	<i>6 months to < 1yr</i>	<i>≥ 1yr</i>	
		<i>Available stable funding (ASF) Items</i>				
1	Capital items and instruments	3,258,539	3,453	-	548,278	3,806,817
2	Own funds	3,258,539	3,453	-	548,278	3,806,817
3	Other capital instruments		-	-	-	-
4	Retail deposits		17,757,401	172,966	576,902	17,264,476
5	Stable deposits		11,003,257	1,616	2,631	10,457,260
6	Less stable deposits		6,754,144	171,350	574,272	6,807,216
7	Wholesale funding:		13,763,093	5,306,993	6,846,439	14,430,375
8	Operational deposits		3,597,621	-	-	1,798,811
9	Other wholesale funding		10,165,472	5,306,993	6,846,439	12,631,564
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	147,300	3,040,345	10,559	2,061,847	2,067,126
12	NSFR derivative liabilities	147,300				
13	All other liabilities and capital instruments not included in the above categories		3,040,345	10,559	2,061,847	2,067,126
14	TOTAL AVAILABLE STABLE FUNDING (ASF) AS AT 30/09/2022					39,367,605

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

Table 36 - Template EU LIQ2: Net Stable Funding Ratio (2 of 2) - 30/09/2022

		30/09/2022				
		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)					2,605,693
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		-	-	-	-
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		11,972,998	1,565,309	21,364,489	24,098,644
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		2,226,591	103,881	634,348	908,948
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		8,447,499	1,163,594	9,725,485	20,584,510
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		284,741	316,228	2,610,462	8,879,251
22	Performing residential mortgages, of which:		256,744	208,920	8,145,487	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		252,581	204,567	8,035,963	-
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		1,042,163	88,914	2,859,169	2,605,185
25	Interdependent assets		-	-	-	-
26	Other assets:		671,706	22,623	3,569,502	3,693,341
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		177,147			8,857
31	All other assets not included in the above categories		494,559	22,623	3,530,302	3,651,164
32	Off-balance sheet items		4,492,791	80,000	700,555	264,035
33	TOTAL RSF AS AT 30/09/2022					30,661,713
34	NET STABLE FUNDING RATIO (%) AS AT 30/09/2022					128.3934 %

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

Table 37 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 30/06/2022

		30/06/2022				
		a	b	c	d	e
		<i>Unweighted value by residual maturity</i>				<i>Weighted value</i>
		<i>No maturity</i>	<i>< 6 months</i>	<i>6 months to < 1yr</i>	<i>≥ 1yr</i>	
		<i>Available stable funding (ASF) Items</i>				
1	Capital items and instruments	3,248,523	17,266	-	547,279	3,795,802
2	Own funds	3,248,523	17,266	-	547,279	3,795,802
3	Other capital instruments		-	-	-	-
4	Retail deposits		17,710,842	81,353	628,384	17,190,150
5	Stable deposits		10,974,687	1,111	899	10,427,907
6	Less stable deposits		6,736,154	80,243	627,485	6,762,243
7	Wholesale funding:		11,867,335	4,930,709	6,833,003	13,566,221
8	Operational deposits		3,667,368	-	-	1,833,684
9	Other wholesale funding		8,199,967	4,930,709	6,833,003	11,732,537
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	102,980	3,915,545	10,294	2,135,712	2,140,859
12	NSFR derivative liabilities	102,980				
13	All other liabilities and capital instruments not included in the above categories		3,915,545	10,294	2,135,712	2,140,859
14	TOTAL AVAILABLE STABLE FUNDING (ASF) AS AT 30/06/2022					38,526,715

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

Table 38 - Template EU LIQ2: Net Stable Funding Ratio (1 of 2) - 30/06/2022

		30/06/2022				
		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)					2,781,707
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		-	-	-	-
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		12,628,586	1,563,728	21,177,525	23,894,913
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		2,734,362	81,090	637,586	951,567
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		8,407,786	1,186,620	9,831,605	20,334,986
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		254,129	309,816	2,658,313	8,713,970
22	Performing residential mortgages, of which:		199,134	220,303	7,866,192	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		195,642	216,522	7,774,840	-
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		1,287,304	75,714	2,842,143	2,608,361
25	Interdependent assets		-	-	-	-
26	Other assets:		823,748	65,791	3,377,720	3,512,156
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		138,369			6,918
31	All other assets not included in the above categories		685,379	65,791	3,338,520	3,471,918
32	Off-balance sheet items		4,257,975	20,000	545,722	241,373
33	TOTAL RSF AS AT 30/06/2022					30,430,150
34	NET STABLE FUNDING RATIO (%) AS AT 30/06/2022					126.6071 %

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) - 31/03/2022

		31/03/2022				
		a	b	c	d	e
		<i>Unweighted value by residual maturity</i>				<i>Weighted value</i>
		<i>No maturity</i>	<i>< 6 months</i>	<i>6 months to < 1yr</i>	<i>≥ 1yr</i>	
Available stable funding (ASF) Items						
1	Capital items and instruments	3,194,643	30,928	-	547,014	3,741,658
2	Own funds	3,194,643	30,928	-	547,014	3,741,658
3	Other capital instruments		-	-	-	-
4	Retail deposits		17,376,292	320,624	477,360	16,949,666
5	Stable deposits		10,899,612	2,028	523	10,357,082
6	Less stable deposits		6,476,680	318,596	476,837	6,592,585
7	Wholesale funding:		11,874,385	110,564	11,552,777	15,685,282
8	Operational deposits		3,546,830	-	-	1,773,415
9	Other wholesale funding		8,327,555	110,564	11,552,777	13,911,867
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	76,796	3,205,951	10,219	1,974,442	1,979,552
12	NSFR derivative liabilities	76,796				
13	All other liabilities and capital instruments not included in the above categories		3,205,951	10,219	1,974,442	1,979,552
14	TOTAL AVAILABLE STABLE FUNDING (ASF) AS AT 31/03/2022					40,129,572

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) - 31/03/2022

		31/03/2022				
		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)					5,505,666
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		51,075	53,939	1,122,557	1,043,435
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		11,367,932	1,637,067	19,452,026	22,336,937
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		299,482	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		2,618,585	145,301	653,819	988,328
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		7,269,511	1,222,454	9,405,688	18,615,351
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		215,679	268,811	2,511,345	7,643,980
22	Performing residential mortgages, of which:		253,668	189,523	6,368,348	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		251,588	187,331	6,305,371	-
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		926,686	79,789	3,024,171	2,733,259
25	Interdependent assets		-	-	-	-
26	Other assets:		481,629	100,548	3,122,685	3,286,202
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		95,465			4,773
31	All other assets not included in the above categories		386,164	100,548	3,083,485	3,248,109
32	Off-balance sheet items		4,361,981	-	654,386	252,225
33	TOTAL RSF AS AT 31/03/2022					32,424,465
34	NET STABLE FUNDING RATIO (%) AS AT 31/03/2022					123.7632 %

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

Section 8 - Disclosure of exposures to credit risk (art. 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 severe 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 discipline, introduced by the European Banking Authority (EBA) and implemented at national level by the Bank of Italy, established more restrictive criteria and methods for classifying a credit exposure as default compared to those previously adopted, 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 to subjects in a state of insolvency (not necessarily ascertained in court) or in substantially comparable situations, regardless of any loss forecasts. Accordingly, no account is taken of any guarantees received in support of such exposures.
- *Unlikely-to-pay (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 unpaid 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 in the bank's financial statements; 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 bank 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 more than 90 days on a continuous basis.

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 guarantees received in support of such exposures.

The loans not allocated to the above categories are deemed to be regular or 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 (UTP), 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 settlements are proposed on an amicable basis in order to terminate the credit 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 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 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 (SICR) 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 as previously defined.

At each balance sheet date, the possibility to observe a significant variation in the credit risk (SICR) inherent in each position with respect to its initial recognition is assessed. The determination of the significant increase in credit risk and the subsequent estimate of impairment is made over a one-year (for positions classified as Stage 1) or multi-year time horizon linked to the residual maturity of the exposure (so-called "Lifetime", for positions classified in Stage 2 and Stage 3), adopting specific calculation methodologies that combine 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 “performing” exposures 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.
- *Watchlist criteria.* The purpose that this absolute criterion intends to fulfill is to identify the additional positions and/or counterparties which, due to different considerations and analyses of both a quantitative and qualitative type, appear to be characterised at the reporting date by a high risk profile or in significant increase compared to the date of origination of the relationship, or that, more generally, it is deemed appropriate to make the subject of particular attention and monitoring and for which classification in Stage 2 is therefore considered suitable.
- *Intra-group transactions.* Intra-group transactions (intercompany trade) are characterised as those transactions in which an exchange of goods and services takes place between the Parent Company and the subsidiaries, which may be entered into for many different purposes (i.e. exchange of cash, services or administrative, accounting, commercial or financial assets by the Parent Company to support the subsidiaries or vice versa) and for which, due to their nature and particular risk profile, it is considered that the conditions for a significant increase in credit risk do not exist.
- *Backstop PD criterion.* Lastly, in order to have a holistic assessment of the evolution of the counterparties' actual credit risk, it is deemed appropriate to classify in Stage 2 the positions in

which the “absolute” increase between the annualised PD lifetime level at the date of origination and the equivalent level at the date of reporting is greater than an assigned criticality threshold (so-called backstop).

Using the relative “staging” criteria, it is possible to evaluate, through the analysis of an appropriate PD-based metric (Probability of Default), 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. With the application of the relative staging criteria, the transfer of positions between stages can take place in both a worsening and an improving sense: the classification model is symmetrical, with the possibility for assets to move indifferently between accounting stages. However, 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 the respective probabilities of occurrence. It is calculated according to the Stage classifications defined above; in particular, there can be:

- 12-month expected credit loss, 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 loss, 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 counterparty default event. For Stage 2 positions, the credit provision may be amended experientially 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 equivalent to the negative difference between their recoverable value and their amortised cost. In the case of a detailed analysis of a loan, 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 guarantees assisting the loan;
- expected timing of recoveries, considering the progress made by recovery procedures;
- internal return rate.

Bad loans may be 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 bad loan positions with limited overall exposure, not exceeding certain pro-tempore “threshold values” identified, and provide for the adoption of streamlined valuation processes, mainly of an automatic nature, based on the use of specific coefficients defined internally according to targeted quantitative analyses.

Unlikely-to-pay loans, which include loans subject to restructuring agreements, may also be 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 of unlikely-to-pay positions follow a similar methodology to that applied 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 the 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 these positions, it is not possible to quantify expected losses on a detailed basis at single-name level. The measurement of their level of impairment – and, thus, of the loan loss 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 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 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 with the counterparty. If it is expected 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 Loss (ECL) under certain conditions.

The Bank incorporates the possible recovery strategies of a non-performing loan considering the different probabilities of occurrence 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, comprising several phases, that starts with identification of the reference scenarios. In general, the 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.

As mentioned, a specific probability of occurrence is attributed to each identified management scenario, determined on both qualitative and quantitative bases; the latter take 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 of Disposal	+	Scenario* Probability of occurrence of Internal Management

The process of determining the expected loss value (ECL) 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 so-called "credit conversion factor" (CCF), is taken into consideration. This is a parameter representing the currently undrawn portion of a credit line that is presumed to be used 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.

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 original contractual conditions or refinancing have been granted due to the debtor's financial difficulties. Forborne as an attribute is transversal to all loans, whatever their administrative status. It can be used for performing loans just as well as for non-performing loans.

These are exposures to counterparties 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 bank 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: a) customers in a performing state with a counterparty rating that is identifying a high level of risk; b) a loan expired or that would have expired for at least 30 days during the three months prior to the contractual amendment; or c) a counterparty that has experienced a deterioration in its internal rating, identifying a rapid increase in the risk profile. During the last financial year, an additional criterion of financial difficulty was introduced, corresponding to the classification of the counterparty, on a continuous basis for a period of at least three months, in a new management cluster called high risk.

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. In line 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 identification, the Unit must assess the nature of the financial difficulties of the debtor and ensure that the expected duration of the concession is consistent with the nature of the forbearance. Subsequently, the economic sustainability of the measure is analysed with respect to the financial situation of the customer; in particular, the adequacy of the debtor 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 determining 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 the addition of clauses that might cause the failure of the “SPPI test”.

The profit / loss on non-substantial changes to forbore 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 that is the subject of a grant measure. In accordance with regulatory requirements, where the NPV delta is more than 1%, the position 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 residual term of the loan. The reduction in credit risk and the allocation of the relationship to Stage 1 reflects the loss of the forbore attribute.

Exposures subject to commercial renegotiations

Included in this category are renegotiations involving changes to the original contractual terms applied to credit exposures, granted primarily for the purpose of maintaining the commercial relationship with the customer (“retention” of loans). By contrast with the “concessions” (forbearance measures), the renegotiations agreed for commercial reasons thus relate to debtors without financial difficulties and include all operations designed to align their cost of borrowing with 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 involve changing the original contractual conditions at the request of the debtor, considering the cost of borrowing or the related duration, with a resulting benefit for the requesting debtor. In general, whenever the Bank agrees to renegotiate in order to avoid losing a customer, the transaction is considered substantial because, without it, the customer would obtain funding from other sources and the Bank would experience a penalisation 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.

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”, which are managed according to business models whose objective is the possession of assets aimed at acquiring contractual cash flows (“HTC”, Held to Collect) or whose objective is pursued through both acquisition 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 credit 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 types of relationships, the unit responsible for monitoring and managing anomalous credit manually proposes the assignment of the “POCI” attribute, subject to approval by the competent decision-making 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	7,148,069	7,139,258	8,811	-	-
010	Loans and advances	32,495,038	29,168,468	2,912,831	1,462,406	1,324,271
020	Central banks	5,011	5,011	-	-	-
030	General governments	479,985	453,789	26,150	449	449
040	Credit institutions	640,588	639,785	803	-	-
050	Other financial corporations	2,566,263	2,489,352	71,863	31,049	28,530
060	Non-financial corporations	17,064,809	15,055,464	1,753,323	1,066,164	950,881
070	Of which SMEs	9,326,224	7,944,522	1,146,066	746,243	651,592
080	Households	11,738,382	10,525,066	1,060,692	364,744	344,411
090	Debt securities	13,554,535	13,323,275	156,911	1,259	-
100	Central banks	-	-	-	-	-
110	General governments	10,826,792	10,794,951	-	-	-
120	Credit institutions	1,185,676	1,097,676	70,751	-	-
130	Other financial corporations	1,194,629	1,119,785	49,586	-	-
140	Non-financial corporations	347,437	310,864	36,573	1,259	-
150	Off-balance-sheet exposures	23,333,979	14,056,522	1,265,339	178,136	82,790
160	Central banks	50,000	-	-	-	-
170	General governments	747,114	598,299	17,003	1,438	-
180	Credit institutions	911,941	228,099	8,693	-	-
190	Other financial corporations	1,916,327	1,728,927	9,214	423	232
200	Non-financial corporations	17,908,061	10,135,839	1,062,422	167,740	75,571
210	Households	1,800,537	1,365,358	168,006	8,535	6,988
220	TOTAL AS AT 31/12/2022	76,531,621	63,687,522	4,343,892	1,641,800	1,407,061
	TOTAL AS AT 31/12/2021	71,556,405	61,714,622	2,536,423	2,091,136	1,781,375

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 2</i>	<i>of which STAGE 3</i>		
005	Cash balances at central banks and other demand deposits	(457)	(212)	(245)	-	-	-
010	Loans and advances	(145,859)	(44,532)	(98,990)	(853,130)	-	(773,337)
020	Central banks	-	-	-	-	-	-
030	General governments	(2,331)	(1,468)	(862)	(422)	-	(422)
040	Credit institutions	(252)	(230)	(22)	-	-	-
050	Other financial corporations	(14,638)	(9,961)	(4,677)	(18,160)	-	(15,641)
060	Non-financial corporations	(70,049)	(16,320)	(52,649)	(639,241)	-	(573,278)
070	Of which SMEs	(46,419)	(8,278)	(37,256)	(410,585)	-	(358,903)
080	Households	(58,590)	(16,554)	(40,779)	(195,307)	-	(183,996)
090	Debt securities	(11,319)	(7,516)	(3,803)	-	-	-
100	Central banks	-	-	-	-	-	-
110	General governments	(6,317)	(6,317)	-	-	-	-
120	Credit institutions	(907)	(700)	(208)	-	-	-
130	Other financial corporations	(876)	(269)	(607)	-	-	-
140	Non-financial corporations	(3,218)	(230)	(2,988)	-	-	-
150	Off-balance-sheet exposures	(26,530)	(16,838)	(9,671)	(36,676)	-	(12,363)
160	Central banks	-	-	-	-	-	-
170	General governments	(303)	(302)	(1)	(21)	-	-
180	Credit institutions	(1,309)	(1,242)	(67)	-	-	-
190	Other financial corporations	(3,025)	(2,896)	(129)	(402)	-	(210)
200	Non-financial corporations	(18,056)	(10,414)	(7,625)	(35,021)	-	(11,509)
210	Households	(3,837)	(1,985)	(1,849)	(1,233)	-	(644)
220	TOTAL AS AT 31/12/2022	(184,165)	(69,098)	(112,708)	(889,805)	-	(785,700)
	TOTAL AS AT 31/12/2021	(145,414)	(74,347)	(68,584)	(1,064,063)	-	(930,563)

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>Collateral and financial guarantees received</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>
	<i>m</i>	<i>n</i>	<i>o</i>	
005	Cash balances at central banks and other demand deposits	-	-	-
010	Loans and advances	(114,266)	22,215,717	547,696
020	Central banks	-	5,011	-
030	General governments	-	173,581	19
040	Credit institutions	-	141,743	-
050	Other financial corporations	-	1,011,561	9,049
060	Non-financial corporations	(113,666)	10,416,402	387,166
070	Of which SMEs	(33,673)	7,065,956	322,216
080	Households	(600)	10,467,418	151,463
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		790,399	8,879
160	Central banks		-	-
170	General governments		26,583	-
180	Credit institutions		6,868	-
190	Other financial corporations		60,081	0
200	Non-financial corporations		566,372	8,381
210	Households		130,495	498
220	TOTAL AS AT 31/12/2022	(114,266)	23,006,115	556,575
	TOTAL AS AT 31/12/2021	(136,526)	23,841,805	831,037

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 2022 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 average quality of assets in the financial statements. In particular, in the last quarter of the year, it concluded a new transaction called "POP NPLS 2022", which involved the sale of a portfolio of bad loans with a gross value of 242.5 million euro.

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

		a	b	c	d	e	f
		<i>Net exposure value</i>					
		<i>On demand</i>	<i><= 1 year</i>	<i>> 1 year <= 5 years</i>	<i>> 5 years</i>	<i>No stated maturity</i>	<i>Total</i>
1	Loans and advances	4,336,965	8,166,757	8,317,695	11,395,799	13,055,641	45,272,856
2	Debt securities	1,113	734,269	5,637,965	6,584,679	36,165	12,994,191
3	TOTAL AS AT 31/12/2022	4,338,078	8,901,026	13,955,660	17,980,478	13,091,806	58,267,048

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 2022 of loans and advances disbursed and debt securities in the portfolio classified 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

		31/12/2022
		a
		<i>Gross carrying amount</i>
010	INITIAL STOCK OF NON-PERFORMING LOANS AND ADVANCES	1,875,969
020	Inflows to non-performing portfolios	474,958
030	Outflows from non-performing portfolios	(888,522)
040	<i>Outflow due to write-off</i>	(163,482)
050	<i>Outflow due to other situations</i>	(725,040)
060	FINAL STOCK OF NON-PERFORMING LOANS AND ADVANCES	1,462,406

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

The quarterly outflows of impaired loans and advances recognised in the last quarter of 2022 include the effects of the “POP NPLS 2022” disposal mentioned above.

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

		31/12/2022	
		a	b
		<i>Gross carrying amount</i>	<i>Related net accumulated recoveries</i>
010	INITIAL STOCK	1,875,969	
020	Inflows to non-performing portfolios	474,958	
030	Outflows from non-performing portfolios	(888,522)	
040	<i>Outflow to performing portfolio</i>	(83,081)	
050	<i>Outflow due to loan repayment, partial or total</i>	(283,535)	
060	<i>Outflow due to collateral liquidation</i>	(39,067)	32,698
070	<i>Outflow due to taking possession of collateral</i>	-	-
080	<i>Outflow due to sale of instruments</i>	(91,401)	35,626
090	<i>Outflow due to risk transfer</i>	(215,717)	39,039
100	<i>Outflow due to write-off</i>	(163,482)	
110	<i>Outflow due to other situations</i>	(12,239)	
120	<i>Outflow due to reclassification as held for sale</i>	-	
130	FINAL STOCK	1,462,406	

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

The totality of the evidence presented in the tables above and below attests to the further improvement in the quality of the Group's credit assets. As at 31 December 2022, both the stock of non-performing exposures and their impact on total loans decreased. 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 impaired</i>
<i>Of which defaulted</i>					
005	Cash balances at central banks and other demand deposits	-	-	-	-
010	Loans and advances	434,459	653,669	653,669	635,462
020	<i>Central banks</i>	-	-	-	-
030	<i>General governments</i>	-	-	-	-
040	<i>Credit institutions</i>	-	-	-	-
050	<i>Other financial corporations</i>	377	14,356	14,356	14,356
060	<i>Non-financial corporations</i>	234,385	464,944	464,944	449,414
070	<i>Households</i>	199,697	174,370	174,370	171,692
080	Debt securities	-	-	-	-
090	Loan commitments given	5,783	10,880	10,880	10,880
100	TOTAL AS AT 31/12/2022	440,242	664,550	664,550	646,342
	TOTAL AS AT 31/12/2021	716,892	868,507	868,507	849,848

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	(20,061)	(366,985)	659,896	269,009
020	<i>Central banks</i>	-	-	-	-
030	<i>General governments</i>	-	-	-	-
040	<i>Credit institutions</i>	-	-	-	-
050	<i>Other financial corporations</i>	(12)	(10,941)	122	-
060	<i>Non-financial corporations</i>	(9,956)	(257,736)	407,750	197,970
070	<i>Households</i>	(10,093)	(98,308)	252,023	71,039
080	Debt securities	-	-	-	-
090	Loan commitments given	(74)	-	4,459	3,629
100	TOTAL AS AT 31/12/2022	(20,136)	(366,985)	664,355	272,638
	TOTAL AS AT 31/12/2021	(27,728)	(424,563)	1,006,976	410,234

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

At the reporting date, forborne exposures showed a moderate decrease compared with 31 December 2021, both in the performing and in the non-performing part of the loan portfolio.

Table 49 - Template EU CQ2 - Quality of forbearance

		31/12/2022	31/12/2021
		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	168,717	190,737
020	Non-performing forborne loans and advances that failed to meet the nonperforming exit criteria	384,148	475,901

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

With regard to forbearance measures granted to customers classified as non-performing loans, 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	7,148,069	7,148,069	-	-	-
010	Loans and advances	32,495,038	32,443,943	51,095	1,462,406	69,852
020	Central banks	5,011	5,011	-	-	-
030	General governments	479,985	479,985	-	449	3
040	Credit institutions	640,588	639,785	803	-	-
050	Other financial corporations	2,566,263	2,566,263	0	31,049	25,132
060	Non-financial corporations	17,064,809	17,036,032	28,778	1,066,164	434,525
070	Of which SMEs	9,326,224	9,302,127	24,098	746,243	360,462
080	Households	11,738,382	11,716,868	21,514	364,744	190,705
090	Debt securities	13,554,535	13,554,535	-	1,259	1,259
100	Central banks	-	-	-	-	-
110	General governments	10,826,792	10,826,792	-	-	-
120	Credit institutions	1,185,676	1,185,676	-	-	-
130	Other financial corporations	1,194,629	1,194,629	-	-	-
140	Non-financial corporations	347,437	347,437	-	1,259	1,259
150	Off-balance-sheet exposures	23,333,979			178,136	
160	Central banks	50,000			-	
170	General governments	747,114			1,438	
180	Credit institutions	911,941			-	
190	Other financial corporations	1,916,327			423	
200	Non-financial corporations	17,908,061			167,740	
210	Households	1,800,537			8,535	
220	TOTAL AS AT 31/12/2022	76,531,621	53,146,547	51,095	1,641,800	651,625
	TOTAL AS AT 31/12/2021	71,556,405	50,969,912	24,820	2,091,136	73,432

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	123,522	135,324	200,019	87,518	195,805	1,462,406
020	Central banks	-	-	-	-	-	-
030	General governments	45	0	398	0	2	449
040	Credit institutions	-	-	-	-	-	-
050	Other financial corporations	49	6	43	4,705	55	31,049
060	Non-financial corporations	95,327	112,747	156,694	73,756	137,372	1,066,164
070	Of which SMEs	90,370	69,248	107,185	51,894	36,501	746,243
080	Households	28,100	22,570	42,884	9,056	58,376	364,744
090	Debt securities	-	-	-	-	-	1,259
100	Central banks	-	-	-	-	-	-
110	General governments	-	-	-	-	-	-
120	Credit institutions	-	-	-	-	-	-
130	Other financial corporations	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	1,259
150	Off-balance-sheet exposures						178,136
160	Central banks						-
170	General governments						1,438
180	Credit institutions						-
190	Other financial corporations						423
200	Non-financial corporations						167,740
210	Households						8,535
220	TOTAL AS AT 31/12/2022	123,522	135,324	200,019	87,518	195,805	1,641,800
	TOTAL AS AT 31/12/2021	155,245	185,386	294,638	200,636	292,293	2,091,136

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	47,513,238	1,463,665	1,463,665	47,058,575
Italy	38,235,341	1,382,887	1,382,887	37,823,821
Switzerland	4,887,268	72,348	72,348	4,878,115
Spain	1,781,067	-	-	1,781,067
France	729,869	13	13	728,941
Monaco	331,465	469	469	331,465
United states	61,058	39	39	61,058
Germany	444,761	2,005	2,005	427,180
Luxembourg	20,076	-	-	15,680
Others	1,022,334	5,903	5,903	1,011,249
OFF-BALANCE-SHEET EXPOSURES	23,512,115	178,136	178,136	
Italy	21,352,464	178,099	178,099	
Switzerland	612,061	10	10	
Spain	21,039	-	-	
France	124,993	27	27	
Monaco	511,321	0	0	
United states	42,385	-	-	
Germany	17,122	-	-	
Luxembourg	150,000	-	-	
Others	680,729	0	0	
TOTAL	71,025,353	1,641,800	1,641,800	47,058,575

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	(993,630)		(16,678)
Italy	(949,928)		(16,678)
Switzerland	(30,338)		-
Spain	(2,636)		-
France	(1,220)		-
Monaco	(721)		-
United states	(303)		-
Germany	(2,734)		-
Luxembourg	(41)		-
Others	(5,708)		-
OFF-BALANCE-SHEET EXPOSURES		63,204	
Italy		60,686	
Switzerland		550	
Spain		17	
France		32	
Monaco		258	
United states		8	
Germany		7	
Luxembourg		110	
Others		1,536	
TOTAL	(993,630)	63,204	(16,678)

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 0.04% threshold.

As at 31 December 2022, the major part of the Group's exposures (both on- and off-balance sheet items) related to counterparties resident in Italy. They account for about 80.5% of total on-balance sheet exposures and about 90.8% of total off-balance sheet exposures. The concentration of domestic exposures on the sub-set of non-performing loans is even more marked: 94.5% and 99.98%, respectively, are the percentages of incidence calculated on the impaired segment alone.

In order to provide an exhaustive picture of the Group's risk profile considering the military conflict between Russia and Ukraine still ongoing, it should be noted that direct exposures towards these two countries remain scarcely material as at 31/12/2022 (0.05% 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>Of which: non-performing</i>						
			<i>Of which: defaulted</i>	<i>Of which: loans and advances subject to impairment</i>	<i>Accumulated impairment</i>	<i>Accumulate d negative changes in fair value due to credit risk on non- performing exposures</i>	
010	Agriculture, forestry and fishing	326,852	5,410	5,410	312,417	(3,779)	-
020	Mining and quarrying	60,840	3,971	3,971	60,840	(2,882)	-
030	Manufacturing	5,301,986	191,577	191,577	5,267,198	(129,284)	(6,856)
040	Electricity, gas, steam and air conditioning supply	531,767	4,420	4,420	527,373	(4,658)	-
050	Water supply	218,669	4,510	4,510	218,668	(3,101)	-
060	Construction	1,699,021	236,557	236,557	1,651,098	(160,269)	(1,727)
070	Wholesale and retail trade	2,961,141	119,194	119,194	2,924,043	(82,755)	(500)
080	Transport and storage	435,321	21,360	21,360	431,667	(15,623)	(176)
090	Accommodation and food service activities	980,201	84,677	84,677	960,087	(46,508)	(269)
100	Information and communication	349,693	25,590	25,590	348,411	(18,716)	(15)
110	Financial and insurance activities	288,500	24,315	24,315	286,636	(15,708)	-
120	Real estate activities	2,547,344	260,849	260,849	2,474,268	(148,564)	(3,122)
130	Professional, scientific and technical activities	1,115,113	44,627	44,627	1,106,839	(35,549)	(1,452)
140	Administrative and support service activities	328,967	16,555	16,555	327,012	(10,456)	(97)
150	Public administration and defence, compulsory social security	48	-	-	48	0	-
160	Education	26,030	774	774	25,825	(428)	(10)
170	Human health services and social work activities	315,191	1,031	1,031	312,871	(2,034)	-
180	Arts, entertainment and recreation	266,829	13,033	13,033	266,090	(8,243)	(119)
190	Other services	377,459	7,714	7,714	375,927	(6,392)	-
200	TOTAL AS AT 31/12/2022	18,130,973	1,066,164	1,066,164	17,877,318	(694,947)	(14,343)
	TOTAL AS AT 31/12/2021	17,317,055	1,381,806	1,381,806	17,042,976	(834,272)	(11,067)

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

At 31 December 2022, the business sectors where the exposures were most concentrated were: Manufacturing (29.2% of total exposure), Wholesale and Retail Trade (16.3% of total exposure) and Real Estate (14.0% of total exposure). With reference to the impaired segment only, the prevailing

segments were: Real Estate (24.5% of total impaired exposures), Construction (22.2% of total impaired exposures) and Manufacturing (18.0% 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	33,957,444	32,495,038	51,095	1,462,406	650,366
020	Of which secured	19,400,087	18,179,490	43,376	1,220,597	533,236
030	Of which secured with immovable property	13,292,116	12,452,110	26,959	840,006	376,116
040	Of which instruments with LTV higher than 60% and lower or equal to 80%	4,545,300	4,401,913		143,387	79,612
050	Of which instruments with LTV higher than 80% and lower or equal to 100%	409,846	323,043		86,803	34,463
060	Of which instruments with LTV higher than 100%	366,344	190,723		175,621	26,888
070	Accumulated impairment for secured assets	(775,980)	(107,529)	(2,241)	(668,450)	(207,888)
080	Collateral					
090	Of which value capped at the value of exposure	17,000,726	16,554,476	28,318	446,250	264,510
100	Of which immovable property	13,930,113	13,499,753	25,237	430,360	254,879
110	Of which value above the cap	21,496,335	19,742,605	62,487	1,753,730	863,558
120	Of which immovable property	20,433,183	18,732,440	62,433	1,700,744	858,361
130	Financial guarantees received	5,762,687	5,661,241	11,772	101,446	57,579
140	Accumulated partial write-off	(114,266)	(2)	-	(114,264)	(20,107)

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	812,039	69,852	123,522	135,324	200,019	87,518	195,805
020	Of which secured	687,361	47,981	109,083	115,144	151,095	80,626	183,432
030	Of which secured with immovable property	463,891	22,349	76,609	88,450	104,486	53,903	118,093
040	Of which instruments with LTV higher than 60% and lower or equal to 80%	63,775						
050	Of which instruments with LTV higher than 80% and lower or equal to 100%	52,341						
060	Of which instruments with LTV higher than 100%	148,733						
070	Accumulated impairment for secured assets	(460,562)	(21,788)	(63,207)	(67,587)	(96,339)	(59,301)	(152,340)
080	Collateral							
090	Of which value capped at the value of exposure	181,740	12,235	34,229	40,346	49,918	18,873	26,140
100	Of which immovable property	175,481	11,807	30,346	39,516	49,244	18,484	26,084
110	Of which value above the cap	890,172	48,248	155,701	143,742	224,097	90,385	227,999
120	Of which immovable property	842,382	45,353	154,653	125,876	213,126	83,751	219,625
130	Financial guarantees received	43,867	13,766	10,969	7,789	4,219	2,411	4,713
140	Accumulated partial write-off	(94,157)	-	(25)	-	(50,878)	(7,553)	(35,702)

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 2022, guaranteed exposures represented more than a half of total loans and advances disbursed by the Group (about 57%); guaranteed exposure rose to over 80% for the impaired segment alone. It should also be noted that, for the portion of the portfolio guaranteed by real estate assets (about 39% of total exposure) only a fraction equal to 13.4% had an LTV ratio (loan amount / guarantee value) higher than 60%.

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

	31/12/2022		31/12/2021	
	a	b	a	b
	<i>Collateral obtained by taking possession</i>		<i>Collateral obtained by taking possession</i>	
	<i>Value at initial recognition</i>	<i>Accumulated negative changes</i>	<i>Value at initial recognition</i>	<i>Accumulated negative changes</i>
010 Property, plant and equipment (PP&E)	-	-	-	-
020 Other than PP&E	39,803	(1,647)	41,620	(3,396)
030 Residential immovable property	7,106	(1,647)	8,927	(3,396)
040 Commercial Immovable property	-	-	-	-
050 Movable property (auto, shipping, etc.)	-	-	-	-
060 Equity and debt instruments	-	-	-	-
070 Other collateral	32,698	-	32,694	-
080 TOTAL	39,803	(1,647)	41,620	(3,396)

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

Similar to as observed at 31 December 2021, 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
	<i>Debt balance reduction</i>		<i>Total collateral obtained by taking possessions</i>			
	<i>Gross carrying amount</i>	<i>Accumulated negative changes</i>	<i>Value at initial recognition</i>	<i>Accumulated negative changes</i>	<i>Foreclosed <= 2 years</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	91,232	(1,647)	39,803	(1,647)	36,422	(675)
030 Residential immovable property	7,106	(1,647)	7,106	(1,647)	3,724	(675)
040 Commercial immovable property	-	-	-	-	-	-
050 Movable property (auto, shipping, etc.)	-	-	-	-	-	-
060 Equity and debt instruments	-	-	-	-	-	-
070 Other collateral	84,126	-	32,698	-	32,698	-
080 TOTAL AS AT 31/12/2022	91,232	(1,647)	39,803	(1,647)	36,422	(675)
TOTAL AS AT 31/12/2021	41,620	(3,396)	41,620	(3,396)	40,831	(3,189)

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	3,382	(972)	-	-	-	-
030	<i>Residential immovable property</i>	3,382	(972)	-	-	-	-
040	<i>Commercial immovable property</i>	-	-	-	-	-	-
050	<i>Movable property (auto, shipping, etc.)</i>	-	-	-	-	-	-
060	<i>Equity and debt instruments</i>	-	-	-	-	-	-
070	<i>Other collateral</i>	-	-	-	-	-	-
080	TOTAL AS AT 31/12/2022	3,382	(972)	-	-	-	-
	TOTAL AS AT 31/12/2021	790	(206)	-	-	-	-

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

At 31 December 2022, collaterals obtained by taking possession and through execution processes remained marginal. The possession activity focuses almost entirely on residential properties with foreclosure date no later than two years with respect to 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 were 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 was mitigated:

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

In this regard, the Parent Company has defined specific guidelines for the disbursement, monitoring and management of moratoria, in order to promptly identify any potential sign of deterioration in credit quality. With reference to these measures, 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 debtors 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 internal ratings with the request to adopt a prospective approach to assessing the

solvency of borrowers with the aim of anticipating future significant changes in the macro-economic context.

The tables below contain information, as at 31 December 2022, 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 2020¹³. 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 payments 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: Information on loans and advances subject to legislative and non-legislative moratoria

The table is no longer published because, as at 31 December 2022, the Group no longer had exposures subject to moratoria in accordance with the Guidelines EBA/GL/2020/02.

Table 61 - Template 2: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria (1 of 2)

	a	b	c		d
			Gross carrying amount		
	Number of obligors		Of which: legislative moratoria	Of which: expired	
1 Loans and advances for which moratorium was offered	18,638	3,869,188			
2 Loans and advances subject to moratorium (granted)	18,587	3,851,697	2,505,421		3,851,697
3 of which: Households		1,125,899	339,962		1,125,899
4 of which: Collateralised by residential immovable property		651,798	96,775		651,798
5 of which: Non-financial corporations		2,577,242	2,100,004		2,577,242
6 of which: Small and Medium-sized Enterprises		1,946,909	1,725,253		1,946,909
7 of which: Collateralised by commercial immovable property		1,344,465	1,196,514		1,344,465

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

¹³ As a result of the changed pandemic scenario and the decreasing relevance of public support measures in the Union, the European Banking Authority (EBA) repealed the guidelines EBA/GL/2020/07 on 16 December last with effect from 1 January 2023.

Table 62 - Template 2: Breakdown of loans and advances 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)	-	-	-	-	-
3	<i>of which: Households</i>	-	-	-	-	-
4	of which: Collateralised by residential immovable property	-	-	-	-	-
5	<i>of which: Non-financial corporations</i>	-	-	-	-	-
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 2022, the Group granted moratoria on loans for a total exposure of 3.9 billion euro; since June, the number of moratoria with suspension still under way has been eliminated. 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 1.3 billion euro;
- moratoria granted on the initiative of a Group company (non-legislative and non-associational) for a total exposure of 356 million euro, of which about 118 million euro referring to retail customers and the rest, about 238 million euro, 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, Wholesale and Retail Trade.

Table 63 - Template 3: 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: forborne</i>	<i>Public guarantees received</i>	<i>Inflows to non-performing exposures</i>
1 Newly originated loans and advances subject to public guarantee schemes	2,851,550	28,214	2,332,692	18,126
2 <i>of which: Households</i>	243,539			-
3 <i>of which: Collateralised by residential immovable property</i>	-			-
4 <i>of which: Non-financial corporations</i>	2,595,875	22,671	2,097,945	10,352
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 2022, loans and advances secured by public guarantee schemes disbursed by the Group amounted to a total of 2.9 billion euro, of which 2.6 billion euro to non-financial corporations and for 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 forms of guarantee 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 (e.g. 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);
- 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.

A further level of control is ensured through a special Committee, which is responsible for all activities aimed at ensuring an effective internal control system over the activities of the providers and technicians entrusted from time to time with the performance of expert valuation activities for the determination of the value of real estate as collateral.

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 local units and the electronic credit application is processed for subsequent checks by the credit investigators and the approval Bodies.

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 the subsidiary Factorit's operations, mitigation to the risk assumed by the factor can be found in the technical practice used to consolidate the transfer of risk versus the assigned debtor and in fragmenting the risk 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 BNT Banca, the 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 strictly related to the type of credit operations carried out by the Group. The collateral portfolio is primarily composed of real 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 entities' settlement areas. Personal guarantees constitute a secondary share of the overall portfolio. The main type of guarantor is the "Sovereign" category (roughly 64% of the total), followed by guarantors classified as "Retail" and "Corporate"

(respectively about 21% and 10% of the total). With reference to guarantors, it is shown that most of them (about 61%) are in the best internal rating classes.

* * *

Summarised below are the Group's exposures as at 31 December 2022 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 64 - Template EU CR3 - CRM Techniques – Overview

		<i>Secured carrying amount</i>				
		<i>Unsecured carrying amount</i>	<i>Of which secured by collateral</i>			<i>Of which secured by financial guarantees</i>
						<i>Of which secured by credit derivatives</i>
		<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>
1	Loans and advances	17,342,654	22,763,413	17,000,726	5,762,687	-
2	Debt securities	13,544,476	-	-	-	-
3	TOTAL AS AT 31/12/2022	30,887,130	22,763,413	17,000,726	5,762,687	-
4	Of which non-performing exposures	62,839	547,696	446,250	101,446	-
EU-5	Of which defaulted	62,839	547,696	446,250	101,446	-
	TOTAL AS AT 31/12/2021	31,499,810	21,370,892	16,047,798	5,323,094	-

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

At 31 December 2022 there were no significant changes compared with last year in the proportions of unsecured exposures (around 58% of the total at 31/12/2022) and exposures secured by CRM techniques (around 42% of the total at 31/12/2022) and, within the latter, between exposures secured by collateral (around 75% of the total secured at 31/12/2022) and by financial guarantees (around 25% of the total secured at 31/12/2022). No risk hedging transactions were made using credit derivatives.

Section 10 - Disclosure of the use of the standardised approach to credit risk (articles 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).

Table 65 - List of ECAIs used for the weighting of credit risk exposures and positions towards securitisation – Standardised approach

Regulatory class	ECAI	Type of rating (1)
Exposures to Central Administration or Central Banks	Scope Ratings	<i>Unsolicited</i>
Exposures to supervised intermediaries	FitchRatings Standard & Poor's Rating Services	<i>Solicited</i>
Exposures to international organisations	FitchRatings Standard & Poor's Rating Services	<i>Solicited</i>
Exposures to multilateral development banks	Standard & Poor's Rating Services	<i>Solicited</i>
Exposures 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 the provisions of Regulation (EU) 575/2013 (CRR), the criteria, summarised below, regarding the use of ECAI 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 refers to the following rules regarding use of the rating:

1. issuer ratings are attributed to comparable financial assets, regardless of their 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 adopts a rule of precedence, which provides for the priority use of the issue rating; only if this is not available, where the conditions dictated by the CRR exist, the rating relating to the issuer is used.

It should be noted that the ECAI rating used is always the long-term rating.

To assess the eligibility of guarantees with a view to CRM, as well as the regulatory volatility adjustments attributed as part of the regulatory formulas for calculating the capital requirements, in general the prevalence rule as above was set (priority use of issue rating and, in its absence, of issuer rating).

* * *

The following table shows, for each of the Group's exposure classes as at 31 December 2022, the effect of the credit risk mitigation (CRM) techniques recognised as part of the determination of the capital requirement for credit risk under the "Standardised Approach". The relative RWA density is also measured for each regulatory class, a summary indicator of risk comparison between portfolios 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	18,177,897	64,979	21,330,840	20,446	197	0.0009 %
2 Regional governments or local authorities	59,217	68,911	59,368	8,999	15,702	22.9675 %
3 Public sector entities	578,032	525,240	577,854	32,905	446,857	73.1641 %
4 Multilateral development banks	147,157	-	321,542	1,221	-	-
5 International organizations	136,823	15,574	136,823	287	-	-
6 Institutions	2,970,110	1,261,124	2,912,246	166,689	1,265,682	41.1078 %
7 Corporates	3,658,997	1,222,177	3,550,213	396,024	3,396,842	86.0780 %
8 Retail	916,093	418,201	618,722	36,544	372,857	56.9016 %
9 Secured by mortgages on immovable property	4,725,730	5,252	4,725,730	1,866	1,941,563	41.0687 %
10 Exposures in default	55,543	1,424	54,693	603	56,910	102.9197 %
11 Higher-risk categories	93,009	-	93,009	-	139,513	150.0000 %
12 Covered bonds	218,642	-	218,642	-	27,484	12.5705 %
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14 collective investments undertakings	808,255	415,543	808,255	15,553	906,851	110.0805 %
15 Equity	548,884	-	548,884	-	888,169	161.8136 %
16 Other items	1,902,363	14,185	1,902,363	7,093	965,133	50.5449 %
17 TOTAL AS AT 31/12/2022	34,996,750	4,012,610	37,859,183	688,229	10,423,761	27.0414 %
TOTAL AS AT 31/12/2021	33,222,395	3,022,123	35,913,258	702,511	9,421,127	25.7297 %

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 2022 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	21,350,334	-	-	-	928	-
2 Regional governments or local authorities	-	-	-	-	65,831	-
3 Public sector entities	-	-	-	-	27,454	-
4 Multilateral development banks	322,763	-	-	-	-	-
5 International organizations	137,110	-	-	-	-	-
6 Institutions	-	-	-	-	1,629,197	-
7 Corporates	-	-	-	-	82,587	51,766
8 Retail	-	-	-	-	-	234,367
9 Secured by mortgages on immovable property	-	-	-	-	-	4,220,613
10 Exposures in default	-	-	-	-	-	-
11 Higher-risk categories	-	-	-	-	-	-
12 Covered bonds	-	-	-	162,441	56,201	-
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14 Collective investment undertakings	259,068	-	-	166	16,785	-
15 Equity	-	-	-	-	-	-
16 Other items	1,050,956	-	-	-	23,554	-
17 TOTAL AS AT 31/12/2022	23,120,231	-	-	162,607	1,902,537	4,506,745
TOTAL AS AT 31/12/2021	22,348,801	-	-	135,294	2,301,577	4,035,954

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	24	-	-	-	-	-
2 Regional governments or local authorities	-	-	-	2,536	-	-
3 Public sector entities	283,878	-	-	299,427	-	-
4 Multilateral development banks	-	-	-	-	-	-
5 International organizations	-	-	-	-	-	-
6 Institutions	1,019,797	-	-	429,939	4	-
7 Corporates	736,159	84,819	-	2,944,820	46,087	-
8 Retail	-	-	420,899	-	-	-
9 Secured by mortgages on immovable property	6,391	-	155,517	345,074	-	-
10 Exposures in default	-	-	-	52,067	3,229	-
11 Higher-risk categories	-	-	-	-	93,009	-
12 Covered bonds	-	-	-	-	-	-
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14 Collective investment undertakings	51,512	-	-	368,183	98,882	389
15 Equity	-	-	-	322,694	-	226,190
16 Other items	-	-	-	751,293	-	83,652
17 TOTAL AS AT 31/12/2022	2,097,760	84,819	576,416	5,516,032	241,210	310,231
TOTAL AS AT 31/12/2021	1,218,981	81,004	556,432	5,493,469	164,549	267,308

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%	Altri			
	m	n	o	p	q	
1	Central governments or central banks	-	-	-	21,351,286	201,937
2	Regional governments or local authorities	-	-	-	68,367	68,367
3	Public sector entities	-	-	-	610,759	416,758
4	Multilateral development banks	-	-	-	322,763	-
5	International organizations	-	-	-	137,110	-
6	Institutions	-	-	-	3,078,936	916,912
7	Corporates	-	-	-	3,946,237	2,268,970
8	Retail	-	-	-	655,266	655,266
9	Secured by mortgages on immovable property	-	-	-	4,727,596	4,727,596
10	Exposures in default	-	-	-	55,296	55,296
11	Higher-risk categories	-	-	-	93,009	93,009
12	Covered bonds	-	-	-	218,642	-
13	Institutions and corporates with a short-term credit assessment	-	-	-	-	-
14	Collective investment undertakings	-	28,824	-	823,808	717,487
15	Equity	-	-	-	548,884	548,884
16	Other items	-	-	-	1,909,455	1,909,455
17	TOTAL AS AT 31/12/2022	-	28,824	-	38,547,412	12,579,935
	TOTAL AS AT 31/12/2021	-	12,402	-	36,615,769	12,438,118

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 (articles 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 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 includes exclusively the Parent Company Banca Popolare di Sondrio. The subsidiaries Factorit and Banca Popolare di Sondrio (SUISSE) will be 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 default¹⁴.

The extension does not include some exposures, which are the subject of a request for authorisation for permanent partial use of the standardised approach (PPU perimeter, Permanent Partial Use). 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);
- All portfolios falling within the corporate scope of the subsidiaries Sinergia Seconda and BNT Banca.

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

¹⁴ 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 is instead included in the multi-year roll-out plan.

definition of default under article 178 of Regulation (EU) No 575/2013 (“CRR”). The main changes included:

- 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 at the date of this document is awaiting formal authorisation to release the new models into production for the purposes of determining capital absorption.

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 internal 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. Finally, further adjustments are foreseen depending on the specific sector of the counterparty or from its possible belonging to an interconnected group from a legal and/or economic point of view.

The “acceptance model”¹⁵ 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 debit counterparties included in the segments covered by internal models is divided into a series of activities.

¹⁵ 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.

The first involves the counterparty credit officer acquiring a series of information of a quantitative or qualitative nature (such as the financial statements, where available, and the qualitative questionnaire to integrate the statistical elements of the models). This information is needed to trigger the automatic rating calculation; they are accompanied by any further indications of a behavioural or trend nature (internal and external).

The rating thus determined by the system can only be changed for “Corporate” counterparties via an “expert” intervention by the operators through an “override” mechanism, which requires confirmation or refusal by the central rating desk unit before being applied.

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 effectively 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 automatically.

The rating class resulting from a specific process of 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 table shows the relative 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”¹⁶ 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

¹⁶ For details on the management segmentation of exposures, please refer to the following paragraph entitled “Risk Segmentation”.

Risk	Creditworthiness	Corporate	Retail – Small Business
Medium	Medium	Speculative grade	Speculative grade
	Uncertain	Speculative grade	Speculative grade
High	Bad	Speculative grade	Speculative grade
	Very Bad	Speculative grade	Speculative grade

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”¹⁷ 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 Loans¹⁸, as well as the consequent evolution of the exposure following the reclassification.

To determine the final LGD to be applied, other model components are also available, such as the costs - both direct and indirect - linked to credit recovery processes, the occurrence of bankruptcy revocations and the potential losses associated with the positions subject to partial write-off.

Furthermore, the estimation of the additional components of Expected Loss Best Estimate (ELBE) and Defaulted Assets (DA) is necessary to account for the expected and unexpected loss associated with defaulted positions.

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.

¹⁷Acronym of “Loss Given Sofferenza”

¹⁸ 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.

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
- 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.

The riskiness summarised by the counterparty PD parameter also contributes to the definition of the sectoral attractiveness underlying the credit policy model.

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. In accordance with IFRS 9 - it 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 portfolio clustering of positions are applied to these positions¹⁹.

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 of unused credit lines 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 solution - net of regulatory floors.

To this end, specific econometric models (“satellite models”) have been set up to estimate on sectoral basis, the possible evolutionary dynamics of the customers' credit risk factors in correspondence with different macro-economic scenarios.

Development of the rating system

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

¹⁹ 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.

- 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;
- 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 managerial 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 models, 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 on the amending application, 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, reporting directly to the Chief Risk Officer - 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

Group	Internal segment
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 ²⁰

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

Regulatory segment	Internal segment
Administrations and central banks	
Multilateral development banks weighted at 0%	Governments
International organisations weighted at 0%	
Public sector bodies	Public administrations (not part of Governments)
Local authorities	
Supervised intermediaries	Other intermediaries and financial businesses Banks and stockbrokers
Individuals	Individuals
Small and medium-sized retail enterprises	Small Economic Operators Small 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

²⁰ This aggregate includes three residual classes.

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 score 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 score 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.

Finally, each rating class is associated with a PD value that reflects the historically observed default rate over a long-term time horizon, identified consistently with the Bank’s Rating Philosophy framework.

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. 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 and the quantification of the costs linked to the credit recovery processes.

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 margins²¹ 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. Having completed the related supervisory assessment, the Group at the date of this document is awaiting formal authorisation to release the new models.

The EAD models relating to “Retail” counterparties, authorised for regulatory purposes by the Supervisory Authority, have been estimated on data samples for the segments used for management purposes: “Individuals”, “Small Economic Operators”, “Small Businesses” and “Non-

²¹ “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.

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 as input in the EAD models, there are data relating to both counterparties and existing credit products.

* * *

The tables below show, for each exposure class envisaged at regulatory level, the values as at 31 December 2022 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;
- 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: Exposures to or secured by corporates (1 of 2)

<i>PD range</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 exposure						
0.00 to <0.15	636,445	1,419,540	3.3000 %	1,098,326	0.1080 %	25,700
0.00 to <0.10	114,627	328,598	5.1000 %	282,381	0.0600 %	11,384
0.10 to <0.15	521,818	1,090,941	2.7000 %	815,945	0.1250 %	14,316
0.15 to <0.25	2,993,401	5,292,942	1.6000 %	3,822,102	0.1810 %	20,555
0.25 to <0.50	3,302,303	4,209,714	2.2000 %	4,232,343	0.4050 %	28,126
0.50 to <0.75	2,615,259	2,808,582	2.3000 %	3,264,616	0.6380 %	14,979
0.75 to <2.50	4,582,950	2,809,490	3.0000 %	5,430,910	1.6220 %	32,162
0.75 to <1.75	2,506,913	1,267,702	3.2000 %	2,910,721	1.1810 %	19,259
1.75 to <2.50	2,076,037	1,541,788	2.9000 %	2,520,189	2.1310 %	12,903
2.50 to <10.00	2,288,126	1,352,400	2.9000 %	2,685,042	4.7260 %	19,817
2.50 to <5.00	1,509,224	919,818	2.9000 %	1,778,076	3.6190 %	13,281
5.00 to <10.00	778,902	432,582	2.9000 %	906,966	6.8950 %	6,536
10.00 to <100.00	1,206,390	500,348	3.4000 %	1,377,039	25.5330 %	13,249
10.00 to <20.00	592,728	311,609	3.4000 %	700,351	13.2310 %	5,166
20.00 to <30.00	126,660	61,658	3.2000 %	146,439	23.0890 %	1,604
30.00 to <100.00	487,002	127,080	3.4000 %	530,249	42.4560 %	6,479
100.00 (default)	1,308,485	179,556	2.6000 %	1,355,599	100.0000 %	5,662
TOTAL AS AT 31/12/2022	18,933,358	18,572,571	21.3000 %	23,265,977	8.4598 %	160,250

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: Exposures to or secured by corporates (2 of 2)

<i>PD range</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 exposure						
0.00 to <0.15	19.3650 %	2	76,287	6.9458 %	227	(1,138)
0.00 to <0.10	20.7980 %	2	8,564	3.0328 %	38	(176)
0.10 to <0.15	18.8690 %	2	67,723	8.3000 %	189	(962)
0.15 to <0.25	24.2940 %	2	786,228	20.5706 %	1,685	(7,451)
0.25 to <0.50	19.6520 %	2	980,240	23.1607 %	3,279	(12,326)
0.50 to <0.75	21.0840 %	2	1,018,471	31.1973 %	4,257	(11,898)
0.75 to <2.50	18.8910 %	3	2,165,563	39.8748 %	16,839	(31,174)
0.75 to <1.75	18.1310 %	2	951,404	32.6862 %	6,274	(15,636)
1.75 to <2.50	19.7690 %	3	1,214,159	48.1773 %	10,565	(15,538)
2.50 to <10.00	17.6840 %	3	1,360,640	50.6748 %	21,457	(37,444)
2.50 to <5.00	17.6380 %	3	851,207	47.8724 %	10,976	(21,890)
5.00 to <10.00	17.7750 %	3	509,433	56.1689 %	10,482	(15,554)
10.00 to <100.00	15.6060 %	3	847,243	61.5264 %	54,458	(42,278)
10.00 to <20.00	15.7870 %	3	438,887	62.6668 %	13,942	(22,029)
20.00 to <30.00	17.7690 %	3	96,285	65.7507 %	6,134	(4,693)
30.00 to <100.00	14.7700 %	4	312,071	58.8536 %	34,383	(15,555)
100,00 (default)	44.0970 %	2	376,901	27.8033 %	572,095	(837,259)
TOTAL AS AT 31/12/2022	21.3820 %	2	7,611,573	32.7155 %	674,297	(980,969)

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: Exposures to or secured by corporates – Corporates - SME (1 of 2)

<i>PD range</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	132,718	457,703	0.9000 %	173,635	0.1180 %	522
0.00 to <0.10	3,034	17,082	0.6000 %	4,036	0.0700 %	98
0.10 to <0.15	129,684	440,622	0.9000 %	169,599	0.1200 %	424
0.15 to <0.25	915,636	1,647,595	0.8000 %	1,051,378	0.1820 %	1,725
0.25 to <0.50	630,475	702,884	1.3000 %	721,521	0.3870 %	995
0.50 to <0.75	757,569	666,402	1.9000 %	885,626	0.5930 %	982
0.75 to <2.50	1,616,877	929,444	1.9000 %	1,794,928	1.6930 %	1,645
0.75 to <1.75	746,176	429,787	2.0000 %	831,597	1.1850 %	878
1.75 to <2.50	870,701	499,657	1.9000 %	963,331	2.1310 %	767
2.50 to <10.00	759,101	309,928	2.8000 %	845,353	4.2780 %	720
2.50 to <5.00	513,320	167,977	2.5000 %	554,871	3.3150 %	425
5.00 to <10.00	245,782	141,951	3.1000 %	290,483	6.1170 %	295
10.00 to <100.00	462,131	244,937	2.5000 %	524,534	24.5560 %	449
10.00 to <20.00	276,284	176,241	3.1000 %	331,714	12.5450 %	203
20.00 to <30.00	31,308	20,801	1.6000 %	34,604	26.1000 %	58
30.00 to <100.00	154,538	47,895	0.8000 %	158,216	49.4010 %	188
100,00 (default)	595,525	60,806	1.5000 %	604,382	100.0000 %	319
TOTAL AS AT 31/12/2022	5,870,032	5,019,699	13.6000 %	6,601,357	12.2687 %	7,357

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: Exposures to or secured by corporates – Corporates - SME (2 of 2)

<i>PD range</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	25.0990 %	2	25,299	14.5702 %	52	(274)
0.00 to <0.10	29.6100 %	2	317	7.8540 %	1	(5)
0.10 to <0.15	24.9910 %	2	24,982	14.7300 %	51	(270)
0.15 to <0.25	23.8560 %	3	190,476	18.1168 %	455	(1,200)
0.25 to <0.50	24.7290 %	2	199,256	27.6161 %	699	(1,584)
0.50 to <0.75	22.3470 %	3	293,557	33.1469 %	1,189	(3,134)
0.75 to <2.50	19.8740 %	3	776,764	43.2755 %	6,070	(9,890)
0.75 to <1.75	20.0030 %	3	322,804	38.8173 %	2,000	(4,570)
1.75 to <2.50	19.7630 %	3	453,961	47.1240 %	4,070	(5,320)
2.50 to <10.00	17.1700 %	3	406,046	48.0327 %	6,333	(7,913)
2.50 to <5.00	16.4010 %	4	242,327	43.6727 %	3,034	(4,276)
5.00 to <10.00	18.6380 %	3	163,718	56.3609 %	3,299	(3,637)
10.00 to <100.00	16.5490 %	3	357,787	68.2104 %	21,540	(17,227)
10.00 to <20.00	16.1780 %	3	215,775	65.0486 %	6,441	(12,123)
20.00 to <30.00	17.5850 %	3	27,454	79.3362 %	1,594	(996)
30.00 to <100.00	17.1000 %	4	114,558	72.4062 %	13,505	(4,108)
100,00 (default)	42.5730 %	2	154,565	25.5740 %	247,219	(354,504)
TOTAL AS AT 31/12/2022	22.9758 %	3	2,403,749	36.4130 %	283,555	(395,727)

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: Exposures to or secured by corporates – Corporates - Other (1 of 2)

<i>PD range</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	73,364	308,115	1.2000 %	109,243	0.1190 %	73
0.00 to <0.10	6	5	-	6	0.0700 %	3
0.10 to <0.15	73,358	308,110	1.2000 %	109,237	0.1190 %	70
0.15 to <0.25	1,419,958	3,184,398	1.4000 %	1,868,956	0.1800 %	397
0.25 to <0.50	915,116	2,946,566	1.6000 %	1,379,317	0.3900 %	221
0.50 to <0.75	741,193	1,781,604	1.8000 %	1,069,949	0.5900 %	174
0.75 to <2.50	924,199	1,199,838	2.4000 %	1,211,130	1.6880 %	260
0.75 to <1.75	496,665	465,066	2.0000 %	588,586	1.1990 %	120
1.75 to <2.50	427,533	734,772	2.7000 %	622,544	2.1500 %	140
2.50 to <10.00	492,650	743,988	2.1000 %	647,590	4.0170 %	139
2.50 to <5.00	365,536	576,100	2.3000 %	495,907	3.3610 %	80
5.00 to <10.00	127,114	167,888	1.5000 %	151,684	6.1600 %	59
10.00 to <100.00	68,496	76,170	2.4000 %	86,952	19.7630 %	88
10.00 to <20.00	42,421	71,314	2.5000 %	60,421	12.4040 %	45
20.00 to <30.00	9,664	229	1.2000 %	9,691	27.1080 %	10
30.00 to <100.00	16,411	4,627	0.9000 %	16,840	41.9380 %	33
100,00 (default)	232,713	62,785	3.0000 %	251,849	100.0000 %	150
TOTAL AS AT 31/12/2022	4,867,690	10,303,465	15.9000 %	6,624,986	4.9914 %	1,502

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: Exposures to or secured by corporates – Corporates - Other (2 of 2)

<i>PD range</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	24.1720 %	2	20,779	19.0209 %	32	(286)
0.00 to <0.10	25.8820 %	1	1	8.8408 %	0	-
0.10 to <0.15	24.1720 %	2	20,779	19.0215 %	32	(286)
0.15 to <0.25	28.1540 %	2	543,067	29.0572 %	956	(4,877)
0.25 to <0.50	27.8050 %	2	605,639	43.9086 %	1,498	(5,130)
0.50 to <0.75	28.0860 %	2	556,789	52.0388 %	1,774	(3,382)
0.75 to <2.50	27.3400 %	2	954,498	78.8105 %	5,608	(5,824)
0.75 to <1.75	27.2510 %	2	394,831	67.0812 %	1,923	(2,680)
1.75 to <2.50	27.4240 %	2	559,668	89.9000 %	3,685	(3,144)
2.50 to <10.00	25.3380 %	2	605,300	93.4695 %	6,607	(13,488)
2.50 to <5.00	25.1570 %	2	419,249	84.5420 %	4,185	(9,163)
5.00 to <10.00	25.9300 %	3	186,050	122.6567 %	2,421	(4,325)
10.00 to <100.00	23.3930 %	3	123,618	142.1681 %	3,555	(1,618)
10.00 to <20.00	26.1690 %	3	92,269	152.7107 %	1,970	(1,485)
20.00 to <30.00	24.0900 %	4	17,585	181.4570 %	636	(17)
30.00 to <100.00	13.0330 %	4	13,764	81.7343 %	949	(116)
100,00 (default)	49.5650 %	1	63,201	25.0949 %	121,090	(177,152)
TOTAL AS AT 31/12/2022	28.3321 %	2	3,472,891	52.4211 %	141,120	(211,757)

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: Exposures to or secured by corporates – Retail - Secured by immovable property SME (1 of 2)

PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors
a	b	c	d	e	f	g
Retail - Secured by immovable property SME						
0.00 to <0.15	117,829	5,384	4.5000 %	120,234	0.1180 %	1,281
0.00 to <0.10	10,406	2,568	4.6000 %	11,584	0.0700 %	96
0.10 to <0.15	107,423	2,816	4.4000 %	108,650	0.1230 %	1,185
0.15 to <0.25	376,814	5,794	2.8000 %	378,430	0.1800 %	3,526
0.25 to <0.50	100,196	2,163	3.2000 %	100,894	0.3050 %	1,001
0.50 to <0.75	82,553	3,168	3.7000 %	83,710	0.6410 %	376
0.75 to <2.50	310,001	6,559	3.0000 %	311,956	1.3720 %	2,279
0.75 to <1.75	181,652	1,787	4.0000 %	182,368	1.0390 %	1,403
1.75 to <2.50	128,349	4,772	2.6000 %	129,588	1.8410 %	876
2.50 to <10.00	196,337	7,792	2.1000 %	197,951	4.1250 %	1,376
2.50 to <5.00	154,132	4,968	2.9000 %	155,572	3.5730 %	1,154
5.00 to <10.00	42,205	2,824	0.6000 %	42,379	6.1540 %	222
10.00 to <100.00	215,533	2,441	4.1000 %	216,540	24.1010 %	1,748
10.00 to <20.00	90,668	1,428	4.5000 %	91,308	11.8510 %	723
20.00 to <30.00	40,907	460	4.2000 %	41,098	21.1090 %	343
30.00 to <100.00	83,958	553	3.2000 %	84,135	38.8580 %	682
100,00 (default)	103,088	159	-	103,088	100.0000 %	601
TOTAL AS AT 31/12/2022	1,502,351	33,460	23.4000 %	1,512,804	11.1970 %	12,188

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: Exposures to or secured by corporates – Retail - Secured by immovable property SME (2 of 2)

PD range	Exposure weighted average LGD (%)	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
a	h	i	j	k	l	m
Retail - Secured by immovable property SME						
0.00 to <0.15	12.5100 %	-	3,417	2.8417 %	17	(50)
0.00 to <0.10	19.5140 %	-	329	2.8407 %	2	(8)
0.10 to <0.15	11.7640 %	-	3,088	2.8418 %	16	(42)
0.15 to <0.25	10.8220 %	-	13,537	3.5771 %	74	(599)
0.25 to <0.50	14.7760 %	-	7,177	7.1129 %	46	(255)
0.50 to <0.75	19.9440 %	-	13,369	15.9703 %	107	(443)
0.75 to <2.50	13.8760 %	-	58,445	18.7349 %	611	(1,888)
0.75 to <1.75	13.4860 %	-	27,868	15.2813 %	263	(923)
1.75 to <2.50	14.4250 %	-	30,577	23.5951 %	349	(964)
2.50 to <10.00	13.8800 %	-	70,422	35.5754 %	1,185	(2,382)
2.50 to <5.00	12.4920 %	-	46,175	29.6808 %	689	(1,775)
5.00 to <10.00	18.9730 %	-	24,247	57.2143 %	496	(607)
10.00 to <100.00	12.7600 %	-	128,385	59.2891 %	6,892	(7,034)
10.00 to <20.00	12.2910 %	-	49,016	53.6824 %	1,356	(2,261)
20.00 to <30.00	13.0580 %	-	26,387	64.2052 %	1,138	(1,812)
30.00 to <100.00	13.1240 %	-	52,982	62.9724 %	4,398	(2,961)
100,00 (default)	33.9530 %	-	61,317	59.4803 %	30,380	(50,511)
TOTAL AS AT 31/12/2022	14.6082 %	-	356,067	23.5369 %	39,312	(63,160)

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: Exposures to or secured by corporates - Retail - Secured by immovable property non-SME (1 of 2)

PD range	On-balance sheet exposures	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD (%)	Number of obligors
a	b	c	d	e	f	g
Retail - Secured by immovable property non-SME						
0.00 to <0.15	128,244	2,805	6.4000 %	130,033	0.1110 %	1,727
0.00 to <0.10	42,048	659	8.4000 %	42,602	0.0500 %	686
0.10 to <0.15	86,196	2,146	5.8000 %	87,431	0.1400 %	1,041
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	1,196,081	14,999	6.0000 %	1,205,141	0.4470 %	10,652
0.50 to <0.75	692,387	3,006	6.5000 %	694,330	0.7400 %	5,996
0.75 to <2.50	888,364	10,392	6.6000 %	895,223	1.6080 %	7,319
0.75 to <1.75	595,274	8,165	6.9000 %	600,911	1.2200 %	5,018
1.75 to <2.50	293,090	2,227	5.5000 %	294,311	2.4000 %	2,301
2.50 to <10.00	378,891	1,937	4.9000 %	379,850	6.7860 %	3,280
2.50 to <5.00	207,507	1,159	5.0000 %	208,089	4.8100 %	1,708
5.00 to <10.00	171,384	778	4.9000 %	171,761	9.1800 %	1,572
10.00 to <100.00	198,314	358	4.0000 %	198,456	29.7870 %	1,864
10.00 to <20.00	78,957	320	4.0000 %	79,085	18.9900 %	745
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	119,357	38	3.8000 %	119,371	36.9400 %	1,119
100,00 (default)	100,705	207	-	100,705	100.0000 %	614
TOTAL AS AT 31/12/2022	3,582,984	33,704	34.4000 %	3,603,737	5.8456 %	31,452

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: Exposures to or secured by corporates - Retail - Secured by immovable property non-SME (2 of 2)

PD range	Exposure weighted average LGD (%)	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
a	h	i	j	k	l	m
Retail - Secured by immovable property non-SME						
0.00 to <0.15	8.9990 %	-	3,272	2.5161 %	13	(95)
0.00 to <0.10	9.0420 %	-	589	1.3836 %	2	(31)
0.10 to <0.15	8.9780 %	-	2,682	3.0680 %	11	(64)
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	8.9270 %	-	86,278	7.1592 %	481	(3,630)
0.50 to <0.75	9.0650 %	-	71,674	10.3228 %	466	(2,922)
0.75 to <2.50	8.9640 %	-	149,702	16.7223 %	1,290	(5,395)
0.75 to <1.75	8.9730 %	-	85,735	14.2676 %	658	(2,817)
1.75 to <2.50	8.9470 %	-	63,967	21.7344 %	632	(2,578)
2.50 to <10.00	8.9580 %	-	142,094	37.4078 %	2,312	(6,094)
2.50 to <5.00	8.9250 %	-	66,729	32.0673 %	893	(2,797)
5.00 to <10.00	8.9980 %	-	75,365	43.8778 %	1,419	(3,296)
10.00 to <100.00	8.9870 %	-	112,105	56.4888 %	5,318	(6,624)
10.00 to <20.00	8.9530 %	-	43,859	55.4583 %	1,345	(2,899)
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	9.0100 %	-	68,246	57.1715 %	3,973	(3,724)
100,00 (default)	22.4100 %	-	43,741	43.4347 %	19,235	(47,898)
TOTAL AS AT 31/12/2022	9.3487 %	-	608,867	16.8954 %	29,114	(72,658)

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: Exposures to or secured by corporates - Retail - Qualifying revolving (1 of 2)

<i>PD range</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 - Qualifying revolving						
0.00 to <0.15	9,306	84,002	6.0000 %	60,082	0.0850 %	9,371
0.00 to <0.10	3,500	53,003	5.9000 %	35,009	0.0460 %	6,179
0.10 to <0.15	5,807	30,999	6.2000 %	25,074	0.1400 %	3,192
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	41,642	60,369	6.3000 %	79,832	0.4380 %	6,226
0.50 to <0.75	12,591	12,824	5.6000 %	19,872	0.7400 %	1,118
0.75 to <2.50	34,521	24,121	5.6000 %	48,550	1.6330 %	2,910
0.75 to <1.75	22,313	16,024	5.6000 %	31,561	1.2200 %	1,748
1.75 to <2.50	12,208	8,097	5.6000 %	16,989	2.4000 %	1,162
2.50 to <10.00	15,465	6,985	6.1000 %	20,080	6.7790 %	1,395
2.50 to <5.00	8,690	3,209	6.4000 %	10,945	4.8100 %	724
5.00 to <10.00	6,775	3,776	5.8000 %	9,135	9.1370 %	671
10.00 to <100.00	3,776	3,865	6.1000 %	6,289	29.4780 %	651
10.00 to <20.00	1,849	1,022	6.8000 %	2,615	18.9900 %	255
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	1,927	2,842	5.9000 %	3,675	36.9400 %	396
100,00 (default)	1,947	404	-	1,947	100.0000 %	187
TOTAL AS AT 31/12/2022	119,248	192,570	35.7000 %	236,653	2.7477 %	21,858

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: Exposures to or secured by corporates - Retail - Qualifying revolving (2 of 2)

<i>PD range</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	13.8220 %	-	476	0.7921 %	7	(24)
0.00 to <0.10	13.7250 %	-	166	0.4741 %	2	(7)
0.10 to <0.15	13.9580 %	-	310	1.2362 %	5	(17)
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	14.1510 %	-	2,526	3.1640 %	49	(245)
0.50 to <0.75	14.1830 %	-	952	4.7904 %	21	(96)
0.75 to <2.50	14.2060 %	-	4,191	8.6314 %	113	(365)
0.75 to <1.75	14.2170 %	-	2,223	7.0448 %	55	(182)
1.75 to <2.50	14.1860 %	-	1,967	11.5791 %	58	(183)
2.50 to <10.00	14.2180 %	-	4,610	22.9586 %	193	(432)
2.50 to <5.00	14.2280 %	-	2,056	18.7798 %	75	(192)
5.00 to <10.00	14.2060 %	-	2,555	27.9658 %	119	(240)
10.00 to <100.00	14.1070 %	-	2,819	44.8203 %	261	(221)
10.00 to <20.00	14.1760 %	-	1,059	40.5053 %	70	(110)
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	14.0570 %	-	1,760	47.8904 %	191	(111)
100,00 (default)	26.6840 %	-	32	1.6381 %	517	(1,181)
TOTAL AS AT 31/12/2022	14.1891 %	-	15,605	6.5942 %	1,162	(2,563)

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: Exposures to or secured by corporates - Retail - Other SME (1 of 2)

<i>PD range</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	125,629	501,545	4.9000 %	369,335	0.1020 %	11,754
0.00 to <0.10	37,756	226,597	4.4000 %	138,155	0.0700 %	3,202
0.10 to <0.15	87,872	274,948	5.2000 %	231,179	0.1210 %	8,552
0.15 to <0.25	280,992	455,154	5.3000 %	523,338	0.1810 %	15,996
0.25 to <0.50	171,229	340,166	5.3000 %	352,341	0.3350 %	5,491
0.50 to <0.75	214,011	288,007	4.6000 %	347,986	0.6380 %	3,823
0.75 to <2.50	563,566	512,255	4.6000 %	801,077	1.4880 %	12,659
0.75 to <1.75	296,163	262,763	4.8000 %	422,931	1.1270 %	6,883
1.75 to <2.50	267,403	249,492	4.4000 %	378,146	1.8920 %	5,776
2.50 to <10.00	348,238	245,797	4.9000 %	469,866	4.5150 %	8,351
2.50 to <5.00	206,155	141,794	5.2000 %	280,049	3.4830 %	5,900
5.00 to <10.00	142,083	104,003	4.6000 %	189,817	6.0390 %	2,451
10.00 to <100.00	227,112	166,746	4.8000 %	307,960	26.6110 %	7,514
10.00 to <20.00	89,261	58,167	5.1000 %	118,978	11.8820 %	2,923
20.00 to <30.00	44,781	40,168	4.0000 %	61,046	22.0770 %	1,368
30.00 to <100.00	93,070	68,411	5.0000 %	127,936	42.4730 %	3,223
100.00 (default)	205,988	53,110	3.6000 %	224,954	100.0000 %	3,304
TOTAL AS AT 31/12/2022	2,136,765	2,562,779	38.0000 %	3,396,858	10.1495 %	68,892

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: Exposures to or secured by corporates - Retail - Other SME (2 of 2)

<i>PD range</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	25.1710 %	-	19,006	5.1461 %	92	(283)
0.00 to <0.10	29.6210 %	-	6,291	4.5535 %	29	(68)
0.10 to <0.15	22.5110 %	-	12,715	5.5002 %	63	(215)
0.15 to <0.25	21.1330 %	-	39,148	7.4805 %	199	(774)
0.25 to <0.50	26.8460 %	-	48,209	13.6826 %	320	(974)
0.50 to <0.75	26.1390 %	-	65,247	18.7500 %	578	(1,581)
0.75 to <2.50	21.5010 %	-	174,193	21.7448 %	2,565	(5,415)
0.75 to <1.75	22.4670 %	-	89,241	21.1007 %	1,092	(2,782)
1.75 to <2.50	20.4190 %	-	84,952	22.4653 %	1,473	(2,632)
2.50 to <10.00	18.9380 %	-	110,883	23.5988 %	4,054	(5,467)
2.50 to <5.00	18.2640 %	-	62,817	22.4307 %	1,770	(2,977)
5.00 to <10.00	19.9310 %	-	48,066	25.3222 %	2,284	(2,490)
10.00 to <100.00	18.8880 %	-	113,680	36.9138 %	15,940	(8,278)
10.00 to <20.00	17.7020 %	-	33,629	28.2645 %	2,505	(2,669)
20.00 to <30.00	20.0430 %	-	24,860	40.7226 %	2,766	(1,869)
30.00 to <100.00	19.4390 %	-	55,191	43.1400 %	10,669	(3,741)
100,00 (default)	56.1560 %	-	50,796	22.5807 %	122,623	(159,179)
TOTAL AS AT 31/12/2022	24.5765 %	-	621,163	18.2864 %	146,371	(181,950)

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: Exposures to or secured by corporates - Retail Other non-SME (1 of 2)

<i>PD range</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	49,354	59,985	14.4000 %	135,764	0.1050 %	3,767
0.00 to <0.10	17,877	28,685	11.5000 %	50,989	0.0460 %	2,255
0.10 to <0.15	31,477	31,301	17.0000 %	84,775	0.1400 %	1,512
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	247,564	142,567	10.2000 %	393,298	0.4440 %	7,719
0.50 to <0.75	114,954	53,572	9.0000 %	163,142	0.7400 %	3,846
0.75 to <2.50	245,423	126,882	9.7000 %	368,045	1.5900 %	8,189
0.75 to <1.75	168,670	84,110	10.0000 %	252,766	1.2200 %	5,019
1.75 to <2.50	76,753	42,772	9.0000 %	115,279	2.4000 %	3,170
2.50 to <10.00	97,443	35,972	7.4000 %	124,352	6.5880 %	6,473
2.50 to <5.00	53,884	24,610	7.6000 %	72,643	4.7460 %	4,482
5.00 to <10.00	43,558	11,362	7.1000 %	51,709	9.1750 %	1,991
10.00 to <100.00	31,030	5,831	8.9000 %	36,307	28.9160 %	2,367
10.00 to <20.00	13,288	3,116	9.3000 %	16,230	18.9900 %	903
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	17,741	2,715	8.4000 %	20,077	36.9400 %	1,464
100,00 (default)	68,520	2,086	0.7000 %	68,675	100.0000 %	1,148
TOTAL AS AT 31/12/2022	854,288	426,895	60.3000 %	1,289,583	7.4686 %	33,509

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: Exposures to or secured by corporates - Retail Other non-SME (2 of 2)

<i>PD range</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	10.8220 %	-	4,039	2.9748 %	15	(126)
0.00 to <0.10	11.1650 %	-	871	1.7086 %	3	(57)
0.10 to <0.15	10.6160 %	-	3,167	3.7363 %	13	(68)
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	10.5340 %	-	31,155	7.9214 %	185	(509)
0.50 to <0.75	10.0940 %	-	16,882	10.3482 %	122	(341)
0.75 to <2.50	9.6300 %	-	47,770	12.9795 %	583	(2,397)
0.75 to <1.75	9.0920 %	-	28,701	11.3549 %	284	(1,682)
1.75 to <2.50	10.8080 %	-	19,069	16.5416 %	300	(715)
2.50 to <10.00	9.8620 %	-	21,286	17.1179 %	774	(1,669)
2.50 to <5.00	9.8430 %	-	11,854	16.3185 %	329	(710)
5.00 to <10.00	9.8880 %	-	9,432	18.2408 %	445	(958)
10.00 to <100.00	8.9100 %	-	8,849	24.3714 %	953	(1,277)
10.00 to <20.00	8.3140 %	-	3,279	20.2057 %	256	(482)
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	9.3930 %	-	5,569	27.7389 %	697	(795)
100,00 (default)	45.4810 %	-	3,250	4.7321 %	31,031	(46,835)
TOTAL AS AT 31/12/2022	12.0012 %	-	133,231	10.3313 %	33,663	(53,153)

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	18,688,934	18,689,680	100.0000 %	-	-
1,1	<i>Of which Regional governments or local authorities</i>		-	-	-	-
1,2	<i>Of which Public sector entities</i>		-	-	-	-
2	Institutions	4,108,313	4,248,644	5.3450 %	94.6550 %	-
3	Corporates	19,192,635	19,576,029	0.6390 %	7.0710 %	92.2900 %
3,1	<i>Of which Corporates - Specialised lending, excluding slotting approach</i>		-	-	-	-
3,2	<i>Of which Corporates - Specialised lending under slotting approach</i>		5,860	-	100.0000 %	-
4	Retail	11,605,166	10,046,499	0.7900 %	0.1300 %	99.0790 %
4,1	<i>of which Retail – Secured by real estate SMEs</i>		1,446,533	-	-	100.0000 %
4,2	<i>of which Retail – Secured by real estate non-SMEs</i>		3,523,330	-	0.0030 %	99.9970 %
4,3	<i>of which Retail – Qualifying revolving</i>		136,320	-	0.0110 %	99.9890 %
4,4	<i>of which Retail – Other SMEs</i>		3,890,734	2.0600 %	0.2530 %	97.6870 %
4,5	<i>of which Retail – Other non-SMEs</i>		1,049,582	-	0.3590 %	99.6410 %
5	Equity	521,588	521,401	100.0000 %	-	-
6	Other non-credit obligation assets	664,615	664,615	99.9190 %	0.0810 %	-
7	TOTAL AS AT 31/12/2022	54,781,251	53,746,868	40.4790 %	9.7060 %	49.8150 %

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 2022 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

	31/12/2022		31/12/2021	
	<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	7,611,573	7,611,573	7,752,467	7,752,467
6 Central governments and central banks	-	-	-	-
7 Institutions	-	-	-	-
8 of which - Corporates	5,876,640	5,876,640	6,179,060	6,179,060
8,1 of which - Corporates SMEs	2,403,749	2,403,749	2,350,573	2,350,573
8,2 of which Corporates - Specialised lending	-	-	-	-
9 Retail	1,734,933	1,734,933	1,573,407	1,573,407
9,1 of which Retail – SMEs - Secured by immovable property collateral	356,067	356,067	311,901	311,901
9,2 of which Retail – non-SMEs - Secured by immovable property collateral	608,867	608,867	522,086	522,086
9,3 of which Retail – Qualifying revolving	15,605	15,605	12,328	12,328
9,4 of which Retail – SMEs - Other	621,163	621,163	609,312	609,312
9,5 of which Retail – Non-SMEs- Other	133,231	133,231	117,780	117,780
10 TOTAL (including FIRB exposures and AIRB exposures)	7,611,573	7,611,573	7,752,467	7,752,467

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 2022, 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 2022 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”²².

²² 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)

		Credit risk Mitigation techniques					
		Funded credit Protection (FCP)					
		Part of exposures covered by Other eligible collaterals (%)					
A-IRB	Total exposures	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	13,226,343	2.3615 %	26.4888 %	25.8965 %	-	0.5923 %
3,1	Of which Corporates – SMEs	6,601,357	4.2987 %	43.6553 %	42.5162 %	-	1.1391 %
3,2	Of which Corporates – Specialised lending	-	-	-	-	-	-
3,3	Of which Corporates – Other	6,624,986	0.4311 %	9.3834 %	9.3360 %	-	0.0474 %
4	Retail	10,039,634	2.4917 %	57.4984 %	57.4745 %	-	0.0239 %
4,1	Of which Retail – Immovable property SMEs	1,512,804	0.0077 %	100.0724 %	100.0724 %	-	-
4,2	Of which Retail – Immovable property non-SMEs	3,603,737	0.0052 %	98.7033 %	98.7033 %	-	-
4,3	Of which Retail – Qualifying revolving	236,653	-	-	-	-	-
4,4	Of which Retail – Other SMEs	3,396,858	3.7719 %	16.9473 %	16.8768 %	-	0.0705 %
4,5	Of which Retail – Other non-SMEs	1,289,583	9.4395 %	9.7740 %	9.7740 %	-	-
5	TOTAL	23,265,977	2.4177 %	39.8699 %	39.5229 %	-	0.3470 %

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 Cash on deposit (%)	Part of exposures covered by Life insurance policies (%)	Part of exposures covered by Instruments held by a third party (%)	Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)	
		g	h	i	j	k	l
1	Central governments and central banks	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-
3	Corporates	-	-	-	-	10.5863 %	-
3.1	Of which Corporates – SMEs	-	-	-	-	16.5055 %	-
3.2	Of which Corporates – Specialised lending	-	-	-	-	-	-
3.3	Of which Corporates – Other	-	-	-	-	4.6882 %	-
4	Retail	0.0005 %	-	0.0005 %	-	8.1691 %	-
4.1	Of which Retail – Immovable property SMEs	-	-	-	-	0.2064 %	-
4.2	Of which Retail – Immovable property non-SMEs	-	-	-	-	0.1526 %	-
4.3	Of which Retail – Qualifying revolving	-	-	-	-	-	-
4.4	Of which Retail – Other SMEs	0.0015 %	-	0.0015 %	-	20.5719 %	-
4.5	Of which Retail – Other non-SMEs	-	-	-	-	8.7414 %	-
5	TOTAL	0.0002 %	-	0.0002 %	-	9.5432 %	-

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	6,855,614	5,876,640
3,1	Of which Corporates – SMEs	3,164,602	2,403,749
3,2	Of which Corporates – Specialised lending		-
3,3	Of which Corporates – Other	3,691,012	3,472,891
4	Retail	2,028,870	1,734,933
4,1	Of which Retail – Immovable property SMEs	419,255	356,067
4,2	Of which Retail – Immovable property non-SMEs	715,740	608,867
4,3	Of which Retail – Qualifying revolving	15,564	15,605
4,4	Of which Retail – Other SMEs	735,044	621,163
4,5	Of which Retail – Other non-SMEs	143,266	133,231
5	TOTAL	8,884,484	7,611,573

Source: COREP reporting framework - Credit and counterparty risks, IRB approach to capital requirements: Template C 08.01

The template below shows the changes in the amounts of risk-weighted exposure (RWA) calculated on the basis of the “Advanced IRB Approach” compared to the previous quarter, giving further details of 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	8,178,955
2	Asset size	(492,646)
3	Asset quality	242,427
4	Model updates	-
5	Methodology and policy	-
6	Acquisitions and disposals	(90,048)
7	Foreign exchange movements	(30,861)
8	Other	(78,150)
9	RISK WEIGHTED EXPOSURE AMOUNT AS AT THE END OF THE REPORTING PERIOD	7,729,677

Source: COREP reporting framework - Flow statements for credit risk, IRB approach to capital requirements: Template C 08.04

As at 31 December 2022, the value of the aggregate of risk-weighted assets subject to credit risk assessed using the “Advanced IRB” approach shows a decrease from the value registered at the beginning of the period.

Table 95 - Template CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - Total

PD range	Number of obligors at the end of the previous year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)	
	a	b					c
0.00 to <0.15		27,052	14	0.0520 %	0.1080 %	0.0940 %	0.0600 %
0.00 to <0.10		12,001	6	0.0500 %	0.0600 %	0.0530 %	0.0520 %
0.10 to <0.15		15,051	8	0.0530 %	0.1250 %	0.1270 %	0.0670 %
0.15 to <0.25		20,246	24	0.1180 %	0.1810 %	0.1830 %	0.1290 %
0.25 to <0.50		27,885	50	0.1790 %	0.4050 %	0.4110 %	0.1890 %
0.50 to <0.75		15,007	50	0.3330 %	0.6380 %	0.7080 %	0.3330 %
0.75 to <2.50		30,535	259	0.8480 %	1.6220 %	1.5270 %	0.8240 %
0.75 to <1.75		18,488	123	0.6650 %	1.1810 %	1.1590 %	0.5980 %
1.75 to <2.50		12,047	136	1.1290 %	2.1310 %	2.0920 %	1.1700 %
2.50 to <10.00		17,096	446	2.6090 %	4.7260 %	5.2620 %	3.0680 %
2.50 to <5.00		11,381	218	1.9150 %	3.6190 %	3.9820 %	2.0820 %
5.00 to <10.00		5,715	228	3.9890 %	6.8950 %	7.8100 %	5.0310 %
10.00 to <100.00		7,133	624	8.7480 %	25.5330 %	23.1710 %	11.4660 %
10.00 to <20.00		3,801	243	6.3930 %	13.2310 %	14.4640 %	7.1330 %
20.00 to <30.00		924	104	11.2550 %	23.0890 %	20.9520 %	11.5800 %
30.00 to <100.00		2,408	277	11.5030 %	42.4560 %	37.7670 %	18.2600 %
100,00 (default)		6,174	6,174	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) - A-IRB - Corporates - SME

PD range	Number of obligors at the end of the previous 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				
a	b	c	d	e	f	g
0.00 to <0.15	540	-	-	0.1180 %	0.1130 %	0.0350 %
0.00 to <0.10	75	-	-	0.0700 %	0.0700 %	0.0820 %
0.10 to <0.15	465	-	-	0.1200 %	0.1200 %	0.0270 %
0.15 to <0.25	1,883	2	0.1060 %	0.1820 %	0.1760 %	0.1110 %
0.25 to <0.50	986	2	0.2030 %	0.3870 %	0.3740 %	0.2580 %
0.50 to <0.75	815	4	0.4910 %	0.5930 %	0.6060 %	0.6040 %
0.75 to <2.50	1,398	10	0.7150 %	1.6930 %	1.5790 %	1.3220 %
0.75 to <1.75	755	4	0.5300 %	1.1850 %	1.1770 %	1.1000 %
1.75 to <2.50	643	6	0.9330 %	2.1310 %	2.0500 %	1.5840 %
2.50 to <10.00	706	25	3.5410 %	4.2780 %	4.4560 %	3.6000 %
2.50 to <5.00	431	17	3.9440 %	3.3150 %	3.3840 %	3.0040 %
5.00 to <10.00	275	8	2.9090 %	6.1170 %	6.1370 %	4.5350 %
10.00 to <100.00	224	20	8.9290 %	24.5560 %	20.7920 %	14.1510 %
10.00 to <20.00	142	12	8.4510 %	12.5450 %	12.2440 %	9.7700 %
20.00 to <30.00	34	5	14.7060 %	26.1000 %	23.7220 %	17.2650 %
30.00 to <100.00	48	3	6.2500 %	49.4010 %	44.0050 %	24.9050 %
100.00 (default)	443	443	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) - A-IRB - Corporates - Other

PD range	Number of obligors at the end of the previous 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				
a	b	c	d	e	f	g
0.00 to <0.15	77	-	-	0.1190 %	0.1180 %	0.0130 %
0.00 to <0.10	2	-	-	0.0700 %	0.0700 %	0.0820 %
0.10 to <0.15	75	-	-	0.1190 %	0.1190 %	0.0110 %
0.15 to <0.25	392	-	-	0.1800 %	0.1780 %	0.1130 %
0.25 to <0.50	182	1	0.5490 %	0.3900 %	0.3840 %	0.2620 %
0.50 to <0.75	125	-	-	0.5900 %	0.5930 %	0.6320 %
0.75 to <2.50	192	2	1.0420 %	1.6880 %	1.5550 %	1.3180 %
0.75 to <1.75	108	1	0.9260 %	1.1990 %	1.1630 %	1.1110 %
1.75 to <2.50	84	1	1.1900 %	2.1500 %	2.0600 %	1.5840 %
2.50 to <10.00	110	5	4.5450 %	4.0170 %	4.3130 %	3.4440 %
2.50 to <5.00	73	2	2.7400 %	3.3610 %	3.4870 %	3.0260 %
5.00 to <10.00	37	3	8.1080 %	6.1600 %	5.9430 %	4.2670 %
10.00 to <100.00	33	2	6.0610 %	19.7630 %	16.8690 %	10.5410 %
10.00 to <20.00	22	1	4.5450 %	12.4040 %	11.6770 %	8.4040 %
20.00 to <30.00	6	1	16.6670 %	27.1080 %	20.7670 %	11.0040 %
30.00 to <100.00	5	-	-	41.9380 %	35.0360 %	19.3910 %
100.00 (default)	102	102	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)-
 A-IRB - Retail - Secured by immovable property SME**

PD range	Number of obligors at the end of the previous 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				
a	b	c	d	e	f	g
0.00 to <0.15	1,157	-	-	0.1180 %	0.1210 %	0.0390 %
0.00 to <0.10	52	-	-	0.0700 %	0.0700 %	0.0820 %
0.10 to <0.15	1,105	-	-	0.1230 %	0.1240 %	0.0370 %
0.15 to <0.25	3,313	2	0.0750 %	0.1800 %	0.1820 %	0.1290 %
0.25 to <0.50	851	1	0.1170 %	0.3050 %	0.2930 %	0.2080 %
0.50 to <0.75	211	1	0.4730 %	0.6410 %	0.6580 %	0.4930 %
0.75 to <2.50	1,792	12	0.6690 %	1.3720 %	1.3060 %	0.7850 %
0.75 to <1.75	1,120	4	0.3570 %	1.0390 %	1.0140 %	0.6540 %
1.75 to <2.50	672	8	1.1900 %	1.8410 %	1.7930 %	1.0020 %
2.50 to <10.00	834	21	2.5780 %	4.1250 %	3.9200 %	2.1280 %
2.50 to <5.00	705	13	1.9150 %	3.5730 %	3.4920 %	1.6280 %
5.00 to <10.00	129	8	6.2020 %	6.1540 %	6.2590 %	4.8590 %
10.00 to <100.00	717	43	6.1320 %	24.1010 %	18.0920 %	8.9770 %
10.00 to <20.00	426	17	4.1030 %	11.8510 %	11.5760 %	5.7460 %
20.00 to <30.00	168	10	5.9520 %	21.1090 %	20.8420 %	10.5960 %
30.00 to <100.00	123	16	13.4150 %	38.8580 %	36.9310 %	17.9720 %
100,00 (default)	468	468	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) - A-IRB - Retail - Secured by immovable property non-SME

PD range	Number of obligors at the end of the previous 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				
a	b	c	d	e	f	g
0.00 to <0.15	1,206	-	-	0.1110 %	0.1000 %	0.0760 %
0.00 to <0.10	518	-	-	0.0500 %	0.0470 %	0.0410 %
0.10 to <0.15	688	-	-	0.1400 %	0.1400 %	0.1030 %
0.15 to <0.25	-	-	-	-	-	-
0.25 to <0.50	9,102	5	0.0570 %	0.4470 %	0.4480 %	0.1780 %
0.50 to <0.75	5,412	7	0.1350 %	0.7400 %	0.7400 %	0.2380 %
0.75 to <2.50	6,223	18	0.3030 %	1.6080 %	1.5710 %	0.6820 %
0.75 to <1.75	4,369	9	0.2140 %	1.2200 %	1.2200 %	0.4770 %
1.75 to <2.50	1,854	9	0.5120 %	2.4000 %	2.4000 %	1.1640 %
2.50 to <10.00	2,404	37	1.5670 %	6.7860 %	6.8210 %	3.5760 %
2.50 to <5.00	1,293	11	0.8900 %	4.8100 %	4.8100 %	1.9650 %
5.00 to <10.00	1,111	26	2.3540 %	9.1800 %	9.1610 %	5.4510 %
10.00 to <100.00	838	45	5.3300 %	29.7870 %	25.2410 %	11.2830 %
10.00 to <20.00	546	25	4.5470 %	18.9900 %	18.9900 %	8.4560 %
20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	292	20	6.7960 %	36.9400 %	36.9400 %	16.5730 %
100,00 (default)	567	567	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) - A-IRB - Retail - Qualifying revolving

PD range	Number of obligors at the end of the previous 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				
a	b	c	d	e	f	g
0.00 to <0.15	-	-	-	0.0850 %	-	-
0.00 to <0.10	-	-	-	0.0460 %	-	-
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	-	-	-	1.6330 %	-	-
0.75 to <1.75	-	-	-	1.2200 %	-	-
1.75 to <2.50	-	-	-	2.4000 %	-	-
2.50 to <10.00	-	-	-	6.7790 %	-	-
2.50 to <5.00	-	-	-	4.8100 %	-	-
5.00 to <10.00	-	-	-	9.1370 %	-	-
10.00 to <100.00	-	-	-	29.4780 %	-	-
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) - A-IRB - Retail - Other SME

PD range	Number of obligors at the end of the previous year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)	
	a	b					c
0.00 to <0.15		11,881	6	0.0500 %	0.1020 %	0.1080 %	0.0620 %
0.00 to <0.10		3,145	2	0.0640 %	0.0700 %	0.0700 %	0.0820 %
0.10 to <0.15		8,736	4	0.0460 %	0.1210 %	0.1210 %	0.0540 %
0.15 to <0.25		14,657	19	0.1330 %	0.1810 %	0.1840 %	0.1320 %
0.25 to <0.50		5,017	11	0.2190 %	0.3350 %	0.3020 %	0.2270 %
0.50 to <0.75		3,945	24	0.6080 %	0.6380 %	0.6570 %	0.4970 %
0.75 to <2.50		11,623	150	1.2900 %	1.4880 %	1.4170 %	0.9060 %
0.75 to <1.75		6,366	68	1.0680 %	1.1270 %	1.0840 %	0.7120 %
1.75 to <2.50		5,257	82	1.5600 %	1.8920 %	1.8200 %	1.1400 %
2.50 to <10.00		6,885	225	3.2750 %	4.5150 %	4.3200 %	2.7300 %
2.50 to <5.00		4,761	111	2.3420 %	3.4830 %	3.5280 %	1.9130 %
5.00 to <10.00		2,124	114	5.3670 %	6.0390 %	6.0950 %	4.5620 %
10.00 to <100.00		3,401	376	11.0830 %	26.6110 %	20.7940 %	11.0720 %
10.00 to <20.00		1,790	137	7.6790 %	11.8820 %	11.7730 %	6.1900 %
20.00 to <30.00		716	88	12.2900 %	22.0770 %	20.8480 %	11.5460 %
30.00 to <100.00		895	151	16.9270 %	42.4730 %	38.7970 %	20.4580 %
100.00 (default)		3,214	3,214	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) - A-IRB - Retail - Other non-SME

PD range	Number of obligors at the end of the previous year		Observed average default rate (%)	Exposures weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)	
	a	b					c
0.00 to <0.15		3,252	2	0.0770 %	0.1050 %	0.0820 %	0.0650 %
0.00 to <0.10		2,026	1	0.0740 %	0.0460 %	0.0470 %	0.0410 %
0.10 to <0.15		1,226	1	0.0810 %	0.1400 %	0.1400 %	0.1030 %
0.15 to <0.25		-	-	-	-	-	-
0.25 to <0.50		6,766	17	0.2540 %	0.4440 %	0.4440 %	0.1760 %
0.50 to <0.75		3,547	12	0.3340 %	0.7400 %	0.7400 %	0.2380 %
0.75 to <2.50		7,014	45	0.6390 %	1.5900 %	1.6650 %	0.7360 %
0.75 to <1.75		4,370	23	0.5220 %	1.2200 %	1.2200 %	0.4770 %
1.75 to <2.50		2,644	22	0.8320 %	2.4000 %	2.4000 %	1.1640 %
2.50 to <10.00		5,256	110	2.0960 %	6.5880 %	5.8640 %	3.2540 %
2.50 to <5.00		3,631	49	1.3630 %	4.7460 %	4.3480 %	2.3200 %
5.00 to <10.00		1,625	61	3.7340 %	9.1750 %	9.2520 %	5.3410 %
10.00 to <100.00		1,684	116	6.9000 %	28.9160 %	29.0530 %	13.0070 %
10.00 to <20.00		740	43	5.7910 %	18.9900 %	18.9900 %	8.4560 %
20.00 to <30.00		-	-	-	-	-	-
30.00 to <100.00		944	73	7.7700 %	36.9400 %	36.9400 %	16.5730 %
100.00 (default)		1,225	1,225	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 - Template 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.

* * *

Given the Group's lack of material exposures to specialised lending and material exposures in equity instruments treated under the "Simple Weighting Method", prospectuses under the following template, to which the Group would be subject pursuant to art. 438(e) of the CRR, have not been published:

Template EU CR10 – Specialised lending and equity exposures under the simple risk weighted approach

Section 12 - Disclosure of environmental, social and governance (ESG) risks (art. 449-bis CRR/CRR II)

This section provides information on environmental, social and governance (ESG) risks, including physical risks and transition risks, required by Article 449-bis of Regulation (EU) No. 575/2013 (“CRR”) on the basis of the uniform publication templates established by the technical standards implementing the disclosure requirements introduced by Commission Implementing Regulation (EU) 2021/637 of 15 March 2021, as amended by the provisions of Implementing Regulation (EU) 2022/2453 of 30 November 2022.

The new public reporting requirements concerning ESG risks are complied with in a sequential and gradual manner, since proportionality measures, including transition periods, have been foreseen in order to facilitate their transposition by banking institutions, transition. In particular, the following information must be fulfilled:

- qualitative, general information on environmental, social and governance risks management aimed at understanding how banking institutions integrate ESG considerations into their corporate governance systems, business models and strategies, and corporate risk management frameworks;
- more specific, quantitative disclosures of physical and transition risks related to climate change, comprising multiple data and information on: a) exposures towards assets linked to atmospheric carbon emissions and subject to critical climate change events; b) mitigation measures implemented by banks to support their counterparties in the transition towards a carbon-neutral economy and in the adaptation to climate change.

Quantitative disclosure is subject to a phase-in period focused on the reporting of counterparties climate gas emissions data and specific taxonomy alignment metrics such as the Green Asset Ratio (GAR) and the Banking Book Taxonomy Alignment Ratio (BTAR). The publication of these two metrics which are aimed at measuring exposures to sectors aligned with the eco-friendly assets EU Taxonomy, as defined by Regulation (EU) 2020/852, consistent with the targets set by the Paris Agreement on Climate Change and the European Green Deal, will become mandatory as of 2024 (with the first reporting date of 31 December 2023) and 2025 (with the first reporting date of 31 December 2024), respectively.

For this first disclosure at 31 December 2022, the following elements are subject to mandatory disclosure:

- qualitative information on environmental, social and governance risks, describing ESG risk management policies and strategies and how these factors are integrated into the overall framework for identifying and monitoring “traditional” banking risks and into credit institutions’ internal decision-making and information processes;
- quantitative templates setting out specific disclosures on exposures to funded counterparties subject to physical and transition risk.

The information in this section is also in line with the contents of the Consolidated Non-Financial Report (NFR) and/or the report prepared by the Group on the basis of the Task Force on Climate-Related Financial Disclosure (TCFD) protocol for the year 2022, published in the “Sustainability” section of the Bank's corporate website (<https://istituzionale.popso.it/it/sostenibilita/dichiarazione-consolidata-di-carattere-non-finanziario>).

In the following paragraphs the qualitative information on the integration of environmental, social and governance risks into the Group's strategies, governance mechanisms and risk management system is described, and the quantitative information required by the aforementioned “Pillar 3” provisions is reported in standardised charts.

For the purposes of this section, the following general definitions apply:

- a) “*environmental, social or governance risks*”: the risk of loss resulting from negative financial impacts on the institution stemming from the impact, current or prospective, of environmental, social or governance factors on the institution's counterparties or invested assets;
- b) “*environmental risk*” or “*climate and environmental risk*”: the risk of loss arising from the negative financial impacts on the institution stemming from the impact, current or prospective, of environmental factors on the institution's counterparties or invested assets, including factors related to the transition towards the following environmental objectives: i) climate change mitigation; ii) climate change adaptation; iii) sustainable use and protection of water and marine resources; iv) transition to a circular economy; v) pollution prevention and control; and vi) protection and restoration of biodiversity and ecosystems. It includes both physical and transition risks;
- c) “*physical risk*”: within the overall environmental risk, the risk of losses arising from the negative financial impacts on the institution stemming from the impact, current or prospective, of the physical effects of environmental factors on the institution's counterparties or invested assets. This term refers to the financial impact of climate change - including both more frequent extreme weather and atmospheric events and gradual climate change - as well as environmental degradation (e.g., air, water and soil pollution, water stress, biodiversity loss and deforestation). Physical risk is classified as “*acute*” if caused by extreme events such as droughts, landslides, floods and storms, and “*chronic*” if caused by progressive changes such as rising temperatures, rising sea levels, water stress, biodiversity loss, land-use change, habitat destruction and resources scarcity;
- d) “*transition risk*”: within the global environmental risk, the risk of losses resulting from the negative financial impacts for the institution stemming from the impact, current or prospective, of the transition to an environmentally sustainable economy on the institution's counterparties or invested assets; this term refers to the financial loss that an institution may incur, directly or indirectly, as a result of the adjustment process towards a low-carbon and more environmentally sustainable economy; this could be caused, for example, by the sudden adoption of climate and environmental policies, technological progress or changing market confidence and preferences, and may result in lower profitability of companies and depreciation of assets;

- e) “*social risk*”: the risk of losses resulting from the negative financial impacts on the institution stemming from the impact, current or prospective, of social factors on the institution's counterparties or invested assets;
- f) “*governance risk*”: the risk of losses resulting from negative financial impacts on the institution stemming from the impact, current or prospective, of governance factors on the institution's counterparties or invested assets;
- g) “*GHG (Green House Gases)*”: the emissions of climate-changing gases attributable to a product, organisation or individual. The most commonly publicly reported are carbon dioxide emissions (CO₂); other examples of polluting gases are water vapour (H₂O), nitrous oxide (N₂O), methane (CH₄) and sulphur hexafluoride (SF₆). They are measured in CO₂ equivalents, a metric measure that enables different types of pollutant gases and their effects on climate change to be assessed homogeneously;
- h) “*GHG Scope 1*”: direct greenhouse gas emissions from sources directly controlled or owned by the organisation (e.g., GHG emissions from combustion in boilers, furnaces and owned vehicles);
- i) “*GHG Scope 2*”: indirect greenhouse gas emissions from electricity and heat consumption, i.e., generated by the energy purchased and consumed by an organisation as part of its production process (e.g., greenhouse gas emissions associated with the purchase of electricity, steam, heat or cooling from third parties);
- j) “*GHG Scope 3*”: other indirect greenhouse gas emissions generated along an organisation's “value chain”, both upstream and downstream; hence, from sources not owned or controlled by the organisation itself (e.g., greenhouse gas emissions related to the production of purchased material, fuel used by vehicles not owned by the organisation, end-use of products or services, investments made);
- k) “*EPC (Energy Performance Certificates)*”: tools used to improve buildings energy performances. They are defined as documents recognised by an EU Member State or a legal entity designated by it displaying the value resulting from the calculation of the energy performance of a building or building unit carried out in accordance with Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings;
- l) “*GHG financed emissions*”: the amount of GHG emissions that can be attributed to a given investment portfolio by weighting the GHG emissions of each company included in the portfolio by the investor's share of its value. For a bank it is a measure of the GHG emissions produced indirectly through lending, investment and insurance underwriting: this metric refers to the amount of GHG emissions related to a counterparty financed by a bank, calculated proportionally to the financial debt incurred by the counterparty to the bank relative to the total GHG emissions generated by the counterparty.

Qualitative information on environmental risk

Business strategy and processes

a) *Explanation of how the business model, strategy and processes, and financial planning incorporate risks arising from environmental factors and how these risks may evolve over time in view of changing technology, strategic frameworks, operating context, stakeholder preferences and changes in the physical environment itself.*

The Group is committed to acting consistently with the United Nations Sustainable Development Goals (SDGs) and, as far as environmental issues are concerned, is inspired by those goals that are most relevant considering its business activities and the UN Global Compact Principles. Within its Code of Ethics the Bank also outlines specific “Behavioural Principles with reference to climate and environmental aspects”.

The Bank implemented a strong body of internal regulations to concretise its commitment to environmental protection and climate change fighting in its business and operations, comprising a Sustainability Policy and an Environmental Policy, both of which are available on the institutional website (<https://istituzionale.popsso.it/it/sostenibilita/il-nostro-impegno>). In the first document the Bank describes how it works to monitor and limit the impact that its activities generate, both directly and indirectly, on the environment and climate. Furthermore the Environmental Policy reinforces the Bank's determination to ensure that its activities and relationships with customers, suppliers, collaborators and partners are managed in light of a cost-benefit balance assessment that takes due account of environmental impacts, with the aim of minimising any negative effects that might arise. The two policies are adopted by all Group companies.

BPS, aware of the urgency related to environmental issues and the fight against climate change, in its Business Plan 2022-2025 (hereinafter, the Business Plan) has paid particular attention to the integration of the environmental factor (E) in its traditional areas of activity, i.e., the granting of credit and the investments in financial assets. In particular, it set an ambitious path in order to reduce its environmental and climate impacts, identifying the challenging goal of adhering to the UN Principles for Responsible Banking (hereafter, “PRB”) and the Net Zero Banking Alliance (hereafter, “NZBA”) in 2023. The latter initiative, promoted by the United Nations, is aimed at accelerating the sustainable transition of the banking sector through the commitment of participating banks to align their lending and investment portfolios towards the goal of “zero net emissions” by 2050.

In early 2023 the Bank formalised its support for the Task Force on Climate-Related Financial Disclosures (hereinafter, “TCFD”), an international organisation aimed at encouraging companies globally to be more transparent about financial risks and opportunities associated with climate change, by committing to report on the internal disclosure of these issues as well as the specific performance targets (KPIs) set, in a special TCFD Report²³, prepared as an annex to the

²³ The Task Force on Climate-Related Financial Disclosure (TCFD) recommends the use of scenario analysis in order to assess climate change risks, so as to obtain a clear direction towards a reduction of direct and indirect impacts. The guidelines developed by the TCFD aim to measure the adequacy of the climate strategy of member companies and to support them in communicating climate-relevant aspects to the outside world in a transparent and timely manner. The first TCFD Report published by the Bank, covering the year 2022, is presented as an annex to the NFR and available on the corporate website (<https://istituzionale.popsso.it/it/sostenibilita/dichiarazione-consolidata-di-carattere-non-finanziario>).

Consolidated Non-Financial Report pursuant to Legislative Decree 254/2016 (hereinafter, “NFR”), thus aligning with international best practices.

As a demonstration of its attention to the fight against climate change and to environmental protection, the Bank carries out detailed analyses of its carbon footprint, which is the calculation of greenhouse gas (GHG) emissions attributable to its own operations and to the various business lines that make up its customer service activities, and is engaged in projects aimed at reducing its environmental impacts, especially those related to its financial and credit asset portfolios (so-called Scope 3 indirect GHG emissions). Further information on the Bank's “GHG Inventory”, on the actions it has taken to reduce its carbon footprint and on the first quantitative targets set can be found in the aforementioned TCFD Report.

Among the initiatives implemented so far by the Group to promote the reduction of environmental impacts the following main activities can be found:

- integration of environmental and climate risk factors into credit processes;
- integration of environmental and climate risk factors into the internal governance system, strategic framework, risk management system and reporting, in line with the expectations of the Supervisory Authority;
- gradual development and placement of investment instruments to promote environmental characteristics;
- development of a specific bond issue program aimed at financing and/or refinancing eco-friendly activities (green bonds);
- progressive promotion of financing products aimed at supporting the economic activities that most contribute to the mitigation and adaptation to climate change, such as, for example:
 - low-emission production processes;
 - purchase of housing with a reduced environmental impact;
 - energy upgrading of buildings;
 - energy production from renewable sources;
- selection of funding opportunities, with reference to companies in “sensitive” sectors, through an assessment of regulatory compliance and environmental standards.

For further information on the “environmental sustainability” content of the Group's Business Plan, as well as the “ESG Business Plan” section of the NFR 22 and the “Strategy” section of the TCFD Report, please refer to the Bank's institutional website.

The initiatives concerning lending activities took the form of the adoption of a new ESG Credit Policy and the development of the “Next - sustainable credit products” range, a new line of loans for individuals and companies wishing to reduce their energy consumption, make their travel more sustainable or invest in energy efficiency and renewable energy. Furthermore, as discussed in more detail in the following paragraphs and in the TCFD Report itself, the Bank is developing risk management systems aimed at identifying, assessing and monitoring climate and environmental risks in an increasingly robust manner.

Finally, the Bank is firmly committed to reducing the environmental impacts of both its own securities portfolio, through the selection of investments in financial instruments with low pollutant emissions, and the financial advisory and asset management services it provides to customers.

b) Objectives, targets and limits for the assessment and management of environmental risks and explanation of the processes used to establish them.

With the 2022-2025 Business Plan the Bank set out an ambitious path towards reducing its environmental and climate impacts, identifying the challenging goal of joining the Net Zero Banking Alliance (NZBA) in 2023.

Also considering the interest of the markets, as well as the requests expressed by the European authorities to intensify their efforts to tackle the global issue of climate change and the need to create specific key indicators (KPIs) to support the monitoring of its own climate performance, starting with a review of its asset and counterparty portfolios, the Bank decided to embark on a path of target setting to define specific, objective and measurable targets in line with the current international strategic framework. For this reason, the Bank has initiated a process to:

- refine the collection of both direct and indirect data on GHG emissions, enabling, already in NFR 22, the preparation of a dedicated inventory based on increasingly robust sources;
- develop near-term targets based on Scope 1 and Scope 2 GHG emissions according to NZBA's science-based methodology for the financial sector;
- develop near-term targets based on Scope 3, category 15 GHG emissions according to NZBA's science-based methodology for the financial sector;
- analyse preliminary assumptions on long-term target with a view to adhere to the NZBA framework, while waiting the publication of specific guidelines for the financial sector.

The Bank's strategic planning is currently being integrated in order to incorporate an effective and clear vision of the implications of climate change from a management perspective in the short, medium and long term. The aim is to understand the climate drivers relevant to the pursuit of the objectives dictated by the business model and to integrate them into the framework of strategic asset allocation choices, assessing their impacts on the company's business profile and its sustainability. The definition of a corporate "climate strategy" cannot in fact disregard the study of scenario analysis, i.e., the projection of asset portfolios under different climate scenarios. Through the use of a scientific methodology, targets are set for reducing the amount of greenhouse gas emissions associated with portfolios. The achievement and monitoring of these targets are entrusted to specific performance indicators.

Please refer to the "Strategy" and "Metrics and Targets" sections of the TCFD Report for more in-depth planning and target setting.

In order to promote an adequate governance of climate and environmental risks, both physical and transition, the Bank is also equipping itself with increasingly effective processes and systems for the control and management of these particular risk drivers in line with the overall structure of internal controls, so as to have an holistic and well-documented view of their impact on "traditional" risk profiles (in this regard please refer to the "Risk Management" section below, point k).

Please refer to the section on “Risk Management”, point q, for a more detailed review of the interventions in terms of targets, limits and metrics for assessing and managing climate and environmental risks conducted as part of the company's Risk Appetite Framework (RAF).

c) Information on current and future (planned) investments in environmentally sustainable activities and sectors aligned with environmental objectives, including climate change targets.

In 2022 the Bank developed its own *ESG Credit Policy*, a document that identifies the approach and general principles for the formulation of an ESG-sensitive credit process in accordance with EBA Guidelines on the granting and monitoring of credit. This document was approved on 22 December 2022 by the Board of Directors. In particular, the Policy:

- identifies the objectives pursued by the Group and the scope of application;
- defines the main technical terms and lists relevant regulations and principles;
- lays down general guidelines for the integration of ESG factors into the credit process, providing details on how ESG, sector and counterparty assessment has to be carried out;
- identifies sensitive sectors and activities;
- provides information about the development of ESG credit products;
- outlines roles and responsibilities;
- indicates how it will be overseen, monitored, shared and disseminated.

With regard to the investment activity offered to customers, the Bank, in compliance with the aforementioned regulations, carried out a thorough investigation in order to select the ESG info-provider that would guarantee appropriate information coverage, in particular on ESG risks, about the financial instruments included in asset management or offered to customers through the advisory service. At the same time the Bank implemented autonomous analyses on the basis of information provided by financial applications normally used for offering its services and examines data received directly from the producers of financial products.

The acquisition, analysis and processing of this information are key to an efficient assessment of the environment and related investment opportunities which, in turn, are essential when building portfolios of financial instruments designed to optimise the risk-yield profile based on the established investment opportunities. In carrying out this activity, both a fundamental analysis approach and technical analysis methodologies are used, without neglecting ESG factor analyses, which are integrated into the decision-making process.

In July 2021 Banca Popolare di Sondrio also issued its first Senior Green Bond, amounting to 500 million euro, under the EMTN (Euro Medium Term Notes) programme, whose framework is aligned with the ICMA principles updated in 2021.

As a participant in the financial markets, the Bank, following changes in the financial context linked to an increasing focus on sustainability factors, has integrated both the sustainability risk and the consideration of major negative effects on sustainability factors into its investment decisions, tailoring more closely its products and services to customers' changing needs. In the securities portfolio management service the integration of ESG factors has been implemented in the

investment process, especially in the definition of specific management lines that favour sustainable, socially and environmentally conscious growth.

With regard to the implementation of Regulation (EU) 2020/852 (hereinafter, “Taxonomy”), the Bank publishes in its NFR the eligibility disclosure under Article 8: this exercise is a useful testing ground to prepare the future taxonomy alignment disclosure. According to the regulatory changes that are available from time to time, it is intended to develop a project aimed at fulfilling the information that the Taxonomy will require to be collected, either by its counterparties or by means of external info-providers. Furthermore, the Group understands the relevance of this exercise in the development of new sustainable strategies and both credit and investment products, and, in planning the activities envisaged within the Business Plan, recognises the Taxonomy and future related regulatory provisions as fundamental references.

d) Information on measures taken to mitigate risks associated with environmental factors. Institutions must consider the counterparty's ability to manage environmental risks.

Please refer to the “Risk Management” paragraph, point m, below.

Governance

Foreword: ESG Governance

With the aim of increasingly integrating environmental, social and governance sustainability into its business, the Bank has implemented its own ESG governance system that provides for the interaction of various bodies and functions dedicated to the supervision, management and control of these issues and their impacts. In order to strengthen corporate governance mechanisms, the 2022-2025 Business Plan envisages further measures aimed at increasing the involvement of the management body and integrating the control systems to oversee the effective implementation of ESG guidelines.

The distribution of roles and responsibilities in the field of sustainability as set out in the *Sustainability Policy* is detailed below:

Board of Directors

- Defines Group-wide guidelines, targets and strategies on sustainability issues (Business Plan);
- Ensures that ESG risks are integrated into business strategies, governance, processes, procedures and the control system;
- Approves the Consolidated Non-Financial Report (NFR) and the main relevant policies;
- Approves the Risk Appetite Framework and risk governance policies, integrating them progressively with ESG issues and, in particular, climate and environmental risks;
- Keeps training and updating on ESG issues and related risks, paying particular attention to climate and environmental risks, in order to monitor and progressively increase its skills, also by filling in questionnaires and self-assessments.

Board of Statutory Auditors

- Supervises the correct handling of these issues.
- Oversees the compliance with the legal requirements for drawing up the NFR;
- Monitors the adequacy of the procedures and processes governing the drafting of the NFR.

Sustainability Committee

- Periodically reviews regulatory developments, standards and relevant national and international practices on ESG issues;
- Supports and makes proposals to the Board of Directors, introducing and amending relevant internal regulations and turning guidelines into concrete initiatives, for which it also defines operational plans and monitors the actual implementation;
- Contributes to the coordination of organisational structures and Subsidiaries in order to comply with the sustainability guidelines established by the Board of Directors and outlined in the strategic planning from time to time;
- Coordinates activities aimed at identifying potentially relevant sustainability issues and updating the materiality matrix. Also examines the NFR, making comments and suggestions;
- Oversees transactions with debt instruments whose issuance is related to Group activities in the field of sustainability;
- Coordinates and monitors the activities with relevant stakeholders and disclosure actions;
- Informs the management body about the work carried out at each meeting (at least quarterly) by making minutes and working documents available;
- Delegates the Head of the Sustainability Department to report periodically to the Board of Directors, at least once every six months, on all the activities carried out and, if necessary, to support the Chief Financial Officer, as part of the recurring reports on the implementation of the Business Plan.

Control and Risk Committee

In line with its mandate, it assists the Board of Directors with regard to ESG and associated risks:

- in determining the guidelines of the internal control and ESG risk management system;
- in periodically reviewing the adequacy of said system in relation to the Bank's characteristics and risk profile as well as its effective functioning.
- in examining the contents of the NFR for the purpose of carrying out a preliminary investigation to the subsequent scrutiny by the management body.

Sustainability Department

- Constantly monitors national and international regulations, standards and practices on sustainability issues;
- Supports and coordinates central and peripheral structures as well as the Subsidiary Companies in understanding and addressing sustainability factors and interfacing with relevant stakeholders;
- Drafts the NFR and coordinates the related activities;
- Carries out, for the parts within its competence, liaison activities with the Supervisory Authorities, in particular supporting the Risk Control Department in relation to climate and environmental risk issues;
- Manages dialogue with ESG rating agencies, handles questionnaire completion and monitors Group-wide ratings;
- Supports and coordinates the drafting of Group guidelines, targets and strategies on sustainability issues (Business Plan);
- Supports the Sustainability Committee:
 - i. in identifying the initiatives to be implemented;
 - ii. in the promotion and management of the strategy on ESG and sustainability issues;
 - iii. in the operational management of ESG issues in accordance with the Business Plan;
 - iv. in the monitoring and reporting of initiatives;
- Promotes external and internal communication on ESG issues, fostering the dissemination of a sustainability culture among colleagues, customers and all stakeholders;
- Along with the Personnel and Organisational Model Service, it defines training plans for the Group's management body, management and staff, aimed at ensuring an appropriate dissemination and awareness of ESG issues and related risks, with particular focus on climate and environmental risks;
- The Head of the Department, along with the Chief Financial Officer, reports periodically to the Board of Directors, at least once every six months, on all the activities carried out, if necessary as part of the recurring reports on the implementation of the Business Plan, involving in advance the Directors participating in the activities of the Sustainability Committee.

Operation ESG contact persons

Appointed for each of the subsidiaries and for each of the main business areas of the Parent Company:

- Are key figures for the dissemination of a culture of sustainability;
- Address ESG factors in relation with their own activities, identifying projects and grabbing business opportunities;
- Facilitate the circulation of information, the coordination of activities and their sharing, allowing for more effective interaction between functions and guiding internal operations.

Mobility Manager

- Continuously supports the decision-making, planning, programming, management and promotion of optimal sustainable mobility solutions for the Group's employees.

e) Information on the management body's involvement in the supervision and management of environmental risks.

As part of its strategic supervisory powers, the Board of Directors (hereinafter, "BoD") is responsible for setting Group-wide guidelines, targets and strategies on environmental and climate issues, and for monitoring progress against the defined targets.

The BoD plays an active guiding and governing role in integrating climate and environmental risks into the corporate and Group culture and strategies, consistently outlining key corporate policies and ensuring the appropriate adaptation of organisational and management systems. In order to ensure the integration of ESG risks into business strategies, governance, processes, procedures and the system of controls and to oversee the proper monitoring of these issues, the BoD is responsible for approving the Risk Appetite Framework and the climate and environmental risk management process, verifying their compatibility with the strategic guidelines and policies for the overall risk governance. The management body is also responsible for conducting an effective supervision of the exposure towards climate and environmental risks, being regularly informed of the time-to-time risk profile and the manner in which it is identified, assessed and measured, and taking appropriate corrective measures if necessary.

The BoD carries out continuous training and updating activities on ESG issues and related risks, with a special focus on climate and environmental risks, in order to monitor and progressively increase its skills, also through the completion of questionnaires and self-assessments.

A number of innovations defined in the most recent update of the *Sustainability Policy* provide for a periodic information flow addressed the BoD, at least once every six months, by the Chief Financial Officer and the Head of the Sustainability Department, on all activities carried out in the field of sustainability. The process of communicating climate-related issues to the BoD also takes place with ad hoc sessions in which the Chief Risk Officer presents ESG risk reports focused on climate and environmental risk factors to Board members on a quarterly basis.

During 2022 the BoD participated to 8 alignment meetings on climate and environmental issues. In addition, during the last financial year, the following reports were submitted to the management body:

- updates on the overall progress of the implementation programmes of the supervisory expectations dictated by the ECB in its “*Guidance on Climate and Environmental Risks*”, a new and more detailed version of which has been finalised basing on the Supervisor's recommendation;
- quarterly reporting on the dynamics of the riskiness of credit and financial exposure portfolios from the perspective of the incidence of ESG factors, with particular regard to climate-environmental (physical and transition) risk sources;
- reporting on the final results of the European-wide climate risk stress test exercise promoted by the ECB in the first part of this year;
- a descriptive methodological compendium of the logics for determining the sectoral ESG Heatmap and the new climate-environmental counterparty scoring system.

f) Information on how the management body integrates the short-, medium- and long-term effects of environmental risks into the organisational structure of the institution for risk management purposes. Institutions must explain how this exercise at management body level is reflected in their business lines and internal control functions.

As established in the *Sustainability Policy*, the BoD defines Group-wide guidelines, targets and strategies on sustainability issues, in particular through the approval of the Business Plan.

As detailed in the “Strategy” section of the TCFD Report, corporate strategic planning is currently being supplemented in order to incorporate an effective and clear view of the implications of climate change from a management perspective, in the short, medium and long term. The aim is to understand relevant climate drivers in order to pursue the targets dictated by the business model and to integrate them into the framework of strategic asset allocation choices, assessing their impacts on the company's business profile and its sustainability.

In order to pursue this objective, the Bank is defining a new planning model aimed at capturing the specificities linked to medium-long term climate-related risks and opportunities (e.g. adherence to decarbonisation initiatives for lending activities and reduction of GHG emissions financed), while maintaining consistency and alignment with the short and medium term strategic planning (budgeting and Business Plan), a process that in turn is intended to evolve to capture the key effects of transition risk and physical risk on the Bank's prospective situation (capital and economic). The evolution of the framework will focus, as a first step, on climate-related aspects and will include the impacts that transition and physical events may generate on the Bank's operations, according to different climate transition scenarios.

On the basis of these activities, specific climate KPIs will be defined and a dedicated reporting system will be set up to adequately monitor the achievement of the targets, using special enabling tools such as: provision of economic forecasts influenced by climate effects, engines for processing forecast estimates of physical risk and transition risk, tools for Portfolio Alignment analysis.

g) Information on the organisation of risk committees and the allocation of tasks and responsibilities within the risk management framework to monitor and manage environmental risks.

The Board's *Control and Risk Committee* supports the BoD in carrying out the functions it oversees regarding the definition of risk objectives and strategies for the prevention and management of risks considered relevant, including ESG risks and risks related to climate and the environment, both in a current and prospective perspective; moreover, without prejudice to the competences of the Remuneration Committee, it ensures that the incentives underlying the Bank's remuneration and incentive system are consistent with the Risk Appetite Framework. The Committee examines the TCFD Report and provides comments and suggestions. It also supports the BoD in the periodic monitoring of risk exposure, verifying the completeness, adequacy and functionality of the internal control system; with particular regard to risk containment, it ascertains compliance with the limits set by the management body and/or required by mandatory regulations.

The *Sustainability Committee* has the function of proposing, advising and coordinating the organisational units responsible for implementing the policies of top management on environmental, social and governance sustainability issues. It consists of: Chief Executive Officer, General Manager, Chief Financial Officer (CFO), Chief Commercial Officer (CCO), Chief Lending Officer (CLO), Chief Risk Officer (CRO), Chief Information and Operations Officer (CIOO), Head of the Logistics and Operational Support Service, Head of the Personnel and Organisational Models Service, Head of the Planning, Investor Relations and Management Control Service, Head of the Sustainability Department. The Committee periodically examines regulatory developments, standards and national and international reference practices on climate and environmental issues and periodically reports to the BoD, supporting and proposing the introduction and amendment of relevant internal regulations and the consideration of guidelines in concrete initiatives, of which it also defines operational plans and monitors their actual implementation. It also contributes to the coordination of organisational structures and Subsidiaries in order to verify their compliance with the sustainability guidelines established by the management body and outlined in strategic planning. The Committee coordinates the activities aimed at identifying potentially relevant sustainability issues also in the context of the materiality analysis and examines the TCFD Report, making comments and suggestions. It also oversees transactions with debt instruments whose issuance is related to activities carried out by the Group in the area of environmental, social and governance sustainability; it coordinates and monitors the activities with relevant stakeholders and disclosure actions. Its responsibilities also include periodic reporting to the Bank's senior bodies.

The managerial *Risk Committee* examines proposals for the definition, integration or significant modification of techniques, methodologies and criteria for monitoring ESG risks, with particular attention to climate and environmental risks, expressing its own opinions and assessments. In addition, it assesses proposals concerning: a) the definition, updating or revision of the parameters representative of the ESG risk appetite, in particular climate and environmental risk, envisaged in the Risk Appetite Framework, b) the introduction, extension, modification or significant integration of systems, models, techniques or methodologies for analysing ESG risks, with particular attention to climate and environmental profiles; finally, it approves, within the scope of its resolution powers, the system of operational level limits/thresholds associated with the exposure metrics to these risks. The Committee consists of: Chief Executive Officer, General Manager, Deputy General Manager, Chief Risk Officer (CRO), Chief Financial Officer (CFO), Chief Commercial Officer (CCO), Chief Lending Officer (CLO), Chief Information and Operations Officer (CIOO), Head of the Compliance Function and DPO, Head of Internal Audit.

The subsidiary Banca Popolare di Sondrio (SUISSE) also has its own ESG Committee to specifically manage issues related to environmental, social and investment governance sustainability. The main tasks of this collegial body are:

- to follow ESG regulation and trends in the asset management industry;
- to formulate proposals for working methodologies, rules, and sustainability parameters to be integrated into the various stages of the investment process;
- to discuss ESG investment ideas to be assessed by the Investment Committee;
- to report to the General Management on the status of the implementation of sustainability policies in investments;
- to draw up a document once a year, called the “ESG Investment Newsletter”, aimed at informing people inside and outside the bank about the Bank’s positioning regarding sustainable investment.

In addition, an ESG team has been established within the company’s Investment Department, with the aim of studying the issue in all its aspects and particularly focusing on product innovation and investment processes. In addition, two specific working groups were set up in June 2022: the Credit Working Group, in charge of regulatory adjustments in the area of credit and mortgage advice (e.g., SBA regulatory impact on mortgages), and the Investment Working Group, in charge of assessing ESG aspects that can be implemented on managed products (e.g., provision of ESG data).

h) Information on how environmental risks are included in the framework and internal reporting, as well as information on the frequency of internal reporting and information exchange on such risks

The Bank adopts a regular system of disclosure and reporting on ESG risk issues, with a focus on climate and environmental risks, which involves a dialogue between various competent bodies and functions. In particular:

- Sustainability Committee: its task is to inform the Board of Directors about the work carried out during each meeting (at least quarterly) by making minutes and working documents available;
- Head of the Sustainability Office: reports periodically to the Board of Directors, in agreement with the Chief Financial Officer, at least once every six months, on all the activities carried out, if necessary as part of the recurring reports on the implementation of the Business Plan, involving in advance the Directors taking part in the Sustainability Committee;
- Audit and Risk Committee: in line with its mandate, it assists the BoD with regard to ESG and related risks (and, in particular, of a climatic-environmental nature):
 - in determining the guidelines of the internal control and risk management system;
 - in periodically reviewing the adequacy of said system with respect to the Bank’s characteristics and related risk profile, as well as its effective functioning;
 - in examining the contents of the NFR, for the purpose of preliminary investigation with respect to the subsequent scrutiny and approval by the BoD.

To support the processes of climate and environmental risk monitoring and control, as well as for robust and reliable decision-making, the Bank’s CRO area prepares adequate internal reporting to

document to the relevant bodies and functions, on request or with predefined periodicity, the analyses and risk measurements performed. At the top management level, the Board of Directors and the Control and Risk Committee are regularly informed of trends in exposure to climate and environmental risks through the production of quarterly reports on the type and level of significance of physical and transition factors relevant to each of the main traditional banking risk categories potentially impacted. For further information, please refer to the “Risk Management” section below, item I.

i) Inclusion of environmental risks in the remuneration policy and related criteria and metrics used to determine the impact of environmental risk considerations on variable remuneration.

Remuneration is a fundamental tool for attracting and retaining staff with the professionalism needed to ensure the growth of Group entities and their ability to compete in target markets. It is therefore essential to develop staff by assigning them to roles with an increasing level of responsibility and complexity.

In this regard, the Group's remuneration policy has evolved, reflecting and supporting the general dimensional expansion of the activities. This development has also revealed the need for increasingly qualified professional resources to work in both central and branch offices, partly because of the new areas that have been opened – among these, the area of environmental, social and governance sustainability, – and partly because of the higher level of competition within the banking system. In keeping with the general trends of the market, and with the aim of attracting, retaining and motivating the best human resources, the Bank has held firm to a number of basic principles: attention to the medium and long-term sustainability of remuneration policies, general balance, meritocracy, a gradual approach and the desire to establish lasting relationships over time.

The Remuneration Policies submitted for approval to the Shareholders' Meeting of 29 April 2023 are the result of a thorough revision of the previous regulations. The main innovations introduced, which are discussed in more detail in the NFR 22 chapter “Human Rights, Diversity and Inclusion”, include:

- the strengthening of the link between the sustainable success of the Group, the individual management performance measurement and remuneration, in particular through:
 - broadening the scope of the quantitative and objective metrics considered in the determination of variable remuneration (excluding Heads of Control Functions);
 - selection of both short-term and long-term performance metrics, consistent with the objectives set out in the 2022-2025 Business Plan (expected results and timelines);
- strengthening of the system of metrics to support the Group's commitment to ESG issues. Specifically, measurable sustainability objectives relating to the improvement of certain types of ESG ratings, the development of sustainable credit and finance processes, the reduction of CO2 emissions, as well as the use of ESG training and adherence to international environmental and social initiatives are considered in the determination of short-term and long-term variable remuneration.

Details on the changes introduced and the operation of the new Policies can be found in the “Annual Report on Remuneration Policy and Compensation Paid”, approved by the Board of Directors on 17 March 2023. This document is subject to approval by the Shareholders' Meeting on 29 April 2023. More in-depth information on the Remuneration Policies applicable to members of the governing bodies and senior executives (managers), as well as on the remuneration determination process and the annual total remuneration ratio, can be found on the Bank's institutional website at the following links:

<https://istituzionale.popso.it/it/governance/documenti-societari>

<https://istituzionale.popso.it/it/investor-relations/assemblea-dei-soci>.

Risk management

j) Integration of the short, medium and long-term effects of environmental factors and risks into the risk management framework and the RAF.

In order to integrate the short, medium and long-term effects of climatic and environmental factors into its overall risk management framework, the Bank has defined the following reference time horizons:

- short term, from 0 to 3 years;
- medium term, 3 to 5 years;
- long term, from 5 to 30 years.

The maximum time horizon considered is therefore 30 years; this timeframe has been taken as a reference by the Bank in its forward-looking processes of estimating instruments and metrics for assessing climate and environmental risks as well as in its analyses of measuring and quantifying its exposures to such risks.

For more information on the integration of the short, medium and long-term effects of climate-environmental factors and risks into risk management systems and Risk Appetite Frameworks, please refer to points n, o and q below in this section “Risk Management”.

k) Information on methods, definitions and international standards used to identify and manage environmental factors and risks.

In promoting adequate governance of climate and environmental risks, the Bank is adopting appropriate systems to manage and control these exposures, in line with the overall internal control framework, so as to have an holistic and well-documented view of their impact on “traditional” risk profiles. These systems aim to identify, measure, monitor and mitigate on an ongoing basis the exposure to physical and transition risk factors through the adoption of procedures, processes and methodologies that ensure a careful risk management.

In particular, the approach adopted for climate and environmental risks management includes:

- the definition of appropriate tools and methodologies to assess the climate-environmental risk profile of sectors, counterparties and investment activities;

- the presence of appropriate processes for identifying, mapping and analysing the level of materiality of the current and prospective exposure to climate and environmental risk factors that may manifest themselves in the context of traditional risk categories;
- the presence of appropriate processes and systems to quantify the potential impacts generated by climate and environmental risks, including through the use of forward-looking assessments (sensitivity or scenario analyses, stress tests, portfolio alignment exercises, etc.);
- the development of consistent systems for monitoring and reporting on exposures to climate and environmental risks based on appropriate metrics and indicators (e.g. classification of counterparties/issuers by economic sector and geographic area of activity, carbon intensity per individual counterparty, etc.);
- the identification of appropriate actions and tools to mitigate the exposure to physical and transition risks, supporting processes for the gradual reduction of these risks within the company's operating areas (also in relation to portfolios, business lines, types of investments, etc.) and increasing their resilience to climate and environmental impacts.

Climate and environmental risks are integrated into the Bank's regular risk management systems as determining factors for existing risk categories.

The Bank has defined the aforementioned management approach on the basis of principles defined by international best practices and guidelines issued by the competent authorities. In particular, the framework of reference regulations, guidelines and standards includes, among others:

- European Parliament Resolution of 29 May 2018 on Sustainable Finance;
- EBA Action Plan on Sustainable Finance of 6 December 2019;
- Regulation (EU) 2019/2088 (so-called SFDR) of the European Parliament and of the Council of 27 November 2019 on sustainability reporting in the financial services sector;
- Regulation (EU) 2020/852 (so-called Taxonomy Regulation) of the European Parliament and of the Council of 18 June 2020;
- Commission Delegated Regulation (EU) No. 2021/2139 of 4 June 2021 supplementing Regulation (EU) No. 2020/852 laying down technical screening criteria for determining under which conditions an economic activity can be considered to substantially contribute to climate change mitigation or adaptation and whether it does not cause significant harm to any other environmental objective;
- Regulation (EU) No. 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulation (EC) No. 401/2009 and Regulation (EU) No. 2018/1999 (so-called "European Climate Regulation");
- Commission Delegated Regulation (EU) No. 2021/2178 of 6 July 2021 supplementing Regulation (EU) No. 2020/852 of the European Parliament and of the Council by specifying the content and presentation of the information that companies subject to Article 19a or Article 29a of Directive 2013/34/EU must report on environmentally sustainable economic activities and specifying the methodology to comply with this obligation;
- ECB Guide on Climate-Related and Environmental Risks of 27 November 2020;

- ECB Good practices for climate-related and environmental risk management - Observations from the 2022 thematic review, November 2022;
- EBA Guidelines on loan origination and monitoring (EBA/GL/2020/06);
- EBA report on management and supervision of ESG risks for credit institutions and investment firms (EBA/REP/2021/18);
- UNEP FI Guidelines for Climate Target Setting for Banks, guidelines developed by the signatories of the UNEP FI Principles for Responsible Banking commitment;
- Science Based Targets, Financial Sector Science-Based Targets Guidance;
- Recommendations of the Task Force on Climate-related Financial Disclosures;
- Partnership for Carbon Accounting Financials (PCAF).

During 2022 the Bank also took part in important initiatives such as the CDP (Carbon Disclosure Project) and the Sustainable Finance Forum; it also recently joined the recommendations of the TCFD (Task Force on Climate-Related Financial Disclosures). By the end of this year, the following additional initiatives are planned:

- UN PRB (Principles for Responsible Banking);
- Net-Zero Banking Alliance.

With regard to the defining framework, please refer to key definitions reported in the introductory part of this Section 12.

l) Indication of the processes by which the entity identifies and monitors its activities and exposures that are sensitive and vulnerable to environmental risks.

The Bank has established regular processes for identifying and assessing the materiality of exposure to risks related to climate and environmental change, physical and transition risks that may affect the business context. The materiality of these risks, understood as their ability to affect the sustainability of current and future business returns and the Group's corporate and liquidity position, is analysed normally on an annual basis. To this end, the Bank adopts specific tools and metrics as well as specific methodologies for conducting analyses to identify its degree of vulnerability to climate and environmental risk factors.

Generally speaking, in order to determine the level of materiality of the risk drivers related to the environment and climate change, the Bank considers these risk factors as causal elements capable of affecting the exposure to existing risks and not as additional factors to the typical perimeter of banking risks that can potentially be assumed. The level of materiality is therefore detected in relation to the possible influence of physical and transition factors on traditional risk categories, thanks to a structured analysis of the transmission channels by which they could propagate in the event of materialisation.

In identifying the relevant risk factors the Bank referred to the dictates contained in the "*Final Guide on climate-related and environmental risks - Supervisory expectations relating to risk management and disclosure*", a document published by the European Central Bank in November 2020 which summarises and defines climate and environmental risk drivers and factors in detail. For the

purposes of its materiality analyses, the Bank takes these drivers and risk factors as a reference, which it confirms and/or supplements, where relevant, by means of the results of internal expert-based assessment processes mapped out in the so-called “Inventory of ESG risks” (for more details please refer to the “Risk Management” section of the Qualitative Information on Social and Governance Risks).

The elements identified in this way are being reviewed and updated from time to time according to developments in scientific knowledge and in the regulatory framework.

A synoptic overview of the relevant climate and environmental risk factors, as classified by the Supervisory Authority, divided into physical and transition risk drivers, is reported below

Physical risk factors		Transition risk factors	
Climate-related	Environmental	Climate-related	Environmental
<ul style="list-style-type: none"> • Extreme weather events • Chronic weather conditions 	<ul style="list-style-type: none"> • Water stress • Resource scarcity • Loss of biodiversity • Pollution 	<ul style="list-style-type: none"> • Policies and regulation • Technology • Market confidence 	<ul style="list-style-type: none"> • Policies and regulation • Technology • Market confidence

For each relevant risk factor, the chart below explains the transmission channels through which climate and environmental risk factors manifest themselves within the traditional banking risk categories.

ESG Risk driver	Transmission channels (non-exhaustive)	Banking risk
Environmental	Lower profitability	Credit risk
Physical risks: • Acute • Chronic	Reduction in property value Decrease in private wealth	Market risk Operational and reputational risk
Transition risks: • Regulatory • Technological obsolescence • Market preferences	Lower asset performance Increased compliance costs Increased legal costs	Liquidity risk Strategic risk

Concerning the conduct of materiality analyses, specific and distinct methods of identifying and detecting materiality levels of exposure to climate and environmental risk factors are defined according to the traditional risk cases analysed. In general, materiality assessments and the subsequent measurement and monitoring of their impact on existing risk exposure levels and, consequently, on potentially associated capital and liquidity requirements, take into account:

- geographical, economic and regulatory context factors (e.g., vulnerability to environmental and climate risks of different economic sectors);
- specific factors linked to strategic objectives, operations and the business model pursued (e.g., services offered and reference markets), the composition of the company's assets (e.g., credit portfolio, financial investments, guarantees, etc.), the composition of funding sources, logistical

aspects (e.g., physical location of Group components, location of counterparties' production activities).

For all the traditional risk categories analysed the process aimed at detecting the materiality of climate-environmental risk sources is divided into the following common sub-stages:

- identification of traditional risks potentially impacted by the effects generated by the exposure to physical and transition risk factors;
- definition of the portfolios and perimeters under analysis for each traditional risk case identified;
- definition and precise description of the transmission channels through which physical and transition risk factors may propagate their impacts on the riskiness of portfolios and the activity perimeters defined for each type of risk analysed;
- identification of appropriate tools and metrics to identify and assess the individual transmission channels through which climate and environmental risk factors manifest themselves;
- development and application of accurate methodologies to detect the degree of materiality of the exposures to identified climate and environmental drivers and risk factors.

Materiality assessments are preparatory to the measurement of climate and environmental risk exposure. In fact, the identification of the most significant physical events and transition risk factors makes it possible to understand and quantify their negative impacts on the business context, in the short, medium and long term, also with a view to orienting strategic choices and ensuring, by this means, the resilience of the business model pursued.

The annual survey of the degree of materiality of the physical and transition factors, inspired by the evaluation methods of the so-called "Exposure Method"²⁴, was carried out, as part of the ICAAP process, primarily for the following traditional banking risks:

- Credit risk
- Market risk
- Operational risk.

Despite the absence of best practice methodological references, preliminary internal analyses of the degree of materiality of climatic and environmental factors in relation to exposure to liquidity risks (funding and market liquidity risk) were also carried out in the first few months of the current financial year, subject to future refinements and additions to the method in line with the Bank's plans to evolve the climate and environmental risk management framework.

For each of the above risk types, different tools and metrics were used to detect the level of materiality, capable of intercepting the extent of climatic and environmental risk factors that may manifest themselves within them, through specific risk transmission channels.

²⁴ The Exposure Method is a methodology useful for assessing the ESG riskiness of individual counterparties and exposures. The approach is based on the direct assessment of an exposure's performance against the ESG risk profile (and, in particular, climate and environmental risk) and can be used to supplement the standard assessment of traditional financial risk categories. The indicators, metrics and/or tools used for this assessment are typically calibrated at the company level, taking into account granular characteristics at the sector level to capture specific sensitivities to climatic and environmental risk factors. See "EBA Report on management and supervision of ESG risks for credit institutions and investment firms", June 2021, European Banking Authority.

For more information on the processes for identifying relevant climate and environmental (physical and transition) risks, the methodological criteria adopted for estimating the materiality of these factors in the context of exposures that are sensitive to them and the outcomes of the latest materiality analyses conducted by the Bank, please refer to, respectively, the chapters “Introduction, context and drafting methodology” (paragraph “ESG Risks”) and “Risk Management” (paragraph “Identification of climate and environmental risks and materiality analysis”) of the TCFD Report 22.

The Bank analyses the evolution of its exposure to climate and environmental risk factors in order to detect potential changes in the risk profile and to identify critical issues or abnormal trends, in terms of numerousness or magnitude of the expected impacts. Specifically, the monitoring of exposure to climate and environmental risk passes through the analysis and periodic evaluation of quantitative, objective and measurable metrics, referring to the various traditional risk categories impacted by these factors. This system of risk indicators and limits, which is being progressively enriched, integrates the Group's Risk Appetite Framework at various hierarchical levels, supporting the control of the effects of physical and transition risk sources on current and prospective positions exposed to traditional risks.

To this end a special reporting system was defined to represent to the top management, on a quarterly basis, the dynamics of the riskiness of the bank's loan and securities portfolios in terms of ESG factors incidence. The list of synthetic indicators used to monitor risks related to the environment and climate change, as well as the description of the escalation mechanisms envisaged in the event of exceeding the set risk limits, are documented, depending on the hierarchical level of the metric, in the “Risk Appetite Statement” (RAS) and in the “Risk Appetite Framework Regulation” of the Group as well as of the individual entities comprising it, or in the specific internal regulations on the management of the risk categories impacted.

The overall environmental and climate risk management process is regulated in a special policy document (“*General Climate and Environmental Risk Regulation*”) approved by the Board of Directors. Individual steps or components of the process are formalised in specific internal regulatory devices forming, together with the aforementioned reference policy, an organic and integrated body of regulations with the general system of risk management documentation.

m) Information on activities, commitments and exposures put in place to mitigate environmental risks.

The Bank, in the face of the identification of any critical issues arising from the vulnerability to climate and environmental risks, envisages the activation of specific mitigation measures. This may occur, in general, as a result of the measurement of key indicators that reveal excessive exposure to risks, both physical and transition, in relation to established risk limits.

To manage these circumstances the Group defines a set of potential management tools and actions to limit its exposure to climate and environmental risks. Since these risk factors are key determinants of the possible scope of impact of the various risk areas to which a bank is typically exposed, mitigation initiatives are specifically defined according to the traditional risk types within which climate and environmental factors tend to materialise.

With particular regard to climate and environmental risks that may arise in the context of credit risk exposure, the following mitigation actions may be taken, by way of example:

- provision of centralised decision-making procedures, with an associated enhanced due diligence process, for the granting of loans to assets and/or counterparties with a high degree of exposure to climate and environmental risk factors, as measured by the internal measurement systems adopted (e.g., scoring);
- offering specific financing products (e.g., “green loans” and other forms of green lending) aimed at fostering the process of improving the climate-environmental profile of customers, supporting their adaptation to the environmentally-sustainable transition;
- introduction of specific climate-environmental performance measurement clauses (e.g., green covenants) in contractual agreements with customers in case of new credit lines in favour of counterparties more exposed to climate and environmental risk factors.

On the other hand, with regard to climate and environmental risks that may arise in the context of market risk exposure, the following mitigation actions may be taken, by way of example:

- reorientation of investment policies in order to redesign the composition of the financial assets portfolio to favour a reduction in the overall exposure to climate and environmental risks.

With regard to climate and environmental risks that arise in the form of operational and reputational risks, the following mitigation measures can be taken, by way of example:

- monitoring the level of maturity and completeness of the physical security procedures and the energy efficiency standards of the Group's buildings, also through the definition of specific business continuity and disaster recovery plans (subject to periodic verifications of their effectiveness), in order to prevent or proactively manage the occurrence of physical risks;
- underwriting and periodic review of the adequacy of insurance policies taken out by the Group to cover potential operational risks arising from climate and environmental factors;
- reorienting its policies for selecting and engaging suppliers and business counterparties on the basis of compliance with certain requirements concerning the environmental sustainability of its business, with reference both to physical risk threats and to compliance with applicable climate-environmental regulations;
- reorienting its core business policies (e.g., customer financial services, credit disbursement and management) towards approaches that favour the prevention and/or reduction of overall exposure to climate and environmental risks, with direct or indirect benefits for the Group (e.g., effect on complaints and penalties);
- monitoring the level of reputation enjoyed in terms of sensitivity to climate-environmental issues, with the possible activation of campaigns to restore the corporate image (e.g., emergency plans and crisis management, communication flows of public recognition of corporate choices) in the event that the Group is perceived as not adhering or only apparently adhering to instances of environmental sustainability (so-called greenwashing).

Finally, with regard to climate and environmental risks capable of affecting liquidity risk exposure, no specific managerial risk mitigation actions other than those listed above are considered, as they already mitigate potential negative impacts on the liquidity position of the Bank.

n) Information on implementation tools to identify and manage environmental risks. These include stress tests, sensitivity analyses or other forward-looking indicators, applied at exposure level, portfolio level, counterparty level or sector level, depending on the materiality of the risk.

With regard to the measurement and quantification of climate and environmental risk profiles, the Bank estimates its exposures on the basis of both current data and forward-looking measures, capturing quantitative metrics of physical and transition risk trends.

In this context, metrics are developed to determine what exposure is considered acceptable, defining an appropriate system of limits and risk indicators. With regard to climate risks in particular, the measurement tools adopted take into account the long-term nature of climate change, assessing how different temperature and greenhouse gas emission paths may accentuate these risks.

The recognition of these metrics enhances the Group's ability to respond to a sudden transition to a low-carbon economy or to individual physical events that may impact the Group's typical operations, counterparties or asset portfolios, and to take mitigating action in a timely manner.

Among the metrics adopted, the Bank uses indicators calculated through the development of internal methodologies for assessing and classifying climate/environmental risk at both sector and individual counterparty/transaction levels, which are useful for portfolio analyses such as those used in the assessment of specific assets, transactions, investments or counterparties/issuers.

The Bank has defined appropriate tools and methodologies to assess the climate-environmental risk profile of sectors, counterparties and investment activities.

A synoptic overview of the assessment tools currently used by the Bank to determine the extent of its exposure to climate and environmental (physical and transition) risks for the main "traditional" risk types impacted is reported below.



CREDIT RISKS

Tool	Description	Use
ESG Heat Map	A tool developed at the sector level to identify the potential risk of ESG factors related to the Bank portfolio towards the 17 Sustainable Development Goals (SDGs) laid down by the United Nations.	<ul style="list-style-type: none"> • Definition of credit policies • Portfolio analysis • Granting process
Counterparty C&E Score	Risk metrics that the Bank has developed internally in order to identify the level of exposure of its credit customers to climate-related and environmental risk factors	<ul style="list-style-type: none"> • Granting process • RAF • Materiality analysis
C&E risk quantification metrics	Metrics for measuring impacts on traditional credit risk parameters through C&E risk transmission channels	<ul style="list-style-type: none"> • ICAAP

MARKET RISKS

Tool	Description	Use
ESG Heat Map	A tool developed at the sector level to identify the potential risk of ESG factors related to the Bank portfolio towards the 17 Sustainable Development Goals (SDGs) laid down by the United Nations.	<ul style="list-style-type: none"> • Portfolio analysis
External ESG rating	Risk metrics that the Bank acquires from external providers to identify the level of exposure of its issuers to climate-related and environmental risk factors	<ul style="list-style-type: none"> • Materiality analysis • ICAAP

OPERATIONAL RISK

Tool	Description	Use
Metrics for assessing extreme weather impacts	The Bank retrieves and processes information sources from external databases (ISPRA and ThinkHazard!) with the aim of determining the classes of exposure to physical risk threats analysed, for which a significant risk exposure can be found in the geographic areas with the highest territorial concentration for the Group.	<ul style="list-style-type: none"> • Materiality analysis • ICAAP

The above tools meet the need to assess the Bank's risk profile from a dual perspective: on the one hand, with a view to analysing the financial impact of environmental and climate factors on its

economic and financial activities by, for example, investigating the riskiness of its counterparty portfolios and exposures due to climate change or environmental degradation (outside-in perspective); on the other hand, with a view to assessing the extent of climate-environmental risk factors determining the Bank's business activity or generated by it, which in turn could become financially relevant if they affect the Bank's stakeholders (inside-out perspective).

In order to respond to the first perspective, the Bank developed the counterparty climate-environmental scoring system according to an internal calculation methodology. This classification tool makes it possible to estimate, through the assignment of a numerical score and an associated risk category, the potential financial impacts associated with the exposure of credit counterparties (corporate segment) to transition and physical risks.

All the elements making up this score are assessed prospectively through the use of forward-looking scenarios or hypotheses, representative of the possible evolution of the counterparty's physical and climate and environmental transition risks over short, medium and long-term horizons, with differentiation assessments at geographic and/or sectoral level. For example, in order to prospectively capture the sensitivity of an individual company to the climate and environmental transition and the related projected financial impacts, some of the climate scenarios proposed by the NGFS²⁵ are adopted over different time horizons of analysis (short term: 3 years; medium term: 5 years; long term: 30 years); the following scenarios in particular are relevant:

- Net Zero 2050 scenario: a particular scenario that assumes the containment of global warming below 1.5°C through strict climate policies and a strong technological innovation. This scenario assumes the immediate introduction of ambitious climate change policies with the goal of achieving net zero CO₂ emissions around 2050;
- “Delayed Transition” scenario: a particular scenario in which it is assumed that annual global GHG emissions will not decrease until 2030, resulting in the delayed implementation of drastic policy choices aimed at keeping the global warming target below 2°C. This calls for economies to start a rapid decarbonisation pathway to achieve the Net Zero 2050 scenario targets;
- “Current Policy” scenario: a particular scenario that assumes no evolution in current environmental and climate change policies, resulting in high physical risks. GHG emissions would grow until 2080, causing a global warming of about 3°C and serious manifestations of physical risk. This scenario helps to assess the long-term magnitude of physical risks, acute and chronic, to the economy and the financial system should gas emissions remain at current levels.

For more details on the characteristics of the climate-environmental risk scoring system under internal development and the additional assessment tools above, please refer to the “Risk Management” section of the TCFD Report 22.

Taking into consideration the findings of the materiality analyses described above, the Bank also incorporates climate and environment-related risk factors into its internal capital adequacy assessment (ICAAP) and liquidity assessment (ILAAP) processes through dedicated impact

²⁵ The NGFS (Network of Central Banks and Supervisors for Greening the Financial System) is a group of central banks committed to contributing to the global development of climate and environmental risk management practices in the financial sector and to mobilising the world of finance towards a commitment to support the transition to a sustainable economy. Among other things, it develops specific forecast scenarios for the prospective assessment of climate risks.

quantifications (e.g., on the values of business portfolios and assets, operating volumes and profitability, management and regulatory risk exposure measures, etc.) based on the application of prospective scenarios simulating climate transition and/or assumptions on the severity of the effects of relevant physical risks.

Getting to the heart of the internal climate risk stress testing framework defined by the Bank, the first major components of the simulation framework were designed and implemented during 2022, adopting recurring data supplies focused on climate drivers and the use of analytical simulation calculation engines to estimate the impacts of physical and transition risks.

In particular, the framework was activated in order to understand the potential impacts, also from a managerial and sustainability point of view, deriving from the action of climate risk transmission channels on traditional risk measures, starting with the credit risk parameters of the loans portfolio to businesses and individuals and of the collateral received (real estate).

At the same time, the components used to conduct climate-risk-adjusted analyses are supporting the introduction of specific climate risk indicators (KRI) in order to complete the process of identifying, measuring and monitoring these risks.

This framework, which was used for the first time in the ICAAP exercise at 31 December 2022, allowed simulations to be conducted to quantify the potential impacts of materially relevant physical risks and transition risk under different time horizons (short, medium, long) and scenario/magnitude assumptions of the events hypothesised. In particular, the stress conditions taken into account refer to:

- adverse events generated by acute physical risks;
- the amplification of the effects of acute risks in the medium to long term, as a result of worsening climatic conditions;
- climate transition events/policies imposed by the external technological or political context (e.g., European decarbonisation policies and/or technological innovations).

For more details on the methodological approach for quantifying climate and environmental risks adopted for ICAAP stress testing, see the “Risk Management” section of the TCFD Report 22.

o) Estimated impact of environmental risk, including climate change risk, on an institution's solvency, regulatory capital requirements and liquidity risk profile as part of its internal capital adequacy assessment process (ICAAP) and internal liquidity adequacy assessment process (ILAAP).

As mentioned in the previous paragraph, this year the Bank planned to develop, within the ICAAP exercise, evolving from the first sensitivity analyses conducted in the previous capital analysis cycle, an organic stress testing system aimed at testing the vulnerability to possible manifestations of climate-environmental risk impacting the credit portfolio, simulating the consequences on specific risk exposure measures.

In line with the Supervisory Authority's expectations, stress analyses were conducted on the basis of the credit risk drivers of the corporate and private loan portfolio. In particular, the stress test was aimed at determining the effects on specific measures of credit risk exposure (potential changes in PD and LGD parameters and consequent impacts on the short, medium and long-term dynamics of

the RWA associated with the exposures covered by the analyses) of pre-defined scenarios of adverse developments in climate and environmental risk factors - physical and transitional - to which both the borrowing companies in the portfolio and the real estate securing loans granted to households and businesses are typically exposed.

The identification of physical and transition risk factors on which the impact analyses are to be focused was based on the findings of the quantitative materiality analyses to which all potential climate-environmental risk factors and their transmission channels were subjected.

The simulation exercise highlighted, even in the context of the “Orderly Transition” scenario, possible material effects on credit risk arising from higher investments and/or operating costs that debtor companies will already have to bear in the short term. Increased efforts from companies from the early years of the scenario will also make it possible to achieve future decarbonisation targets.

However, the quantitative results observed must be interpreted with caution with regard to capital adequacy considerations, due to:

- an incomplete availability of timely data relevant to climate change and environmental degradation impact assessments (e.g., geo-location of counterparties and real estate collateral, data on atmospheric greenhouse gas emissions produced by counterparties, data on the energy classes of real estate assets acquired as collateral), compensated by proxy methods that do not meet uniform standards;
- the lack of information about the existence of possible risk mitigations activated by counterparties (e.g., companies' ecological transition plans, insurance coverage against physical risk threats, technological developments underway for the reconversion of highly carbon-intensive business production activities, modernisation of housing, etc.).

With respect to the ILAAP process, the Bank planned this year to conduct a prototype materiality analysis exercise of climate and environmental risk factors on liquidity risk, with the aim of identifying the potential magnitude of relevant physical and transition factors in determining the exposure to both funding liquidity risk and market liquidity risk. The preliminary analyses performed are preparatory to a forthcoming activity to quantify the effects of these factors on representative measures of corporate liquidity.

p) Information on data and elements for environmental risk management, key information currently missing and measures being taken to fill data gaps and improve data quality and accuracy.

From the point of view of infrastructures and data management processes, the Bank is progressively working on defining ESG databases that are as complete and accurate as possible in order to retrieve and store all the information needed to govern and manage environmental, social and governance sustainability risks. To this end, specific architectural foundations have been defined so that information systems increasingly respond to the need to systematically collect, process and aggregate the data required to assess ESG risk exposure, to acquire information in an orderly manner through interchange channels and to place it within dedicated ICT environments available to multiple processes and users.

A data dictionary is also being developed to identify and collect all information needs related to the integration of ESG considerations into business processes to enable any company user to understand the source and granularity of the available data.

Information that makes up the Bank's ESG assets is mainly derived from qualified external info-providers (who provide proxy or exact data of counterparties or issuers of investment securities), from the collection of data from public sources or directly from customers themselves.

As it is well known, the matter of "ESG data" suffers from certain weaknesses in terms of completeness and accuracy (proxy) as well as a lack of standardisation and homogeneity. The creation of datasets that are as complete, accurate and robust as possible is therefore a fundamental element of the framework for the governance and control of these risks; for this reason, the Bank is assiduously engaged in activities to acquire, systematise and computerise management systems and verify the quality of the data and their sources.

q) Information on the limits set for climatic and environmental risks and their corrective actions.

The Bank has supplemented the Group's Risk Appetite Statement, on the one hand, through the inclusion of qualitative indications and objectives relating to aspects of ESG risk governance and management and, on the other hand, through the introduction, at a complementary level (RAF 2nd level), of a quantitative parameter for measuring the extent of climate and environmental risk profiles in the context of the credit risk exposure of the corporate portfolio.

With regard to qualitative objectives, the Bank outlined:

- the commitment to activate policies to guide the reconversion of bank credit towards green and sustainable sectors, as well as to define the evaluation elements - current and prospective - related to the impact of climate and environmental factors on the economic and financial stability of its counterparties;
- the recognition of the risks of environmental degradation and climate change as significant sources of credit risk, resulting in the adoption of systems to measure these factors at the individual counterparty level. The single-name scoring of customers to assess their exposure to climate-environmental factors and the portfolio synthesis through specific risk appetite metrics are considered elements of strategic direction for the Group, especially in the areas of (i) the formulation and implementation of credit strategy, (ii) the offer of financing products to customers and (iii) the definition of lending pricing logics;
- the promotion of the integration of additional and new ESG risk assessments in the expression of the Group's risk appetite, in order to guide strategic choices with a view to limiting the impact of these factors on credit and investment, strategic, reputational and legal risk exposures, also through the development of dedicated quali-quantitative metrics.

Using risk-based analysis tools the Group also aims: (i) to refrain from investing in counterparties that have, even prospectively, negative impacts on the environment, on climate and on human rights; (ii) to define appropriate impact mitigation measures proportionate to the materiality of the ESG determinants.

As for the new quantitative indicator, it was defined to measure the concentration, in the loan portfolio regarding the corporate segment, of debtor counterparties with a negative assessment of vulnerability to climate and environmental risk factors summarised through the cited internal scoring system. A threshold (risk trigger) is applied to the indicator, which is calculated as the ratio between the value of exposure to counterparties with a negative climate-environmental risk score and the total amount of exposure of the corporate portfolio covered by the score. The monitoring of this indicator uses appropriate systems for detecting, reporting and alerting deviations (alert or escalation procedures) governed by the Group's RAF Regulation.

In addition, within its ESG Credit Policy, the Bank has identified a number of sectors and economic activities that are considered “sensitive” from an ESG point of view and for which special attention is paid during the lending phase, with the aim of adopting a responsible approach. The identified sectors pertaining to the “Environmental” sphere are the following:

- Coal mining
- Oil & Gas
- Production of electricity from non-renewable sources
- Mining (other than coal).

r) Impact/link of climate and environmental risks with respect to prudential risk categories, including credit risk, liquidity risk, market risk and operational risk.

According to the dictates of the Supervisory Authorities, risks related to the environment and climate change do not constitute a risk category in their own right, as they typically manifest themselves and materialise through “traditional” risk categories, influencing the magnitude or likelihood of the materialising impacts: in other words, they represent determining factors for typical risk categories, such as credit, market, operational, reputational and liquidity risks. Climate and environmental risks may therefore simultaneously constitute causal factors of various existing risk categories and subcategories, manifesting themselves in these through specific channels of transmission.

In line with the Group's taxonomic risk inventory (“Risk Map”), climate and environmental risk profiles include the two typical risk drivers of transition and physical risk. Both may cause impacts on economic activities and, consequently, on the financial system: these types of risk factors in fact influence the level of productive activities and can even permanently compromise them through direct (e.g. material damage, drop in productivity or profitability of banking counterparties, depreciation of relevant assets, etc.) or indirect impacts (e.g. by causing subsequent events such as the interruption of production chains or macro-financial changes).

These risk factors are also likely to affect the resilience of a bank's business model in the medium and longer term, especially for financial institutions with a business plan based on economic sectors and markets that are particularly vulnerable to climate and environmental risks. In addition, physical and transition risks may give rise to further losses originating directly or indirectly from lawsuits (so-called “legal liability risk”) as well as from the reputational damage that may arise if the public, counterparties and/or investors associate the banking institution with adverse environmental effects.

In relation to this, for each main area of “traditional” risk, the Bank has defined, formalising them in a designated policy document (“*General Regulation of Climate and Environmental Risks*”), specific guidelines for setting up models for integrating climate and environmental risk assessments in the context of the respective management systems:

- *Credit risk:*
 - a) Climate and environmental risk factors and their impacts on credit risk are considered at all relevant stages of the credit granting and management process.
 - b) As part of the granting of credit, operational criteria of a qualitative-quantitative nature are formalised to distinguish economic sectors and individual borrowers on the basis of their exposure to climate and environmental risks.
 - c) For customers associated with higher environmental and climate risks and for larger counterparties, more in-depth analyses are appropriate, taking into account the current and/or prospective impacts of transition factors (e.g., changes in environmental pollution regulatory policies) as well as the quality of the client's management of physical and transition risks.
 - d) Specific climate and environmental due diligence checks are promoted, both at the beginning of a customer relationship and on an ongoing basis. The Group intends, in particular, to establish a constructive dialogue with its most critical counterparties, also in order to support them in improving their environmental sustainability profile.
 - e) Climate and environmental risks are integrated into the valuation of collateral, with particular regard to the risks of loss of value of real estate as collateral.
 - f) The pricing of loans reflects differences in charges related to climate and environmental risks, e.g., by applying higher financing costs for assets particularly exposed to physical and transition risks.
- *Market risk:*
 - a) The Group monitors the effects of climate and environmental factors on its positions exposed to market risk, taking into account the significance of physical and transition risks for the banking and trading book. This is due to the fact that investments in financial assets issued by companies with business models perceived as environmentally unsustainable or located in geographic areas susceptible to physical risks could decline in value as a result of changing regulatory policies, market confidence or technology, or due to severe weather events or gradual adverse changes in climatic conditions.
 - b) The integration of climate and environmental factors into market risk management processes may require the Group to adjust its investment policies in its own financial instruments.
 - c) In addition to measuring the degree of “environmental sustainability” of portfolio investments, the ability to assess the possible impact of adverse events related to the materialisation of climate/environmental risks on the pricing of financial instruments should be noted.
- *Operational and reputational risks:*

- a) The Group takes into account the possible impact of climate and environmental risks on business continuity as well as on the level of reputational and legal risks in relation to the various business lines and operations carried out, by putting in place adequate control and mitigation measures, also with regard to outsourced services and IT activities, especially if suppliers of essential or important services/functions are located in areas exposed to extreme weather events or other environmental vulnerabilities.
 - b) Business continuity could be affected by adverse impacts caused by physical risk events (e.g., disruptions in operations caused by material damage to buildings, branches and data processing centres as a result of extreme weather and environmental events). In relation to this, the Group takes all necessary measures to safeguard business continuity and ensure timely restoration of operations in the event of a disaster, both in terms of policies and in terms of the functioning of tangible assets, including IT systems.
 - c) The Group assesses the extent to which the nature of its activities may increase the risk of negative financial impacts from future reputational damage, legal liability and litigation.
- *Liquidity risk:*
 - a) The Group integrates climate and environmental risks into the measurement and management of liquidity risk, assessing potential deterioration of the liquidity position due to cash outflows and/or a decrease in the amount of liquidity reserves and/or changes in the degree of liquidity of financial instruments held on its own account.
 - b) As part of ILAAP reporting, impact assessments on net cash outflows or cash reserves take into account severe but plausible scenario assumptions of materialising physical and transition risks, paying particular attention to fundamental vulnerabilities.

Qualitative information on social risks

Strategy and business processes

- a) *Explanation of how the business model, strategy and processes, and financial planning incorporate risks arising from social factors (i.e. social risks) and how these risks evolve over time in view of changing technology, strategic frameworks, operating context and stakeholder preferences.*

Solidarity, subsidiarity, attention to individuals and communities and proximity to families and small and medium-sized enterprises are part of the founding values of the Group, which is also committed to fostering the economic and social development of the local communities and territories in which it operates, with particular attention to families and SMEs, acting consistently with Agenda 2030 and, in particular, with several SDGs on social issues such as:

- SDG 3: Health and well-being
- SDG 4: Quality education
- SDG 5: Gender equality

- SDG 10: Reduce inequalities
- SDG 11: Sustainable cities and communities
- SDG 12: Responsible consumption and production

In its Sustainability Policy the Group affirms its long-standing commitment to fostering the economic and social development of the communities in its reference territories, constantly promoting the dialogue with these communities, with particular regard to their constituent structures, made up of families and small and medium-sized enterprises. Consistently, it develops initiatives to support them that have a positive impact on quality of life, employment, investment, skills development and personal and social relationships.

These values are also reflected in the “Next step” Business Plan 2022-2025, with which the Group, focused on its distinctive areas, maintains its intention to grow while keeping its ambition for social sustainability high.

Giving value to diversity and inclusion represents a priority commitment for the Group in order to support a working environment that respects all forms of individual uniqueness and participation, inspired by principles of freedom, fairness and dignity in professional relations, and free of any collective or individual discriminatory behaviour. This commitment was further realised in 2022 and early 2023, through:

- the issuing of specific “Guidelines on Diversity and Inclusion”;
- joining the “*Valore D*” initiative, the first association of Italian companies promoting gender balance and an inclusive culture for the growth of companies and the country;
- the signing of the Charter “Women in banking: enhancing gender diversity”, drawn up by the Italian Banking Association (ABI).

The objective is to create an inclusive working environment that promotes plurality, respect and free expression and that allows for the recognition and enhancement of everyone's talent, offering each individual the same opportunities for professional growth and salary dynamics. To this end, a training programme for all staff on ESG issues was finalised in 2022.

In the same context, a Regulation on diversity in the composition of the Board of Directors and the Board of Statutory Auditors was adopted, a document that identifies the measures adopted to ensure that the composition of corporate bodies reflects an adequate degree of diversification in terms, inter alia, of skills, experience, age, gender and international projection, in order to encourage the emergence of different perspectives and points of view on the subjects of competence.

The Group identifies and manages social risks within its business processes. For more information on this, please refer to the following points.

b) Description of objectives, targets and limits for the assessment and management of social risks, as well as a description of the processes they use to establish these objectives, targets and limits. Institutions must explain the links of these objectives, targets and limits with the applicable international and EU policy framework and available benchmarks.

The current ESG Strategy, which constitutes an integral part of the broader Business Plan, includes, among other things:

- the introduction of ESG objectives in the remuneration policies;
- the definition of an operational plan on Diversity and Inclusion;
- the activation of the women's leadership programme;
- the definition of the giving strategy, including:
 - sponsorships
 - donations
- the adoption of an ESG rating for suppliers;
- the formalisation of a programme for digitalising processes for customers.

In the 2022-2025 Business Plan the Group also aims to consolidate its position in the corporate sector, with a particular focus on SMEs, as well as to intensify its presence in high-value areas with under-exploited potential, capitalising as much as possible on the new opportunities offered by the market - in particular, the National Recovery and Resilience Plan (so-called *PNRR*) -, including in areas contiguous to the banking business.

More information can be found on the Bank's institutional website at the following link <https://istituzionale.popsi.it/it/documenti/piano-industriale-di-gruppo-2022-2025>.

When approving the distribution of the annual profit, the Bank allocates a sum to be used for charitable donations, which are assessed by a specific Charity Commission that meets, except for special cases, on a weekly basis.

The Bank acts consistently with the 2030 Agenda and supports the goals of SDGs 3 “Ensure healthy lives and promote well-being for all at all ages” and 4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”.

Staff administration is underpinned by a robust and consolidated system of personnel management and training, which harmonises personal development paths with corporate objectives for building skills to achieve the internal necessary levels of professionalism. A corporate welfare program and an adequate planning in terms of health and safety are also created, developing awareness of possible risks, promoting responsible behaviours from all personnel and favouring working conditions functional to the protection of the psychophysical integrity of workers and respect for their moral personality.

Regarding “Dialogue with the social partners”, relations with trade union organisations, as defined in the company Code of Ethics, are characterised by the utmost transparency, fairness, integrity, impartiality and independence, respecting the roles and prerogatives of each subject, in a climate of mutual respect and willingness to dialogue and participate, while guaranteeing the widest possible freedom and representation.

For the Group the respect for human rights is a fundamental and indispensable requirement, and therefore it protects and promotes the safeguard and the continuous dissemination of these rights in the performance of its activities. With this in mind, it proceeds, with a holistic approach and with

the will to be a player for change, on the path already undertaken of identifying, implementing and monitoring Diversity and Inclusion objectives, implementing the most appropriate ways to achieve them in its own and system context.

The Group's *Sustainability Policy*, issued in the first half of 2021, expressly recalls the commitment to promote and respect human rights, as set out also in the UN Global Compact. The Code of Ethics reiterates that the Bank is committed to guaranteeing working conditions that respect the dignity of the individual, and to neither admitting nor tolerating forms of discrimination contrary to the law: to this end, the Code requires that acts of psychological violence or attitudes or behaviour that are discriminatory or harmful to individuals, their beliefs, convictions or preferences are not permitted in both internal and external labour relations.

With reference to SDG 11 above, the Group continues to ensure a strong social commitment by maintaining access points in scarcely populated areas as a further confirmation of the strong support guaranteed to local communities.

Access points in low-populated areas

	2022	2021	2020
Total Group access points (treasury offices, branches, etc.)	509	506	484
Number of municipalities with <5000 inhabitants served	131	130	130
Number of access points in municipalities with <5000 inhabitants	136	135	135
Percentage	26.72%	26.68%	27.89%
Number of access points in municipalities with <5000 inhabitants closed during the year	0	0	0
Number of access points in municipalities with <5000 inhabitants opened during the year	0	0	0

With reference to the commitment on “Responsible Consumption and Production” (SDG 12), relations with suppliers are regulated in the Code of Ethics, which represents a fundamental charter of corporate principles that includes commitments to guarantee transparency and fairness in relations, but also in the provisions dictated by the Group's policies on outsourcing, which provides for the inclusion in contracts with critical suppliers of general clauses in terms of the eligibility requirements of suppliers to guarantee the compliance with environmental protection regulations and workers' rights. In general, therefore, preference is given to suppliers who adopt high standards to safeguard social rights and good environmental practices.

With a view to assisting companies interested in internationalisation, the Bank promotes several initiatives aiming at disseminating clear and up-to-date information on the opportunities offered by foreign markets but also at supporting companies in opening new business channels in international markets. A total of 36 initiatives with 3,375 participants were realised in 2022, reaching an all-time record in recent years, thanks to the increase in dedicated staff and the online mode, which allowed for a faster organisation.

c) *Description of measures to mitigate risks associated with social factors, including understanding the capacity of counterparties to manage social risks and engaging in dialogue with them to mitigate social risks.*

Social risks are defined by the Group as risk profiles arising from exposures to counterparties that can be negatively influenced by social factors, or as the risks to which it is directly exposed due to its characteristics and operations. These factors typically relate to protection of the rights, welfare and interests of individuals and society and include elements such as (in)equality, personal health, inclusion, labour relations, occupational health and safety, human capital and community relations.

The process of managing and mitigating social risks takes place through a reconciliation to ESG risk subcategories and then to traditional banking risks. This process allows for a timely identification and description in order to adopt appropriate control methods specific to each identified category.

For further details please refer to NFR 22 available on the Bank's institutional website at the following link: <https://istituzionale.popso.it/it/sostenibilita/dichiarazione-consolidata-di-carattere-non-finanziario> (ref. p. 179 et seq.).

Governance

d) *Information on the management body's involvement in the supervision and management of social risks.*

See the section "Governance" (*Foreword: ESG Governance*) on "Qualitative information on environmental risk".

e) *Information on the organisation of risk committees and the allocation of tasks and responsibilities within the risk management framework to monitor and manage social risks.*

Social risks are appropriately monitored and managed through the organisational structures in charge, in general, of governing environmental, social and governance issues. In this regard, please refer to the "Governance" section (*Foreword: ESG Governance*) on "Qualitative information on environmental risk".

In addition, specifically for the social component, in agreement with the trade union representatives, a specific Commission on equal opportunities has been set up which has the following purposes:

- identifying appropriate measures to achieve equal opportunities;
- promoting measures to facilitate the reintegration of women workers after maternity leave and to safeguard their professionalism;
- promoting initiatives aimed at eliminating any behaviour harmful to personal freedoms, including sexual harassment;
- evaluating any reports about direct or indirect discrimination at a working or professional level and making proposals on this matter.

f) *Information on how social risks are included in the framework and internal reporting, as well as information on the frequency of internal reporting and information exchange on such risks.*

The internal reporting of sustainability issues related to social risks is carried out through a mutual dialogue between the competent bodies and functions, in particular between the Sustainability Department, the Sustainability Committee and the Control and Risk Committee.

For more details on this, please refer to the “Governance” section, point h, on “Qualitative information on environmental risk”.

During 2022 and in the first part of 2023 the management body attended several meetings in which specific ESG-related topics were discussed, containing information of relevance to social risk management, namely:

- approval of the “Guidelines on Diversity and Inclusion”;
- approval of the “ESG Credit Policy”;
- approval of the Consolidated Non-Financial Report 2021 and 2022 pursuant to Legislative Decree 254/2016;
- approval of the “Home-Work Travel Plan”.

g) Inclusion of social risks in the remuneration policy and related criteria and metrics used to determine the impact of social risk considerations on variable remuneration.

Please refer to the “Governance” section, point i, on “Qualitative information on environmental risk”.

Risk management

h) Information on methods, definitions and international standards used to identify and manage social risks.

In managing social risks the Bank refers to the principles defined by international best practices and the guidelines issued by the competent authorities. In particular, the regulatory framework taken as reference includes:

- United Nations Global Compact (2000);
- United Nations Sustainable Development Goals (2015);
- UNEP FI Principle for Responsible Banking (PRB) (2019);
- Universal Declaration of Human Rights - United Nations General Assembly (1948);
- International Covenant on Economic, Social and Cultural Rights and International Covenant on Civil and Political Rights - United Nations General Assembly, 1966 (entered into force in 1976 and implemented in Italy in 1978);
- Declaration on Fundamental Principles and Rights at Work - International Labour Organisation (ILO), 1998 and the 8 Core Conventions;
- UN Conventions on the Rights of Women, on the elimination of all forms of racial discrimination, on the rights of the child, on the rights of persons with disabilities;

- Standards of Conduct for Businesses developed in 2017 by the United Nations High Commissioner for Human Rights on anti-discrimination against lesbian, gay, bisexual, transgender and intersex persons;
- Guidelines Diversity & Inclusion in Business - UN Global Compact Network Italy (2021);
- Directive 2013/36/EU 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;
- Legislative Decree 231/2001 (Administrative Liability of Entities) as amended;
- Legislative Decree 198/2006 (Code of equal opportunities between men and women) as amended;
- Legislative Decree 81/2008 (Consolidation act on the protection of health and safety in the workplace) as amended;
- Legislative Decree 254/2016, implementing Directive 2014/95/EU of the European Parliament and of the Council on the disclosure of non-financial information of certain large and public interest companies;
- Legislative Decree 179/2017 (Provisions for the protection of the authors of reports of offences or irregularities of which they have become aware in the context of a public or private employment relationship, so-called “whistleblowing”) as amended.

In the first part of 2023 Banca Popolare di Sondrio Group joined, as an ordinary member, “*Valore D*”, which is the first Association of large companies created in Italy that is committed to promoting an inclusive corporate culture, without discrimination, capable of bringing out everyone's talent through the enhancement of diversity. Through this partnership the Bank will be able to take advantage of several services and growth opportunities, including a rich training offer to be spread throughout the Group to create an inclusive corporate culture that gives value to all diversities.

Furthermore, the Bank, as evidence of its growing sensitivity to these issues, has endorsed the Charter “Women in banking: enhancing gender diversity”, drawn up by the Italian Banking Association (ABI), aimed at enhancing equal treatment and opportunities between genders in the banking sector and within corporate organisations

In relation to the definition of social risks adopted by the Bank, please refer to the “Corporate Strategy and Processes” section above, point c.

i,j,k,m) Indication of the processes by which the entity identifies, measures and monitors social risks and the tools used in support.

Impact/link of social risks with respect to prudential risk categories, including credit risk, liquidity risk, market risk and operational risk.

As of 2020, the Bank has adopted an initial method of identifying and categorising environmental, social and governance (ESG) risk profiles based on a self-assessment approach that originates from the best practices promoted internationally, capable of integrating and supporting, with a forward-looking vision, the activities of measuring and managing these risks. This reconnaissance method is based on the identification and mapping of ESG risk categories perceived as capable to

arise in the short, medium and long term, both from an outside-in and an inside-out perspective (“dual perspective”), in light of the strategic guidelines pursued and the management policies adopted for the conduct of the company's business.

ESG risk types identified are classified according to a taxonomic approach inspired by the evaluation scheme adopted in the CDP (Carbon Disclosure Project) Questionnaire for the retrieval of information relating to risks linked to sustainability, suitably contextualised through the enhancement of specific information attributes, defined in the scope of the Recommendations of the Task Force on Climate-related Financial Disclosure (TCFD). The risk mapping and the taxonomies have been internally integrated with further analysis aspects, functional to a more precise identification and classification of non-climatic environmental, social and governance considerations (topics not covered by the CDP initiative, which focuses only on risks associated with carbon emissions).

In order to carry out this internal exercise aimed at identifying the risks linked to the specific reality of the banking group, the following types of risks pertaining to the “S” (Social) sphere are defined, taking the TCFD recommendations as a starting point:



On an annual basis the ESG factors mapped, including those relating to the “Social” component, are subjected to an expert-based assessment by various company representatives and Group subsidiaries, who, through dedicated cycles of interviews, are called upon to identify, within its sphere of competence, the possible negative effects - current or prospective - of different issues related to sustainability, cataloguing them in a specific “ESG risk inventory” and accompanying them with additional information, useful for qualifying the identified risk dimensions.

The reconnaissance exercise is then supplemented by an examination of the interconnections between the ESG risks resulting from the Inventory and the list of characteristic banking risks present in the “Risk Map” (credit, market, operational, liquidity risks, etc.), which is a system for defining, identifying and assessing the relevant risk profiles used as a reference for the Group's main risk governance processes (e.g. RAF, ICAAP, ILAAP), through an empirical association between the two frameworks.

In 2022 the Chief Risk Officer Area promoted the update of the Inventory on the same scope of corporate structures as the previous year. This update envisaged, first of all, a general rationalisation of the risk descriptors surveyed during the previous annual self-assessment activity, followed by a passage with the company contact persons involved for an approval and possible integration of the reported contents.

On the other hand, as regards the classification and measurement of risks pertaining to the “Social” aspect, the Bank has developed its own ESG Heatmap, a tool aimed at identifying at sector level the potential risk linked to ESG factors inherent in asset portfolios (loans and advances, investments

in proprietary securities). It is represented by a double-entry matrix instrumental in the sectoral mapping of economic activities from the point of view of their exposure to climate-environmental, social and governance risk factors, allowing a score to be associated with each economic sector on the basis of assessments of the potential environmental damage caused by the activities or the possible negativity from the point of view of the principles of social equity or good governance of the business organisation that characterise each sector.

The mapping process underpinning the development of the sectoral ESG Heatmap sees as its main source for defining the matrix's categorisations the analysis and classification standard published periodically by UNEP FI, an initiative developed from the collaboration between UNEP (United Nations Environment Programme) and the global financial sector. The tool used (Impact Radar - Portfolio Impact Analysis Tool for Banks), by identifying specific areas or categories of negative impact, makes it possible to determine the extent to which players in a given sector of economic activity are at risk of harming the achievement of one or more of the 17 SDGs dictated by the UN as part of the global action programme "Agenda 2030 for Sustainable Development". The 17 SDGs are translated by UnepFI into 38 categories of negative impact from ESG liability risks, with assessment conducted at sector level using specific indicators.

The methodological approach is based on an inside-out materiality perspective aimed at assessing the sectoral incidence of risk that the Bank may face when doing business with counterparties/sectors that may be responsible for actions, conduct or practices that may have negative consequences, not only for the quality of the environment and climate change, but also in compliance with socially recognised values and rules of good corporate governance.

The following chart shows the negative impact factors, pertaining to the "Social" sphere, defined by UNEP FI for each economic sector and analysed by the Bank during the elaboration of its sectoral ESG Heatmap.

ESG Pillars	UNEPFI factors
Social	<ul style="list-style-type: none"> • Availability of water • Availability of food • Availability of housing • Healthcare • Child labour • Privacy • Education • Access to energy • Mobility • Conflicts and modern slavery • Natural disasters • Access to the financial offer • Access to information • Access to culture • Justice • Social equality • Age discrimination • Protection of minorities

Based on the level of negative impact on ESG factors detected through the Heatmap, a riskiness scale was constructed according to five different levels identified by colours indicating the “potential risk” of each economic macro/sub-sector, both in terms of the overall ESG assessment and by individual “Environmental”, “Social” and “Governance” components.

l) Information on limits set in relation to the financing of projects or counterparties that significantly harm the social objectives of their business strategy

The Bank has supplemented the Group's Risk Appetite Statements with specific statements and qualitative goals relating to the management of environmental, social and governance risks. Please refer to the “Risk Management” section, point q, on “Qualitative information on environmental risk”.

In addition, within its ESG Credit Policy, the Bank has identified a number of sectors and economic activities that are considered “sensitive” from an ESG point of view and for which special attention is paid during the lending process with the aim of adopting a responsible approach. The identified sectors pertaining to the “Social” sphere are the following:

- Manufacture of and trade in arms
- Gambling
- Tobacco.

In addition to the aforementioned “sensitive” sectors, for financing transactions with counterparties resident in countries with privileged taxation and in countries subject to embargoes/restrictions on assets, it is planned to intensify controls in the credit-granting phase by means of an escalation decision-making process and, if possible, to provide a specific support to customers with a view to facilitating their transition to a more sustainable business.

Within the scope of its business relations the Bank acts in compliance with the principles laid down in its Code of Ethics, promoting its values also towards third parties with whom it has business relations through the stipulation of contractual agreements whereby the parties undertake to comply with its provisions. If third parties are legal persons the Bank shall ensure that the dissemination and observance of the Code of Ethics is guaranteed by all natural persons included in the organisation of the third party.

Qualitative information on governance risks

Governance

a) Information on how the counterparty's governance performance is integrated into the governance systems.

Consideration of the counterparty's governance performance must cover the necessary steps in the counterparty's decision-making, supervisory and management processes at all levels, including committees of the highest governance body and committees responsible for economic, environmental and social decision-making.

The assessment of the implementation of good governance systems of counterparties is carried out, as part of the preliminary investigation process, by means of the collection of information governed by specific internal regulations on credit granting and review activities.

In particular, the process involves the production of a set of qualitative information, capable of influencing the economic-financial situation of the counterparty, such as:

- the quality of the managerial and entrepreneurial structure;
- the sector in which the counterparty operates, with particular reference to the main competitive forces that characterise it and the positioning of the counterparty;
- the business plan in relation to the credit line requested and the specificities of the sector in which the counterparty operates;
- the political, economic and legal context if the counterparty operates abroad, where there are credit lines with cross-border elements;
- the customer's belonging to a group of connected customers, especially when repayment depends on cash flow from other connected parties;
- exposure to economic, social and governance sustainability factors (ESG factors), in particular related to environmental pollution, climate change impacts and the adequacy of mitigation strategies.

b) How the role of the counterparty's highest governing body is taken into account in the disclosure of non-financial information, including the committee or top-level functional position that formally reviews and approves the organisation's sustainability report and ensures that all relevant aspects are addressed.

The Bank considers corporate governance assessments as part of its processes for gathering information on counterparties in order to analyse their:

- corporate composition;
- allocation of powers and system of delegation;
- presence of anomalous indicators (protests, conservatory events and procedures detected).

This activity is carried out by analysing chamber of commerce visas, incorporation documents and any company proxy structure. In order to assess ESG risk factors the following information are typically used:

- internal data required from the customer (e.g., sector, geographical location)
- counterparty data acquired from public sources (e.g., non-financial statements, corporate sustainability documents)
- data gathered from specialised info-providers (e.g., MSCI, Vigeo, CDP)
- data from research institutes (e.g., UNEP FI).

c) Information on how the counterparty governance results are integrated into the institution's corporate governance systems.

As already highlighted in the “Risk Management” section on “Qualitative information on environmental risk” the governance aspect is an integral part of the ESG assessment of the Bank’s counterparties.

The Bank and the other members of the Banking Group are strongly committed to preventing the products and services offered from being used for the purposes of money laundering and terrorist financing, by promoting a culture of full compliance with the provisions in force and the effective fulfilment of the obligations of “passive cooperation”, aimed at ensuring an in-depth knowledge of customers and the preservation of documents relating to transactions carried out, and of “active cooperation”, aimed at identifying and reporting suspicious money laundering transactions. The adoption of strict policy rules on the prevention of money laundering and terrorist financing at Group level is an expression of the commitment of all entities to combat said criminal phenomena.

Risk management

d) Ways of integrating governance risks into risk management systems

As for social risks, the method for identifying, mapping and categorising relevant risks pertaining to the “Governance” sphere is the “ESG Risk Inventory”. For more details on this, please refer to points i,j,k,m of the “Risk Management” section on “Qualitative information on social risks”.

For a bank, governance risks arise from exposures to counterparties that may be negatively influenced by factors related to corporate governance or from similar risks to which the bank is directly exposed due to its characteristics and operations. These factors relate to the governance arrangements/choices of counterparties or of the banks themselves, including the incorporation of ESG considerations into their corporate governance policies and procedures.

Within the “Governance” risk macro-category, the same sub-categories were identified as in the “Social” area for the purposes of compiling the aforementioned Inventory:

RISKS:	
LEGAL AND POLICY	TECHNOLOGY
MARKET	REPUTATION
CREDIT	STRATEGY AND BUSINESS

Also with regard to the measurement of risks pertaining to the governance aspect, the reference tool is the aforementioned sectoral ESG Heatmap. For more details, please refer to points i,j,k,m of the “Risk Management” section on “Qualitative information on social risks”.

The following chart shows the negative impact factors, referring to the “Governance” sphere, defined by UNEP FI for each economic sector and analysed by the Bank during the elaboration of its sectoral ESG Heatmap.

ESG Pillars	UNEPI factors
Governance	<ul style="list-style-type: none"> • Safety and social protection • Employment • Strong institutions, peace and stability

* * *

Quantitative disclosures of environmental, social and governance risks are set out below in accordance with the technical standards introduced by Commission Implementing Regulation (EU) 2021/637 of 15 March 2021, as amended by Implementing Regulation (EU) 2022/2453 of 30 November 2022 pursuant to Art. 449-bis of the CRR.

The review of the disclosure templates for transition risk and physical risks related to climate change subject to disclosure requirements as of 31 December 2022 includes the following tabular formats:

A) Indicators of potential transition risk related to climate change

- *Template 1*: it reports quantitative information on the quality and residual maturity of credit exposures to non-financial corporations operating in carbon-related economic sectors, accompanied by information on the level of GHG emissions (GHG Scope 1, Scope 2 and Scope 3 emissions, of which GHG Scope 3 emissions are financed) produced by these counterparties;
- *Template 2*: it reports information on commercial and residential real estate secured loans and real estate collateral recovered, classified according to the energy consumption and energy performance certificates (APE or EPC) of the real estate units;
- *Template 4*: it reports aggregated and anonymised information on outstanding exposures to counterparties that are among the top 20 most carbon-intensive companies in the world.

B) Indicators of potential physical risk related to climate change

- *Template 5*: it reports information on the banking book's exposures to non-financial corporates, loans secured by real estate and real estate collateral recovered, exposed to chronic and acute climate-related physical risks, with a breakdown by sector and by geographic location of the counterparty's business or collateral.

C) Climate change-related mitigation actions

- *Template 10*: it reports information on possible mitigating actions and exposures to climate change risks to assets that are not aligned with Regulation (EU) 2020/852 (“Green Taxonomy”) but that support counterparties in the process of transition and adaptation to climate change mitigating objectives (e.g., information on bonds held and sustainable loans provided to finance “environmentally-friendly” assets).

In all published quantitative models financial information refers to the entire banking Group. In contrast, climate-environmental information is only available for the Group's legal entities established in EU-27 countries.

Table 107 - Template 1: Banking book- Climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity (1 of 3)

	a	b	c	d	e
	Gross carrying amount (Mln EUR)				
Sector/subsector	Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation		Of which environmentally sustainable (CCM)	Of which stage 2 exposures	Of which non-performing exposures
1 Exposures towards sectors that highly contribute to climate change	15,258,212	384,909	-	1,619,047	933,839
2 A - Agriculture, forestry and fishing	326,843	-	-	43,069	5,402
3 B - Mining and quarrying	61,936	-	-	10,656	3,971
4 B.05 - Mining of coal and lignite	-	-	-	-	-
5 B.06 - Extraction of crude petroleum and natural gas	2,918	-	-	-	-
6 B.07 - Mining of metal ores	1	-	-	-	-
7 B.08 - Other mining and quarrying	59,017	-	-	10,656	3,971
8 B.09 - Mining support service activities	-	-	-	-	-
9 C - Manufacturing	5,353,969	165,143	-	498,166	191,574
10 C.10 - Manufacture of food products	867,342	-	-	44,710	40,486
11 C.11 - Manufacture of beverages	94,520	-	-	2,016	2,377
12 C.12 - Manufacture of tobacco products	-	-	-	-	-
13 C.13 - Manufacture of textiles	185,348	-	-	30,308	10,434
14 C.14 - Manufacture of wearing apparel	59,387	-	-	8,326	13,067
15 C.15 - Manufacture of leather and related products	21,683	-	-	206	160
16 C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	82,938	-	-	11,063	3,074
17 C.17 - Manufacture of pulp, paper and paperboard	102,261	-	-	4,605	190
18 C.18 - Printing and service activities related to printing	81,326	-	-	4,845	28,724
19 C.19 - Manufacture of coke oven products	170,113	163,024	-	107,974	754
20 C.20 - Production of chemicals	248,995	-	-	54,463	594
21 C.21 - Manufacture of pharmaceutical preparations	144,010	-	-	29,744	-
22 C.22 - Manufacture of rubber products	244,761	-	-	23,431	1,835
23 C.23 - Manufacture of other non-metallic mineral products	163,700	1,279	-	44,065	6,891
24 C.24 - Manufacture of basic metals	509,980	-	-	8,460	3,173
25 C.25 - Manufacture of fabricated metal products, except machinery and equipment	928,541	-	-	25,963	14,053
26 C.26 - Manufacture of computer, electronic and optical products	109,839	-	-	16,761	37,144
27 C.27 - Manufacture of electrical equipment	151,704	226	-	8,033	12,000
28 C.28 - Manufacture of machinery and equipment n.e.c.	483,351	-	-	36,866	7,661
29 C.29 - Manufacture of motor vehicles, trailers and semi-trailers	332,622	-	-	15,723	1,331
30 C.30 - Manufacture of other transport equipment	199,590	-	-	5,252	1,922
31 C.31 - Manufacture of furniture	75,155	-	-	6,372	3,806
32 C.32 - Other manufacturing	56,867	-	-	3,861	1,023
33 C.33 - Repair and installation of machinery and equipment	39,934	613	-	5,121	874
34 D - Electricity, gas, steam and air conditioning supply	589,755	156,731	-	49,590	4,420
35 D35.1 - Electric power generation, transmission and distribution	441,599	148,116	-	33,642	4,054
36 D35.11 - Production of electricity	259,783	147,693	-	30,798	4,054
37 D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	119,764	8,614	-	11,813	366
38 D35.3 - Steam and air conditioning supply	28,393	-	-	4,135	-
39 E - Water supply; sewerage, waste management and remediation activities	218,620	-	-	884	4,510
40 F - Construction	1,713,205	2,219	-	192,200	237,816
41 F.41 - Construction of buildings	1,148,324	-	-	125,921	193,005
42 F.42 - Civil engineering	221,516	-	-	29,759	17,258
43 F.43 - Specialised construction activities	343,365	2,219	-	36,521	27,552
44 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	2,965,539	60,655	-	309,871	119,194
45 H - Transportation and storage	461,699	-	-	43,322	21,425
46 H.49 - Land transport and transport via pipelines	262,954	-	-	28,700	10,296
47 H.50 - Water transport	44,132	-	-	0	7,806
48 H.51 - Air transport	5,420	-	-	4,113	65
49 H.52 - Warehousing and support activities for transportation	132,909	-	-	10,494	3,219
50 H.53 - Postal and courier activities	16,283	-	-	15	38
51 I - Accommodation and food service activities	980,193	-	-	91,030	84,677
52 L - Real estate activities	2,586,451	161	-	380,259	260,849
53 Exposures towards sectors other than those that highly contribute to climate change	3,301,776	10,148	-	259,026	133,584
54 K - Financial and insurance activities	302,447	-	-	52,729	24,315
55 Exposures to other sectors (NACE codes J, M - U)	2,999,329	10,148	-	206,297	109,269
56 TOTAL	18,559,989	395,057	-	1,878,074	1,067,423

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 4.02 - F 4.03 - F 6.01); Internal ESG Database

Table 108 - Template 1: Banking book- Climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity (2 of 3)

Sector/subsector	f	g	h	i	j
	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions (Mln EUR)			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) (in tons of CO2 equivalent)	
		Of which Stage 2 exposures	Of which non-performing exposures		Of which Scope 3 financed emissions
1 Exposures towards sectors that highly contribute to climate change	610,490	47,816	550,444	11,226,725	8,480,751
2 A - Agriculture, forestry and fishing	3,775	1,274	2,251	16,237	-
3 B - Mining and quarrying	2,883	235	2,634	46,559	23,190
4 B.05 - Mining of coal and lignite	-	-	-	-	-
5 B.06 - Extraction of crude petroleum and natural gas	0	-	-	11,669	9,469
6 B.07 - Mining of metal ores	-	-	-	-	-
7 B.08 - Other mining and quarrying	2,882	235	2,634	34,890	13,722
8 B.09 - Mining support service activities	-	-	-	-	-
9 C - Manufacturing	136,183	11,949	122,002	9,724,186	7,922,155
10 C.10 - Manufacture of food products	29,976	1,164	28,209	2,587,081	2,475,341
11 C.11 - Manufacture of beverages	2,095	60	1,988	6,686	3,418
12 C.12 - Manufacture of tobacco products	-	-	-	-	-
13 C.13 - Manufacture of textiles	6,994	699	6,253	106,726	79,405
14 C.14 - Manufacture of wearing apparel	10,120	241	9,865	4,904	1,473
15 C.15 - Manufacture of leather and related products	107	1	92	2,115	1,761
16 C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	2,569	425	2,100	54,110	37,854
17 C.17 - Manufacture of pulp, paper and paperboard	352	96	190	113,842	40,360
18 C.18 - Printing and service activities related to printing	16,172	203	15,913	10,079	3,823
19 C.19 - Manufacture of coke oven products	2,789	2,156	620	772,632	200,137
20 C.20 - Production of chemicals	1,756	1,151	536	127,182	3,836
21 C.21 - Manufacture of pharmaceutical preparations	508	450	-	15,567	10,087
22 C.22 - Manufacture of rubber products	1,752	523	1,074	218,304	173,108
23 C.23 - Manufacture of other non-metallic mineral products	5,968	1,045	4,884	355,111	232,266
24 C.24 - Manufacture of basic metals	2,719	266	2,250	3,219,188	2,756,698
25 C.25 - Manufacture of fabricated metal products, except machinery and equipment	10,286	803	9,232	558,029	445,359
26 C.26 - Manufacture of computer, electronic and optical products	18,530	388	18,117	45,784	40,845
27 C.27 - Manufacture of electrical equipment	10,920	219	10,627	432,540	420,665
28 C.28 - Manufacture of machinery and equipment n.e.c.	6,285	1,374	4,752	673,784	642,093
29 C.29 - Manufacture of motor vehicles, trailers and semi-trailers	1,410	208	1,096	196,030	147,117
30 C.30 - Manufacture of other transport equipment	1,266	114	1,049	119,984	113,889
31 C.31 - Manufacture of furniture	2,217	194	1,982	63,011	58,893
32 C.32 - Other manufacturing	761	93	640	24,514	21,167
33 C.33 - Repair and installation of machinery and equipment	630	76	533	16,983	12,559
34 D - Electricity, gas, steam and air conditioning supply	4,672	985	3,105	384,575	-
35 D35.1 - Electric power generation, transmission and distribution	3,874	606	2,881	305,589	-
36 D35.11 - Production of electricity	3,577	557	2,881	193,296	-
37 D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	701	293	223	69,205	-
38 D35.3 - Steam and air conditioning supply	97	87	-	9,780	-
39 E - Water supply; sewerage, waste management and remediation activities	3,101	18	3,001	50,366	-
40 F - Construction	162,081	8,990	151,118	574,068	499,900
41 F.41 - Construction of buildings	129,705	4,960	123,279	352,453	327,439
42 F.42 - Civil engineering	11,101	641	10,211	137,745	116,019
43 F.43 - Specialised construction activities	21,275	3,389	17,627	83,870	56,442
44 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	83,312	7,811	73,191	347,582	-
45 H - Transportation and storage	15,806	774	14,712	72,957	35,505
46 H.49 - Land transport and transport via pipelines	8,094	639	7,246	42,369	25,793
47 H.50 - Water transport	5,820	0	5,795	3,890	362
48 H.51 - Air transport	21	19	-	4,225	139
49 H.52 - Warehousing and support activities for transportation	1,840	116	1,644	21,570	8,869
50 H.53 - Postal and courier activities	32	0	27	902	342
51 I - Accommodation and food service activities	46,793	3,009	43,040	7,426	-
52 L - Real estate activities	151,885	12,770	135,390	2,770	-
53 Exposures towards sectors other than those that highly contribute to climate change	102,018	9,197	88,797		
54 K - Financial and insurance activities	15,712	1,484	13,734		
55 Exposures to other sectors (NACE codes J, M - U)	86,306	7,713	75,063		
56 TOTAL	712,508	57,013	639,241	11,226,725	8,480,751

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 4.02 - F 4.03 - F 6.01); Internal ESG Database

Table 109 - Template 1: Banking book- Climate Change transition risk: Credit quality of exposures by sector, emissions and residual maturity (3 of 3)

Sector/subsector	GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company- specific reporting	k l m n o p				Average weighted maturity
		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	
1 Exposures towards sectors that highly contribute to climate change	6.18%	7,847,738	2,661,097	1,736,711	2,322,645	4.96
2 A - Agriculture, forestry and fishing	0.00%	150,309	80,767	69,835	25,094	7.99
3 B - Mining and quarrying	4.71%	32,026	19,988	950	8,972	3.74
4 B.05 - Mining of coal and lignite	0.00%	-	-	-	-	-
5 B.06 - Extraction of crude petroleum and natural gas	100.00%	2,918	-	-	-	0.06
6 B.07 - Mining of metal ores	0.00%	1	-	-	-	0.04
7 B.08 - Other mining and quarrying	0.00%	29,107	19,988	950	8,972	3.72
8 B.09 - Mining support service activities	0.00%	-	-	-	-	-
9 C - Manufacturing	12.79%	3,672,701	781,050	169,498	703,636	3.55
10 C.10 - Manufacture of food products	4.61%	551,171	134,244	41,435	140,326	3.84
11 C.11 - Manufacture of beverages	0.00%	44,556	40,164	7,167	2,634	5.98
12 C.12 - Manufacture of tobacco products	0.00%	-	-	-	-	-
13 C.13 - Manufacture of textiles	4.77%	111,487	34,119	2,932	36,809	3.19
14 C.14 - Manufacture of wearing apparel	0.00%	38,283	7,650	2,114	11,286	2.92
15 C.15 - Manufacture of leather and related products	1.94%	16,890	1,222	66	3,391	2.55
16 C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.00%	43,323	10,657	10,305	16,897	4.77
17 C.17 - Manufacture of pulp, paper and paperboard	6.70%	53,942	20,179	3,148	24,992	3.61
18 C.18 - Printing and service activities related to printing	0.00%	59,686	7,299	3,304	10,926	3.91
19 C.19 - Manufacture of coke oven products	91.11%	138,729	23,699	-	7,685	1.21
20 C.20 - Production of chemicals	8.22%	194,708	25,754	4,660	23,828	3.59
21 C.21 - Manufacture of pharmaceutical preparations	41.60%	127,524	869	126	6,232	2.46
22 C.22 - Manufacture of rubber products	8.41%	159,614	30,326	9,552	45,270	3.73
23 C.23 - Manufacture of other non-metallic mineral products	0.00%	112,422	23,629	2,244	23,558	3.46
24 C.24 - Manufacture of basic metals	3.70%	378,052	41,327	11,273	79,329	2.72
25 C.25 - Manufacture of fabricated metal products, except machinery and equipment	0.00%	542,717	212,370	27,390	145,214	3.88
26 C.26 - Manufacture of computer, electronic and optical products	0.00%	84,686	9,421	5,701	9,466	3.89
27 C.27 - Manufacture of electrical equipment	0.00%	101,531	21,361	2,127	19,712	3.39
28 C.28 - Manufacture of machinery and equipment n.e.c.	1.38%	350,476	56,034	20,187	54,191	3.56
29 C.29 - Manufacture of motor vehicles, trailers and semi-trailers	55.39%	288,876	34,531	-	9,216	3.53
30 C.30 - Manufacture of other transport equipment	81.78%	187,887	6,251	272	5,180	2.97
31 C.31 - Manufacture of furniture	0.00%	41,714	12,800	7,943	10,186	4.97
32 C.32 - Other manufacturing	0.00%	22,258	18,816	5,289	10,268	4.78
33 C.33 - Repair and installation of machinery and equipment	0.00%	22,169	8,327	2,262	7,040	4.57
34 D - Electricity, gas, steam and air conditioning supply	12.96%	241,434	158,301	64,509	125,512	6.65
35 D35.1 - Electric power generation, transmission and distribution	17.12%	134,828	139,823	64,509	102,439	6.83
36 D35.11 - Production of electricity	16.03%	56,618	123,319	64,097	15,748	7.35
37 D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	0.68%	100,606	363	-	18,795	2.66
38 D35.3 - Steam and air conditioning supply	0.00%	6,000	18,114	-	4,279	5.25
39 E - Water supply; sewerage, waste management and remediation activities	0.00%	110,966	59,428	20,385	27,841	5.25
40 F - Construction	4.07%	815,120	248,639	159,242	401,398	4.25
41 F.41 - Construction of buildings	0.00%	478,494	185,636	132,774	273,899	4.60
42 F.42 - Civil engineering	29.82%	163,900	6,836	7,190	43,590	3.05
43 F.43 - Specialised construction activities	0.00%	172,726	56,166	19,278	83,909	3.96
44 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	1.59%	1,696,629	463,319	155,222	592,869	3.64
45 H - Transportation and storage	5.93%	216,680	90,151	88,434	62,605	6.25
46 H.49 - Land transport and transport via pipelines	0.46%	98,869	43,484	70,614	48,191	7.17
47 H.50 - Water transport	0.00%	42,900	409	-	823	1.88
48 H.51 - Air transport	0.00%	1,931	-	3,176	313	8.21
49 H.52 - Warehousing and support activities for transportation	7.99%	64,034	38,977	14,643	13,222	5.28
50 H.53 - Postal and courier activities	95.25%	8,946	7,281	-	56	3.94
51 I - Accommodation and food service activities	0.00%	318,941	219,504	347,883	63,789	8.24
52 L - Real estate activities	0.00%	592,932	539,951	660,753	310,929	7.89
53 Exposures towards sectors other than those that highly contribute to climate change		1,553,552	596,016	212,296	439,269	4.51
54 K - Financial and insurance activities		111,415	109,777	31,635	49,621	4.77
55 Exposures to other sectors (NACE codes J, M - U)		1,442,137	486,240	180,661	389,648	4.44
56 TOTAL	5.18%	9,401,290	3,257,113	1,949,007	2,761,913	4.85

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 4.02 - F 4.03 - F 6.01); Internal ESG Database

The above tables show the exposures to non-financial corporations outstanding as at 31 December 2022, with a focus on the economic sectors most susceptible to climate transition risks. In particular, evidence is given at the sectoral NACE code level of the counterparties:

- of the credit quality of these exposures, including the impaired exposure status, any accounting classification to Stage 2 and the related provisioning values on loans, and the maturity categories to which the exposures belong;
- of greenhouse gas (GHG) financed by the Group, determined in line with the Partnership for Carbon Accounting Financials (PCAF) standard, divided into Scope 1 and 2 and Scope 3. Specifically, the GHG emission data reported are derived directly from the NFR (Non-Financial Report) published by the counterparties obliged to such reporting or, if not available, from proxies elaborated by highly qualified info-providers.

In addition to the total amounts per NACE sector, subtotals are included for those sub-sectors with a strong influence on climate change. In particular, totals are shown for those business sectors listed in Sections A to H and Section L of Annex I of Regulation (EC) No. 1893/2006, including oil, gas, mining and transport, defined as “sectors that highly contribute to climate change” in recital 6 of Commission Delegated Regulation (EU) 2020/1818, as well as a subtotal of exposures to “other sectors”.

The templates are also supplemented with information on companies excluded from the EU benchmark indices aligned with the Paris Climate Agreement, as specified in Article 12(1)(d) to (g) and Article 12(2) of Delegated Regulation (EU) 2020/1818, aggregated at sector level. These counterparties are represented by:

- companies that derive 1% or more of their revenues from the exploration, extraction, distribution or refining of hard coal and lignite;
- companies that derive 10% or more of their revenues from the exploration, extraction, distribution or refining of oil fuels;
- companies that derive 50% or more of their revenues from the exploration, extraction, production or distribution of gaseous fuels;
- companies that derive 50% or more of their revenues from electricity generation with a GHG intensity of more than 100 g CO₂ e/kWh.

These companies were identified using information on the nature of the company's revenues obtained from external providers, if available, or through the internal reconciliation of the counterparty's main economic activity to the regulatory perimeter.

As recalled by Article 12.2 of Delegated Regulation (EU) 2020/1818, defined as “excluded from the EU benchmarks aligned with the Paris Climate Agreement” were also companies that are deemed to significantly undermine one or more of the environmental objectives set forth in Article 9 of Regulation (EU) 2020/852 of the European Parliament and of the Council (so-called “Taxonomy Regulation”). For this purpose, information on the alignment of the counterparty's activities with environmental objectives provided by external providers were used.

Table 110 - Template 2: Banking book - Climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral

Counterparty sector	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	P
	Total gross carrying amount (in MEUR)															
	Level of energy efficiency (EP score in kWh/m ² of collateral)							Level of energy efficiency (EPC label of collateral)							Without EPC label of collateral	
	0; <= 100	> 100; <= 200	> 200; <= 300	> 300; <= 400	> 400; <= 500	> 500	A	B	C	D	E	F	G	Of which level of energy efficiency (EP score in kWh/m ² of collateral) estimated		
1 Total EU area	8,048,582	365,394	1,007,435	1,316,110	631,053	888,364	371,343	193,151	79,775	105,942	186,867	174,366	167,636	304,142	4,113,971	81.85%
Of which Loans collateralised by commercial immovable property	4,072,337	133,417	281,065	650,244	477,204	597,636	199,174	104,478	40,504	64,547	113,177	72,908	52,188	101,511	2,098,095	85.29%
Of which Loans collateralised by residential immovable property	3,969,139	231,977	726,370	665,866	153,849	290,728	172,169	88,673	39,271	41,395	73,690	101,458	115,448	202,631	2,015,876	78.26%
Of which Collateral obtained by taking possession: residential and commercial immovable properties	7,106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
Of which Level of energy efficiency (EP score in kWh/m ² of collateral) estimated	3,376,123	108,666	652,357	1,023,344	483,449	808,889	290,385								3,367,091	100.00%
6 Total non-EU area	3,892,297	6,026	8,776	8,458	2,889	8,647	2,580	1,501	133	706	667	786	1,204	3,424	34,823	83.10%
Of which Loans collateralised by commercial immovable property	147,541	-	-	-	-	27	19	-	-	-	-	-	-	19	67	40.02%
Of which Loans collateralised by residential immovable property	3,744,756	6,026	8,776	8,458	2,889	8,620	2,561	1,501	133	706	667	786	1,204	3,405	34,755	83.18%
Of which Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
Of which Level of energy efficiency (EP score in kWh/m ² of collateral) estimated	28,875	4,102	6,864	6,127	1,776	7,733	2,335								28,937	100.00%

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 13.03.1); Internal ESG Database

The above table shows the gross book value of exposures secured by real estate (residential and commercial) and real estate collateral recovered as at 31 December 2022, supplemented by information on the energy efficiency level of the collateral measured in terms of energy consumption in kWh/m², the energy efficiency class attributed by the energy performance certificate (APE or EPC) of the real estate collateralised property as defined in Article 2(12) of Directive 2010/31/EU for Member States, or as defined in any relevant local regulations for exposures outside the European Union, where equivalent to the Union energy performance class.

The representation of exposure values is divided on the basis of the location of the pledged property or the real estate obtained by acquiring possession of it (“EU area” or “non-EU area”), indicating the extent to which energy efficiency category data are estimated and not based on EPC classes. Specifically, when the energy efficiency category is an estimate data, evidence of this is provided in the dedicated row of the model; in all other cases the energy performance information has been obtained by means of an external info-provider, directly from the regional registers that have a telematic structure that can be queried, giving evidence of this in the dedicated rows of the table.

Table 111 - Template 4: Banking book - Climate change transition risk: Exposures to top 20 carbon-intensive firms

	a	b	c	d	e
	<i>Gross carrying amount (aggregate)</i>	<i>Gross carrying amount towards the counterparties compared to total gross carrying amount (aggregate)*</i>	<i>Of which environmentally sustainable (CCM)</i>	<i>Weighted average maturity</i>	<i>Number of top 20 polluting firms included</i>
1	-	-	-	-	-

* For counterparties among the world's top 20 carbon emitters

As shown in the above table, as at 31 December 2022 the Group had no material exposures to the world's top 20 carbon-intensive companies.

The lists used to identify these exposures are the following:

- *Carbon Majors Database - Carbon-Majors-Report-2017.pdf* (<https://www.cdp.net/en>);
- *Climate Accountability Institute* (<https://climateaccountability.org/>).

Both lists are annexed to this document.

The table below provides information on the banking book's exposures to non-financial corporations - loans and advances, fixed-yield securities and equity instruments not held for trading and for sale -, loans secured by real estate and real estate collateral recovered, subject to acute and chronic climate-related hazards.

A cross-section is provided both by sector of economic activity (NACE classification) and by geographical location of counterparty activity or collateral, with reference to sectors and geographical areas subject to acute and chronic climate change-related events. The credit quality of the exposures and the related accounting provisions are also disclosed.

For the identification of exposures subject to acute and chronic physical hazards the Bank uses dedicated estimates provided by external providers who assign physical risk assessments conducted through special calculation engines that take into account the geographical location of headquarters and production sites for companies and buildings for collateral properties. The RCP 4.5 climate change scenario is used in the calculation logic: this scenario predicts that greenhouse gas emissions will peak in 2040 with a subsequent downward trend, generating global average temperature increases of between 2 and 3°C by 2100, depending on the estimation model applied to each physical risk analysed.

The types of acute and chronic physical hazards shown in the table below were examined, with high spatial resolution of analysis for Italy and the EU-27 territory.

Chronic Physical Risk	Acute Physical Risk
Changing temperatures	Heat waves
Heat stress	Waves of freezing cold
Changing wind patterns	Fire
Changing patterns and types of precipitation	Windstorm

Thawing of permafrost	Drought
Sea level rise	Heavy rainfall
Water stress	Floods
Soil and coastal erosion	Landslides and subsidence
Soil degradation	

Table 112 - Template 5: Banking book - Climate change physical risk: Exposures subject to physical risk – All countries

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	<i>Gross carrying amount (Mln EUR)</i>														
	<i>of which exposures sensitive to impact from climate change physical events</i>														
<i>All countries</i>		<i>Breakdown by maturity bucket</i>					<i>Average weighted maturity</i>	<i>of which exposures sensitive to impact from chronic climate change events</i>	<i>of which exposures sensitive to impact from acute climate change events</i>	<i>of which exposures sensitive to impact both from chronic and acute climate change events</i>	<i>Of which Stage 2 exposures</i>	<i>non-performing exposures</i>	<i>Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions</i>		
		<i><= 5 years</i>	<i>> 5 year <= 10 years</i>	<i>> 10 year <= 20 years</i>	<i>> 20 years</i>								<i>of which Stage 2 exposures</i>	<i>Of which non-performing exposures</i>	
1	A - Agriculture, forestry and fishing	326,843	64,357	48,367	35,857	15,882	6.29	11,488	85,006	67,969	22,825	138	839	663	67
2	B - Mining and quarrying	61,936	18,949	15,185	-	2,003	4.23	-	2,819	33,318	2,786	623	466	59	397
3	C - Manufacturing	5,353,969	1,106,092	289,885	85,691	267,269	3.00	96,781	1,194,780	457,376	235,426	62,038	38,128	5,191	32,296
4	D - Electricity, gas, steam and air conditioning supply	589,755	34,379	76,080	38,788	91,163	4.58	30,789	151,370	58,251	19,690	777	1,156	337	528
5	E - Water supply; sewerage, waste management and remediation activities	218,620	28,829	5,065	816	8,892	3.45	5,602	31,008	6,992	175	-	18	6	-
6	F - Construction	1,713,205	169,484	78,299	59,111	106,673	4.51	24,152	230,774	158,640	50,857	35,869	21,519	1,588	19,539
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	2,965,539	843,249	266,013	100,932	337,737	3.32	33,365	1,241,421	273,146	216,713	48,571	31,199	5,381	24,773
8	H - Transportation and storage	461,699	59,409	39,710	60,067	30,980	7.34	1,180	54,953	134,032	13,384	2,700	1,915	142	1,612
9	L - Real estate activities	2,586,451	310,086	243,497	384,857	128,627	7.51	153,846	634,839	278,383	183,930	113,450	55,198	6,515	47,208
10	Loans collateralised by residential immovable property	7,713,895	59,372	150,249	468,194	156,452	14.42	13,204	214,491	606,571	106,733	27,327	19,725	5,004	13,500
11	Loans collateralised by commercial immovable property	4,219,879	125,353	147,741	368,263	54,622	9.60	36,693	247,586	411,699	85,213	86,554	45,548	3,915	40,979
12	Repossessed colaterals	7,106	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Other relevant sectors (breakdown below where relevant)	4,281,970	779,410	443,851	343,205	144,964	5.72	291,353	797,411	622,665	152,093	94,452	65,272	4,720	59,061

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 4.02 - F 4.03 - F 6.01 - F 13.03.1); Internal Database ESG

Table 113 - Template 5: Banking book - Climate change physical risk: Exposures subject to physical risk – Italy

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	
<i>Gross carrying amount (Mln EUR)</i>															
<i>of which exposures sensitive to impact from climate change physical events</i>															
Italy	Breakdown by maturity bucket						Average weighted maturity	of which exposures sensitive to impact from chronic climate change events	of which exposures sensitive to impact from acute climate change events	of which exposures sensitive to impact both from chronic and acute climate change events	Of which Stage 2 exposures	Of which non-performing exposures	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
													of which Stage 2 exposures	Of which non-performing exposures	
	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years											
1	A - Agriculture, forestry and fishing	325,900	64,357	48,367	35,857	15,882	6.29	11,488	85,006	67,969	22,825	138	839	663	67
2	B - Mining and quarrying	59,721	18,949	15,185	-	2,003	4.23	-	2,819	33,318	2,786	623	466	59	397
3	C - Manufacturing	5,255,234	1,106,092	289,885	85,691	267,269	3.00	96,781	1,194,780	457,376	235,426	62,038	38,128	5,191	32,296
4	D - Electricity, gas, steam and air conditioning supply	589,155	34,379	76,080	38,788	91,163	4.58	30,789	151,370	58,251	19,690	777	1,156	337	528
5	E - Water supply; sewerage, waste management and remediation activities	218,552	28,829	5,065	816	8,892	3.45	5,602	31,008	6,992	175	-	18	6	-
6	F - Construction	1,493,560	169,484	78,299	59,111	106,673	4.51	24,152	230,774	158,640	50,857	35,869	21,519	1,588	19,539
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	2,736,770	843,249	266,013	100,932	337,737	3.32	33,365	1,241,421	273,146	216,713	48,571	31,199	5,381	24,773
8	H - Transportation and storage	431,716	59,409	39,710	60,067	30,980	7.34	1,180	54,953	134,032	13,384	2,700	1,915	142	1,612
9	L - Real estate activities	2,104,199	310,086	243,497	384,857	128,627	7.51	153,846	634,839	278,383	183,930	113,450	55,198	6,515	47,208
10	Loans collateralised by residential immovable property	3,944,614	57,319	142,979	447,730	155,081	14.45	12,080	208,676	582,354	95,465	25,312	18,609	4,530	12,890
11	Loans collateralised by commercial immovable property	4,012,093	125,312	147,313	368,244	54,622	9.60	36,693	247,586	411,211	84,766	86,554	45,530	3,898	40,979
12	Repossessed colaterals	7,106	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Other relevant sectors (breakdown below where relevant)	3,748,356	779,410	443,851	343,205	144,964	5.72	291,353	797,411	622,665	152,093	94,452	65,272	4,720	59,061

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 4.02 - F 4.03 - F 6.01 - F 13.03.1); Internal Database ESG

Table 114 - Template 5: Banking book - Climate change physical risk: Exposures subject to physical risk – Rest of the world

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	
<i>Gross carrying amount (Mln EUR)</i>															
<i>of which exposures sensitive to impact from climate change physical events</i>															
<i>Rest of the world</i>	<i>Breakdown by maturity bucket</i>						<i>of which exposures sensitive to impact from chronic climate change events</i>	<i>of which exposures sensitive to impact from acute climate change events</i>	<i>of which exposures sensitive to impact both from chronic and acute climate change events</i>	<i>Of which Stage 2 exposures</i>	<i>Of which non-performing exposures</i>	<i>Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions</i>			
	<i><= 5 years</i>	<i>> 5 year <= 10 years</i>	<i>> 10 year <= 20 years</i>	<i>> 20 years</i>	<i>Average weighted maturity</i>	<i>of which Stage 2 exposures</i>						<i>Of which non-performing exposures</i>			
1	A - Agriculture, forestry and fishing	943	-	-	-	-	-	-	-	-	-	-	-	-	
2	B - Mining and quarrying	2,215	-	-	-	-	-	-	-	-	-	-	-	-	
3	C - Manufacturing	98,735	-	-	-	-	-	-	-	-	-	-	-	-	
4	D - Electricity, gas, steam and air conditioning supply	601	-	-	-	-	-	-	-	-	-	-	-	-	
5	E - Water supply; sewerage, waste management and remediation activities	68	-	-	-	-	-	-	-	-	-	-	-	-	
6	F - Construction	219,645	-	-	-	-	-	-	-	-	-	-	-	-	
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	228,769	-	-	-	-	-	-	-	-	-	-	-	-	
8	H - Transportation and storage	29,983	-	-	-	-	-	-	-	-	-	-	-	-	
9	L - Real estate activities	482,252	-	-	-	-	-	-	-	-	-	-	-	-	
10	Loans collateralised by residential immovable property	3,769,281	2,053	7,269	20,464	1,371	13.73	1,124	5,815	24,218	11,268	2,015	1,116	474	610
11	Loans collateralised by commercial immovable property	207,786	40	428	19	-	8.20	-	-	487	447	-	17	17	-
12	Repossessed colaterals	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Other relevant sectors (breakdown below where relevant)	533,614	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Consolidated financial statements (data verified by FINREP: Templates F 18.00 - F 4.02 - F 4.03 - F 6.01 - F 13.03.1); Internal Database ESG

The purpose of the disclosures required by *Template 10 - Other climate change-related mitigation actions not covered by Regulation (EU) 2020/852* is to describe climate change-related mitigation actions implemented by institutions and to represent customer exposures that are intended to support counterparties in achieving their climate change mitigation and adaptation objectives but are not aligned with the Taxonomy standards set out in Regulation (EU) 2020/852 (and therefore not included in the calculation of the GAR and BTAR metrics to be published in the future).

However, the identification of Taxonomy-aligned activities is still under analysis with mandatory public reporting from 31 December 2023. For the purposes of this Disclosure Document, all mitigation activities have therefore been considered as described below²⁶.

Pending the analyses resulting from the adoption of the taxonomic regulations, examples of mitigating activities relevant to the disclosure required by Template 10 are given of the credit products deemed eligible under the Bank's Green Bond framework as per specific guidelines issued by ICMA (International Capital Market Association).

Economic activities that can be financed or refinanced through the above-mentioned "green bond" issuance programme include activities that meet the following eligibility criteria:

- *Green Building*: loans or assets for the purchase, construction and renovation of residential and/or commercial buildings that meet energy efficiency requirements;
- *Renewable Energy*: loans for the acquisition, development and management of infrastructure for the production of energy from renewable sources;
- *Clean Transportation*: loans for low-carbon transport activities and the acquisition, as well as construction and operation of dedicated low-carbon transport infrastructure.
- *Energy Efficiency*: loans for goods that contribute to reducing energy consumption (e.g., energy-saving lighting);
- *Environmentally sustainable management of living natural resources and land use*: loans for activities that contribute to the sustainable management of natural resources and land use (e.g., investments in protected areas such as regional nature parks);
- *Pollution prevention and control*: loans for activities that contribute to the prevention, collection, disposal and recycling of waste;
- *Sustainable Water and Wastewater Management*: loans for activities that improve the quality, efficiency, distribution and conservation of water.

In particular, with reference to the 2022 financial year, it is possible to record the disbursement of 949 million euro in loans for environmental purposes, 500 million euro of which linked to resources raised through the inaugural issue of Senior Green Bonds placed in 2021 under the EMTN (Euro Medium Term Notes) programme.

²⁶ Consequently, it cannot be ruled out that the current identification of climate change-related mitigation actions includes activities that will be aligned with the European Taxonomy in the future and will therefore enter the GAR or BTAR metrics in December 2023 and December 2024, respectively.

Section 13 - Disclosure of exposures to counterparty risk (articles 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 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 2022, 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”²⁷, 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 2022, including:

²⁷ 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 115 - Template EU CCR1 – Analysis of CCR exposure by approach (1 of 2)

		a	b	c	d
		Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value
EU-1	EU - Original Exposure Method (for derivatives)	-	-		1.4
EU-2	EU - Simplified SA-CCR (for derivatives)	12,739	53,921		1.4
1	SA-CCR (for derivatives)	50,901	31,235		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 116 - 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)	93,379	93,379	93,379	34,063
1	SA-CCR (for derivatives)	114,991	113,938	114,779	57,476
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)	704,157	169,467	169,467	71,576
5	VaR for SFTs	-	-	-	-
6	TOTAL	912,528	376,783	377,625	163,116

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 117 - Template EU CCR2 - CVA capital charge

	31/12/2022		31/12/2021	
	a	b		
	Exposure value	RWAs	Exposure value	RWAs
1	TOTAL PORTFOLIOS SUBJECT TO THE ADVANCED METHOD			
	-	-	-	-
2				
		-		-
3				
		-		-
4	ALL PORTFOLIOS SUBJECT TO THE STANDARDISED METHOD			
	183,820	24,999	142,192	11,835
EU-4	Based on the original exposure method			
	-	-	-	-
5	TOTAL SUBJECT TO THE CVA CAPITAL CHARGE			
	183,820	24,999	142,192	11,835

Source: COREP reporting framework - Credit assessment adjustment risk (CVA risk): Template C25.00

Table 118 - Template EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk (1 of 2)

Exposure classes	Classes of credit worthiness (Weighting Factors)					
	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					
	-	25,129	-	-	118,805	209,521
7	Corporates					
	-	-	-	-	-	3
8	Retail					
	-	-	-	-	-	-
9	Institutions and corporates with a short-term credit assessment					
	-	-	-	-	-	-
10	Other items					
	-	-	-	-	-	-
11	TOTAL AS AT 31/12/2022					
	-	25,129	-	-	118,805	209,524
	TOTAL AS AT 31/12/2021					
	-	-	-	-	172,758	160,491

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

Table 119 - Template EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk (2 of 2)

Exposure classes	Classes of credit worthiness (Weighting Factors)						Total exposure value
	g	h	i	j	k	l	
	70%	75%	100%	150%	Others		
1	Central governments or central banks	-	-	19,430	-	-	19,430
2	Regional governments or local authorities	-	-	-	-	-	-
3	Public sector entities	-	-	-	-	-	-
4	Multilateral development banks	-	-	-	-	-	-
5	International organisations	-	-	-	-	-	-
6	Institutions	-	-	712	-	-	354,167
7	Corporates	-	-	407	-	-	410
8	Retail	-	2,395	-	-	-	2,395
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
10	Other items	-	-	1,773	-	-	1,773
11	TOTAL AS AT 31/12/2022	-	2,395	22,321	-	-	378,175
	TOTAL AS AT 31/12/2021	-	1,973	8,877	-	-	344,099

Source: COREP reporting framework - Credit and counterparty risks, standardised approach to capital requirements: Template C 07

Table 120 - Template EU CCR4 – IRB approach – CCR exposures by exposure class and PD scale: Central governments and central banks

The template is not published due to the absence of significant exposures subject to counterparty risk in the specific segment.

Table 121 - 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 122 - 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	112	0.1200 %	3
0.15 to <0.25	6,306	0.1762 %	35
0.25 to <0.50	8,698	0.3900 %	29
0.50 to <0.75	2,453	0.5900 %	15
0.75 to <2.50	2,268	1.5560 %	19
2.50 to <10.00	1,362	4.9135 %	12
10.00 to <100.00	2,253	14.6778 %	2
100.00 (Default)	-	-	-
SUBTOTAL (Exposure classes CORPORATES)	23,453	2.1003 %	115

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 123 - Template EU CCR4 – IRB approach – CCR exposures by exposure class and PD scale: 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	24.9792 %	1	11	10.0632 %
0.15 to <0.25	24.3379 %	1	1,125	17.8457 %
0.25 to <0.50	24.6593 %	1	2,765	31.7876 %
0.50 to <0.75	24.9231 %	1	862	35.1371 %
0.75 to <2.50	25.0281 %	1	1,231	54.2940 %
2.50 to <10.00	23.2658 %	3	1,171	85.9416 %
10.00 to <100.00	24.8970 %	1	3,214	142.6322 %
100.00 (Default)	-	-	-	-
SUBTOTAL (Exposure classes CORPORATES)	24.5800 %	1	10,380	44.2573 %

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 124 - 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	186	0.0895 %	17
0.15 to <0.25	51	0.1890 %	8
0.25 to <0.50	822	0.4521 %	15
0.50 to <0.75	5	0.7400 %	1
0.75 to <2.50	34	1.4416 %	9
2.50 to <10.00	5	3.7810 %	2
10.00 to <100.00	21	13.7023 %	5
100.00 (Default)	2	100.0000 %	1
SUBTOTAL (Exposure classes RETAIL)	1,126	0.8320 %	58
TOTAL AS AT 31/12/2022	24,579	2.0420 %	173

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 125 - 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	20.4424 %	-	7	4.0170 %
0.15 to <0.25	19.6590 %	-	4	7.2922 %
0.25 to <0.50	11.8870 %	-	71	8.6899 %
0.50 to <0.75	11.5240 %	-	1	11.3460 %
0.75 to <2.50	18.4109 %	-	7	19.2525 %
2.50 to <10.00	13.6630 %	-	1	17.2239 %
10.00 to <100.00	14.3911 %	-	5	24.0359 %
100.00 (Default)	20.9090 %	-	0	1.3158 %
SUBTOTAL (Exposure classes RETAIL)	13.9186 %	-	96	8.5004 %
TOTAL AS AT 31/12/2022	24.0910 %	1	10,476	42.6190 %

Source: COREP reporting framework - Counterparty risk, IRB approach to capital requirements - PD ranges: Template C 34.07

Table 126 - 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	-	-	-	-	55,991	-	138,859	-
2	Cash – other currencies	-	-	-	-	-	-	30,585	-
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 31/12/2022	-	-	-	-	55,991	-	169,444	-

Source: COREP reporting framework - Composition of guarantees for counterparty risk: Template C 34.08

Table 127 - 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	-	-	-	-	-	-	3,798	-
2	Cash – other currencies	-	-	-	-	-	-	-	-
3	Domestic sovereign debt	-	-	-	-	-	-	1,572,830	-
4	Other sovereign debt	-	-	-	-	-	-	-	-
5	Government agency debt	-	-	-	-	-	-	-	-
6	Corporate bonds	-	-	-	-	-	-	664,461	-
7	Equity securities	-	-	-	-	-	-	-	-
8	Other collateral	-	-	8,282	-	-	-	39,697	-
9	TOTAL AS AT 31/12/2022	-	-	8,282	-	-	-	2,280,786	-

Source: COREP reporting framework - Composition of guarantees for counterparty risk: Template C 34.08

Table 128 - Template EU CCR6: Credit derivative exposures

The template is not published due to the absence of exposures related to credit derivative transactions.

Table 129 - 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 130 - Template EU CCR8 – Exposures to CCPs

		31/12/2022	
		a	b
		Exposure value	RWEA
1	EXPOSURES TO QCCPS (TOTAL)		963
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	25,129	503
3	(i) OTC derivatives	-	-
4	(ii) Exchange-traded derivatives	-	-
5	(iii) SFTs	25,129	503
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	23,175	460
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 of exposure to securitisation positions (art. 449 CRR/CRR II)

Own securitisations

As part of a multi-year strategic programme of measures to contain impaired loans, Banca Popolare di Sondrio completed four securitisation transactions through the bulk sale of non-performing loans in the three-year period 2020-2022.

Diana securitisation

In the first transaction of June 2020, named “Diana”, a portfolio of non-performing loans with a gross value of 999.7 million euro (consisting of 74% secured loans) was sold in a massive manner, with economic effect from 1 April 2019, to the securitisation vehicle named “Diana S.P.V. S.r.l.” established pursuant to Law 130/99, which in turn issued three tranches of ABS notes totalling 274 million euro (27.4% of the gross value of the assigned loans):

- 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.

Luzzatti securitisation

The second securitisation transaction, named “Luzzatti”, was completed by Banca Popolare di Sondrio in December 2020 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 named “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 disposed. 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 current regulatory obligations. For the senior notes, coverage from the Italian State was requested and obtained through the GACS scheme.

Luzzatti II securitisation

As a continuation of the de-risking and asset quality improvement strategy pursued, in December 2021, the Bank concluded, together with 11 other participating institutions, an additional securitization transaction of non-performing loans named “Luzzatti II.”

The transaction involved the sale, with economic effect from 1 January 2021, of a portfolio of loans classified as non-performing 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, an entity which, in turn, issued three tranches of ABS notes attributable to Banca Popolare di Sondrio for a total of 115.62 million euro (27.47% of the gross value of the loans transferred), 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 disposed;
- a junior tranche of 5.12 million euro, equal to 1.21% of the gross value of the loans disposed.

In order to obtain the deconsolidation of the loans disposed, 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 proceeded with derecognition of the portfolio of non-performing loans disposed. For the senior notes, coverage from the Italian State was requested and obtained through the GACS scheme.

Luzzatti III securitisation

On 29 December 2022, Banca Popolare di Sondrio, together with 14 other participating banks, concluded a new multi-originator securitisation transaction named “Luzzatti III”, involving loans classified as non-performing loans for a total gross book value of 545 million euro, of which 242.5 million euro related to the Bank (portfolio consisting of 57% secured loans). The securitisation vehicle company named “Luzzatti POP NPLs 2022 S.r.l.” issued three tranches of ABS notes for a total of 65.71 million euro (equal to 27.09% of the value of the loans disposed), broken down as follows:

- a senior tranche amounting to 56 million euro, corresponding to 23.09% of the gross value of the loans disposed, rated Baa1 and BBB+ by the agencies Moody's and Arc Ratings, respectively; the tranche in question, wholly retained by the Bank, presents structural characteristics of eligibility for the GACS and, should this state guarantee be reintroduced, the participating banks will assess the advisability of availing themselves of it;
- a mezzanine tranche of 8.29 million euro, equal to 3.41% of the gross value of the loans disposed;
- a junior tranche of 1.42 million euro, equal to 0.59% of the gross value of the loans disposed.

In order to obtain the deconsolidation of the loans disposed, according to the provisions of the applicable sector legislation, 95%, respectively, of the mezzanine and junior tranches, were successfully placed with institutional investors. The Bank therefore proceeded with derecognition of the portfolio of non-performing loans disposed.

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)²⁸ and deriving from third-party transactions. Such investments, held entirely for purposes other than trading, are classified for accounting purposes in "Financial assets measured at fair value" and "Financial assets measured at amortised cost". No guarantees or credit lines are provided on these 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 investment activities underlying the investments, the aforementioned SEC-SA methodology is applicable to them, largely based on the availability of information on the 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 standardised approach.

* * *

The tables below show the Group's exposure to securities deriving from its own and third-party securitisations as at 31 December 2022.

²⁸ 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 (Simple, Transparent and Standardised) securitisations, which meet particular requirements.

Table 131 - 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	-	-	56,985	56,985	787,360
2 Retail (total)	-	-	865	865	-
3 residential mortgage	-	-	-	-	-
4 credit card	-	-	-	-	-
5 other retail exposures	-	-	865	865	-
6 re-securitisation	-	-	-	-	-
7 Wholesale (total)	-	-	56,120	56,120	787,360
8 loans to corporates	-	-	-	-	787,360
9 commercial mortgage	-	-	-	-	-
10 lease and receivables	-	-	-	-	-
11 other wholesale	-	-	56,120	56,120	-
12 re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 132 - 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	787,360	844,345	-	-	-
2 Retail (total)	-	865	-	-	-
3 residential mortgage	-	-	-	-	-
4 credit card	-	-	-	-	-
5 other retail exposures	-	865	-	-	-
6 re-securitisation	-	-	-	-	-
7 Wholesale (total)	787,360	843,480	-	-	-
8 loans to corporates	787,360	787,360	-	-	-
9 commercial mortgage	-	-	-	-	-
10 lease and receivables	-	-	-	-	-
11 other wholesale	-	56,120	-	-	-
12 re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 133 - 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	-	-	476,056	-	476,056
2 Retail (total)	-	-	24,283	-	24,283
3 residential mortgage	-	-	-	-	-
4 credit card	-	-	-	-	-
5 other retail exposures	-	-	24,283	-	24,283
6 re-securitisation	-	-	-	-	-
7 Wholesale (total)	-	-	451,773	-	451,773
8 loans to corporates	-	-	-	-	-
9 commercial mortgage	-	-	-	-	-
10 lease and receivables	-	-	451,773	-	451,773
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) programs²⁹.

Table 134 - 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.

²⁹ 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 135 - 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	787,360	-	56,010	-	975
2	Traditional transactions	-	-	56,010	-	975
3	Securitisation	-	-	56,010	-	975
4	<i>Retail underlying</i>	-	-	-	-	865
5	<i>Of which STS</i>	-	-	-	-	-
6	Wholesale	-	-	56,010	-	110
7	<i>Of which STS</i>	-	-	-	-	-
8	Re-securitisation	-	-	-	-	-
9	Synthetic transactions	787,360	-	-	-	-
10	Securitisation	787,360	-	-	-	-
11	<i>Retail underlying</i>	-	-	-	-	-
12	<i>Wholesale</i>	787,360	-	-	-	-
13	Re-securitisation	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 136 - 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	787,360	56,010	-	975	118,104	50,409
2	Traditional transactions	-	56,010	-	975	-	50,409
3	Securitisation	-	56,010	-	975	-	50,409
4	<i>Retail underlying</i>	-	-	-	865	-	-
5	<i>Of which STS</i>	-	-	-	-	-	-
6	Wholesale	-	56,010	-	110	-	50,409
7	<i>Of which STS</i>	-	-	-	-	-	-
8	Re-securitisation	-	-	-	-	-	-
9	Synthetic transactions	787,360	-	-	-	118,104	-
10	Securitisation	787,360	-	-	-	118,104	-
11	<i>Retail underlying</i>	-	-	-	-	-	-
12	<i>Wholesale</i>	787,360	-	-	-	118,104	-
13	Re-securitisation	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 137 - 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>					
		SEC-SA	1250% RW	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW				
1	TOTAL EXPOSURES	-	12,187	9,448	4,033	-					
2	Traditional transactions	-	12,187	-	4,033	-					
3	Securitisation	-	12,187	-	4,033	-					
4	Retail underlying	-	10,812	-	-	-					
5	Of which STS	-	-	-	-	-					
6	Wholesale	-	1,375	-	4,033	-					
7	Of which STS	-	-	-	-	-					
8	Re-securitisation	-	-	-	-	-					
9	Synthetic transactions	-	-	9,448	-	-					
10	Securitisation	-	-	9,448	-	-					
11	Retail underlying	-	-	-	-	-					
12	Wholesale	-	-	9,448	-	-					
13	Re-securitisation	-	-	-	-	-					

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 138 - 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>			
		RW ≤20%	SEC-IRBA	RW >50% to 100%	RW >100% to <1250%	1250% RW/deductions	SEC-IRBA						
1	TOTAL EXPOSURES	451,773	-	-	24,283	-							
2	Traditional transactions	451,773	-	-	24,283	-							
3	Securitisation	451,773	-	-	24,283	-							
4	Retail underlying	-	-	-	24,283	-							
5	Of which STS	-	-	-	-	-							
6	Wholesale	451,773	-	-	-	-							
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 139 - 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	-	476,056	-	-	-	-	-
2 Traditional transactions	-	476,056	-	-	-	-	-
3 Securitisation	-	476,056	-	-	-	-	-
4 <i>Retail underlying</i>	-	24,283	-	-	-	-	-
5 <i>Of which STS</i>	-	-	-	-	-	-	-
6 Wholesale	-	451,773	-	-	-	-	-
7 <i>Of which STS</i>	-	-	-	-	-	-	-
8 Re-securitisation	-	-	-	-	-	-	-
9 Synthetic transactions	-	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-	-
11 <i>Retail underlying</i>	-	-	-	-	-	-	-
12 <i>Wholesale</i>	-	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 140 - 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
	<i>RWEA (by regulatory approach)</i>			<i>Capital charge after cap</i>		
	<i>SEC-SA</i>	<i>1250% RW</i>	<i>SEC-IRBA</i>	<i>SEC-ERBA (including IAA)</i>	<i>SEC-SA</i>	<i>1250% RW</i>
1 TOTAL EXPOSURES	298,103	-	-	-	7,284	-
2 Traditional transactions	298,103	-	-	-	7,284	-
3 Securitisation	298,103	-	-	-	7,284	-
4 <i>Retail underlying</i>	230,337	-	-	-	1,862	-
5 <i>Of which STS</i>	-	-	-	-	-	-
6 Wholesale	67,766	-	-	-	5,421	-
7 <i>Of which STS</i>	-	-	-	-	-	-
8 Re-securitisation	-	-	-	-	-	-
9 Synthetic transactions	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-
11 <i>Retail underlying</i>	-	-	-	-	-	-
12 <i>Wholesale</i>	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-

Source: COREP reporting framework - Detailed information on securitisation: Templates C 14.00 - C 14.01

Table 141 - 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	2,863,685	2,034,957	1,930
2	Retail (total)	1,792,422	1,792,422	-
3	residential mortgage	-	-	-
4	credit card	-	-	-
5	other retail exposures	1,792,422	1,792,422	-
6	re-securitisation	-	-	-
7	Wholesale (total)	1,071,263	242,535	1,930
8	loans to corporates	828,727	-	1,930
9	commercial mortgage	-	-	-
10	lease and receivables	-	-	-
11	other wholesale	242,535	242,535	-
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 (art. 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 (CRR).

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 to 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 142 - 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	873,399	1,010,364	1,143,848	142,638	1,782,976
3 Subject to TSA:	873,399	1,010,364	1,143,848		
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 2022.

Table 143 - Template EU MR1 - Market risk (standardised approach)

	31/12/2022	31/12/2021
	a	b
	RWEAs	RWEAs
Outright products		
1 Interest rate risk (general and specific)	216,915	230,894
2 Equity risk (general and specific)	364,037	472,280
3 Foreign exchange risk	183,152	202,120
4 Commodity risk	4,223	2,569
Options		
5 Simplified approach	-	-
6 Delta-plus approach	1,555	1,431
7 Scenario approach	-	-
8 Securitisation (specific risk)	-	-
9 TOTAL	769,882	909,293

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, letter 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 originating from the banking book is given by the possibility that an unexpected change in market interest rates negatively affects the economic value of shareholders' equity ("value" approach or economic value perspective) as well as the profitability of the Group (margin approach or current earnings perspective).

The set of assets and liabilities included in the risk exposure measurements coincides with instruments generating net interest income other than debt securities belonging to the regulatory trading portfolio, foreign exchange forwards, interest rate options and interest rate swaps belonging to the regulatory trading portfolio.

A definition of interest rate risk arising from the banking book, together with a description of the associated measurement, mitigation and control processes, is provided in Section 2 of this document.

The monitoring of interest rate risk is based on a set of indicators and a dedicated system of limits and thresholds aimed at guarding against the risk both from the perspective of economic value (indicators "EVE" - Economic Value of Equity) and from the perspective of net interest income and current earnings (indicators "NII" - Net Interest Income and "EAR" - Earnings at Risk).

In particular, the monitoring framework includes: a) a primary level (Level 1) RAF indicator, of a "regulatory" nature; b) six complementary level (Level 2) RAF indicators, represented by measures of a "managerial" nature; c) a third group of operational level (Level 3) RAF indicators, three of which are of a "managerial" nature and one of a "regulatory" nature.

With reference to the "management" measures, the exposure to interest rate risk is quantified, both in terms of sensitivity of the economic value of shareholders' equity and of net interest income and current profit, considering the evolution scenarios envisaged by the industry guidelines, i.e.:

- two parallel movements, undifferentiated by currency, of the market rate reference curves of +/- 200 basis points;
- the six rate scenarios described 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.

Furthermore, two further hypothetical rate movement scenarios are simulated, designed by the Bank itself, aimed at respectively capturing future market expectations ("on-going" scenario) and specific particularly adverse situations that have occurred in the past ("historical" scenario).

The quarterly analyses dedicated to the calculation of "regulatory" metrics, the so-called "Supervisory Outlier Test", are conducted using the same rate movement scenarios, with the exception of the "ongoing" and "historical" scenarios. Additional specific rate trend scenarios, contextualised to the market conditions prevailing at the time, are used in the ICAAP stress testing of the main capital, income and financial variables to determine the impacts:

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

The calculation of risk indicators and the verification of compliance with the relevant system of limits and monitoring thresholds take place on a monthly basis, with the exception of the “regulatory” metrics laid down in the sector guidelines published by the European Banking Authority (EBA), for which monitoring takes place on a quarterly basis. In the event of threshold/limit violations, there are differentiated escalation processes according to the RAF level to which the metrics belong.

The Audit function ensures the adequacy of interest rate risk management arrangements and compliance with existing internal and regulatory standards. The Validation function periodically carries out an independent assessment of the correct application of the measurement methodologies used, also verifying the validity of the assumptions in use in the so-called “behavioural models” implemented by the Bank for a more accurate quantification of interest rate risk measures (described in more detail in Section 2 above)³⁰.

The ALM and Investment Committee establishes asset and liability balancing actions to ensure compliance with current interest rate risk targets by, among other things, matching strategies at maturity or repricing dates of assets and liabilities and possible risk hedging strategies through the use of derivative financial instruments.

The guidelines concerning the policies for the measurement, management and control of interest rate risk, as well as aspects relating to the methodology in use and governance are defined in a specific policy document approved by the Bank’s Board of Directors.

The Group, when planning its commercial strategies for the collection and deployment of funds from customers, as well as when defining its proprietary investment policies in financial assets and equity investments, pays particular attention to balancing the interest rate risk profile that can be seen across the entire financial statements. The aim of these guidelines is to limit the potential impact on economic capital and income results of any fluctuations in market rates, thereby pursuing direct hedging of interest rate risk between asset and liability transactions. When the commercial dynamics that characterise the banking business generate an exposure that is not in line with the risk propensity, the Group implements the appropriate containment measures by resorting to instruments and techniques suitable for bringing the interest rate risk profile within the desired levels. In relation to this, starting in the financial year 2022, the Bank launched specific initiatives to hedge the interest rate risk arising from the disbursement of fixed-rate mortgages (so-called “Macro Fair Value Hedging”) through the signing with market counterparties of dedicated Interest Rate Swap contracts with specific characteristics of duration, amount and rate aligned to the pools of loans being hedged.

The loan relationships in euro granted by the Bank and, consequently, their cash flow profile and average repricing maturity are modelled using a statistical approach called “Survival analysis - Full Accelerated Life Model”, aimed at predicting the impact on the amount of interest rate risk arising

³⁰ The assumptions and parameters of the “behavioural models” used for the internal measurement systems are the same as those used to generate the regulatory exposures published in the EU IRRBB1 table below.

from the early repayment of loans (pre-payment) depending on the interest rate scenarios taken into account in the risk measures.

The survival analysis of active mortgages makes use of a specific behavioural model for different “replication portfolios”, i.e. identified clusters of assets differentiated by rate type, loan type and outstanding debt amount. The model assumes that the effect of a key variable can accelerate or decelerate the financial duration of a loan; the variables considered in the modelling are of the following types:

- qualitative (macro-area and sector of economic activity of the borrower, geographical area of the borrower, residual life of the loan, amount of loan debt, age of the borrower, plus an additional variable aimed at capturing, for each loan, the presence of at least one partial early repayment event in the time series);
- macroeconomic (domestic product growth rate, unemployment rate, house price growth rate, inflation rate);
- quantitative (coupon incentive).

The financial profile and average repricing maturity of the so-called “on-demand items” assets (Non-Maturing Assets - NMA) and liabilities (Non-Maturing Deposits - NMD) denominated in euro of the Parent Company and those denominated in euro and Swiss franc of the subsidiary Banca Popolare di Sondrio (SUISSE) are in turn treated using two different behavioural statistical models. The first, called “Minimum Probable Amount”, models the expected persistence of asset and liability volumes with no contractual maturity. The second, on the other hand, provides probabilistic estimates of the evolution of the rate conditions applied to “on-demand items”.

The combination of the two models makes it possible to determine the average repricing duration of the balance sheet liabilities subject to behavioural modelling.

At 31 December 2022, this maturity for “on-demand items” payable, in euro, was 2.25 years, net of the volatile component, and 1.95 years if overnight transactions are also taken into account (maximum permissible maturity: 20 years). For Swiss franc-denominated “on-demand items” payable, on the other hand, the average repricing term is equivalent to 5.38 years, net of the volatile component; however, if the overnight portion is also taken into account, the average repricing term is reduced to 4.87 years (maximum permissible term: 18 years).

* * *

The table below shows the expected quantitative effects of a change in rates on the future interest margin³¹ over a twelve-month period and on the value of the shareholders' equity³², expressed in thousands of euro and obtained with reference to 31 December 2022 on the basis of hypothetical scenarios of interest rate changes that include:

- parallel changes in interest rates of +/- 200 basis points;

³¹ 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.

³² “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 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);

The measures set out in the table are in line with those reported by Banca Popolare di Sondrio for the purposes of the periodic supervisory reporting called Short-Term Exercise (STE).

The change in the economic value of total equity is calculated as the sum of the changes obtained in each currency identified as material (Euro and Swiss Franc) by weighting at 50% any “positive contributions” pursuant to paragraphs 113 and 114 of Guidelines EBA/GL/2018/02.

The change in future net interest income is calculated on each currency identified as material (Euro and Swiss franc) weighting any “positive contributions” at 100% and using scenarios of parallel shifts of the interest rate curves upwards or downwards by 200 basis points for each material currency.

Table 144 - Template EU IRRBB1 - Interest rate risks of non-trading book activities

Supervisory shock scenarios	a	b	c	d
	Changes of the economic value of equity		Changes of the net interest income	
	Current period (2022)	Last period (2021)	Current period (2022)	Last period (2021)
1. Parallel up	(109,712)	(363,143)	45,610	91,238
2. Parallel down	69,006	97,844	(21,672)	22,013
3. Steepener	61,359	14,189		
4. Flattener	(110,855)	(35,211)		
5. Short rates up	(135,687)	(148,582)		
6. Short rates down	81,847	89,243		

Source: internal information

The change in the economic value of equity at 31 December 2022 differs from the figures recorded at the end of the previous year as a result of a combination of two main factors. The first contributing factor relates to the change in the maximum permissible duration parameter, previously defined as 15 years, assumed by the behavioural model of “on-demand items” (Minimum Probable Amount). This change, by lengthening the average repricing time estimated for the generality of non-maturity liabilities, impacts with varying magnitude all scenarios considered, mitigating the magnitude of risk exposure (or increasing the benefit in the case of a simulated positive impact) in scenarios where increases in long-term interest rates are assumed (e.g. “Parallel up”, “Short rates up” and “Steepener” scenarios); on the other hand, the change accentuated the levels of risk exposure (or decreased the positive impact) in scenarios characterised by decreases in long-term interest rates (e.g. “Flattener”, “Parallel down” and “Short rates down” scenarios). The second influencing factor relates to the general upward shift in risk-free rate curves observed in 2022: the particular market trend has in fact increased the magnitude of the effective shocks applied in risk assessment scenarios characterised by falling reference rates, which are now affected to a much lesser extent by the application of the “post-shock” floors provided for in the relevant EBA regulation.

With regard to the estimates of the change in net interest income at 31 December 2022 compared to those drawn up at the end of 2021, a decrease in the potential benefit is shown for the “Parallel up” scenario due to a partial increase in the responsiveness of sight funding from customers to adjust to changed rate conditions; in the “Parallel down” scenario, on the other hand, an increase in the exposure measure is observed, mainly attributable to the widening of the negative rate shocks applied in the simulations for the reasons described above.

Section 18 - Disclosure of encumbered and unencumbered assets (art. 443 CRR/CRR II)

At 31 December 2022, 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 (40.7% of the total);
- securities pledged to guarantee refinancing operations with the European Central Bank (23.3% of the total);
- securities pledged for repurchase agreements (12.4% of the total);
- mortgage loans pledged to obtain advances (10.0% of the total);
- residential mortgage loans included in cover pools to guarantee outstanding covered bond issues (6.9% of the total);
- securities pledged to associated/subsidiary companies (2.5% of the total);
- securities pledged to the retirement and pension/assistance fund (0.6% of the total);
- securities pledged to obtain mortgage loans from the European Investment Bank (EIB) (0.6% of the total);
- own securities pledged for the issue of cashier's cheques (0.4% of the total);
- securities pledged in securities lending transactions (0.3% of the total);
- securities pledged for trading in derivatives on regulated markets (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 (1.8% of the total).

At 31 December 2022, sources of liabilities obtained by the Group for the assets subject to encumbrance are mainly composed of:

- refinancing obtained from the European Central Bank (71.5% of the total);
- funding from repurchase agreements (17.8% of the total);
- other advances payable (5.3%);
- covered bond issues (4% of the total);
- cashier's cheques in circulation (0.9% of the total);
- mortgage loans from the European Investment Bank (EIB) (0.4% 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 2022, the amount of the “cover pool” (residential mortgages) bound to guarantee the outstanding issues exceeds by 862.5 million euro (equal to 69% of the value of the cover pool at 31 December 2022) the minimum coverage requirement of the regulatory regime for maintaining the current rating by the appointed agency, and by 594.5 million euro (equal to 47% of the value of the cover pool as at 31 December 2022) 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 90%). The subsidiary BPS (SUISSE) contributes to the Group's total encumbered assets to a secondary extent (about 10%). 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 2022. 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 145 - Template EU AE1 - Encumbered and unencumbered assets (1 of 2)

		Carrying amount of encumbered assets		Fair value of encumbered assets	
		010	of which notionally eligible EHQLA and HQLA	040	of which notionally eligible EHQLA and HQLA
			030		050
010	ASSETS OF THE REPORTING INSTITUTION	16,387,372	5,915,866		
030	Equity instruments	16,273	-	16,273	-
040	Debt securities	6,446,423	5,915,866	6,352,490	5,836,848
050	of which: covered bonds	76,053	72,641	71,733	68,516
060	of which: asset-backed securities	-	-	-	-
070	of which: issued by general governments	5,808,040	5,742,725	5,739,606	5,672,377
080	of which: issued by financial corporations	688,729	162,113	653,246	153,331
090	of which: issued by non-financial corporations	23,786	5,710	22,434	5,675
120	Other assets	9,952,576	-		

Table 146 - Template EU AE1 - Encumbered and unencumbered assets (2 of 2)

		Carrying amount of encumbered assets		Fair value of encumbered assets	
		060	of which EHQLA and HQLA	090	of which EHQLA and HQLA
			080		100
010	ASSETS OF THE REPORTING INSTITUTION	39,158,426	6,765,203		
030	Equity instruments	966,236	28,255	1,338,019	28,255
040	Debt securities	6,740,976	5,305,617	6,392,339	5,049,252
050	of which: covered bonds	144,736	131,554	137,545	126,748
060	of which: asset-backed securities	508,790	-	508,790	-
070	of which: issued by general governments	4,818,680	4,624,518	4,598,413	4,434,336
080	of which: issued by financial corporations	1,598,002	436,022	1,513,206	408,294
090	of which: issued by non-financial corporations	324,981	241,376	282,518	209,966
120	Other assets	31,451,214	1,401,802		

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 (6.1 billion euro as at 31 December 2022), and loans included in “Other assets” (10.7 billion euro as at 31 December 2022), of which they are the predominant component.

The amounts of unencumbered assets shown in column 060 of the table above consist mainly of loans (22.3 billion euro as at 31 December 2022 included under “Other assets,” of which they are the largest component), debt securities (6.1 billion euro as at 31 December 2022) and equity securities (0.9 billion euro as at 31 December 2022). These types of assets appear to be potentially usable within the main areas of operation listed above. The other unencumbered assets, amounting to approximately 3.3 billion euro at 31 December 2022, 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 securitisation of non-performing loans promoted by Banca Popolare di Sondrio, corresponding to the retained portion of the junior and mezzanine tranches of ABS securities issued against these transactions. The book value of these instruments amounted to 0.08 billion euro as at 31 December 2022; the underlying credit ratios, commensurate with the percentage of junior and mezzanine securities retained by the Bank (5%), are not subject to derecognition.

Table 147 - 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 disclosing institution	-	-	79,526	79,526
140 Loans on demand	-	-	-	-
150 Equity instruments	-	-	-	-
160 Debt securities	-	-	79,526	79,526
170 of which: covered bonds	-	-	-	-
180 of which: asset-backed securities	-	-	-	-
190 of which: issued by general governments	-	-	79,526	79,526
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	-	-	4,342	-
241 Own covered bonds and securitization issued and not yet pledged			-	-
250 TOTAL COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED 31/12/2022	4,560,043	2,715,130		
TOTAL COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED 31/12/2021	-	-		

Source: FINREP - Asset Encumbrance: Template F 32.02 Guarantees received

Table 148 - Template EU AE3 - Sources of encumbrance

		31/12/2022		31/12/2021	
		<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	030
010	Carrying amount of selected financial liabilities	10,914,728	15,361,792	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 2022, to deposits of 11.9 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 information required by art. 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 in the annex to the “*Annual report on the remuneration policy and compensation paid*”. This document, which fulfils the disclosure requirements under the “Pillar 3” regulatory provisions for the financial year 2022, is available on the Bank's institutional website at <https://istituzionale.popso.it/it/investor-relations/assemblea-dei-soci> (Shareholders' Meeting 2023 - Meeting Documents).

Certain non-quantitative information is further detailed in the document “Compensation policies of the Banca Popolare di Sondrio Banking Group” also published on the company website at <https://istituzionale.popso.it/it/investor-relations/assemblea-dei-soci> (2023 Shareholders' Meeting, Meeting Documents).

Specific reference is therefore made to this documentation.

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.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, 28 April 2023

Signed Maurizio Bertoletti
Manager responsible for preparing
the Company's accounting documents



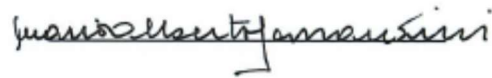
Declaration pursuant to art. 435, paragraph 1, letters e) and f) of Regulation (EU) No 575/2013

Managing Director Mario Alberto Pedranzini, under a mandate granted by the Board of Directors by resolution dated 7 February 2023, 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 2022*" are in line with the profile and strategy of 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, 28 April 2023

Signed Mario Alberto Pedranzini
Managing Director



Annexes

Annex 1: Lists Top 20 most polluting companies in the world

1. Carbon Majors Database and Reports of the Carbon Disclosure Project

Carbon Majors emissions of CO2 and methane 1988–2015				
Producer	Cumulative 1988-2015 Scope 1 GHG, MtCO ₂ e	Cumulative 1988-2015 Scope 3 GHG, MtCO ₂ e	Cumulative 1988-2015 Scope 1+3 GHG, MtCO ₂ e	Cumulative 1988-2015 Scope 1+3 of global industrial GHG, %
China (Coal)	9,622	119,312	128,933	14.3
Saudi Arabian Oil Company (Aramco)	4,263	36,298	40,561	4.5
Gazprom OAO	4,652	30,569	35,221	3.9
National Iranian Oil Co	2,468	18,037	20,505	2.3
ExxonMobil Corp	1,833	15,952	17,785	2.0
Coal India	892	15,950	16,842	1.9
Petroleos Mexicanos (Pemex)	2,055	14,749	16,804	1.9
Russia (Coal)	1,216	15,524	16,740	1.9
Royal Dutch Shell PLC	1,212	13,805	15,017	1.7
China National Petroleum Corp (CNPC)	1,479	12,564	14,042	1.6
BP PLC	1,072	12,719	13,791	1.5
Chevron Corp	1,215	10,608	11,823	1.3
Petroleos de Venezuela SA (PDVSA)	1,108	9,971	11,079	1.2
Abu Dhabi National Oil Co	1,135	9,635	10,769	1.2
Poland Coal	884	9,596	10,480	1.2
Peabody Energy Corp	266	10,098	10,364	1.2
Sonatrach SPA	1,490	7,507	8,997	1.0
Kuwait Petroleum Corp	767	8,194	8,961	1.0
Total SA	778	7,762	8,541	0.9
BHP Billiton Ltd	588	7,595	8,183	0.9
ConocoPhillips	654	6,809	7,463	0.9
Petrobras	533	6,375	6,907	0.8
Lukoil	557	6,193	6,750	0.8

2. Climate Accountability Institute

Carbon Majors emissions of CO2 and methane 1965-2018		
Entity	MtCO ₂ e	% of global FF
Saudi Aramco, Saudi Arabia	61,143	4.33%
Gazprom, Russia	44,757	3.17%
Chevron, USA	43,787	3.10%
ExxonMobil, USA	42,484	3.01%



National Iranian Oil Co.	36,924	2.62%
BP, UK	34,564	2.45%
2Royal Dutch Shell, The Netherlands	32,498	2.30%
Coal India, India	24,338	1.73%
Pemex, Mexico	23,025	1.63%
PetroChina / China Natl Petroleum	16,515	1.17%
Petroleos de Venezuela (PDVSA)	16,029	1.14%
Peabody Energy, USA	15,783	1.12%
ConocoPhillips, USA	15,422	1.09%
Abu Dhabi, United Arab Emirates	14,532	1.03%
Kuwait Petroleum Corp., Kuwait	13,923	0.99%
Iraq National Oil Co., Iraq	13,162	0.93%
Total SA, France	12,755	0.90%
Sonatrach, Algeria	12,700	0.90%
BHP, Australia	10,068	0.71%
Petrobras, Brazil	9,061	0.64%
Top Twenty	493,471	34.98%

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.

Asset encumbrance

It represents a legal right in rem in favour of a creditor over a property owned by another party (debtor). A typical example is the creation of collateral in repo transactions and for central bank financing.

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.

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.

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 aimed at facilitating the mobilisation of non-performing bank loans through securitisation transactions pursuant to Decree 18 of 14 February 2016 converted into Law No. 49 of 8 April 2016 and subsequent MEF decree of 3 August 2016. 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) 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”);
- b) 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.

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.

SPV

A Special Purpose Vehicle is a company specifically set up by one or more entities to carry out a specific transaction (in particular a securitisation transaction).

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).