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UniCredit Group Disclosure (Pillar III)

as at 31 December 2022

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Regulatory framework and key metrics

Regulatory framework

In 2010, the Basel III framework was adopted and consequently translated in the European Union (EU) into Regulation through the Capital Requirement Regulation (CRR) (Regulation 575/2013) and Capital Requirement Directive IV (CRD IV) (Directive 2013/36/EU).

The CRR is binding for all EU member states and became effective on 1 January 2014.

The Basel Committee's framework is based on three pillars:

- Pillar I on minimum capital requirements, which defines the rules for the calculation of credit, market and operational risk;
- Pillar II, about Supervisory Review and Evaluation Process (SREP), which requires banks to (i) undertake an Internal Capital Adequacy Assessment Process (ICAAP) to identify and assess risks, also those not included in Pillar I; (ii) maintain sufficient capital to face these risks; (iii) an Internal Liquidity Adequacy Assessment Process (ILAAP) focusing on maintaining sufficient liquidity (and funding) risk management;
- Pillar III (Market Disclosure), which encourages market discipline and transparency by developing a set of qualitative and quantitative disclosure requirements, thus allowing investors and other market participants to better assess institutions' capital, risk exposures, risk assessment processes and capital adequacy.

On 16 April 2019, the European Parliament approved the final agreement on a package of reforms proposed by the European Commission to strengthen the resilience and resolvability of European banks. The package of reforms, which comprised certain amendments to CRR and CRD IV commonly referred to as "CRR2" (Regulation EU 876/2019) and "CRD V" (Directive 2019/878/EU), came into force on 27 June 2019, also envisaging transitional timetables.

In June 2020, the European Banking Authority (EBA) published the final Implementing Technical Standards (EBA/ITS/2020/04) on Pillar III that implements changes introduced in the CRR2. Such standards are applicable by June 2021, as adopted and published on the Official Journal with the Commission Implementing Regulation (EU) 2021/637 of 15 March 2021¹.

Moreover, the EBA/ITS/2020/04 and the subsequent Regulation above mentioned repealed the EBA Guidelines and Regulations previously issued on specific Pillar III disclosure topics².

The Regulation 2020/873, known as "Quick-Fix", which was published on 26 June 2020 and came into force since 27 June 2020, anticipated some regulatory treatments become part of the go live of the Regulation (EU) 2019/876 (CRR2) starting from 30 June 2021.

Moreover, in January 2022 the EBA published the Final Implementing Technical Standards (EBA/ITS/2022/01) on prudential disclosures on Environmental, Social and Governance risks (ESG) in accordance with the CRR2 Article 449a (on an annual basis for the first year and semi-annually thereafter). Such ITS was adopted by the European Commission and published on the Official Journal with the Implementing Regulation (EU) 2022/2453 of 30 November 2022, amending the Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks (ESG).

The following regulations are applicable as well: (i) the European Commission Regulatory Technical Standards (RTS) or Implementation Technical Standards (ITS) issued on proposal of the EBA; (ii) the recommendations published on 29 October 2012 in the document "Enhancing the risk disclosures of banks" by the international Enhanced Disclosure Task Force (EDTF), which was established under the auspices of the Financial Stability Board (FSB); (iii) the guidelines issued by the EBA with reference to Pillar III disclosure time to time in force; and (iv) the additional disclosure requirements required by the EBA with reference to the measures issued in the context of the Covid-19 outbreak reported in the following paragraph.

For further details on the contents of Pillar III Disclosure of UniCredit group and regulatory requirements, refer to the section "Contents cross reference to the regulatory disclosure requirements", which shows the cross reference to the information published in the period, as included in the present document or in external documents³.

Particularly, the following tables are reported:

- Cross reference to the information required by CRR2;
- Cross reference to the EBA and Regulation EU requirements;
- Cross reference to the EDTF recommendations.

¹ The Regulation establishes implementing technical standards with regard to public disclosures by institutions of the information referred to in Titles II and III of Part Eight of Regulation (EU) 575/2013 of the European Parliament and of the Council and repealing Commission Implementing Regulation (EU) 1423/2013, Commission Delegated Regulation (EU) 2015/1555, Commission Implementing Regulation (EU) 2016/200 and Commission Delegated Regulation (EU) 2017/2295. The Regulation was subsequently amended by Regulation (EU) 631/2022 as regards the disclosure of exposures to interest rate risk on positions not held in the trading book.

² The EBA Guidelines and Regulations repealed from June 2021: (i) Sound remuneration policies under articles 74(3) and 75(2) of Directive 2013/36/EU and disclosures under article 450 of Regulation (EU) 575/2013 (EBA/GL/2015/22); (ii) Disclosure requirements under Part Eight of Regulation (EU) 575/2013 (EBA/GL/2016/11); (iii) LCR disclosure to complement the disclosure of liquidity risk management under article 435 of Regulation (EU) 575/2013 (EBA/GL/2017/01); (iv) Disclosure of non-performing and forbore exposures (EBA/GL/2018/10 amended by EBA/GL/2022/13) which continue to apply to small and non-complex institutions and other institutions; (v) Commission Implementing Regulation (EU) 1423/2013, (vi) Commission Delegated Regulation (EU) 2015/1555, (vii) Commission Implementing Regulation (EU) 2016/200; (viii) Commission Delegated Regulation (EU) 2017/2295.

³ Consolidated First Half Financial Report, Annual Reports and Accounts, other documents published on the UniCredit group website, based on the frequency of publication of the relevant information.

Regulatory framework and key metrics

Measures issued in the context of the Covid-19 outbreak, provided by the European regulatory authorities and National Member States

The paragraph below is prepared according to the document "Statement on supervisory reporting and Pillar 3 disclosures in light of Covid-19" issued by the EBA on 31 March 2020 and includes the information relating to the measures provided by the European regulatory authorities and National Member States during 2022.

For the overview of the measures relating to the period between the year 2020 and 2021, including (i) the references to the European Central Bank (ECB) and the European Banking Authority publications, and (ii) the impacts for the Group refer to the related section of the Pillar III document as at 31 December 2021.

With reference to the comments on risk management, reference shall be made to the paragraph "Effects arising from Covid-19 pandemic" of the Consolidated financial statements as at 31 December 2022, Notes to the consolidated accounts, Part E - Information on risks and related hedging policies, Section 2 - Risks of the prudential consolidated perimeter (2.1 Credit risk, 2.2 Market risk, 2.4 Liquidity risk, 2.5 Operational risk, 2.6 Other risks).

Measures from the ECB and the EBA issued during 2022

During the Covid-19 outbreak, the Governing Council of the European Central Bank determined several measures to ensure that its directly supervised banks can continue to fulfill their role in funding the real economy given the economic effects of Covid-19. As well, the European Banking Authority issued several statements to explain a number of interpretative aspects on the functioning of the prudential framework in relation to the classification of loans in default, the identification of forbore exposures, and their accounting treatment. These clarifications help ensure consistency and comparability in risk metrics across the whole European banking sector, which are crucial to monitor the effects of the crisis.

The measures issued during 2022 are set out below:

- The EBA measure relating to Covid-19 reporting and disclosure requirements issued on 17 January 2022 which introduced the need to monitor the exposures and the credit quality of loans benefitting from various public support measures and to provide related disclosure applying "Guidelines on the reporting and disclosure of exposures subject to measures applied in response to the Covid-19 crisis" (EBA/GL/2020/07); given the decreasing relevance public support measures in the Covid-19-related context, and in line with the EBA proportionate approach to reporting and disclosure, such Guidelines are repealed from 1 January 2023 (the EBA Closure Report of Covid-19 measures of the 16 December 2022 - EBA/REP/2022/32).
- ECB measures issued on 24 March 2022 which stated the following:
 - gradual phase out of collateral easing measures introduced in April 2020 in three steps between July 2022 and March 2024;
 - gradual restoration of the Eurosystem's pre-pandemic risk tolerance in order to avoid cliff effects on collateral availability;
 - waiver of the minimum credit quality requirement for GGBs (Greek government bonds), allowing NCBs to accept them as collateral in line with continued eligibility in PEPP (Pandemic emergency purchase programme).

Main measures from National Member States

With regard to the measures adopted in Italy, reference shall be made to the Pillar III document as at 31 March 2022. Moreover, several countries in which the Group operates have passed laws for concession of payment moratorium to grant private entities and enterprises sufficient liquidity to counteract the effect of the Covid-19 emergency.

Specifically, the moratorium (legal and offered by bank) is still in force as at 31 December 2022 with reference to: Germany, Croatia, Hungary, Austria, Slovakia, Czech Republic. With reference to Hungary, it should be noted that the local government has decided to extend the moratorium expiring on 30 June 2022 for customers whose debt was found to be in a moratorium on 17 June 2022. In July 2022, customers respecting the conditions, could have requested the extension of the moratorium until the end of the year.

For more details reference shall be made to the Pillar III document as at 31 December 2021.

UniCredit internal regulation

UniCredit prepares, on a consolidated basis, the Pillar III report in accordance with the CRR2 and the CRDV (and with the further regulatory framework above described).

The UniCredit group Disclosure (Pillar III) is published on a quarterly basis in accordance with CRR2 article 433a and it is prepared in accordance with a formal internal policy (Internal Regulation) adopted in the application of the CRR2 article 431(3), that sets out the internal controls and procedures.

The key elements of this policy are:

- identification of roles and responsibilities of the corporate bodies, departments and Group legal entities involved in the process of producing the disclosure;
- identification of the information to be published (in accordance with the EBA GL/2014/14 and CRR2 articles 432 and 433). There is a formal process set up for the identification of the need for higher frequency than the minimum required by CRR2 of all Pillar 3 disclosures which is compatible with the size, the scope and the range of activities of the Group;
- instructions for Group legal entities contributions and related controls;
- consolidation of the disclosure contributions and related controls;
- approval by the Board of Directors;
- publication on the UniCredit group website;

Regulatory framework and key metrics

- evaluation related to Pillar III re-publication, after the initial issuance, for alignment with the most recent submissions of regulatory reporting. Furthermore, pursuant to article 431(3) of Part Eight of CRR2, this document is prepared in accordance with the internal regulation and processes, systems and controls.

The document is also accompanied by the Declaration by the Manager charged with preparing the financial reports, pursuant to article 154-bis, paragraph 2, of the "Consolidated Law on Finance", which attest that the information disclosed in this document corresponds to the accounting documents, books and records.

Notes to this disclosure

The present disclosure is prepared in accordance with the supervisory reporting.

Highlights

Developments in geopolitical tensions between Russian Federation and Ukraine

- With reference to the Risk Weighted Exposures Amount (RWEAs) calculation for the exposures treated according to the Standardized approach, UniCredit continues to apply a risk assessment coherent with the exposures treated according to internal models (also pursuant with the CRR articles 121, par. 2 and 122, par. 2). To this regard, an increase in the Credit RWEAs occurred in the fourth quarter 2022, following the internal downgrade of the Russia Sovereign according to the internal models.
- As a result of the geopolitical tensions, the ECB suspended the EUR/RUB listing since 2 March 2022 (last fixing on 1 March 2022), while the Central Bank of Russia ("CBR") continued to provide a fixing versus other currencies. Despite such suspension, the availability of RUB FX rate is needed for preparing the Consolidated financial statements for the conversion into EUR of: (i) RUB denominated exposures held by UniCredit S.p.A. and subsidiaries having a presentation currency different from EUR; (ii) Russian subsidiaries' net assets (and related FX reserve) in the consolidated financial results of UniCredit group.

In light of the IAS21 requirements (which establish that when several exchange rates are available, the rate used is the one at which the future cash flows represented by the transaction or balance could have been settled if those cash flows had occurred at the measurement date), the Group decided to adopt the RUB quotes listed by the Electronic Broking Service ("EBS") in substitution of the lacking EUR/RUB quote. The choice of the provider was executed following a qualitative and quantitative assessment, which reported the following outcome: (i) the RUB quotes published by the platform are representative of effective transactions between participants to the market; (ii) the FX quotes are liquid; (iii) the EBS RUB quotes resulted from actual transactions by non-Russian based operators, thus granting that such quote effectively represents a market participant assessment of the value of the RUB and therefore of the economic conditions of Russia (such conclusions were also corroborated by the meeting held by the ECB - Foreign Exchange Contact Group during May 2022 in which the EBS representative reported that EBS's EUR/RUB market continues to function, and that liquidity in the Russian Ruble is below pre-invasion levels, with activity concentrated mostly among larger banks in offshore markets). In more detail, the mentioned EBS rate was used both for converting RUB denominated exposures held by entities having EUR as presentation currency, as well as for consolidating the net assets of AO UniCredit Bank (Russia) and determining the related FX reserve.

In addition to the above, it is worth reminding those exposures held by Russian subsidiaries and denominated into currencies different from RUB shall be first converted into RUB for the purpose of consolidated financial statements preparation. In this regard, while the adoption of EBS RUB quote would be appropriate, the conversion into RUB of exposures denominated in foreign currencies held by Russian Subsidiaries was executed considering the rate provided by CBR considering that the difference between CBR and EBS quotes was not significant.

In this regard it cannot be excluded that, once the ECB will restart listing RUB/EUR FX rate, these quotes might be different from EBS quotes, thus requiring the recognition of an impact in Net Equity and in P&L.

General information

With reference to the best practices identified by the EBA in the Report "on assessment of Institutions' Pillar 3 Disclosure (EBA/Rep/2020/09)", the sustainability and ESG risks (Environmental, Social and Governance risks) disclosure is reported on the basis of the current regulatory framework:

- within the present document in the "Environmental, Social and Governance risks (ESG)" chapter according to article 449a of CRR2, starting from 31 December 2022;
- within the "ESG and Sustainability" section of the Group website (<https://www.unicreditgroup.eu/en/esg-and-sustainability/sustainability-reporting.html>) that includes:
 - UniCredit Integrated Report that describes how the bank creates sustainable value that has a positive impact on society by supporting the advancement of local communities, the competitiveness of enterprises and the well-being of individuals. UniCredit has prepared this document of financial and non-financial performance in compliance with the requirements of Articles 3 and 4 of Legislative Decree 254/2016, which implements European Directive 2014/95/EU in Italy. The guidelines adopted for the preparation of the sustainability information included in the Integrated Report, including its Supplement, are the "GRI Standards" and the "Financial Services Sector Disclosures", both issued by the GRI - Global Reporting Initiative;
 - separate document dedicated to disclosure requested by the Task Force on Climate-Related Financial Disclosures ("TCFD") recommendations: shifting to a low-carbon and climate-resilient economy includes actions such as the endorsement of the Task Force on Climate-Related Financial Disclosure (TCFD) recommendations. UniCredit committed to the TCFD recommendations in 2019 and started reporting already in the 2019 Integrated Report. Since 2020, the TCFD report is published as a stand-alone report, in alignment with the TCFD recommendations published in 2017.

Regulatory framework and key metrics

Moreover:

- regarding the editability of the information published, this document includes the two Annexes which are published in excel format on the UniCredit group website (refer to web links in the Annex section):
 - Annex 1 - Template EU CCA - Main features of regulatory Own Funds instruments and eligible liabilities instruments;
 - Annex 2 - List of templates Regulation (EU) 637/2021;
- in order to facilitate the understanding of the consistency of the quantitative data between the tables of the present document, the Annex 2 reports, in excel format, the reconciliation of the regulatory figures represented in the various templates (where applicable).

It should be also noted that:

- all amounts, unless otherwise specified, are expressed in millions of euro, (therefore, the amounts lower than €0.5 million are reported with "0");
- with reference to the numbering of rows of the templates required by Regulation (EU) 2021/637, in order to allow the comparability between CRR2 disclosure requirements and Basel standards, the templates report:
 - an additional suffix (a, b, c, etc.), in the case of items included in the (EU) Regulation but not in the Basel framework (whenever an additional row is required, the row number is prefixed by "EU");
 - the continued numeration with the text "not applicable", in the case of items included in the Basel framework but not in the (EU) Regulation;
- data refer to the prudential scope of consolidation;
- any discrepancy between data disclosed in this document is solely due to the effect of rounding;
- the amounts reported are coherent with the most recent submissions of the regulatory reporting for each period; as a result, some amounts may differ from those disclosed in previous publications;
- the disclosures to be provided by the systemically important banks were published on the UniCredit group's website according to the deadline defined in the relevant regulations (<https://www.unicreditgroup.eu/en/investors/financial-reporting/financial-reports.html>).

Regulatory framework and key metrics

Key metrics

Template EU KM1 - Key metrics

(€ million)

DESCRIPTION	a	b	c	d	e
	31.12.2022	30.09.2022	30.06.2022	31.03.2022	31.12.2021
Available Own Funds (amounts)					
1 Common Equity Tier 1 (CET1) capital	51,442	51,337	51,906	48,243	50,933
2 Tier 1 capital	57,521	57,416	58,003	54,340	57,780
3 Total capital	66,062	66,421	66,788	62,652	64,850
Risk-weighted exposure amounts					
4 Risk-weighted exposure amount	308,466	319,980	316,731	329,922	321,992
Capital ratios (as a percentage of risk-weighted exposure amount)					
5 Common Equity Tier 1 ratio (%)	16.68%	16.04%	16.39%	14.62%	15.82%
6 Tier 1 ratio (%)	18.65%	17.94%	18.31%	16.47%	17.94%
7 Total capital ratio (%)	21.42%	20.76%	21.09%	18.99%	20.14%
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)					
Additional own funds requirements to address risks other than the risk of excessive leverage (%)	1.75%	1.75%	1.75%	1.75%	1.75%
EU 7a Of which: to be made up of CET1 capital (%)	0.98%	0.98%	0.98%	0.98%	0.98%
EU 7b Of which: to be made up of Tier 1 capital (%)	1.31%	1.31%	1.31%	1.31%	1.31%
EU 7c Of which: to be made up of Tier 1 capital (%)	1.31%	1.31%	1.31%	1.31%	1.31%
EU 7d Total SREP own funds requirements (%)	9.75%	9.75%	9.75%	9.75%	9.75%
Combined buffer and overall capital requirement (as a percentage of risk-weighted exposure amount)					
8 Capital conservation buffer (%)	2.50%	2.50%	2.50%	2.50%	2.50%
Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	-	-	-	-
EU 8a Institution specific countercyclical capital buffer (%)	0.13%	0.08%	0.05%	0.05%	0.05%
EU 9a Systemic risk buffer (%)	-	-	-	-	-
10 Global Systemically Important Institution buffer (%)	1.00%	1.00%	1.00%	1.00%	1.00%
EU 10a Other Systemically Important Institution buffer (%)	-	-	-	-	-
11 Combined buffer requirement (%)	3.63%	3.58%	3.55%	3.55%	3.55%
EU 11a Overall capital requirements (%)	13.38%	13.33%	13.30%	13.30%	13.30%
12 CET1 available after meeting the total SREP own funds requirements (%)	11.19%	10.56%	10.90%	9.14%	10.33%
Leverage ratio					
13 Leverage ratio total exposure measure	946,901	1,032,101	1,044,558	1,046,730	1,011,462
14 Leverage ratio	6.07%	5.56%	5.55%	5.19%	5.71%
Additional Own Funds requirements to address risks of excessive leverage (as a percentage of leverage ratio total exposure amount)					
EU 14a Additional own funds requirements to address the risk of excessive leverage (%)	-	-	-	-	-
EU 14b of which: to be made up of CET1 capital (percentage points)	-	-	-	-	-
EU 14c Total SREP leverage ratio requirements (%)	3.00%	3.00%	3.00%	3.00%	3.00%
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 requirements (%)	3.00%	3.00%	3.00%	3.00%	3.00%
Liquidity Coverage Ratio					
15 Total high-quality liquid assets (HQLA) (Weighted value-average)	190,318	194,525	199,801	202,092	201,871
EU 16a Cash outflows - Total weighted value	182,356	183,484	183,391	180,031	176,358
EU 16b Cash inflows - Total weighted value	63,895	65,779	66,933	65,907	65,491
16 Total net cash outflows (adjusted value)	118,461	117,705	116,458	114,124	110,867
17 Liquidity Coverage Ratio (%)	161%	165%	172%	177%	182%
Net Stable Funding Ratio					
18 Total available stable funding	545,681	599,630	600,120	645,369	633,894
19 Total required stable funding	420,231	442,917	448,388	478,879	471,343
20 NSFR ratio (%)	130%	135%	134%	135%	134%

Note:

The section related to the information on Liquidity Coverage Ratio refer to weighted value average, in coherence with the representation provided in the Template EU LIQ1.

Regulatory framework and key metrics

Contents cross reference to the regulatory disclosure requirements

In coherence with the regulatory framework, the tables below show the cross reference to the information published annually, as included in the present document or in external documents.

Cross reference to the information required by CRR2

CRR2 ARTICLE	CONTENT	REG. (EU) 2021/637 AND SUBSEQUENT AMENDMENT REFERENCE (*)	REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)/EXTERNAL DOCUMENTS	
435	Risk management objectives and policies	Table EU OVA Table EU OVB Table EU CRA Table EU MRA Table EU LIQA Table EU ORA	AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies: Introduction Section 2 Risks of the prudential consolidated perimeter: 2.1 Credit risk 1. General aspects - Credit strategies 2. Credit risk management policies - 2.1 Organisational aspects - 2.2 Credit risk management, measurement and control - 2.4 Credit risk mitigation techniques 2.2 Market risks 2.4 Liquidity risk 2.5 Operational risks - A. General aspects, operational processes and methods for measuring operational risk 2.6 Other risks - Other risks included in Economic Capital
			website	"Corporate Governance report" document on UniCredit Group website (https://www.unicreditgroup.eu/it/governance.html)
436	Scope of application	Table EU LIB	AR	Notes to the consolidated accounts - Part A Accounting Policies - A.1 General - Section 3 Consolidation scope and methods - 4. Significant restrictions
		Table EU LIA Template EU LI1 Template EU LI2 Template EU PV1 Template EU LI3	P3	Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation
437/437a	Own Funds/Owns Funds and eligible liabilities	Template EU CC1 Template EU CC2 Template TLAC1 (**) Template TLAC3 (**) Template EU CCA	P3	Own Funds Own Funds - Total Loss Absorbing Capacity
			website	Annex 1 - Template EU CCA - Main features of regulatory Own Funds instruments and eligible liabilities instruments (in editable format excel to link https://www.unicreditgroup.eu/en/investors/financial-reporting/pillar-3-disclosures.html) Full terms and conditions of capital instruments and eligible liabilities instruments (Article 437 and 437a, paragraph 1, letter c) are reported in the link included in the "Notes" section of the Template EU CCA
438	Own Funds requirements and risk-weighted exposure amounts	Template EU KM1 Template EU OV1 Template EU CR10 Template EU CR8 Template EU CCR7 Template EU MR2-B Table EU OVC	P3	Regulatory framework and key metrics Own Funds requirements and risk-weighted exposure amounts Credit risk - Use of IRB approach Credit risk - Counterparty risk exposure Market risk
			AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Introduction - Internal Capital Adequacy Assessment Process ("ICAAP") and Risk Appetite
439	Exposure to counterparty credit risk	Table EU CCRA Template EU CCR1 Template EU CCR2 Template EU CCR3 Template EU CCR4 (AIRB and FIRB) Template EU CCR5 Template EU CCR6 Template EU CCR8	P3	Credit risk - Counterparty risk exposure
440	Countercyclical capital buffers	Template EU CCyB2 Template EU CCyB1	P3	Own Funds - Countercyclical capital buffers
441	Indicators of global systemic importance		website	G-SIBs Disclosure document to link https://www.unicreditgroup.eu/en/investors/financial-reporting/financial-reports.html

Regulatory framework and key metrics

continued: Cross reference to the information required by CRR2

CRR2 ARTICLE	CONTENT	REG. (EU) 2021/637 AND SUBSEQUENT AMENDMENT REFERENCE (*)	REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)/EXTERNAL DOCUMENTS	
442	Exposures to credit risk and dilution risk	Template EU CQ1 Template EU CQ2 Template EU CQ3 Template EU CQ4 Template EU CQ5 Template EU CQ6 Template EU CQ7 Template EU CQ8 Template EU CR1 Template EU CR2a Template EU CR1-A Table CRB	P3	Credit risk - Non-performing and forbore exposures
			AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Section 2 Risks of the prudential consolidated perimeter - 2.1 Credit risk - 3. Non-performing credit exposures - 3.1 Management strategies and policies
443	Encumbered and unencumbered assets	Template EU AE1 Template EU AE2 Template EU AE3 Table EU AE4	P3	Liquidity risk - Encumbered and unencumbered assets
444	Use of the Standardised Approach	Table EU CRD Template EU CR4 Template EU CR5	P3	Credit risk - Use of standardised approach
445	Exposure to market risk	Template EU MR1	P3	Own Funds requirements and risk-weighted exposure amounts
446	Operational risk management	Table EU ORA	AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Section 2 Risks of the prudential consolidated perimeter - 2.5 Operational risks - A. General aspects, operational processes and methods for measuring operational risk
		Template EU OR1	P3	Operational risk
447	Key metrics	Template EU KM1	P3	Regulatory framework and key metrics
		Template EU KM2 (**)		Own Funds - Total Loss Absorbing Capacity
448	Exposure to interest rate risk on positions not held in the trading book	Template EU IRRBB1	P3	Market risk - Exposures to interest rate risk on positions not held in the trading book
449	Exposure to securitisation positions	Table EU SECA Template EU SEC1 Template EU SEC2 Template EU SEC3 Template EU SEC4 Template EU SEC5	P3	Securitisation exposures
449a	Environmental, Social and Governance risks (ESG)	Table 1, 2 and 3 Template 1, 2, 4, 5 and 10	P3	Environmental, Social and Governance risks (ESG)
450	Remuneration policy	Table EU REMA Template EU REM1 Template EU REM2 Template EU REM3 Template EU REM4 Template EU REM5	website	Remuneration section on Group website (https://www.unicreditgroup.eu/en/governance/compensation.html)
451	Leverage ratio	Template EU LR1 Template EU LR2 Template EU LR3 Table LRA	P3	Leverage

Regulatory framework and key metrics

continued: Cross reference to the information required by CRR2

CRR2 ARTICLE	CONTENT	REG. (EU) 2021/637 AND SUBSEQUENT AMENDMENT REFERENCE (*)	REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)/EXTERNAL DOCUMENTS	
451a	Liquidity requirements	Template EU LIQ1 Table EU LIQB	P3	Liquidity risk - Liquidity Coverage Ratio
		Template EU LIQ2		Liquidity risk - Net Stable Funding Ratio
		Table EU LIQA	AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Section 2 Risks of the prudential consolidated - 2.4 Liquidity risk
452	Use of the IRB Approach to credit risk	Table EU CRE Template EU CR6 (AIRB and FIRB) Template EU CR6-A Template EU CR9 (AIRB and FIRB)	P3	Credit risk - Use of the IRB approach
453	Use of credit risk mitigation techniques	Template EU CR7 Template EU CR7-A (AIRB and FIRB) Template EU CR3	P3	Credit risk - Use of risk mitigation techniques (CRM)
		Template EU CR4		Credit risk - Use of standardised approach
		Table EU CRC	AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Section 2 Risks of the prudential consolidated perimeter - 2.1 Credit risk - 2. Credit risk management policies - 2.4 Credit risk mitigation techniques
454	Use of the Advanced Measurement Approaches to operational risk	Table EU ORA	AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Section 2 Risks of the prudential consolidated perimeter - 2.5 Operational risks - A. General aspects, operational processes and methods for measuring operational risk
		Template EU OR1	P3	Operational risk
455	Use of internal market risk models	Template EU MR2-A Template EU MR3	P3	Market risk - Exposure and use of internal models
		Table EU MRB Template EU MR4	AR	Notes to the consolidated accounts - Part E Information on risks and related hedging policies - Section 2 Risks of the prudential consolidated perimeter - 2.2. Market risks

Notes:
 (*) Commission Implementing Regulation (EU) 2021/637 of 15 March 2021 laying down implementing technical standards with regard to public disclosures by institutions of the information referred to in Titles II and III of Part Eight of Regulation (EU) 575/2013 of the European Parliament and of the Council, subsequently amended by:
 • Commission Implementing Regulation (EU) 2022/631 of 13 April 2022 as regards the disclosure of exposures to interest rate risk on positions not held in the trading book (Template EU IRRBB1);
 • Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022 as regards the disclosure of environmental, social and governance risks (Tables and Templates ESG).
 In this column, according to Regulation (EU) 2021/637, quantitative information is identified with "Template", while qualitative information with "Table".
 The following templates are not published as not applicable for the Group as at 31 December 2022: EU CR10.3, EU CR10.4, EU INS1, EU INS2 e EU CR9.1.

(**) Reference to Commission Implementing Regulation (EU) 2021/763 (Minimum requirement for own funds and eligible liabilities).

Regulatory framework and key metrics

Cross reference to the EBA and Regulation EU requirements

CONTENT	REFERENCE TO THE PRESENT DOCUMENT (P3)
Commission Implementing Regulation (EU) 2021/637 as regard the information referred to Part Eight, Titles II and III, of Regulation (EU) 575/2013	Refer to "Cross reference to the information required by CRR2" table
Commission Implementing Regulation (EU) 2021/763 as regard the minimum requirement for Own Funds and eligible liabilities	
Commission Implementing Regulation (EU) 2022/2453 as regards the disclosure of environmental, social and governance risks (ESG)	
Commission Implementing Regulation (EU) 2022/631 as regards the disclosure of exposures to interest rate risk on positions not held in the trading book	
EBA Statement issued on 31 March 2020 - Supervisory Reporting and Pillar 3 disclosure in the context of the Covid-19 outbreak	Regulatory framework - Measures issued in the context of the Covid-19 outbreak, provided by the European regulatory authorities and National Member States
EBA/GL/2020/07 - Guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis	Credit risk - Non-performing and forborne exposures Template 1: Information on loans and advances subject to legislative and non-legislative moratoria Template 2: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria Template 3: Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis
EBA/GL/2020/12 - Guidelines amending Guidelines EBA/GL/2018/01 on uniform disclosures under Article 473a of Regulation (EU) No 575/2013 (CRR) on the transitional period for mitigating the impact of the introduction of IFRS 9 on own funds to ensure compliance with the CRR 'quick fix' in response to the COVID-19 pandemic	Own Funds - Template IFRS9-FL - Comparison of institutions' Own Funds and capital and Leverage Ratios with and without the application of transitional arrangements for IFRS9 or analogous ECLs

Regulatory framework and key metrics

Cross reference to the EDTF recommendations

The table below refers to the document “Enhancing the risk disclosures of banks” published in October 2012 by the Enhanced Disclosure Task Force (“EDTF”), established by the Financial Stability Board (FSB).

This document contains 32 recommendations aiming at improving disclosure transparency for those risk profiles investors envisaged the need of more clear and complete information.

EDTF RECOMMENDATION		REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)		SECTION/PARAGRAPH/TEMPLATE	
General recommendations					
1.Disclosure - Indexing of risk information	P3	Index	The present disclosure represents the document where all related risk information is reported including reference to other report or means of disclosures		
2.Disclosure - Risk terminology & measures	P3	Glossary	A Glossary chapter is included at the end of this document. Specific parameters and definitions are found in the single risks' sections		
3.Top and emerging risks	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.6 Other risks - Top and emerging risks		
4.New key regulatory ratio	P3	Leverage	Quantitative information (Templates EU LR1, EU LR2 and EU LR3)		
		Liquidity risk	Liquidity Coverage Ratio Net Stable Funding Ratio		
		Own Funds	Total Loss Absorbing Capacity		
Risk governance & risk management strategies/business model					
5.Risk management organization	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Introduction Section 2 - Risks of the prudential consolidated perimeter: 2.1 Credit risk Qualitative information: 1. General aspects 2. Credit risk management policies 2.2 Market risks 2.4 Liquidity risk 2.5 Operational risks - A. General aspects, operational processes and methods for measuring operational risk		
6.Risk management Risk culture	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Introduction - Risk Culture in UniCredit group		
7.Risk management and business model	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Introduction Section 2 - Risks of the prudential consolidated perimeter - Section 2.6 Other risks - Other risks included in Economic Capital (Business, real estate, financial investment); Reputational risk		
		Notes to the consolidated accounts Part L - Segment Reporting	Section A. Primary segment - Template A.2 - Breakdown by business segment: balance sheet amounts and RWA		
		P3	Own Funds requirements and risk weighted exposure amounts	Template Risk Weighted Exposure Amounts segmentation	
8.Stress testing disclosures	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter: 2.1 Credit risk - Qualitative information 2.2 Market risks 2.4 Liquidity risk 2.5 Operational risks		
	P3	Credit risk	Counterparty risk exposure		
Capital adequacy and risk-weighted assets					
9.Capital surcharges & buffers	P3	Own Funds requirements and risk weighted exposure amounts	Template EU OV1 – Overview of risk weighted exposure amounts		
10.Regulatory capital - summary and reconciliation	P3	Own Funds	Templates: EU CC2 - Reconciliation of regulatory Own Funds to balance sheet in the audited financial statements EU CC1 - Composition of regulatory Own Funds		

Regulatory framework and key metrics

continued: Cross reference to the EDTF recommendations

EDTF RECOMMENDATION	REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)		SECTION/PARAGRAPH/TEMPLATE
11.Regulatory capital - changes over time	P3	Own Funds	Template Flow Statement for Own Funds
12.Capital planning - targeted level of capital	AR	Notes to the consolidated accounts Part F - Consolidated shareholders' equity	Section 1 - Consolidated Shareholders' Equity
		Consolidated report on operations	Group results - Capital and value management - Capital strengthening
13.RWEAs and business activities	P3	Own Funds requirements and risk weighted exposure amounts	Template Risk Weighted Exposure Amounts segmentation
14.RWEA calculation method and models	P3	Own Funds requirements and risk weighted exposure amounts	Template EU OV1 – Overview of risk weighted exposure amounts
		Credit risk	Use of the IRB approach
		Market risk	Exposure and use of internal models
	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter: 2.2 Market risks 2.5 Operational risks - A. General aspects, operational processes and methods for measuring operational risk
15.RWEA - IRB RWEAs by internal rating grade	P3	Credit risk	Use of the IRB approach - Rating Group Master Scale Template
16.RWEA - Changes overtime	P3	Own Funds requirements and risk weighted exposure amounts	Templates: EU OV1 - Overview of risk weighted exposure amounts Yearly changes in Risk Weighted Exposure Amounts - business segment
17.RWEA - Backtesting	P3	Credit risk	Use of the IRB approach: Expected loss versus actual loss comparison Template EU CR9 - IRB approach - Back-testing of PD per exposure class (fixed PD scale)
Liquidity			
18.Liquidity	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.4 Liquidity risk
	P3	Liquidity risk	Liquidity Buffer and Funding Strategies
		Scope of application	Substantial or legal impediments, current or foreseeable, that hinder the rapid transfer of capital resources or funds within the Group
19.Funding - Asset encumbrance	P3	Liquidity risk	Encumbered and unencumbered assets
Funding			
20.Funding - Maturity Analysis	P3	Market risk	Exposures to interest rate risk on positions not held in the trading book
	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.4 Liquidity risk - Time breakdown by contractual residual maturity of financial assets and liabilities template
21.Funding - Funding strategy	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.4 Liquidity risk
	P3	Liquidity risk	Liquidity Buffer and Funding Strategies
Market risk			
22.Market risk - linkages with positions included in the market risk disclosures	P3	Market risk	Exposure and use of internal models: Risk measures Template Link between market risk metrics and balance sheet items
23.Market risk - other significant risk factors	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.2 Market risks
24.Market risk - Model disclosures			
25.Market risk - techniques to assess the risk of loss beyond reported risk measures and parameters			

Regulatory framework and key metrics

continued: Cross reference to the EDTF recommendations

EDTF RECOMMENDATION	REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)		SECTION/PARAGRAPH/TEMPLATE
Credit risk			
26.Credit risk - Overall credit risk profile and credit risk concentrations	P3	Credit risk	Templates: Breakdown of sovereign debt securities by country and portfolio Breakdown of sovereign loans by country EU CR1-A - Maturity of exposures EU CR2a - Changes in the stock of non-performing loans and advances and related net accumulated recoveries Breakdown of loans and advances other than held for trading to non-financial corporations by NACE codes
27.Credit risk - Impaired/NPLs policies	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.1. Credit risk - Qualitative information: 3. Non-performing credit exposures - 3.1 Management strategies and policies 4. Financial assets subject to commercial renegotiations and forbome exposures
		Notes to the consolidated accounts Part A - Accounting policies	Section A.2 Main items of the accounts - 3 Financial assets at amortised cost
	P3	Credit risk	Template EU CR1 - Performing and non-performing exposures and related provisions
28.Credit risk - Impaired/NPLs opening and closing balances	P3	Credit risk	Template EU CR2a - Changes in the stock of non-performing loans and advances and related net accumulated recoveries
	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter - 2.1. Credit risk - Qualitative information - 4. Commercial renegotiation financial assets and forbome exposures
		Notes to the consolidated accounts Part B - Consolidated balance sheet	Section 4 - Financial assets at amortised cost - Item 40 (Template Financial assets at amortised cost: breakdown by product of loans and advances to banks and Template Financial assets at amortised cost: breakdown by product of loans and advances to customers)
29.Credit risk - Derivatives exposure	P3	Credit risk	Counterparty risk exposure
	AR	Notes to the consolidated accounts Part B - Consolidated balance sheet	Section Other information: Table 6. Financial assets subject to accounting offsetting or under master netting agreements and similar agreements Table 7. Financial liabilities subject to accounting offsetting or under master netting agreements and similar agreements
		Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter: 2.1 Credit risk - Information on structured trading derivatives with customers 2.3 Derivative instruments and hedging policies - paragraphs 2.3.1 Trading financial derivatives, 2.3.2 Hedging policies - Quantitative information and 2.3.3 Other information on derivatives instruments (trading and hedging)
30.Credit risk mitigation	P3	Credit risk	Template EU CR3 – CRM techniques overview: Disclosure of the use of credit risk mitigation techniques Counterparty risk exposure

Regulatory framework and key metrics

continued: Cross reference to the EDTF recommendations

EDTF RECOMMENDATION	REFERENCE TO THE PRESENT DOCUMENT (P3)/ANNUAL REPORTS AND ACCOUNTS AS AT 31.12.2022 (AR)		SECTION/PARAGRAPH/TEMPLATE
Other risks			
31.Other risks - Risk types and risk management	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Introduction Section 2 - Risks of the prudential consolidated perimeter: 2.5 Operational risks - A. General aspects, operational processes and methods for measuring operational risk 2.6 Other risks
32.Other risks - Publicly known risk events	AR	Notes to the consolidated accounts Part E - Information on risks and related hedging policies	Section 2 - Risks of the prudential consolidated perimeter: 2.5 Operational risks - B. Legal Risks, C. Risks arising from employment law cases and D. Risks arising from tax disputes 2.6 Other risks - Top and emerging risks

Scope of application

Name of the bank to which the disclosure requirements apply

UniCredit S.p.A., parent company of "UniCredit" banking group registered in the Register of Banking Groups.

Outline of the differences in the basis of consolidation for accounting and prudential purposes

In this section of the disclosure the prudential scope of consolidation of the UniCredit group is reported.

The scope of consolidation is determined according to the prudential regulations and differs from the scope of the Consolidated financial statements, determined under IAS/IFRS, with consequent differences between the financial data disclosed in this document and included in the Consolidated financial statements at the same date.

Such different treatments are disclosed in the Annex 3 - Template "EU LI3 - Outline of the differences in the scopes of consolidation":

- Consolidated entities:
 - banking, financial and instrumental companies directly or indirectly controlled by UniCredit S.p.A. to which the line-by-line consolidation method is applied;
 - banking, financial and instrumental companies in which UniCredit S.p.A. holds, directly or indirectly, a 20% stake or more, when they are jointly controlled with other entities and/or according to agreements signed with them; to these subsidiaries the proportional consolidation method is applied;
 - other banking and financial companies in which UniCredit S.p.A. holds, directly or indirectly, a 20% stake or more or anyway subject to significant influence, to which the equity method is applied;
 - companies, other than banking, financial and instrumental companies, directly or indirectly controlled by UniCredit S.p.A., exclusively or jointly, or subject to significant influence, to which the equity method is applied.
- Entities subject to the treatment for Own funds pursuant to articles 46 and 48 of CRR:
 - companies of the financial sector in which a non-significant/significant shareholding is owned, subject to deduction from Own Funds.

It should be noted that this disclosure, which refers to the consolidated data as at 31 December 2022, excludes (see also Annex 3 - Template "Names of all subsidiaries not included in the basis of consolidation and aggregate amount of their capital deficiencies with respect to any mandatory capital requirements."):

- equity investments that individually hold a total balance sheet assets lower than €1,000, composed by:
 - No.45 subsidiaries (of which No.9 belonging to the Banking Group) and No.1 joint venture;
 - No.4 associate companies;
 - No.137 minority interests included in the "Financial assets mandatorily at fair value" or "Financial assets at fair value through other comprehensive income" portfolios.
- No.119 entities (No.155 as at 31 December 2021) controlled either directly or through consolidated subsidiaries and accounted for at cost that are listed within Equity investments item in Regulatory Balance sheet, of which:
 - No.16 belonging to the Banking Group (No.17 as at 31 December 2021);
 - No.103 not belonging to the Banking Group (No.138 as at 31 December 2021).
- No.19 controlled entities (of which No.1 belonging to the Banking Group) that are not consolidated and not listed within Equity investments item in Regulatory Balance sheet.

In the "Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation" to the present document are reported the following information:

- basis of consolidation for accounting and prudential purposes as at 31 December 2022;
- names of all subsidiaries not included in the basis of consolidation and aggregate amount of their capital deficiencies with respect to any mandatory capital requirements.

Scope of application

Application of disclosure requirements on a consolidated basis and on significant subsidiaries

In accordance with the Article 13 of the Regulation (EU) 575/2013 ("CRR") and subsequent amendments, UniCredit group, as an "EU parent institutions", complies with the obligations laid down in Part Eight based on its consolidated situation.

Moreover, the large subsidiaries and those of material significance for their local market disclosing the information specified in Articles 437, 438, 440, 442, 450, 451, 451a and 453 (on individual or sub-consolidated basis), are the following:

- Disclosure on individual basis:
 - UniCredit Bank AG.
 - UniCredit Banka Slovenija DD.
- Disclosure on sub-consolidated basis:
 - UniCredit Bank Austria AG;
 - Zagrebačka Banka DD;
 - UniCredit Bulbank AD;
 - UniCredit Bank Czech Republic and Slovakia, a.s.;
 - UniCredit Bank Hungary Zrt;
 - UniCredit Bank S.A. (Romania).

Scope of application

Template EU LI1 - Differences between the accounting and prudential scope of consolidation and mapping of financial statements categories with regulatory risk categories

(€ million)

DESCRIPTION		a		b	c	d	e	f	g	
		CARRYING VALUES AS REPORTED IN PUBLISHED FINANCIAL STATEMENTS (*)		CARRYING VALUES UNDER SCOPE OF PRUDENTIAL CONSOLIDATION (*)	CARRYING VALUES OF ITEMS (**)					NOT SUBJECT TO OWN FUNDS REQUIREMENTS OR SUBJECT TO DEDUCTION FROM OWN FUNDS (****)
					SUBJECT TO THE CREDIT RISK FRAMEWORK	SUBJECT TO THE CCR FRAMEWORK	SUBJECT TO THE SECURITISATION FRAMEWORK	SUBJECT TO THE MARKET RISK FRAMEWORK (***)		
Breakdown by asset classes according to the balance sheet in the published financial statements										
1	Cash and cash balances	111,776	111,770	111,770	-	-	-	-		
2	Financial assets at fair value through profit or loss:	72,959	72,941	8,344	41,764	66	64,443	88		
3	a) Financial assets held for trading	64,443	64,443	-	41,681	-	64,443	-		
4	a.1) Reverse Repos	1,167	1,167	-	1,167	-	1,167	-		
5	a.2) Derivatives instruments	39,643	39,643	-	39,643	-	39,643	-		
6	b) Financial assets designated at fair value	323	323	323	45	-	-	-		
7	c) Other financial assets mandatorily at fair value	8,193	8,175	8,021	38	66	-	88		
8	Financial assets at fair value through other comprehensive income	54,887	54,853	53,548	8,277	1,305	-	-		
9	Financial assets at amortised cost:	582,661	583,086	512,320	55,974	31,106	-	152		
10	a) Loans and advances to banks	57,796	57,796	41,626	16,170	-	-	-		
11	a.1) Reverse Repos	16,170	16,170	-	16,170	-	-	-		
12	b) Loans and advances to customers	524,865	525,291	470,694	23,340	31,106	-	152		
13	b.1) Reverse Repos	23,340	23,340	-	23,340	-	-	-		
14	Hedging derivatives	2,851	2,851	-	2,851	-	-	-		
15	Changes in fair value of portfolio hedged items (+/-)	(6,576)	(6,576)	-	-	-	-	(6,576)		
16	Equity investments	3,540	3,919	3,802	-	-	-	117		
17	Insurance reserves charged to reinsurers	-	-	-	-	-	-	-		
18	Property, plant and equipment	9,164	8,391	8,391	-	-	-	-		
19	Intangible assets	2,350	2,349	661	-	-	-	1,632		
20	of which: goodwill	-	-	-	-	-	-	-		
21	Tax assets:	13,120	13,116	10,038	-	-	-	2,881		
22	a) current	1,272	1,270	1,270	-	-	-	-		
23	b) deferred	11,848	11,846	8,768	-	-	-	2,881		
24	Non-current assets and disposal groups classified as held for sale	1,229	1,189	1,189	-	-	-	-		
25	Other assets	9,811	9,948	9,766	-	-	-	181		
26	Total assets	857,773	857,837	719,830	108,865	32,476	64,443	(1,525)		
Breakdown by liability classes according to the balance sheet in the published financial statements										
1	Financial liabilities at amortised cost:	727,473	727,651	-	32,402	-	-	695,250		
2	a) Deposits from banks	131,341	131,321	-	14,125	-	-	117,196		
3	a.1) Repos	14,125	14,125	-	14,125	-	-	-		
4	b) Deposits from customers	511,925	512,123	-	18,276	-	-	493,847		
5	b.1) Repos	18,276	18,276	-	18,276	-	-	-		
6	c) Debt securities in issue	84,207	84,207	-	-	-	-	84,207		
7	Financial liabilities held for trading	51,234	51,235	-	40,402	-	51,235	-		
8	a) Derivatives instruments	40,341	40,342	-	40,342	-	40,342	-		
9	b) Repos	60	60	-	60	-	60	-		
10	Financial liabilities designated at fair value	10,192	10,192	-	-	-	-	10,192		
11	Hedging derivatives	3,403	3,403	-	3,403	-	-	-		
12	Value adjustment of hedged financial liabilities (+/-)	(21,504)	(21,504)	-	-	-	-	(21,504)		
13	Tax liabilities:	1,681	1,640	1,260	-	-	-	1,378		
14	a) current	1,140	1,139	-	-	-	-	1,139		
15	b) deferred	540	501	1,260	-	-	-	240		
16	Liabilities associated with assets classified as held for sale	579	533	-	-	-	-	533		
17	Other liabilities	13,036	13,054	-	-	-	-	13,054		
18	Provision for employee severance pay	368	368	-	-	-	-	368		
19	Provisions for risks and charges	7,814	7,760	-	-	-	-	7,760		
20	Total liabilities	794,276	794,333	1,260	76,206	-	51,235	707,032		

Notes:

(*)

The differences between the amounts under the columns a) and b) substantially depend on the composition of IAS/IFRS versus regulatory perimeters (ref. Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation).

Scope of application

Shareholder's equity items are not reported among the balance sheet liabilities of this template as they are already disclosed in template EU CC2 - Reconciliation of regulatory Own Funds to balance sheet in the audited financial statements, of the chapter Own Funds of the present document.

(**)

The allocation of the amount in column b) across columns from c) to g) is based on the following approach:

- for balance sheet assets' items such amount depends on the risk categories, they may be subject to, including also those items which do not involve capital requirement;
- for balance sheet liabilities' items such amount includes the amount of liabilities relevant for the calculation of risk-weighted assets or for offsetting balance sheet assets' items;
- The sum of amounts disclosed in columns from c) to g) may be different than the total amount in column b) for the following reasons:
 - some items may be subject to capital requirements for more than one risk under the regulatory framework (e.g. derivative instruments and reverse repos classified in item "Financial assets held for trading");
 - with reference to tax assets and liabilities the amounts disclosed in columns c) and g), include the effects arising from IFRS9 transitional adjustments and are calculated net of deferred tax liabilities according to CRR netting rules, which are different from the accounting netting rules reflected into the carrying values under column b).

(***)

The amount disclosed in column f) does not correspond to the amount under column "VaR perimeter" of the template "Link between market risk metrics and Balance Sheet items" under the chapter Market risk of the present document, as carrying values reported in such template are referred to the accounting (IFRS) perimeter.

(****)

The amount of Total Assets disclosed under the column g) equal to -€1,525 million includes:

- the item "Changes in fair value of portfolio hedged items" equal to -€6,576 million not subject to capital requirements;
- for items under the balance sheet assets side, the ones subject to deduction from Own Funds for a total amount of €5,051 million, that is different than the sum of items 8, 10, 15, EU-20a, 22, 55, of template EU CC1 - "Composition of regulatory Own Funds", under the section "Own Funds" of the present document, for an amount equal to €57 million mainly due to the deduction related to the insufficient coverage for non-performing exposures according to article 36(m) partially offset by the positive effect arising from the IFRS9 transitional adjustment related to the item 10 and item 22, reported in item 27a - "Other regulatory adjustments";
- for item "Tax Assets" equal to €2,881 million, the positive effect arising from IFRS9 Transitional adjustment mainly related to the sterilization (equal to €178 million) related to the exclusion of the deferred tax assets that rely on future profitability and arise from temporary differences after the regulatory netting generated by the application of the IFRS9 accounting principle.
- the amount differs from the sum of items 10 and 22 of template EU CC1 - "Composition of regulatory Own Funds", for an amount equal to €5 million related to the positive effect arising from the IFRS9 transitional adjustment and reported in item 27a - "Other regulatory adjustments";
- for item "Intangible Assets" equal to €1,632 million, the deduction for software assets in line with article 36(1) (b) of CRR and it is represented net of deferred tax liabilities (equal to €63 million) for reducing the amount of deduction;
- for items under the balance sheet liabilities side, (i) the liabilities which are not included in the regulatory framework for risk-weighted assets (for a total amount equal to €707,032 million), (ii) the amount of deferred tax liabilities (equal to €240 million) which includes the effects arising from IFRS9 transitional adjustments that are used for reducing the amount deferred tax assets which rely on future profitability and do not arise from temporary differences which are subject to deduction from Own Funds.

Scope of application

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

(€ million)

DESCRIPTION	a	ITEMS SUBJECT TO			
		CREDIT RISK FRAMEWORK	SECURITISATION FRAMEWORK	CCR FRAMEWORK	MARKET RISK FRAMEWORK
TOTAL (*)					
1 Assets carrying value amount under the scope of prudential consolidation (as per template LI1) (**) 861,171	861,171	719,830	32,476	108,865	64,443
2 Liabilities carrying value amount under the scope of prudential consolidation (as per template LI1) (***) 77,466	77,466	1,260	-	76,206	51,235
3 Total net amount under the scope of prudential consolidation (****) 861,171	861,171	719,830	32,476	108,865	64,443
4 Off-balance-sheet amounts 365,593	365,593	365,593	-	-	-
5 Differences in valuations (291)	(291)	(291)	-	-	-
6 Differences due to different netting rules, other than those already included in row 2 (A) (64,129)	(64,129)	-	-	(64,129)	-
7 Differences due to consideration of provisions (B) 9,621	9,621	9,621	-	-	-
8 Differences due to the use of credit risk mitigation techniques (CRMs) (C) (2,940)	(2,940)	(2,940)	-	-	-
9 Differences due to credit conversion factors (261,316)	(261,316)	(261,316)	-	-	-
10 Differences due to Securitisation with risk transfer (D) 2,309	2,309	-	2,309	-	-
11 Other differences (E) (26,796)	(26,796)	(25,375)	(1,422)	-	-
12 Exposure amounts considered for regulatory purposes (****) 883,223	883,223	805,122	33,364	44,737	371

EU LIA - Explanations of differences between accounting and regulatory exposure amounts (notes referred to the template above)

This template provides the reconciliation between (i) the carrying value amount under the scope of regulatory consolidation (as reported in template EU LI1), and (ii) the exposure amount considered for regulatory purposes (i.e. EAD) for the exposures subject to credit risk, securitisation framework, CCR and market risk.

(*)

With reference to the column a), the amounts correspond to the carrying value under the regulatory scope of consolidation calculated as sum of column from b) to d) of this template, while amount reported in column e) related to carrying values subject to the market risk framework is not included.

(**)

With reference to the row 1, the amounts disclosed in columns from b) to e) correspond to the carrying value under the scope of regulatory consolidation of the balance sheet assets, as reported in columns from c) to f) of template EU LI1 in the present section.

(***)

With reference to the row 2, the amounts disclosed under the columns from b) to e) correspond to the carrying value under the scope of regulatory consolidation of the balance sheet liabilities reported respectively under the columns from c) to f) of template EU LI1 in the present section.

(****)

The amount disclosed in row 3 coincides with the row 1 since any applicable on-balance sheet netting of assets and liabilities are already reflected in the amounts reported in row 1.

(*****)

The amount disclosed in row 12, column e) refers only to the "Positions subject to capital charge" for market risk position under the Standardized Approach. It is worth mentioning that it does not include the exposures subject to market risk under Internal Model for which EAD is not strictly applicable.

Scope of application

A.

The negative change related to the row **"Differences due to different netting rules, other than those already included in row 2"** mainly refers to the following effects recognized in the calculation of the exposure amount for derivatives and SFTs considered for regulatory purposes (i.e. EAD) according to CRR:

- recognition of master netting agreements;
- offsetting with collateral on OTC derivatives;
- inclusion of derivatives with negative fair value booked among balance sheet liabilities in the perimeter for counterparty risk;
- recognition of collateral under the financial collateral comprehensive method for SFT;
- use of EEPE models and SA-CCR approach for EAD calculation.

B.

The positive change related to the row **"Differences due to consideration of provisions"** refers to the recognition of credit risk adjustments (i.e. LLP) in the calculation of EAD for exposures under IRB methods.

C.

The negative change related to the row **"Differences due to the use of credit risk mitigation techniques (CRMs)"** refers to the recognition Credit risk mitigation techniques affecting the exposure amount.

D.

The positive change related to the row **"Differences due to Securitisation with risk transfer"** mainly refers to:

- securitisation positions where Group acts as a sponsor:

Adopting the line-by-line consolidation method, the following items are recognised in the consolidated accounts:

- assets held by consolidated vehicles in place of the loans provided to them or the liabilities subscribed by Group companies, now eliminated on consolidation;
- loans to purchase companies for non-consolidated subordinated vehicles.

With respect to non-consolidated Purchase companies, the Consolidated financial statements, while not including the assets recorded in their books, show the maximum amount of the risk borne by the Group which, with respect to purchase companies wholly financed by the consolidated conduits, corresponds to the value of the assets of these purchase companies.

At regulatory point of view the risk is measured on liquidity facility provided to each purchase companies within the ABCP Conduit Program (for more details please refer to the chapter "Securitisation Exposures" of the present document);

- credit risk mitigation techniques affecting the exposure amount.

E.

The negative change related to the row **"Other differences"** mainly refers to differences related to the credit risk framework and securitization framework:

- collateral posted for OTC derivatives with negative fair value subject to master netting agreement, which amount is recognized in the EAD calculation for counterparty risk (ref. note A);
- assets posted as collateral to a CCP that are bankruptcy remote in the event that the CCP becomes insolvent (Segregated initial margin), which exposure value is zero according to CRR article 306;
- EAD related to "Default Fund" and "Other non credit risk obligation" not required for regulatory purposes;
- Unsettled "Reverse Repurchase transactions".

Scope of application

Template EU PV1 - Prudent valuation adjustments (PVA)

(€ million)

CATEGORY LEVEL AVA		a	b	c	d	e	EU e1	EU e2	f	g	h
		RISK CATEGORY					CATEGORY LEVEL AVA - VALUATION UNCERTAINTY		TOTAL CATEGORY LEVEL POST-DIVERSIFICATION		
		EQUITY	INTEREST RATES	FOREIGN EXCHANGE	CREDIT	COMMODITIES	UNEARNED CREDIT SPREADS AVA	INVESTMENT AND FUNDING COSTS AVA		OF WHICH: TOTAL CORE APPROACH IN THE TRADING BOOK	OF WHICH: TOTAL CORE APPROACH IN THE BANKING BOOK
1	Market price uncertainty	90	58	2	28	13	3	1	98	34	65
2	Set not applicable in the EU										
3	Close-out cost	56	43	10	32	1	15	11	84	57	28
4	Concentrated positions	17	1	-	30	-			47	0	47
5	Early termination	-	-	-	-	-			-	-	-
6	Model risk	19	9	-	14	32	8	5	44	19	25
7	Operational risk	-	-	-	-	-			-	-	-
8	Set not applicable in the EU										
9	Set not applicable in the EU										
10	Future administrative costs	1	14	0	2	0			17	15	3
11	Set not applicable in the EU										
12	Total Additional Valuation Adjustments (AVAs) as at 31.12.2022								291	123	167
	Total Additional Valuation Adjustments (AVAs) as at 31.12.2021								246	137	109

The Additional Valuation Adjustments (AVA) have increased with respect to end of 2021 as driven by a general widening of market uncertainties, especially in relation to the macroeconomic conditions.

Own Funds

Starting from 1 January 2014, the calculation of capital requirements takes into account the regulatory framework known as “Basel 3”, adopted as a result of the Regulation (EU) 575/2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation - “CRR”), updated in the Regulation (EU) 876/2019 (“CRR2”) and subsequently amended in the Regulation (EU) 873/2020, and in the Directive (EU) 2013/36 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (Capital Requirements Directive IV - “CRDIV”), also according to their adoption by Italian Laws.

Such regulation foresees the following breakdown of Own Funds:

- Tier 1 Capital (T1), made by:
 - Common Equity Tier 1 Capital (CET1) and
 - Additional Tier 1 Capital (AT1);
- Tier 2 Capital (T2);
- The sum of Tier 1 Capital and Tier 2 Capital generates the Total Own Funds (Total Capital).

It is worth mentioning that in the update to the Regulation (EU) 575/2013 transposed in the Regulation (EU) 876/2019 (CRR2), the main impacts on Group Own Funds calculation, applicable starting from 30 June 2019, derived from the modification to the computability rules of the Additional Tier 1 and Tier 2 instruments. In particular considering the new conditions provisioned by the CRR2 articles 52 and 63, an additional grandfathering framework has been introduced to the instruments issued before 27 June 2019 and valid till 28 June 2025 for those instruments that do not comply with the new computability conditions presented (ref. CRR2 article 494b).

Capital requirements⁴ and buffers for UniCredit group

The minimum capital requirements applicable to the Group as of 31 December 2022, in coherence with CRR article 92, are the following (Pillar 1):

- CET1: **4.50%**
- T1: **6.00%**
- Total Capital: **8.00%**

In addition to such requirements, for 2022 the Group shall also meet the following additional requirements:

- **1.75%**, as Pillar 2 Requirements in coherence with SREP results;
- **2.50%**, as Capital Conservation buffer (CCB) according to CRDIV article 129;
- **1.00%**, as Global Systemically Important Institutions (“G-SII”) buffer⁵;
- **0.13%**, as Countercyclical Capital buffer⁶ (CCyB) according to the CRDIV article 130, to be calculated on a quarterly basis.

Moreover, the article 104a.4 of CRDV allows banks to partially use capital instruments that do not qualify as CET1 capital (e.g. Additional Tier 1 or Tier 2 instruments) to meet the Pillar 2 Requirements (P2R). As consequence, in line with Pillar 2 Requirements, required in coherence with 2021 SREP results and equal to 1.75%, UniCredit group shall meet:

- at least the 0.98% of such requirement through Common Equity Tier 1 Capital in the assumption, fulfilled as of 31 December 2022, that the amount of AT1 Capital exceeds the regulatory minimum of 1.50% (i.e. being 1.97%);
- at least the 1.31% of such requirement through Tier 1 capital in the assumption, fulfilled as of 31 December 2022, that the amount of T2 Capital exceeds the regulatory minimum of 2.00% (i.e. being 2.77%).

Therefore, as at 31 December 2022, the Group shall meet the following overall capital requirements:

- CET1: **9.12%**
- T1: **10.95%**
- Total Capital: **13.38%**

⁴ CET1 Systemic risk buffer (aimed at preventing and mitigating long-term, non-cyclical, systemic or macro-prudential risks that are not provided for by the CRR) is not applicable as at 31 December 2022 in Italy.

⁵ It should be noted that UniCredit group was identified by the Banca d'Italia as an O-SII authorised to operate in Italy, and it has to maintain a CET1 capital buffer; such level is equal to 1.00% in 2022. Nevertheless, it is worth mentioning that according to the CRDIV article 131.14, the higher of the G-SII and the O-SII buffer will apply; hence, UniCredit group is subject to the application of 1.00% G-SII buffer for 2022.

⁶ Amount rounded to two decimal numbers. With reference to 31 December 2022: (I) countercyclical capital rates have generally been set at 0%, except for the following countries: Bulgaria (1.00%); Czech Republic (1.50%); Denmark (2.00%); Estonia (1.00%); Hong Kong (1.00%); Iceland (2.00%); Luxembourg (0.50%); Norway (2.00%); Romania (0.50%); Slovakia (1.00%); Sweden (1.00%); United Kingdom (1.00%) (II) with reference to the exposures towards Italian counterparties, Banca d'Italia has set the rate equal to 0%.

Own Funds

Here below a scheme of the UniCredit group capital requirements and buffers which also provides evidence of the "Total SREP Capital Requirement" (TSCR) and the "Overall Capital Requirement" (OCR) related to the outcome of the SREP process held in 2021 and applicable for 2022.

Capital requirements and buffers for UniCredit group

REQUIREMENT	CET1	T1	TOTAL CAPITAL
A) Pillar 1 requirements	4.50%	6.00%	8.00%
B) Pillar 2 requirements	0.98%	1.31%	1.75%
C) TSCR (A+B)	5.48%	7.31%	9.75%
D) Combined capital buffer requirement:	3.63%	3.63%	3.63%
of which:			
1. Capital Conservation Buffer (CCB)	2.50%	2.50%	2.50%
2. Global Systemically Important Institution buffer (G-SII)	1.00%	1.00%	1.00%
3. Institution-specific Countercyclical Capital buffer (CCyB)	0.13%	0.13%	0.13%
E) OCR (C+D)	9.12%	10.95%	13.38%

The following table shows UniCredit group transitional⁷ capital ratios as at 31 December 2022 compared with previous periods.

Group transitional capital ratios

GROUP TRANSITIONAL CAPITAL RATIOS	31.12.2022			30.09.2022	30.06.2022	31.03.2022	31.12.2021
	RATIO	DELTA Q/Q	DELTA Y/Y				
CET1 Capital ratio	16.68%	0.63%	0.86%	16.04%	16.39%	14.62%	15.82%
Tier 1 Capital ratio	18.65%	0.70%	0.70%	17.94%	18.31%	16.47%	17.94%
Total Capital ratio	21.42%	0.66%	1.28%	20.76%	21.09%	18.99%	20.14%

Transitional capital ratios of UniCredit S.p.A.

The following table shows the transitional⁸ capital ratios of UniCredit S.p.A. as at 31 December 2022 compared with previous periods.

Transitional capital ratios of UniCredit S.p.A.

UNICREDIT SPA - TRANSITIONAL CAPITAL RATIOS	31.12.2022			30.09.2022	30.06.2022	31.03.2022	31.12.2021
	RATIO	DELTA Q/Q	DELTA Y/Y				
CET1 Capital ratio	25.70%	0.31%	-0.06%	25.39%	25.83%	24.47%	25.76%
Tier 1 Capital ratio	29.21%	0.39%	-0.13%	28.81%	29.21%	27.72%	29.34%
Total Capital ratio	33.81%	0.28%	0.63%	33.53%	33.77%	31.65%	33.18%

Consolidated profit/loss of the period eligible for Own Funds purposes

- The Group consolidated net profit as at 31 December 2022 is equal to €6,458 million.
- The dividend policy communicated with the plan "UniCredit Unlocked" envisages, from 2022, a 35% cash pay-out ratio applied to the definition of Net Profit introduced with the plan. In this respect, Net Profit means Stated Net Profit (i.e. accounting net profit) adjusted for AT1, Cashes coupon and impacts from DTAs from tax loss carry forward sustainability test.
- As per first quarter 2022 decision, considering the extraordinary nature of the geopolitical events, the 35% cash pay-out ratio is calculated on the Net Profit excluding Russia segment contribution. Being the latter equal to €5,447 million for 2022, the 35% corresponds to cash dividends of €1,907 million. In addition, €25 million has been destined to social, cultural and charity initiatives.
- Thus, considering the 2022 accrued Group foreseeable charges (€1,932 million, including also the social, cultural and charity initiatives) to reduce the consolidated net profit (€6,458 million), a positive amount for €4,526 million is reported in the consolidated Own Funds.

Transitional consolidated Own Funds

Regarding the transitional adjustments as at 31 December 2022, these are:

- grandfathering of Additional Tier 1 and Tier 2 instruments: the transitional adjustment applicable till 2025 according to the CRR2 article 494b, applicable to the Additional T1 and T2 instruments issued before 27 June 2019 that do not comply with the CRR2 articles 52 and 63;
- IFRS9 transitional arrangements: starting from June 2020, UniCredit group has received from the competent Authority the approval to apply the transitional arrangements on IFRS9 as per CRR article 473a. The methodological approach is reported in the following paragraph.

⁷ The transitional adjustments as at 31 December 2022 are (i) grandfathering of Additional Tier 1 and Tier 2 instruments and (ii) IFRS9 transitional arrangements starting from 30 June 2020.

⁸ The transitional adjustments as at 31 December 2022 refer to the grandfathering of Additional Tier 1 and Tier 2 instruments.

Own Funds

Transitional arrangements related to the application of IFRS9

Starting from 1 January 2018, the IFRS9 accounting standard entered into force, envisaging a new framework for provisioning computation based on expected credit losses rather than on incurred losses. As of first-time adoption date, UniCredit group decided not to apply for the transitional arrangements provisioned in CRR for IFRS9.

Being UniCredit group still in the position to benefit of the IFRS9 transitional arrangements from the possibility allowed by the Regulation to reverse once during the transitional period the choice made at the inception, and also in light of the ECB Recommendation issued on 20 March 2020 for institutions that had not already implemented the transitional IFRS9 arrangements, UniCredit group asked to the Competent Authority the approval to apply the transitional adjustment according to the revised framework introduced by the amended CRR2 both for the static component (i.e. first time adoption effects accounted as of 1 January 2018) and for the dynamic component (i.e. considering separately (i) the increase of LLP between 1 January 2020 and 1 January 2018 and (ii) the increase of LLP accounted after 1 January 2020). The Competent Authority granted the permission to fully apply the transitional arrangements set out in article 473a of CRR starting from the second quarter 2020.

From a methodological standpoint, it is worth mentioning that the IFRS9 transitional adjustment represents a “one-off” positive adjustment to be recognised in the calculation of CET1 capital, which does not originate indirect impacts on the calculation of other CET1 elements apart from the amount of DTA arising from temporary difference to be deducted. In this respect, considering article 473a(7) of the amended CRR2, the portion of DTA arising from temporary differences which is related to the transitional amount added back to CET1 shall be excluded from the amount of DTA to be deducted from CET1 following the regulatory netting.

Specifically, with reference to each component of the adjustment, it is worth mentioning the following interpretations of the regulation:

- the static component of the adjustment to be considered (ref. to elements A2,SA and A2,IRB in Art.473a) is the entire amount of LLPs, both referred to performing and non-performing assets, considering separately Standard (STD) and IRB exposures, booked in IFRS9 First Time Adoption. According to article 473a of the amended CRR2, the transitional adjustment corresponding to the static component is calculated by applying the following percentage factors: 70% for 2020, 50% for 2021, 25% for 2022, 0% starting from 2023;
- the dynamic component of the adjustment includes only LLPs referred to performing assets (i.e. sum of LLPs under IFRS9 Stage1 and Stage2) according to article 473a (3). Furthermore, the dynamic component is composed of the following two elements:
 - **element 1:** the increase of LLP between 1 January 2020 and 1 January 2018; in case of IRB exposures the amount of LLPs is reduced by the regulatory expected losses (EL) at both dates. Such element 1 is subject to the following transitional percentages (i.e. the same applied to the static component): 70% for 2020, 50% for 2021, 25% for 2022, 0% starting from 2023;
 - **element 2:** the increase of LLP accounted after 1 January 2020. In case of IRB exposures, the amount of LLPs is reduced by the regulatory expected losses (EL) at both 1 January 2020 and subsequent reference dates. Such element 2 is subject to the following transitional percentages: 100% for 2020 and 2021, 75% for 2022, 50% for 2023, 25% for 2024, 0% starting from 2025;
- lastly, according to 473a(7) of the amended CRR2, the transitional adjustment applied to CET1 and related to STD exposures (i.e. ABSA) has to be reflected in RWEA when calculating the transitional RWEA, in order to consider the increase in the exposure value determined in accordance with CRR article 111(1) due to the minor amount of LLPs reducing CET1.

As at fourth quarter 2022, the transitional arrangements related to the application of IFRS9 generate adjustments: (i) positive on CET1 capital for approximately €2.1 billion (68 basis points); (ii) negative on T2 capital for approximately -€446 million (stemming from the updated amount of the excess of LLP on IRB portfolio computable in T2 capital).

Prudential framework for software assets treatment

As part of the Risk Reduction Measures package, article 36(1)(b) of the CRR has been amended, introducing an exemption from the deduction of software assets from CET1 capital, primarily aimed to encourage investments in software in the context of the evolution of the banking sector in a more digital environment, applicable from fourth quarter 2020 (for details refer to Pillar III as at 31 December 2021).

Countercyclical Capital buffer (CCyB)

According to the CRDIV article 130, the Countercyclical Capital buffer (CCyB) shall be calculated on a quarterly basis. With reference to the fourth quarter 2022, the countercyclical rates have been changed versus third quarter 2022 with reference to the following countries: Bulgaria (from 0.50% to 1.00%), Czech Republic (from 1.00% to 1.50%), Denmark (from 1.00% to 2.00%), Estonia (from 0.00% to 1.00%), Norway (from 1.50% to 2.00%), Romania (from 0.00% to 0.50%), United Kingdom (from 0.00% to 1.00%); as well, as of the same date, UniCredit group countercyclical capital reserve is equal to 0.13%, increased compared with third quarter 2022 (equal to 0.08%), mainly due to the changes in countercyclical rates in Bulgaria, Czech Republic and Romania, where the UniCredit group holds subsidiaries.

Own Funds

Deductions connected to investments in financial sector entities and deferred tax assets that rely on future profitability and arise from temporary differences

With reference to 31 December 2022, UniCredit does not exceed the thresholds related to significant investments in CET1 instruments issued by financial sector entities and deferred tax assets that rely on future profitability and arise from temporary differences, not generating a capital deduction from Common Equity Tier 1 Capital.

In particular, the deferred tax assets that rely on future profitability and arise from temporary differences summed up to the direct, indirect and synthetic holdings detained by UniCredit in financial sector entities in which UniCredit has a significant investment do not exceed the threshold of 17.65% of the residual amount of Common Equity Tier 1 items after applying the adjustments and deductions in CRR articles 32 to 36 in full.

It is worth mentioning that the amount above mentioned does not consider the effects related to the transitional adjustments referred to IFRS9.

Atlante Fund and Italian Recovery Fund (ex Atlante Fund II)

As at 31 December 2022, the investment held by UniCredit in the quotes of Atlante Fund and Italian Recovery Fund (ex Atlante Fund II), for approximately €290 million, is primarily referred to investments in securitisation notes related to non-performing loans: the regulatory treatment of the Fund's quotes recognised in the UniCredit financial statements foresees the calculation of RWEA on the basis of each underlying assets of CIUs, in accordance with CRR article 152(2) and (4b).

With reference to the residual commitments, for €8,5 million, the regulatory treatment foresees the application of a credit conversion factor equal to 100% ("full risk" according to the Annex I of the CRR) and for the calculation of the related risk-weighted exposures, it is applied the CRR article 152(9).

Financial conglomerate

As at 31 December 2022 reporting date, the UniCredit group is exempted from the supplementary supervision, although it is recognised as a financial conglomerate by the Joint Committee (ref. communication JC 2022 71).

1. Common Equity Tier 1 Capital - CET1

Common Equity Tier 1 Capital mainly includes the following elements:

- Main Common Equity Tier 1 Capital items, recognised as Common Equity Tier 1 only where they are available to the institution for unrestricted and immediate use to cover risks or losses as soon as these occur: (I) capital instruments, provided the conditions laid down in CRR article 28 or, where applicable, article 29 are met; (II) share premium accounts related to the instruments referred to in point (I); (III) retained earnings; (IV) accumulated other comprehensive income; (V) other reserves; Common Equity Tier 1 Capital items also include minority interests for the computable amount recognised by the CRR;
- Prudential filters of Common Equity Tier 1 Capital: (I) filter related to increase in equity under the applicable accounting framework that results from securitised assets; (II) filter related to the fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value; (III) filter related to gains or losses on liabilities of the institution that are valued at fair value that result from changes in the own credit standing of the institution; (IV) filter related to all fair value gains and losses arising from the institution's own credit risk related to derivative liabilities; (V) filter related to additional value adjustments (prudent valuation);
- Deductions from Common Equity Tier 1 items: (I) intangible assets; (II) deferred tax assets (DTA) that rely on future profitability and do not arise from temporary differences; (III) negative amounts resulting from the calculation of expected loss amounts when compared with credit risk adjustments (shortfall) for those positions evaluated according to IRB methods; (IV) defined benefit pension fund assets on the balance sheet of the institution; (V) direct, indirect and synthetic holdings by an institution of own Common Equity Tier 1 instruments, including own Common Equity Tier 1 instruments that an institution is to purchase under an actual or contingent obligation by virtue of an existing contractual obligation; (VI) exposures deducted from CET1 as an alternative to the application of 1,250% risk weight; (VII) the applicable amount of direct, indirect and synthetic holdings by the institution of Common Equity Tier 1 instruments of financial sector entities where the institution does not have a significant investment in those entities (deducted for the amount exceeding the thresholds foreseen by the regulation); (VIII) deferred tax assets (DTA) that rely on future profitability and arise from temporary differences, and the applicable amount of direct, indirect and synthetic holdings by the institution of the Common Equity Tier 1 instruments of financial sector entities where the institution has a significant investment in those entities (deducted for the amount exceeding the thresholds foreseen by the regulation); (IX) the applicable amount of insufficient coverage for non-performing exposures.

As at 31 December 2022, CET1 Capital includes ordinary shares issued by UniCredit S.p.A., equal to €20,600 million; such item does not include €609 million related to the ordinary shares underlying the Usufruct contract (Cashes) which are reclassified in Tier 2 Capital starting from 1 January 2022, following the end of the CRR1 grandfathering regime, being Tier 2 compliant according to CRR2 eligibility conditions.

2. Additional Tier 1 Capital - AT1

The AT1 positive elements are represented by the following items: (I) capital instruments, where the conditions laid down in CRR2 article 52 are met; (II) the share premium accounts related to the instruments referred to in point (I); (III) capital instruments for the amount computable in Own funds according to the transitional provisions foreseen by the CRR (grandfathering). Furthermore, the Additional Tier 1 Capital includes also the minority interests for the computable amount not already recognised in the Common Equity Tier 1 Capital.

Own Funds

3. Tier 2 Capital - T2

The T2 positive elements are represented by the following items: (I) capital instruments and subordinated loans where the conditions laid down in CRR2 article 63 are met; (II) the share premium accounts related to instruments referred to in point (I); (III) possible surplus of credit risk adjustments with reference to expected losses for positions evaluated according to IRB methods; (IV) capital instruments and subordinated loans for the amount computable in Own funds according to the transitional provisions foreseen by the CRR (grandfathering).

The Tier 2 Capital also includes the minority interests for the computable amount not already recognised in the Tier 1 Capital and the T2 instruments issued by the subsidiaries for the computable amount as defined by the CRR.

As at 31 December 2022, the Group Own Funds include the instruments issued before 27 June 2019, subject to grandfathering framework according to CRR2 article 494b.

Own Funds

Template EU CC1 - Composition of regulatory Own Funds

(€ million)				
DESCRIPTION	a	b		
		AMOUNTS AS AT 31.12.2022	AMOUNTS AS AT 30.09.2022	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 (A)	23,116	23,116	31-32
	of which: Ordinary shares	23,116	23,116	
	of which: Instrument type 2	-	-	
	of which: Instrument type 3	-	-	
2	Retained earnings	23,164	23,164	29
3	Accumulated other comprehensive income (and other reserves) (B)	3,881	6,170	17-18-19-20-21- 22-23-30
EU-3a	Funds for general banking risk	-	-	
4	Amount of qualifying items referred to in article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	-	-	
5	Minority interests (amount allowed in consolidated CET1)	48	51	35
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend (C)	4,526	2,591	36
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	54,735	55,091	
Common Equity Tier 1 (CET1) capital: regulatory adjustments				
7	Additional value adjustments (negative amount)	(291)	(353)	38
8	Intangible assets (net of related tax liability) (negative amount)	(1,749)	(1,536)	4
9	Not applicable			
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) CRR are met) (negative amount) (D)	(2,886)	(2,065)	10
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	629	683	17-21
12	Negative amounts resulting from the calculation of expected loss amounts	(7)	(9)	43
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	83	(25)	39
15	Defined-benefit pension fund assets (negative amount)	(181)	(329)	37
16	Direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount) (E)	(7)	(1,009)	34
17	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	
20	Not applicable			
EU-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	(135)	(108)	
EU-20b	of which: qualifying holdings outside the financial sector (negative amount)	-	-	
EU-20c	of which: securitisation positions (negative amount)	(135)	(107)	41
EU-20d	of which: free deliveries (negative amount)	-	(1)	42
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38(3) CRR are met) (negative amount)	-	-	
22	Amount exceeding the 17.65% threshold (negative amount) (F)	-	-	
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	-	-	1-2-3
24	Not applicable			
25	of which: deferred tax assets arising from temporary differences	-	-	10
EU-25a	Losses for the current financial year (negative amount)	-	-	
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)	-	-	
26	Not applicable			
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	-	-	
27a	Other regulatory adjustments (G)	1,252	996	44
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(3,293)	(3,754)	
29	Common Equity Tier 1 (CET1) capital	51,442	51,337	

Own Funds

continued: Template EU CC1 - Composition of regulatory Own Funds

		(€ million)		
		a		b
		AMOUNTS AS AT 31.12.2022	AMOUNTS AS AT 30.09.2022	SOURCE BASED ON REFERENCE NUMBERS/LETTERS OF THE BALANCE SHEET UNDER THE REGULATORY SCOPE OF CONSOLIDATION
DESCRIPTION				
Additional Tier 1 (AT1) capital: instruments				
30	Capital instruments and the related share premium accounts	5,202	5,201	26
31	of which: classified as equity under applicable accounting standards	5,202	5,201	
32	of which: classified as liabilities under applicable accounting standards	-	-	
33	Amount of qualifying items referred to in article 484(4) CRR and the related share premium accounts subject to phase out from AT1	-	-	33
EU-33a	Amount of qualifying items referred to in article 494a(1) CRR subject to phase out from AT1	-	-	
EU-33b	Amount of qualifying items referred to in article 494b(1) CRR subject to phase out from AT1	898	898	27
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	9	10	45
35	of which: instruments issued by subsidiaries subject to phase out	-	-	
36	Additional Tier 1 (AT1) capital before regulatory adjustments	6,109	6,109	
Additional Tier 1 (AT1) capital: regulatory adjustments				
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	(31)	(30)	46
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)	-	-	
41	Not applicable			
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	(31)	(30)	
44	Additional Tier 1 (AT1) capital	6,078	6,079	
45	Tier 1 capital (T1 = CET1 + AT1)	57,521	57,416	
Tier 2 (T2) capital: instruments				
46	Capital instruments and the related share premium accounts (H)	7,640	7,969	15
47	Amount of qualifying items referred to in article 484(5) CRR and the related share premium accounts subject to phase out from T2 as described in article 486(4) CRR	-	-	33
EU-47a	Amount of qualifying items referred to in article 494a(2) CRR subject to phase out from T2	-	-	
EU-47b	Amount of qualifying items referred to in article 494b(2) CRR subject to phase out from T2	3	29	16
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	468	409	48
49	of which: instruments issued by subsidiaries subject to phase out	-	-	
50	Credit risk adjustments	979	1,053	49
51	Tier 2 (T2) capital before regulatory adjustments	9,090	9,460	
Tier 2 (T2) capital: regulatory adjustments				
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(60)	(59)	50
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, indirect and synthetic 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)	-	-	
54a	Not applicable			
55	Direct, indirect and synthetic 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)	(43)	(45)	51
56	Not applicable			
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 (I)	(446)	(352)	52
57	Total regulatory adjustments to Tier 2 (T2) capital	(550)	(455)	
58	Tier 2 (T2) capital	8,541	9,005	
59	Total capital (TC = T1 + T2)	66,062	66,421	
60	Total Risk exposure amount	308,466	319,980	

Own Funds

continued: Template EU CC1 - Composition of regulatory Own Funds

		(€ million)	
		a	b
		SOURCE BASED ON REFERENCE NUMBERS/LETTERS OF THE BALANCE SHEET UNDER THE REGULATORY SCOPE OF CONSOLIDATION	
DESCRIPTION		AMOUNTS AS AT 31.12.2022	AMOUNTS AS AT 30.09.2022
Capital ratios and requirements including buffers			
61	Common Equity Tier 1 capital	16.68%	16.04%
62	Tier 1 capital	18.65%	17.94%
63	Total capital	21.42%	20.76%
64	Institution CET1 overall capital requirements (J)	9.12%	9.06%
65	of which: capital conservation buffer requirement	2.50%	2.50%
66	of which: countercyclical capital buffer requirement	0.13%	0.08%
67	of which: systemic risk buffer requirement	-	-
EU-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer requirement	1.00%	1.00%
EU-67b	of which: additional own funds requirements to address the risks other than the risk of excessive leverage	0.98%	0.98%
68	Common Equity Tier 1 capital (as a percentage of risk exposure amount) available after meeting the minimum capital requirements (K)	11.19%	10.56%
National minima (if different from Basel III)			
69	Not applicable		
70	Not applicable		
71	Not applicable		
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)	2,782	2,948
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)	3,671	4,147
74	Not applicable		
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in article 38(3) CRR are met) (L)	3,149	2,883
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) (L)	3,123	3,118
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach (L)	979	1,053
Capital instruments subject to phase-out arrangements (only applicable between 1 January 2014 and 1 January 2022)			
80	Current cap on CET1 instruments subject to phase out arrangements	-	-
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	-
82	Current cap on AT1 instruments subject to phase out arrangements	-	-
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	-
84	Current cap on T2 instruments subject to phase out arrangements	-	-
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-

Notes to the template EU CC1 “Composition of regulatory Own Funds”

Amounts included in the notes below refer to 31 December 2022 if not otherwise specified. Regarding the transitional adjustments as at 31 December 2022 it is worth mentioning that:

- the grandfathering framework according to the CRR2 article 494 b) entered into force on 27 June 2019; it is applicable to the Additional T1 and T2 instruments issued before 27 June 2019 that do not comply with the CRR2 articles 52 and 63;
- it is decided to apply the transitional regime due to the introduction of IFRS9 accounting principle according to article 473a of Regulation (EU) 873/2020 that amends Regulation (EU) 876/2019.

A.

This item does not include €609 million related to the ordinary shares underlying the Usufruct contract (Cashes), which are reclassified in Tier 2, starting from 1 January 2022 under item “46. Capital instruments and the related share premium accounts”, following the end of the CRR1 grandfathering regime, being Tier 2 compliant according to CRR2 eligibility conditions.

B.

The change compared to 30 September 2022 (negative for €2,289 million) mainly refers to: (i) the cancellation of the unavailable reserve created for the execution of the “Second Tranche of the Buy-Back Programme 2021”, following the cancellation of the shares bought back for €1,000 million; (ii) negative change in exchange reserve (equal to €905 million) mainly due to the Ruble depreciation; (iii) negative change in actuarial reserve (equal to €334 million).

Own Funds

C.

Reference should be made to paragraph "Consolidated profit/loss eligible for Own Funds purposes" in the introductory section of this chapter.

D.

The amount of this item (equal to €2,886 million) does not consider the effects related to the transitional adjustments due to IFRS9 that are included in the item "27a. Other regulatory adjustments".

E.

The change compared to 30 September 2022 (equal to €1,002 million) is mainly related to the cancellation of the shares due to the end of the "Second Tranche of the Buy-Back Programme 2021" for €1,000 million.

F.

Reference should be made to paragraph "Deductions connected to investments in financial sector entities and deferred tax assets that rely on future profitability and arise from temporary differences" in the introductory section of this chapter.

G.

The amount reported in this item (equal to €1,252 million) mainly includes:

- the effect related to the transitional arrangements referred to the entry into force of IFRS9 accounting principles according to article 473a of Regulation (EU) 873/2020 published on 27 June 2020 that amends Regulation (EU) 876/2019 (positive for €2,078 million) that includes the following transitional adjustments: (i) static component for €569 million (applicable percentage in 2022 equal to 25%); (ii) dynamic component for €1,504 million (applicable percentage in 2022 equal to 75%);
- the additional deduction of CET1 Capital due to article 3 of CRR (equal to €547 million) in accordance with ECB guidance to banks on non-performing loans.

H.

The change compared to 30 September 2022 (negative for €329 million) is mainly referred to the differences in exchange rate.

I.

The amount reported in this item (negative for €446 million) takes into account the effects of IFRS9 transitional adjustments and it is referred to the calculation of the excess related to the credit risk adjustments in comparison with the expected loss computed in Tier 2 capital.

J.

Reference should be made to table "Capital requirements and buffers for UniCredit group" in the introductory section of this chapter.

K.

The amount reported in this item is calculated by subtracting from the Common Equity Tier 1 capital ratio at the date (i.e. item 61: 16.68%) the minimum Common Equity Tier 1 requirement (equal to 4.5%) and the Pillar 2 requirement on CET1 (equal to 0.98%) in coherence with SREP results of 2021 and with the application of article 104a.4 of CRDV based on which the Pillar 2 requirement can be satisfied also through AT1 and T2 instruments (i.e. at least 75% through T1 and at least 56.25% through CET1). The change compared to 30 September 2022 depends on the following items: (i) increase in Common Equity Tier 1 Capital for €105 million and (ii) decrease in risk weighted exposures for €11,514 million.

L.

The amounts included in items 75, 78 e 79 do not consider the effects related to the transitional adjustments due to IFRS9 that are included in item "27a. Other regulatory adjustments".

Own Funds

Template IFRS9-FL - Comparison of institutions' Own Funds and capital and Leverage Ratios with and without the application of transitional arrangements for IFRS9 or analogous ECLs

(€ million)

DESCRIPTION		31.12.2022	30.09.2022	30.06.2022	31.03.2022	31.12.2021
1	Common Equity Tier 1 (CET1) capital (A)	51,442	51,337	51,906	48,243	50,933
2	Common Equity Tier 1 (CET1) capital as if IFRS9 or analogous ECLs transitional arrangements had not been applied	49,364	49,322	49,811	46,146	48,313
3	Tier 1 capital	57,521	57,416	58,003	54,340	57,780
4	Tier 1 capital as if IFRS9 or analogous ECLs transitional arrangements had not been applied	55,443	55,400	55,907	52,243	55,160
5	Total capital	66,062	66,421	66,788	62,652	64,850
6	Total capital as if IFRS9 or analogous ECLs transitional arrangements had not been applied (B)	64,430	64,757	65,099	60,591	63,273
Risk-weighted assets (amounts)						
7	Total risk-weighted assets (C)	308,466	319,980	316,731	329,922	321,992
8	Total risk-weighted assets as if IFRS9 or analogous ECLs transitional arrangements had not been applied	308,596	320,057	316,722	329,574	321,498
Capital ratios						
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	16.68%	16.04%	16.39%	14.62%	15.82%
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS9 or analogous ECLs transitional arrangements had not been applied	16.00%	15.41%	15.73%	14.00%	15.03%
11	Tier 1 (as a percentage of risk exposure amount)	18.65%	17.94%	18.31%	16.47%	17.94%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS9 or analogous ECLs transitional arrangements had not been applied	17.97%	17.31%	17.65%	15.85%	17.16%
13	Total capital (as a percentage of risk exposure amount)	21.42%	20.76%	21.09%	18.99%	20.14%
14	Total capital (as a percentage of risk exposure amount) as if IFRS9 or analogous ECLs transitional arrangements had not been applied	20.88%	20.23%	20.55%	18.38%	19.68%
Leverage ratio						
15	Leverage ratio total exposure measure	946,901	1,032,101	1,044,558	1,046,730	1,011,462
16	Leverage ratio (D)	6.07%	5.56%	5.55%	5.19%	5.71%
17	Leverage ratio as if IFRS9 or analogous ECLs transitional arrangements had not been applied	5.87%	5.38%	5.36%	5.02%	5.47%

Notes to the "Template IFRS9-FL: Comparison of institutions' Own Funds and capital and Leverage Ratios, with and without the application of transitional arrangements for IFRS9 or analogous ECLs"

Starting from 30 June 2020 UniCredit has decided to apply the transitional arrangements referred to the entry into force of IFRS9 accounting principles according to article 473a of Regulation (EU) 873/2020 published on 27 June 2020 that amends Regulation (EU) 876/2019, for any further details refer to paragraph "Transitional arrangements related to the application of IFRS9".

The table above shows the main data on available capital, risk-weighted assets, capital ratios and leverage ratio after IFRS9 transitional arrangements, and how they would have been if the arrangements had not been applied.

A.

The amount under this item (equal to €51,442 million) includes €2,078 million due to IFRS9 transitional adjustments, of which: i) static component for €569 million (applicable percentage in 2022 equal to 25%); ii) dynamic component for €1,504 million (applicable percentage in 2022 equal to 75%).

B.

This item (equal to €64,430 million) does not include the effect related to IFRS9 transitional adjustments for €1,632 million; such amount is composed of the part related to IFRS9 transitional adjustment on CET1 capital reported in point A (for €2,078 million) partially offset by the part of re-calculation of the excess of the credit risk adjustments included in Tier 2 capital (negative for €446 million).

C.

The amount of risk weighted exposures considers the effects of IFRS9 transitional adjustments and includes:

- the increase of risk weighted exposures related to the benefit on CET1 Capital deriving from the static component connected to the standard portfolio;
- the decrease of risk weighted exposures related to the reduction on deferred tax assets that rely on future profitability and arise from temporary differences subject to regulatory netting and weighted at 250%.

D.

The leverage ratio exposure includes the positive amount of IFRS9 transitional adjustment applied to CET1 as per article 473a(7a) of the CRR2. The overall effect on the ratio considering the transitional IFRS9 adjustments applied to CET1 and to exposure is positive for 0.21%.

Own Funds

Separate disclosure of deductions (CRR article 437d)

(€ million)

TRANSITIONAL THRESHOLDS FOR DEDUCTION OF DEFERRED TAX ASSETS AND INVESTMENTS IN FINANCIAL SECTOR ENTITIES	AMOUNTS
10% CET1 threshold for not significant investments in financial sector entities	4,991
10% CET1 threshold for significant investment in financial sector entities and deferred tax assets (DTA) that rely on future profitability and arise from temporary differences	4,991
17.65% CET1 threshold for significant investment and DTA not deducted from the 10% threshold (A)	7,604

(€ million)

REF. CRR ART.	NATURE OF DEDUCTIONS	TOTAL AMOUNT SUBJECT TO DEDUCTION	AMOUNT DEDUCTED - REF. COLUMN C OF EU CC1 TEMPLATE	REF. TO THE ITEMS OF EU CC1 TEMPLATE	AMOUNT EXCLUDED FROM DEDUCTIONS
36.b	Intangible assets	1,749	1,749	8	-
36.c	Deferred tax assets that rely on future profitability, of which:	6,035	2,886		3,149
	not arising from temporary differences	2,886	2,886	10	-
	arising from temporary differences (A)	3,149	-	25-75	3,149
36.d	IRB Shortfall	7	7	12	-
36.e	Defined benefit pension fund assets	181	181	15	-
36.f	Own CET1 instruments	7	7	16	-
36.h	Not significant investments in CET1 instruments issued by FSE (B)	1,344	-	72	1,344
36.i	Significant investments in CET1 instruments issued by FSE (A)	3,671	-	23-73	3,671
36.k	Deductions of exposures qualifying for risk weight 1250%	135	135	EU-20a	-
36.m	Insufficient coverage for non performing exposures	62	62	27a	-
56.a	Own AT1 instruments	31	31	37	-
56.b	Reciprocal cross holding of AT1 instruments	-	-	-	-
56.c	Not significant investments in AT1 instruments issued by FSE (B)	418	-	72	418
56.d	Significant investments in AT1 instruments issued by FSE	-	-	40	-
66.a	Own T2 instruments	60	60	52	-
66.c	Not significant investments in T2 instruments issued by FSE (B)	833	-	72	833
66.d	Significant investments in T2 instruments issued by FSE	43	43	55	-

Notes to the template "Separate disclosure of deductions (CRR article 437.d)"

The amount included in the table above does not consider the adjustment connected with the IFRS9 transitional arrangement.

A.

The amount not deducted from CET1 capital (for a total amount of €6,820 million, risk weighted at 250%), related to significant investments in Common Equity Tier 1 instruments (row 36.i, equal to €3,671 million) and deferred tax assets that rely on future profitability and arise from temporary differences (row 36.c, equal to €3,149 million) on 31 December 2022 does not exceed the 17.65% of Common Equity Tier 1 Capital after applying the adjustments and deductions in CRR articles 32 to 36 in full (equal to €7,604 million).

B.

The sum of not significant investments referred to CRR articles 36.h, 56.c, 66.c is equal to €2,595 million and differs for €188 million from the item "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)" of "Template EU CC1 - Composition of regulatory own funds" due to the inclusion of eligible liabilities. The amount equal to €2,782 million does not exceed 10% CET1 threshold and therefore no deductions from Own Funds are applied.

Own Funds

Flow Statement for Own Funds (Enhanced Disclosure Task Force recommendation No.11)

(€ million)

OWN FUNDS	01.01.2022 - 31.12.2022	01.01.2021 - 31.12.2021
Common Equity Tier 1 Capital		
Opening Amount	50,933	51,971
Instruments and reserves (A)	1,186	1,685
1. Capital	85	76
2. Reserves and share premium reserves	(3,088)	(599)
3. Accumulated other comprehensive income (B)	(275)	1,823
4. Net profit of the period (net of foreseeable dividends) (C)	4,526	366
5. Eligible minority interests	(62)	20
Regulatory adjustments	(677)	(2,724)
6. Prudential filters (D)	83	217
7. Own CET1 instruments (E)	668	(665)
8. Goodwill and other intangible assets	(313)	(216)
9. Loss for the current financial year	-	-
10. Deferred tax assets that rely on future profitability and not arise from temporary differences	(829)	(1,190)
11. Deferred tax assets that rely on future profitability and arise from temporary differences (F)	247	(205)
12. Significant and not significant investments in CET1 instruments issued by financial sector entities (F)	330	(269)
13. Shortfall on IRB positions	0	6
14. Deductions for securitisations	(40)	(25)
15. Other deductions	(120)	(17)
16. Other regulatory adjustments, of which related to: (G)	(704)	(361)
16.1 IFRS9	(542)	(28)
16.2 Additional deductions of CET1 Capital due to Article 3 CRR	(106)	(327)
16.3 Insufficient coverage for non-performing exposures	(56)	(6)
Closing Amount	51,442	50,933
Additional Tier 1 Capital		
Opening Amount	6,847	7,350
Instruments	(769)	(504)
17. Eligible instruments, included instruments subject to grandfathering (H)	(753)	(502)
18. Additional Tier 1 instruments issued by subsidiaries	(15)	(2)
Regulatory adjustments	0	2
19. Own AT1 instruments	0	2
20. Significant investments in AT1 instruments issued by financial sector entities	-	-
Closing Amount	6,078	6,847
Tier 1 capital	57,521	57,780
Tier 2 capital		
Opening Amount	7,070	8,143
Instruments	111	(524)
21. Eligible instruments, included instruments subject to grandfathering (I)	197	(609)
22. Tier 2 instruments issued by subsidiaries	8	8
23. Excess for IRB positions	(93)	76
Regulatory adjustments	1,360	(549)
24. Own T2 instruments	0	45
25. Significant investments in T2 instruments issued by financial sector entities (J)	762	30
26. Transitional adjustments, of which:	598	(625)
26.1 Amount related to shortfall on IRB positions (K)	598	(625)
Closing Amount	8,541	7,070
Total Own Funds at the end of the period	66,062	64,850

Notes to the template "Flow Statement for Own Funds (Enhanced Disclosure Task Force recommendation No.11)"

All amounts are referred to changes of period, except for the opening/closing ones and for the amount of profit that represents the stock at the reference date. In addition to the evolution occurred in 2022, changes in this period reflect also the application of the transitional regime due to the introduction of IFRS9 accounting principle according to article 473a of Regulation (EU) 873/2020 that amends Regulation (EU) 876/2019.

Own Funds

A.

The amounts reported in rows 1, 2, 3, 4 of the template do not include the portion related to minority interests, reported in the item related to the overall minority interests eligible in Common Equity Tier 1 (CET1) according to CRR (ref. row 5 of the template).

B.

The amount referred to 2022 (negative for €275 million) mainly reflects: (i) positive change in actuarial reserve (equal to €1,410 million); (ii) positive change (equal to €87 million) in exchange reserve, mainly due to Ruble appreciation; (iii) negative change in reserves related to equity and debt instruments at fair value (equal to €1,617 million).

C.

Reference should be made to paragraph "Consolidated profit/loss eligible for Own Funds purposes" in the introductory section of this chapter.

D.

The positive change referred to 2022 (equal to €83 million) mainly reflects the changes related to the following filters: (i) positive change for the increase in cash flow hedge reserve, equal to €290 million, partially compensated by (ii) negative change in own credit risk (CRR article 33), equal to €162 million; (iii) negative change for the increase in the deduction of additional value adjustments (CRR article 34), equal to €45 million.

E.

The positive change referred to 2022 (equal to €668 million) mainly reflect the conclusion of the Second Buy-Back program (launched on 13 December 2021) with the consequent cancellation of the repurchased shares (equal to €652 million).

F.

As at 31 December 2022, UniCredit does not exceed the threshold of 17.65% of CET1 capital. The positive changes of 2022 refer to deferred tax assets that rely on future profitability and arise from temporary differences (equal to €247 million) and significant investments in financial sector entities (equal to €330 million) that together exceeded the threshold of 17.65% of CET1 capital as of 31 December 2021, according to CRR (article 48). The amount above mentioned does not consider the effects related to the transitional adjustments referred to IFRS9.

G.

The negative change referred to 2022 (equal to €704 million) mainly reflects:

- the lower phase-in percentage applicable in 2022 on the Static Component (from 50% in 2021 to 25% in 2022) negative for €569 million;
- the negative change (equal to €56 million) of deduction related to the insufficient coverage for non-performing exposures driven by the coverage requirement (from 35% to 100% for the unsecured exposures) applicable since June 2022.

H.

The negative change in 2022 (equal to €753 million) mainly refers to:

- the negative change related to the authorization received by the Competent Authority to early redeem the instrument XS1539597499 (equal to €495 million), executed on 3 June 2022;
- the negative change (equal to €258 million) related to the amount of ordinary shares underlying the Usufruct contract (Cashes), classified under this item until 31 December 2021, in line with phase-out according to CRR1 grandfathering rules.

For the treatment of Cashes as at 31 December 2022, refer to paragraph "Common Equity Tier 1 Capital - CET1" in the introductory section of this chapter.

I.

The positive change in 2022 (equal to €197 million) mainly refers to:

- the positive change (equal to €258 million) related to the amount of ordinary shares underlying the Usufruct contract (Cashes), classified in this item starting from 1 January 2022, following the end of the CRR1 grandfathering;
- the positive change (equal to €184 million) deriving from the exchange rates partially offset by the regulatory amortization;
- the negative effect on Tier 2 Capital due to the maturity of the instrument XS0849517650 (computable amount €247 million).

J.

The positive change in 2022 (equal to €762 million) is mainly related to the disposal of the residual 18% of the stake in Yapı ve Kredi Bankası A.S. that implies the reclassification of the counterparty as "not significant financial sector entity"; therefore, the subordinated instruments issued by Yapı ve Kredi Bankası A.S. and held by UniCredit S.p.A. are not directly deducted anymore from the Own Funds, but are reclassified among the instruments issued by not significant financial sector entity, whose total amount does not exceed the 10% regulatory threshold of the CET1.

K.

The positive change in 2022 (equal to €598 million) mainly reflects the effects of IFRS9 transitional adjustments and it is referred to the recalculation of the excess of the credit risk adjustments included in Tier 2 capital.

Own Funds

Template EU CC2 - Reconciliation of regulatory Own Funds to balance sheet in the audited financial statements

(€ million)

DESCRIPTION	a		b			c		
	ACCOUNTING FIGURES (*)		AMOUNTS RELEVANT FOR OWN FUNDS PURPOSES (**)			REF. TO TEMPLATE EU CC1	NOTES (***)	
	ACCOUNTING PERIMETER	REGULATORY PERIMETER	COMMON EQUITY TIER 1 (CET1)	ADDITIONAL TIER 1 (AT1)	TIER 2 (T2)			
BALANCE SHEET - ASSETS								
1	20 C. Financial assets at fair value through P&L mandatorily at fair value - Equity investments	(348)	(344)					
2	30. Financial assets at fair value through other comprehensive income - Equity investments	(1,298)	(1,263)	-	-	-	23	
3	70. Investments in associates and joint ventures	(3,540)	(3,919)					
4	100. Intangible assets of which:	(2,350)	(2,349)	(1,749)	-	-	8	
5	- Goodwill	-	-	(117)	-	-		
6	- Other Intangible Assets	(2,350)	(2,349)	(1,632)	-	-		
7	110. Deferred Tax assets of which mainly:	(13,120)	(13,116)	(2,886)	-	-		
8	- Deferred tax assets that do not rely on future profitability	(7,065)	(7,063)	-	-	-		
9	- Multiple goodwill redemption	-	-	-	-	-		
10	- Deferred tax assets that rely on future profitability	(6,056)	(6,053)	(2,886)	-	-	10-25	
BALANCE SHEET - LIABILITIES AND SHAREHOLDERS' EQUITY								
11	Subordinated Liabilities of which:							
12	- 10B. Deposits from customers							
13	- 10C. Debt securities issued	7,247	7,247	-	-	7,643		
14	- 30. Financial liabilities designated at fair value of which:							
15	- Eligible instruments	7,136	7,136	-	-	7,031	46	
16	- Instruments subject to phase-out	111	111	-	-	3	EU-47b	
17	120. Revaluation reserves of which mainly:	(4,612)	(4,612)	(3,983)	-	-	3-11	
18	- Valuation reserves on debt and capital instruments at fair value through OCI	(767)	(780)	(917)	-	-	3	
19	- Revaluation reserves of actuarial net losses	(2,405)	(2,405)	(2,433)	-	-	3	
20	- Other positive items - Special revaluation laws and Property plant and equipment	2,055	2,050	2,066	-	-	3	
21	- Cash flow hedge reserves	(626)	(626)	-	-	-	3-11	
22	- Exchange differences	(2,590)	(2,590)	(2,622)	-	-	3	
23	- Financial liabilities at fair value	(81)	(81)	(78)	-	-	3	
24	- Reserves related to non-current assets held for sale and investments accounted for using the equity method	(198)	(180)	-	-	-		
25	140. Equity instruments of which:	6,100	6,100	-	6,100	-		
26	- Eligible instruments	5,202	5,202	-	5,202	-	30	
27	- Instruments subject to grandfathering	898	898	-	898	-	EU-33b	
28	150. Reserves of which:	31,657	31,657	31,657	-	-		
29	- Retained earnings	23,164	23,164	23,164	-	-	2	
30	- Other reserves	8,493	8,493	8,493	-	-	3	
31	160. Share premium	2,516	2,516	2,515	-	-	1	
32	170. Issued capital	21,220	21,220	20,600	-	609	1	
33	of which: Ordinary shares underlying the Usufruct contract (Cashes)	609	609	-	-	609	46	
34	180. Treasury shares (-)	(0)	(0)	(7)	-	-	16	
35	190. Minority interests	158	166	48	-	-	5	
36	200. Net profit (loss) for the year (+/-)	6,458	6,458	4,526	-	-	EU-5a	
OTHER ELEMENTS FOR RECONCILIATION WITH OWN FUNDS								
Total other elements of which:				721	(21)	898		
37	- Assets referred to defined benefit pension funds			(181)	-	-	15	
38	- Additional value adjustments			(291)	-	-	7	
39	- Prudential filters to Common Equity Tier 1 of which:			83	-	-		
40	- Own credit spread			83	-	-	14	
41	- Deduction for securitisations			(135)	-	-	EU-20c	
42	- Deduction for free deliveries			-	-	-	EU-20d	
43	- Shortfall of expected losses vs provisions (IRB models)			(7)	-	-	12	
44	- Other regulatory adjustments			1,252	-	-	27a	
45	- Instruments issued by subsidiaries included in Additional Tier 1			-	9	-	34	
46	- Deduction for holdings in own Additional Tier 1 instruments			-	(31)	-	37	
47	- Deduction for holdings of Additional Tier 1 instruments of financial sector entities where the institution has a significant investment			-	-	-		
48	- Instruments issued by subsidiaries included in Tier 2			-	-	468	48	
49	- Excess of provisions vs expected losses (IRB models)			-	-	979	50	
50	- Deduction for holdings in own Tier 2 instruments			-	-	(60)	52	
51	- Deduction for holdings of Tier 2 instruments of financial sector entities where the institution has a significant investment			-	-	(43)	55	
52	- Regulatory adjustments applied to Tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)			-	-	(446)	EU-56b	
Total transitional Own Funds				51,442	6,078	8,541		

Notes:
 (*) The differences between accounting and regulatory figures mainly depend on the composition of accounting (IFRS) and regulatory perimeters (ref. Annex 3 - Template EU L13 - Outline of the differences in the scopes of consolidation).

(**) Contribution positive (negative) to the Own Funds. With reference to negative elements of Own Funds (i.e. deduction), the amount reported includes also, for each reference items, the quote related to held for sale assets. The transitional adjustments as at 31 December 2022 are (i) grandfathering of Additional Tier 1 and Tier 2 instruments and (ii) IFRS9 transitional arrangements starting from 30 June 2020.

(***) Notes related to column "Amounts relevant for Own Funds purposes".

Own Funds

Notes to the template EU CC2 “Reconciliation of regulatory own funds to balance sheet in the audited financial statements”

A.

As at 31 December 2022, the amounts of significant and not significant investments in financial sector entities (Financial Sector Entity - FSE) do not exceed the conditional thresholds defined by the CRR (ref. article 46); hence, no deductions are applied to CET1 capital. It is worth specifying that the amount in significant investments in financial sector entities not deducted from CET1 capital is subject to a risk weight of 250% in the calculation of Risk Weighted Assets, consistently with CRR article 48. It has to be mentioned that the amounts above reported are not influenced by the effects related to the transitional adjustments referred to IFRS9 in accordance with the Q&A 2018_3784. With reference to the item “70. Investments in associates and joint ventures”, the main difference between accounting and regulatory amounts refers to those Entities consolidated by equity method in coherence with the contents of note (*)

B.

As at 31 December 2022, the amount of the deduction (€117 million) is referred to the goodwill incorporated into the valuation of significant investments.

C.

The amount of deduction (€1,632 million) refers to the methodology for the software assets' CET1 capital deduction calculation in line with article 36(1)(b) of CRR (equal to €1,695 million) and the reduction related to the deferred tax effects according to CRR article 37 (€63 million).

D.

With reference to the amount of deferred tax assets that rely on future profitability, the amount deducted from CET1 capital (equal to €2,886 million), expressed net of deferred tax liabilities based on CRR article 38, is referred to deferred tax assets that do not arise from temporary differences fully deducted from CET1 capital. Deferred tax assets that rely on future profitability and arise from temporary differences, do not exceed the conditional threshold of 17.65% of CET1 capital as defined in CRR (ref. article 48). The amount of deduction (€2,886 million) is reconciled with the amount reported in item “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) CRR are met)” of Template EU CC1 - Composition of regulatory Own Funds.

It is specified that the amount of deferred tax assets that rely on future profitability and arise from temporary differences not deducted from CET1 capital, is subject to a risk weight of 250% in the calculation of Risk Weighted Assets consistently with CRR article 48.

E.

The amount of eligible instruments (equal to €7,643 million) only refers to instruments issued by the parent company UniCredit S.p.A. while subordinated instruments issued by Group subsidiaries are included in consolidated Own Funds for the amount resulting from the application of CRR articles 85-88 and, hence, not directly allocated to the related balance sheet items (the amount resulting from such calculation is reported in item “Instruments issued by subsidiaries included in Tier 2” among the “Other elements for reconciliation with Own Funds”).

This amount (equal to €7,643 million) is reconciled with the amount reported in Template EU CC1 - Composition of regulatory Own Funds and it is referred to:

- eligible instrument for €7,031 million and included in item “46. Capital instruments and the related share premium accounts” of the Template EU CC1 - Composition of regulatory Own Funds;
- item 170 (equal to €609 million) related to the ordinary shares underlying the Usufruct contract (Cashes), which have been reclassified in Tier 2, starting from 1 January 2022 under item “46 - Capital instruments and the related share premium accounts” of the Template EU CC1 - Composition of regulatory Own Funds, following the end of the CRR1 grandfathering regime, being Tier 2 compliant according to CRR2 eligibility conditions;
- instruments subject to grandfathering (equal to €3 million) that do not satisfy the new computable conditions inserted in the Regulation (EU) 876/2019 (CRR2) and included in item EU-47b “Amount of qualifying items referred to in article 494b (2) CRR subject to phase out from T2” of Template EU CC1 - Composition of regulatory Own Funds.

F.

The sum of the amounts “accounting figures”, regulatory perimeter of items “120. Revaluation reserves” (equal to -€4,612 million) and “150. Reserves” for the component related to the “Other reserves” (equal to €8,493 million) is equal to €3,881 million and reconciled with item “3 Accumulated other comprehensive income (and other reserves)” including unrealised gains and losses according to the applicable accounting principles of Template EU CC1 - Composition of regulatory Own Funds.

With reference to item “120. Revaluation reserves”, it is specified that the relevant amount reported in Own Funds:

- includes, for each category of reserves, also the portion of regulatory balance sheet value that refers to non-current assets held for sales, and investments accounted for using the equity method;

Own Funds

- is calculated by applying to the regulatory and accounting value (-€4,612 million) the prudential filter (€629 million) referred to cash flow hedge reserves (ref. to item "11. Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value" of Template EU CC1 - Composition of regulatory Own Funds).

G.

The amount of instruments subject to phase-out only refers to Additional Tier 1 issued by the parent company UniCredit S.p.A.

It is reported below the reconciliation between Additional Tier1 instruments with item "EU-33b Amount of qualifying items referred to in article 494b(1) CRR subject to phase out from AT1" of Template EU CC1 - Composition of regulatory Own Funds for €898 million and item 140 (equal to €898 million) referred to instruments that do not satisfy the computable conditions inserted in the article 52 of Regulation (EU) 876/2019 (CRR2).

H.

The amount of the item "Treasury shares" differs from the total amount of own CET1 instruments deducted from Own Funds (€7 million) that includes the deduction on indirect and synthetic holdings.

I.

The amount included in Own Funds (equal to €48 million) refers to the computable amount of minority interests recognised in Common Equity Tier 1 Capital resulting from the application of CRR articles 85-88.

J.

Reference should be made to paragraph "Consolidated profit/loss eligible for Own Funds purposes" in the introductory section of this chapter.

K.

The amount reported in this item (equal to €1,252 million) is reconciled with item "27a Other regulatory adjustments" of Template EU CC1 - Composition of regulatory Own Funds and mainly includes:

- the effect related to the transitional arrangements referred to the entry into force of IFRS9 accounting principles according to article 473a of Regulation (EU) 873/2020 published on 27 June 2020 that updates the Regulation (EU) 876/2019 (positive for €2,078 million) that includes the following transitional adjustments: (i) static component for €569 million (applicable percentage in 2022 equal to 25%); (ii) dynamic component for €1,504 million (applicable percentage in 2022 equal to 75%);
- the additional deduction of CET1 Capital due to article 3 of CRR (equal to €547 million) in accordance with ECB guidance to banks on non-performing loans.

L.

The amount included in this item (negative for €446 million) takes into account the effects of IFRS9 transitional adjustments and it is referred to the calculation of the excess related to the credit risk adjustments in comparison with the expected loss computed in Tier 2 capital. The item is reconciled with the amount reported in item "EU 56b Other regulatory adjustments to T2 capital" of Template EU CC1 - Composition of regulatory Own Funds.

Own Funds

Countercyclical capital buffers

Template EU CCyB2 - Amount of institution-specific countercyclical capital buffer

DESCRIPTION		(€ million)
		a
1	Total risk exposure amount	308,466
2	Institution specific countercyclical capital buffer rate	0.13%
3	Institution specific countercyclical capital buffer requirement	409

Own Funds

Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer

BREAKDOWN BY COUNTRY	(€ million)												
	a	b	c	d	e	f	g	h	i	j	k	l	m
	GENERAL CREDIT EXPOSURES		RELEVANT CREDIT EXPOSURES – MARKET RISK		SECURITISATION EXPOSURES VALUE FOR NON-TRADING BOOK	TOTAL EXPOSURE VALUE	31.12.2022			TOTAL	RISK-WEIGHTED EXPOSURE AMOUNTS	OWN FUNDS REQUIREMENT WEIGHTS (%)	COUNTERCYCLICAL CAPITAL BUFFER RATE (%)
	EXPOSURE VALUE UNDER THE STANDARDISED APPROACH	EXPOSURE VALUE UNDER THE RB APPROACH	SUM OF LONG AND SHORT POSITION OF TRADING BOOK FOR SA	VALUE OF TRADING BOOK EXPOSURE FOR INTERNAL MODELS			RELEVANT CREDIT RISK EXPOSURES - CREDIT RISK	RELEVANT CREDIT EXPOSURES – MARKET RISK	RELEVANT CREDIT EXPOSURES – SECURITISATION POSITIONS IN THE NON-TRADING BOOK				
ABU DHABI	63	601	-	0	-	664	17	-	-	17	219	0.09	0.00%
ALGERIA	0	109	-	-	-	109	11	-	-	11	133	0.06	0.00%
ARGENTINA	1	3	-	-	-	4	0	-	-	0	3	0.00	0.00%
ARMENIA	0	4	-	-	-	4	0	-	-	0	3	0.00	0.00%
AUSTRALIA	12	2	-	0	2	16	1	0	0	1	10	0.00	0.00%
AUSTRIA	4,163	55,982	0	6	376	60,527	1,434	1	3	1,438	17,974	7.76	0.00%
AZERBAIJAN	0	219	-	-	-	219	2	-	-	2	23	0.01	0.00%
BAHAMA ISLANDS	59	3	-	-	-	62	1	-	-	1	8	0.00	0.00%
BANGLADESH	0	142	-	-	-	143	11	-	-	11	141	0.06	0.00%
BELARUS	0	32	-	-	-	32	0	-	-	0	6	0.00	0.00%
BELGIUM	156	1,458	0	5	93	1,712	69	0	1	69	868	0.37	0.00%
BERMUDA	917	112	0	0	-	1,029	14	0	-	14	177	0.08	0.00%
BOSNIA AND HERCEGOVINA	2,444	1	-	-	-	2,445	123	-	-	123	1,538	0.66	0.00%
BRAZIL	18	47	-	0	-	66	3	-	-	3	32	0.01	0.00%
BRITISH VIRGIN ISLANDS	0	7	-	-	-	7	0	-	-	0	1	0.00	0.00%
BULGARIA	1,957	7,537	-	2	955	10,451	426	0	7	433	5,411	2.34	1.00%
CANADA	37	189	-	-	-	226	8	1	-	8	103	0.04	0.00%
CAYMAN ISLANDS	14	3	0	-	-	17	2	0	-	2	27	0.01	0.00%
CHILE	2	1	-	0	-	3	0	-	-	0	1	0.00	0.00%
CHINA	20	11	-	0	-	31	1	0	-	1	10	0.00	0.00%
COLOMBIA	0	7	-	-	-	7	0	-	-	0	4	0.00	0.00%
COSTA RICA	2	12	-	-	-	14	0	-	-	0	3	0.00	0.00%
CROATIA	8,722	157	-	-	-	8,878	455	-	-	455	5,681	2.45	0.00%
CUBA	0	4	-	-	-	4	0	-	-	0	1	0.00	0.00%
CYPRUS	53	192	-	0	-	245	7	-	-	7	88	0.04	0.00%
CZECH REPUBLIC	1,741	15,853	-	9	-	17,603	679	1	-	680	8,499	3.67	1.50%
DENMARK	32	700	0	4	-	735	25	1	-	25	315	0.14	2.00%
ECUADOR	0	1	-	-	-	1	0	-	-	0	2	0.00	0.00%
EGYPT	195	425	-	-	-	620	16	-	-	16	196	0.08	0.00%
ESTONIA	1	20	-	0	-	21	1	0	-	1	9	0.00	1.00%
ETHIOPIA	115	0	-	-	-	115	0	-	-	0	1	0.00	0.00%
FINLAND	21	831	-	1	-	853	22	1	-	23	290	0.13	0.00%
FRANCE	571	7,048	0	95	2,684	10,398	239	9	21	270	3,369	1.45	0.00%
GEORGIA	2	2	-	-	-	5	0	-	-	0	3	0.00	0.00%
GERMANY	6,808	126,787	0	67	7,171	140,832	3,140	8	66	3,214	40,174	17.35	0.00%
GHANA	1	1	-	-	-	2	0	-	-	0	2	0.00	0.00%
GREECE	25	89	-	0	2	117	3	0	0	3	41	0.02	0.00%
GUERNSEY	25	46	0	-	-	71	2	0	-	2	20	0.01	0.00%

Own Funds

continued: Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

	(€ million)												
	a	b	c	d	e	f	g	h	i	j	k	l	m
	GENERAL CREDIT EXPOSURES		RELEVANT CREDIT EXPOSURES – MARKET RISK		SECURITISATION EXPOSURES VALUE FOR NON-TRADING BOOK	TOTAL EXPOSURE VALUE	31.12.2022			TOTAL	RISK-WEIGHTED EXPOSURE AMOUNTS	OWN FUNDS REQUIREMENT WEIGHTS (%)	COUNTERCYCLICAL CAPITAL BUFFER RATE (%)
BREAKDOWN BY COUNTRY	EXPOSURE VALUE UNDER THE STANDARDISED APPROACH	EXPOSURE VALUE UNDER THE IRB APPROACH	SUM OF LONG AND SHORT POSITION OF TRADING BOOK FOR SA	VALUE OF TRADING BOOK EXPOSURE FOR INTERNAL MODELS			RELEVANT CREDIT RISK EXPOSURES - CREDIT RISK	RELEVANT CREDIT EXPOSURES – MARKET RISK	RELEVANT CREDIT EXPOSURES – SECURITISATION POSITIONS IN THE NON-TRADING BOOK				
HONDURAS	0	7	-	-	-	7	0	-	-	0	0	0.00	0.00%
HONG KONG	8	84	-	2	-	94	4	0	-	4	48	0.02	1.00%
HUNGARY	3,503	3,605	-	1	-	7,109	297	0	-	298	3,720	1.61	0.00%
ICELAND	0	-	-	0	-	0	0	0	-	0	0	0.00	2.00%
INDIA	6	41	-	0	-	46	1	-	-	1	17	0.01	0.00%
INDONESIA	0	43	-	0	-	43	1	-	-	1	14	0.01	0.00%
IRAN	0	2	-	-	-	2	0	-	-	0	0	0.00	0.00%
IRAQ	0	28	-	-	-	28	0	-	-	0	3	0.00	0.00%
IRELAND	329	865	2	0	5,517	6,713	31	1	91	123	1,539	0.66	0.00%
ISLE OF MAN	0	51	-	-	-	51	2	-	-	2	24	0.01	0.00%
ISRAEL	6	43	-	0	-	49	1	0	-	1	9	0.00	0.00%
ITALY	32,179	147,176	2	79	16,456	195,891	7,203	11	379	7,593	94,910	40.98	0.00%
JAPAN	6	25	-	0	-	31	0	0	-	0	4	0.00	0.00%
JERSEY	0	202	-	-	-	202	23	-	-	23	286	0.12	0.00%
JORDAN	0	45	-	-	-	45	5	-	-	5	57	0.02	0.00%
KAZAKHSTAN	47	3	-	0	-	50	4	0	-	4	50	0.02	0.00%
KENYA	2	1	-	-	-	3	0	-	-	0	3	0.00	0.00%
KUWAIT	0	53	-	-	-	53	2	-	-	2	23	0.01	0.00%
LATVIA	8	20	-	0	-	29	1	0	-	1	14	0.01	0.00%
LEBANON	0	2	-	-	-	2	0	-	-	0	1	0.00	0.00%
LIBERIA	0	240	-	-	-	240	5	-	-	5	66	0.03	0.00%
LIECHTENSTEIN, PRINCIPALITY OF	11	118	0	-	-	129	3	0	-	3	35	0.02	0.00%
LITHUANIA	11	24	-	0	-	35	2	0	-	2	19	0.01	0.00%
LUXEMBOURG	1,209	6,743	6	5	55	8,018	271	3	1	275	3,435	1.48	0.50%
MACEDONIA	2	0	-	-	-	2	0	-	-	0	1	0.00	0.00%
MALAYSIA	9	3	-	-	-	11	1	-	-	1	9	0.00	0.00%
MALTA	96	7	-	-	-	103	7	-	-	7	92	0.04	0.00%
MARSHALL ISLANDS	0	275	-	-	-	275	9	-	-	9	113	0.05	0.00%
MEXICO	60	293	-	1	-	354	14	0	-	14	176	0.08	0.00%
MONTENEGRO	14	0	-	-	-	14	1	-	-	1	14	0.01	0.00%
MOROCCO	2	70	-	-	-	72	3	-	-	3	39	0.02	0.00%
NETHERLANDS	412	6,406	-	12	100	6,930	243	2	1	246	3,075	1.33	0.00%
NIGERIA	0	1	-	-	-	1	0	-	-	0	2	0.00	0.00%
NORWAY	8	716	-	0	-	724	8	0	-	8	94	0.04	2.00%
OMAN	0	158	-	-	-	158	3	-	-	3	40	0.02	0.00%
PAKISTAN	0	37	-	-	-	37	10	-	-	10	124	0.05	0.00%
PANAMA	599	16	-	-	-	616	0	-	-	0	4	0.00	0.00%
PARAGUAY	2	0	-	-	-	2	0	-	-	0	1	0.00	0.00%

Own Funds

continued: Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

	(€ million)												
	a	b	c	d	e	f	g	h	i	j	k	l	m
	GENERAL CREDIT EXPOSURES		RELEVANT CREDIT EXPOSURES – MARKET RISK		SECURITISATION EXPOSURES VALUE FOR NON-TRADING BOOK	TOTAL EXPOSURE VALUE	31.12.2022 OWN FUNDS REQUIREMENTS				RISK-WEIGHTED EXPOSURE AMOUNTS	OWN FUNDS REQUIREMENT WEIGHTS (%)	COUNTERCYCLICAL CAPITAL BUFFER RATE (%)
BREAKDOWN BY COUNTRY	EXPOSURE VALUE UNDER THE STANDARDISED APPROACH	EXPOSURE VALUE UNDER THE IRB APPROACH	SUM OF LONG AND SHORT POSITION OF TRADING BOOK FOR SA	VALUE OF TRADING BOOK EXPOSURE FOR INTERNAL MODELS			RELEVANT CREDIT RISK EXPOSURES - CREDIT RISK	RELEVANT CREDIT EXPOSURES – MARKET RISK	RELEVANT CREDIT EXPOSURES – SECURITISATION POSITIONS IN THE NON-TRADING BOOK	TOTAL			
PERU	2	3	-	0	-	5	0	-	-	0	3	0.00	0.00%
PHILIPPINES	2	4	-	0	-	5	0	-	-	0	3	0.00	0.00%
POLAND	211	517	-	5	84	817	24	0	2	26	331	0.14	0.00%
PORTUGAL	12	514	-	0	22	549	17	0	1	18	223	0.10	0.00%
QATAR	1	438	-	-	-	439	11	-	-	11	142	0.06	0.00%
ROMANIA	3,984	4,685	-	1	-	8,670	448	0	-	448	5,597	2.42	0.500%
RUSSIA	4,125	5,556	-	7	-	9,688	851	0	-	851	10,638	4.59	0.000%
SAN MARINO	7	22	-	-	-	29	1	-	-	1	19	0.01	0.000%
SAUDI ARABIA	117	145	-	0	-	263	8	-	-	8	96	0.04	0.000%
SENEGAL	0	17	-	-	-	17	0	-	-	0	0	0.00	0.000%
SERBIA	3,023	186	-	-	-	3,209	180	-	-	180	2,256	0.97	0.000%
SINGAPORE	185	1,353	-	0	-	1,538	22	-	-	22	281	0.12	0.000%
SLOVAKIA	749	7,025	-	4	-	7,778	294	0	-	294	3,676	1.59	1.000%
SLOVENIA	1,707	542	-	0	-	2,249	103	0	-	103	1,289	0.56	0.000%
SOUTH AFRICAN REPUBLIC	3	265	-	0	-	268	22	0	-	22	278	0.12	0.000%
SOUTH KOREA	5	0	-	7	-	12	0	1	-	1	11	0.00	0.000%
SPAIN	269	3,502	-	28	1,332	5,131	107	3	15	125	1,567	0.68	0.000%
SWEDEN	29	1,185	0	1	-	1,215	20	0	-	20	250	0.11	1.000%
SWITZERLAND	505	5,068	0	84	-	5,657	170	2	-	172	2,151	0.93	0.000%
TAIWAN	8	37	-	-	-	45	1	-	-	1	9	0.00	0.000%
TANZANIA	1	2	-	-	-	3	1	-	-	1	7	0.00	0.000%
THAILAND	0	11	-	-	-	11	0	-	-	0	4	0.00	0.000%
TUNISIA	1	34	-	-	-	35	6	-	-	6	70	0.03	0.000%
TURKEY	1,144	903	-	0	-	2,047	150	0	-	150	1,871	0.81	0.000%
U.S.A.	1,288	7,690	1	111	392	9,482	302	12	6	320	4,002	1.73	0.000%
UKRAINE	0	18	-	0	-	18	0	0	-	0	6	0.00	0.000%
UNITED KINGDOM	4,957	9,557	0	35	293	14,840	242	4	11	258	3,222	1.39	1.000%
URUGUAY	0	15	-	-	-	15	0	-	-	0	3	0.00	0.000%
UZBEKISTAN	0	43	-	-	-	43	1	-	-	1	13	0.01	0.000%
VIET-NAM	1	65	-	-	-	66	3	-	-	3	43	0.02	0.000%
Other States	115	27	0	0	-	143	8	0	-	8	100	0.04	0.000%
TOTAL	89,156	435,469	12	571	35,533	560,740	17,862	62	605	18,529	231,608		

Own Funds

Total Loss Absorbing Capacity

Starting from 27 June 2019 UniCredit group, as a Global Systemically Important Institution ("G-SII"), is subject to the "Total Loss Absorbing Capacity" (TLAC) requirement, introduced by Regulation 876/2019 ("CRR2") and aimed at ensuring that the G-SIIs have a sufficient amount of Own Funds and liabilities with a high total loss absorbing capacity.

TLAC requirement is formally separated and does not alter or replace Resolution Authority decisions concerning the minimum MREL requirement according to Directive 2014/59/EU amended by Directive 2019/879/EU.

In accordance with the CRR2 article 92a, the minimum TLAC requirement applicable is equal to the maximum between:

- 18% of the total risk exposure amount to which the Combined Capital Reserve applicable to the Group (3.63%) at the reference date is added; therefore, the total minimum requirement applicable as at 31 December 2022 is 21.63%;
- 6.75% of the overall leverage exposure measure.

Referring to UniCredit group:

- the applicable requirement as at 31 December 2022 is equal to 21.63% based on the total risk exposure amount;
- TLAC minimum requirement is applied on a consolidated basis and shall be respected by the Parent company (Single Point of Entry (SPE), the unique Resolution Entity).

To comply with the above-mentioned minimum requirements, the Regulation envisages the following elements:

- Own Funds computed according to CRR and CRR2 provisions;
- Tier 2 Capital with a residual maturity equal or greater than 1 year as at 31 December 2022 for the amount related to the regulatory amortization not included in the Own Funds, according to CRR2 article 64;
- Eligible liabilities that meet the conditions of computability according to CRR2 article 72b, computable to the extent they are not already included among Additional Tier 1 Capital and Tier 2 Capital;
- Eligible liabilities that do not meet the subordination requirement according to paragraph d) of CRR2 article 72b(2), but comply with the other eligibility conditions, which are computable for TLAC purposes, if allowed by the Resolution Authority, below the threshold of 3.5% of the total risk exposure amount.

In application of the grandfathering regime introduced by CRR2 article 494b 3, the liabilities issued before 27 June 2019 that do not comply with the conditions of computability referred to paragraph b) point ii) and from paragraph f) to paragraph m), are considered as TLAC eligible instruments according to CRR2 article 72b.

The contents included in this section have been defined by referring to the final version of "Draft implementing technical standards on disclosure and reporting MREL and TLAC" (EBA/ITS/2020/06) transposed by the Commission implementing Regulation (EU) 2021/763.

TLAC requirements (at resolution Group level)

The Resolution Strategy defined by the Single Resolution Board (SRB) for the UniCredit group is SPE for those legal entities within the European Union, with the "Bail-in" as main resolution tool applicable to UniCredit S.p.A. (i.e. the unique Resolution Entity).

The table below provides summary information about the evolution of the amount of Own Funds and Eligible Liabilities and the related ratios over the quarters.

The TLAC ratio as at 31 December 2022 amounts to 26.90% and is well above the applicable requirement (21.63%)

The variation observed in Eligible Liabilities, compared to the previous quarter, is mainly due to the Senior non-Preferred instruments no longer eligible for remaining maturity less than one year, such decrease has been partially offset by new issuances.

Template EU KM2 - Key metrics

		G-SII REQUIREMENT FOR OWN FUNDS AND ELIGIBLE LIABILITIES (TLAC)				
		b	c	d	e	f
OWN FUNDS AND ELIGIBLE LIABILITIES, RATIOS AND COMPONENTS		31.12.2022	30.09.2022	30.06.2022	31.03.2022	31.12.2021
1	Own funds and eligible liabilities	82,991	86,014	85,722	81,738	81,941
2	Total risk exposure amount of the resolution group (TREA)	308,466	319,980	316,731	329,922	321,992
3	Own Funds and eligible liabilities as a percentage of TREA	26.90%	26.88%	27.06%	24.78%	25.45%
4	Total exposure measure (TEM) of the resolution group	946,901	1,032,101	1,044,558	1,046,730	1,011,462
5	Own Funds and eligible liabilities as percentage of the TEM	8.76%	8.33%	8.21%	7.81%	8.10%
6a	Does the subordination exemption in article 72b(4) of the CRR apply (5% exemption)?	NO	NO	NO	NO	NO
6b	Aggregate amount of permitted non-subordinated eligible liabilities instruments if the subordination discretion in accordance with article 72b(3) CRR is applied (max 3.5% exemption)	10,796	11,199	11,086	11,547	8,050
6c	If a capped subordination exemption applies under article 72b(3) CRR, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised under row 1, divided by funding issued that ranks pari passu with excluded Liabilities and that would be recognised under row 1 if no cap was applied (%)	73.53%	78.93%	77.08%	79.26%	58.87%

Note:

The column "a" is not shown as refer to "Minimum requirement for own funds and eligible liabilities (MREL)" required starting from 1 January 2024.

Own Funds

Template EU TLAC1 - TLAC composition (at resolution group level)

		(€ million)
		31.12.2022
		G-SII REQUIREMENT FOR OWN FUNDS AND ELIGIBLE LIABILITIES (TLAC)
Own Funds and eligible liabilities and adjustments		
1	Common Equity Tier 1 capital (CET1)	51,442
2	Additional Tier 1 capital (AT1)	6,078
6	Tier 2 capital (T2)	8,541
11	Own Funds for the purpose of articles 92a CRR and 45 BRRD (A)	66,062
Own Funds and eligible liabilities: Non-regulatory capital elements		
12	Eligible liabilities instruments issued directly by the resolution entity that are subordinated to excluded liabilities (not grandfathered) (B)	6,133
EU12a	Eligible liabilities instruments issued by other entities within the resolution group that are subordinated to excluded liabilities (not grandfathered)	-
EU12b	Eligible liabilities instruments that are subordinated to excluded liabilities, issued prior to 27 June 2019 - (subordinated grandfathered)	-
EU12c	Tier 2 instruments with a residual maturity of at least one year to the extent they do not qualify as Tier 2 items	-
13	Eligible liabilities that are not subordinated to excluded liabilities (not grandfathered pre cap) (C)	13,061
EU13a	Eligible liabilities that are not subordinated to excluded liabilities, issued prior to 27 June 2019 and grandfathered (pre-cap) (D)	1,623
14	Amount of non subordinated instruments eligible, where applicable after application of article 72b (3) CRR (E)	10,796
17	Eligible liabilities items before adjustments	16,929
EU17a	<i>of which subordinated liabilities items</i>	6,133
Own Funds and eligible liabilities: Adjustments to non-regulatory capital elements		
18	Own Funds and eligible liabilities items before adjustments	82,991
20	(Deduction of investments in other eligible liabilities instruments)	-
22	Own Funds and eligible liabilities after adjustments	82,991
Risk-weighted exposure amount and Leverage exposure measure of the resolution group		
23	Total risk exposure amount (TREA)	308,466
24	Total exposure measure (TEM)	946,901
Ratio of Own Funds and eligible liabilities		
25	Own Funds and eligible liabilities as a percentage of TREA	26.90%
26	Own funds and eligible liabilities as a percentage of TEM	8.76%
27	CET1 (as a percentage of TREA) available after meeting the resolution group's requirements (F)	8.43%
28	Institution-specific combined buffer requirement - of which:	3.63%
29	- capital conservation buffer requirement	2.50%
30	- countercyclical buffer requirement	0.13%
31	- systemic risk buffer requirement	-
EU31a	- Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	1.00%
EU-32a	Total amount of excluded liabilities referred to in article 72a(2) CRR (G)	310,830

Notes to the template "EU TLAC1: TLAC composition (at resolution group level)"

A.

The value of Own Funds is referred to the amount calculated at Group level. The amounts reported are reconciled with the figures included in the template EU CC1 - Composition of regulatory Own Funds, in particular:

- item "1 Common Equity Tier 1 capital (CET1)" of this template is reconciled with the Item "29 Common Equity Tier 1 (CET1) capital";
- item "2 Additional Tier 1 capital (AT1)" of this template is reconciled with the Item "44 Additional Tier 1 (AT1) capital";
- item "6 Tier 2 capital (T2)" of this template is reconciled with the Item "58 Tier 2 (T2) capital".

B.

The amount equal to €6,133 million is related to the liabilities issued by UniCredit S.p.A. that satisfy the subordination requirement according to CRR2 article 72b(2)(d) and includes Senior non-Preferred instruments. Such amount is net of the deduction of the plafond, granted by the SRB as general prior permission for the buyback and market making activities for the period 1 January 2023 - 31 December 2023 for an amount equal to €150 million. This row neither includes the amortised portion of T2 instruments where remaining maturity is greater than or equal to one year (CRR2 article 72a(1)(b), to be reported, if any, in row EU12c) nor eligible liabilities grandfathered under CRR2 article 494b(3).

C.

The amount of €13,061 million is related to liabilities issued by UniCredit S.p.A. that do not satisfy the subordination requirement according to CRR2 article 72b(2)(d) but that qualify as Eligible Liabilities according to CRR2 article 72b(3) and includes Senior Preferred instruments. This row does not include any amount recognizable on a transitional basis in accordance with CRR2 article 494b(3) (grandfathered instruments) and reports the amount of the liabilities before the application of the cap of 3.5% of RWEA.

Own Funds

D.

The amount of €1,623 million is related to liabilities issued by UniCredit S.p.A. prior to 27 June 2019 that do not satisfy the subordination requirement according to CRR2 article 72b(2)(d) but that qualifies as Eligible Liabilities according to CRR2 article 72b(3) and includes Senior Preferred instruments. This row includes the amount qualifying as eligible liabilities on a transitional basis in accordance with CRR2 article 494b(3) (grandfathered instruments) and shows the amount of the liabilities before the application of the cap of 3.5% of RWEA.

E.

The amount equal to €10,796 million includes the Senior Preferred bonds computable within the eligible liabilities after the application of the cap of 3.5% of RWEA. As at 31 December 2022, the amount of Senior Preferred bonds of €14,684 million is net of the deduction of the plafond, granted by the SRB as general prior permission for the buyback and market making activities for the period 1 January 2023 - 31 December 2023 for an amount equal to €850 million and exceeds the threshold of the 3.5% of RWEA; hence, the amount computed as TLAC eligible instruments is equal to €10,796 million (equal to 3.5% of RWEA).

F.

The amount represents the CET1 available after meeting the resolution Group's minimum capital requirements on CET1 and TLAC. The minimum capital requirement on CET1 reflects the anticipation of article 104a(4) of CRDV application consistently with what reported in the Own Funds section, table "Capital requirements and buffers for UniCredit group".

G.

The amount of €310,830 million represents the total amount of excluded liabilities referred to in CRR2 article 72a(2) and mainly consists of covered and preferential deposits, sight and short-term deposits with an original maturity of less than one year, secured liabilities, liabilities arising from derivatives and from debt instruments with embedded derivatives.

Template EU TLAC3 - Resolution entity - Creditor rating*

INSOLVENCY RANKING (A)		1	2	4	5	TOTAL
1	DESCRIPTION OF THE INSOLVENCY RANKING	EQUITY	SUBORDINATED DEBTS (D)	SENIOR NON PREFERRED	UNSECURED DEBTS	
2	Liabilities and Own Funds (B)	49,329	13,439	10,713	64,228	137,709
3	of which: excluded liabilities	-	-	-	38,591	38,591
4	Liabilities and Own Funds less excluded liabilities (C)	49,329	13,439	10,713	25,636	99,117
5	Subset of liabilities and Own Funds less excluded liabilities that are Own Funds and liabilities potentially eligible for meeting TLAC - of which:	49,329	13,133	6,283	15,534	84,279
6	- residual maturity ≥ 1 year < 2 years	-	-	-	414	414
7	- residual maturity ≥ 2 year < 5 years	-	-	5,553	10,494	16,046
8	- residual maturity ≥ 5 years < 10 years	-	4,467	730	4,443	9,640
9	- residual maturity ≥ 10 years but excluding perpetual securities	-	2,564	-	183	2,747
10	- perpetual securities	49,329	6,099	-	-	55,428

Notes to the template "TLAC3 - Resolution entity - Creditor rating"

(*) The figures included in the template is reported at resolution entity level. According to the resolution strategy defined for UniCredit group, the Parent company represents the SPE and the amounts refer to capital and liabilities issued by UniCredit S.p.A. at individual level.

This template provides information on all liabilities ranking lower than or pari passu to eligible liabilities, including own funds and other capital instruments, showing the distribution of liabilities across the hierarchy of claims.

A.

The Insolvency Ranking is consistent with the provisions of articles 111 and subsequent of Insolvency Law and of article 91 par 1 and 1-bis of Legislative Decree 385/1993 included in Annex 3b - "Insolvency Ranking in the jurisdictions of the Banking Union" published by the SRB, in force for Italy from 14 July 2022.

B.

The amounts included in row 2 are referred to the outstanding amount comprehensive of accruals interests and intragroup position. It is specified that the total Equity is expressed considering the share Capital and reserves not including Own Funds deductions, while for derivatives, included in column 5 "Unsecured debts", it is considered the fair value as reported in the balance sheet.

Own Funds

C.

The amount included in row 5 is different from the one included in row 4 because of the liabilities that do not satisfy the computable conditions defined in CRR2 article 72a, mainly related to intragroup liabilities and liabilities with residual maturity less than one year as at 31 December 2022. It is specified that the amount included in the column total of the row is different from the value included in row 18 of template TLAC1 "TLAC composition (at resolution Group level)", since for the TLAC calculation the amount of the consolidated Own Funds is considered and the Plafond, granted by the SRB as general prior permission for the buyback and market making activities, is deducted.

D.

The category includes Additional Tier 1 Capital (AT1) and Tier 2 Capital (T2) instruments; the ranking is determined by the contractual provisions governing each instrument.

The amount of Subordinated debts (column 2, of which in row 5) is different from the sum of the maturity breakdown included in rows 6, 7, 8, 9 and 10 for the inclusion of Subordinated instruments included in Own Funds and hence TLAC eligible with residual maturity less than one year.

Own Funds requirements and risk weighted exposure amounts

Overview of RWEAs (comment to the EU OV1 Template)

As at fourth quarter 2022, the amount of Group RWEA stood at €308.5 billion, showing a decrease with reference to the third quarter 2022 for approx. €11.5 billion:

- Credit and Counterparty risk RWEAs decreased for -€9.2 billion (rows 1, 6, 16, excluding row EU 8b) according to the following breakdown:
 - Credit risk -€6.5 billion mainly driven by credit risk exposures under IRB approach and due to (i) lower commercial volumes in Italy, Russia and Eastern Europe, (ii) several active portfolio management initiatives, including new synthetic securitisation finalized in the quarter in particular in Germany, Italy and Bulgaria, (iii) foreign exchange movements mostly reflecting Russian Ruble and USD Dollar depreciation. These drivers have been partially offset by (iv) a new LGD model in Austria;
 - Counterparty risk exposures under IMM approach -€2.1 billion principally driven by derivative exposures in Germany and Italy;
- Market risk RWEAs decreased for -€2.4 billion (rows EU 8b, 15, 20), mainly driven by:
 - Standardised Approach - foreign exchange risk (-€1.1 billion) following the decrease in the structural Russian positions Ruble denominated;
 - IMA approach (-€1 billion) following the decrease of market transactions in the trading book of UniCredit Bank AG and lower exposure towards Republic of Italy in the trading book of UniCredit S.p.A.

Template EU OV1 - Overview of risk weighted exposure amounts

		RISK WEIGHTED EXPOSURE AMOUNTS (RWEAs)		TOTAL OWN FUNDS REQUIREMENTS
		a	b	c
DESCRIPTION		31.12.2022	30.09.2022	31.12.2022
1	Credit risk (excluding CCR)	248,661	255,135	19,893
2	Of which the standardised approach	87,749	88,015	7,020
3	Of which the foundation IRB (F-IRB) approach	12,023	13,108	962
4	Of which slotting approach	4,848	4,800	388
EU 4a	Of which equities under the simple risk weighted approach	1,202	1,507	96
5	Of which the advanced IRB (A-IRB) approach	136,199	145,863	10,896
6	Counterparty credit risk - CCR	10,817	13,162	865
7	Of which the standardised approach	1,700	1,825	136
8	Of which internal model method (IMM)	7,534	9,668	603
EU 8a	Of which exposures to a CCP	328	349	26
EU 8b	Of which credit valuation adjustment - CVA	1,235	1,290	99
9	Of which other CCR	21	30	2
10	Not applicable			
11	Not applicable			
12	Not applicable			
13	Not applicable			
14	Not applicable			
15	Settlement risk	60	88	5
16	Securitisation exposures in the non-trading book (after the cap)	7,560	7,978	605
17	Of which SEC-IRBA approach	2,290	1,964	183
18	Of which SEC-ERBA (including IAA)	3,058	3,200	245
19	Of which SEC-SA approach	2,212	2,814	177
EU 19a	Of which 1250%/deduction	-	-	-
20	Position, foreign exchange and commodities risks (Market risk)	10,149	12,485	812
21	Of which the standardised approach	3,896	5,194	312
22	Of which IMA	6,254	7,291	500
EU 22a	Large exposures	-	-	-
23	Operational risk	31,218	31,132	2,497
EU 23a	Of which basic indicator approach	831	1,078	66
EU 23b	Of which standardised approach	2,835	2,960	227
EU 23c	Of which advanced measurement approach	27,552	27,094	2,204
24	Amounts below the thresholds for deduction (subject to 250% risk weight) (for information)	16,628	17,158	1,330
25	Not applicable			
26	Not applicable			
27	Not applicable			
28	Not applicable			
29	Total	308,466	319,980	24,677

Own Funds requirements and risk weighted exposure amounts

Starting from June 2020, UniCredit group decided to apply the transitional regime connected to the introduction of IFRS9 accounting principle in accordance with the article 473a of Regulation (EU) 873/2020 that amends Regulation (EU) 876/2019 in recommendation to mitigate impacts in consideration of Covid-19 emergency.

The amount weighted at 250% reported in template above (Item 24 "Amounts below the thresholds for deduction (subject to 250% risk weight) (for information)") includes the effects related to the abovementioned transitional adjustments and in particular reflects the exclusion of the deferred tax assets that rely on future profitability and arise from temporary differences referred to IFRS9.

As at 31 December 2022, UniCredit group does not exceed the threshold of 17.65% of Common Equity Tier 1 Capital.

Template EU CR10 - Specialised lending and equity exposures under the simple risk weighted approach (CR10.1)

(€ million)

SPECIALISED LENDING: PROJECT FINANCE (SLOTING APPROACH)								
REGULATORY CATEGORIES	REMAINING MATURITY	ON-BALANCE SHEET EXPOSURE	OFF-BALANCE SHEET EXPOSURE	RISK WEIGHT	EXPOSURE POST CCF AND POST CRM	RISK WEIGHTED EXPOSURE AMOUNT	EXPECTED LOSS AMOUNT	
		a	b	c	d	e	f	
Category 1	Less than 2.5 years	5	1	50%	6	3	-	
	Equal to or more than 2.5 years	220	21	70%	221	120	1	
Category 2	Less than 2.5 years	9	5	70%	10	6	0	
	Equal to or more than 2.5 years	61	34	90%	85	75	1	
Category 3	Less than 2.5 years	1	0	115%	1	1	0	
	Equal to or more than 2.5 years	0	-	115%	0	0	0	
Category 4	Less than 2.5 years	-	-	250%	-	-	-	
	Equal to or more than 2.5 years	-	-	250%	-	-	-	
Category 5	Less than 2.5 years	3	-	-	3	-	1	
	Equal to or more than 2.5 years	-	-	-	-	-	-	
Total as at 31.12.2022	Less than 2.5 years	18	7		20	10	1	
	Equal to or more than 2.5 years	281	55		307	196	2	
Total as at 30.06.2022	Less than 2.5 years	17	3		19	10	1	
	Equal to or more than 2.5 years	178	43		193	118	3	

Template EU CR10 - Specialised lending and equity exposures under the simple risk weighted approach (CR10.2)

(€ million)

SPECIALISED LENDING: INCOME-PRODUCING REAL ESTATE AND HIGH VOLATILITY COMMERCIAL REAL ESTATE (SLOTING APPROACH)								
REGULATORY CATEGORIES	REMAINING MATURITY	ON-BALANCE SHEET EXPOSURE	OFF-BALANCE SHEET EXPOSURE	RISK WEIGHT	EXPOSURE POST CCF AND POST CRM	RISK WEIGHTED EXPOSURE AMOUNT	EXPECTED LOSS AMOUNT	
		a	b	c	d	e	f	
Category 1	Less than 2.5 years	693	111	50%	778	378	-	
	Equal to or more than 2.5 years	1,263	228	70%	1,420	946	6	
Category 2	Less than 2.5 years	1,768	464	70%	2,070	1,403	8	
	Equal to or more than 2.5 years	948	407	90%	1,139	981	9	
Category 3	Less than 2.5 years	423	126	115%	518	563	15	
	Equal to or more than 2.5 years	165	39	115%	190	210	5	
Category 4	Less than 2.5 years	43	2	250%	45	97	4	
	Equal to or more than 2.5 years	31	-	250%	31	64	2	
Category 5	Less than 2.5 years	243	1	-	243	-	121	
	Equal to or more than 2.5 years	6	-	-	6	-	3	
Total as at 31.12.2022	Less than 2.5 years	3,170	704		3,652	2,440	148	
	Equal to or more than 2.5 years	2,413	675		2,786	2,201	25	
Total as at 30.06.2022	Less than 2.5 years	3,149	726		3,637	2,611	86	
	Equal to or more than 2.5 years	2,566	639		2,870	2,205	56	

Own Funds requirements and risk weighted exposure amounts

Template EU CR10 - Specialised lending and equity exposures under the simple risk weighted approach (CR10.5)

(€ million)

CATEGORIES	EQUITY EXPOSURES UNDER THE SIMPLE RISK-WEIGHTED APPROACH					
	ON-BALANCE SHEET EXPOSURE	OFF-BALANCE SHEET EXPOSURE	RISK WEIGHT	EXPOSURE POST CCF AND POST CRM	RISK WEIGHTED EXPOSURE AMOUNT	EXPECTED LOSS AMOUNT
	a	b	c	d	e	f
Private equity exposures	392	-	190%	392	744	3
Exchange-traded equity exposures	306	-	290%	37	106	0
Other equity exposures	92	3	370%	95	352	2
Total as at 31.12.2022	790	3		523	1,202	6
Total as at 30.06.2022	605	3		608	1,534	8

The template CR10.4 “Specialised lending: commodities finance (slotting approach)” and template CR10.3 “Specialised lending: Object Finance (slotting approach)” are not disclosed as the Group doesn’t have exposures as at 31 December 2022.

Template EU MR1 - Market risk under the standardised approach

(€ million)

DESCRIPTION		a
		RWEAs
Outright products		
1	Interest rate risk (general and specific)	542
2	Equity risk (general and specific)	40
3	Foreign exchange risk	3,051
4	Commodity risk	2
Options		
5	Simplified approach	-
6	Delta-plus approach	261
7	Scenario approach	-
8	Securitisation (specific risk)	-
9	Total as at 31.12.2022	3,896
	Total as at 30.06.2022	5,067

With regards to foreign exchange risk (row 3 of the template above), according to the EBA Guidelines on the treatment of structural FX risk (EBA/GL/2020/09), applicable starting from January 2022, UniCredit group includes, in the calculation of foreign exchange RWEA, the net open currency positions stemming from Legal entities with reporting currency different from Eur. In this regard, UniCredit obtained formal approval from the ECB (as per article 352(2) of the CRR) to exclude from the calculation of foreign exchange RWEA those positions that serve to hedge the consolidated total capital ratio against the adverse effects of exchange rates. The variation observed is attributable to the foreign exchange RWEA and is mainly due to the decrease in the structural position in Ruble.

Own Funds requirements and risk weighted exposure amounts

Risk Weighted Exposure Amounts segmentation

(€ million)

CATEGORIES	RWEAs	
	31.12.2022	31.12.2021
Total RWEAs	308,466	321,992
A. Credit and Counterparty Risk	265,803	283,065
A.1 Italy	107,535	122,217
A.2 Germany	64,660	67,564
A.3 Central Europe	54,261	55,448
A.4 Eastern Europe	23,039	22,445
A.5 Russia	13,701	10,421
A.6 Group Corporate Centre	2,608	4,609
A.7 Non Core	-	361
B. Market Risk	11,445	8,267
B.1 Italy	588	1,152
B.2 Germany	7,349	6,076
B.3 Central Europe	1,481	500
B.4 Eastern Europe	925	304
B.5 Russia	926	174
B.5 Group Corporate Centre	175	62
B.6 Non Core	-	-
C. Operational Risk	31,218	30,661
C.1 Italy	12,069	12,360
C.2 Germany	9,120	8,876
C.3 Central Europe	4,659	5,080
C.4 Eastern Europe	2,902	2,645
C.5 Russia	1,517	920
C.5 Group Corporate Centre	950	780
C.6 Non Core	-	-

Notes:

- Figures as of 2021 were recast, where necessary, on a like-to-like basis to consider changes in scope of business segment and methodological rules.
- The amount in row A "Credit and Counterparty Risk" is consistent with the sum of the following rows of the EU OV1 template:
 - row 1 "Credit risk";
 - row 6 "Counterparty credit risk" excluding the row EU 8b "Of which credit valuation adjustment (CVA)";
 - row 16 "Securitisation exposures in the non-trading book".
- The amount in row B "Market Risk" is consistent with the sum of the following rows of the EU OV1 template:
 - row 20 "Position, foreign exchange and commodities risks (Market risk)";
 - row 15 "Settlement risk";
 - row EU 8b "Of which credit valuation adjustment (CVA)".

Own Funds requirements and risk weighted exposure amounts

Ytd changes in Risk Weighted Exposures Amounts - business segment

(€ million)

RWEAs - CHANGES IN FY 2022							
CATEGORIES	GROUP	ITALY	GERMANY	CENTRAL EUROPE	EASTERN EUROPE	RUSSIA	GROUP CORPORATE CENTRE ⁽¹⁾
Total RWEAs, opening balances	321,992	135,729	82,516	61,027	25,394	11,516	5,811
Acquisitions (+)/Dismissal (-)⁽²⁾	-	-	-	-	-	-	-
of which:							
- Credit and counterparty risk	-	-	-	-	-	-	-
- Market risk	-	-	-	-	-	-	-
- Operational risk	-	-	-	-	-	-	-
A. Credit and counterparty risk changes	(17,262)	(14,682)	(2,904)	(1,187)	594	3,279	(2,362)
A.1 Asset size	(16,098)	(10,700)	(3,141)	484	51	(3,374)	583
A.2 Asset quality	(4,053)	(1,748)	(3,355)	(5,217)	(93)	6,371	(10)
A.3 Model updates	8,901	(379)	4,520	4,343	481	(0)	(63)
A.4 Methodology and policy	266	236	-	-	(135)	165	-
A.5 Foreign exchange movements	(115)	217	(149)	(91)	(8)	(95)	9
A.6 Other changes	(6,162)	(2,307)	(779)	(706)	298	212	(2,880)
B. Market risk changes	3,178	(563)	1,273	982	621	752	113
B.1 Regulatory changes	3,318	330	222	966	805	824	171
B.2 Book evolution and methodology changes	(450)	(893)	588	185	(183)	(89)	(58)
B.3 Other changes	311	0	463	(169)	(0)	17	0
C. Operational risk changes	557	(291)	245	(420)	258	597	170
Total RWEAs, closing balances	308,466	120,192	81,130	60,402	26,866	16,143	3,733

Notes:

1. Centre Global Functions, inter-segment adjustments and consolidation adjustments not attributable to individual segments.

2. Acquisition (+)/Dismissal (-): Acquisition/Dismissal of consolidated subsidiaries with impact on the Group exceeding the materiality threshold of €500 million for disclosure purposes; below this threshold the impact disclosed in item A.1, A.6, B.2, B.3, C.

Definitions:

A.1.Asset size: Impact on RWEA caused by change in Exposure At Default

A.2.Asset quality: Impact of Probability of Default/Loss Given Default/Exposure At Default given by re-rating of customer due to recalibration and migrations

A.3.Model Updates: Impact coming from Rollout, model and methodology changes

A.4.Methodology and policy: Impact of new/updated regulation and of specific feedback from the Supervisor

A.5.Foreign exchange movements: Impact of fx rate fluctuations

A.6 Other: impact of Data quality actions and Other effects

B.1.Regulatory Changes: Impact of new/updated regulation and of specific feedbacks from the Supervisor

B.2.Book Evolution: Changes due to business evolution, market indicators and Methodology changes

The "Other changes" in the item A.6 mainly refer to fine tuning on risk parameters setting in Italy and Germany and variations on specific exposures, included the reduction of convertible DTA in Italy and a decrease in RWEA from significant investments.

Credit risk

Non-performing and forborne exposures

The present section includes the disclosure requirements in according to Regulation (EU) 637/2021 (with reference to CRR2 article 442) and EBA “Guidelines on reporting and disclosure of exposures subject to measures applied in response to the Covid-19 crisis” (EBA/GL/2020/07), shown in coherence with the FINREP submission as of 31 December 2022.

The signs in the tables below are coherent with the related Regulatory Reporting (FINREP, Asset Encumbrance e ECB Covid Reporting).

Template EU CQ1 - Credit quality of forborne exposures

(€ million)

DESCRIPTION	a		b		c		d		e		f		g		h	
	GROSS CARRYING AMOUNT/NOMINAL AMOUNT OF EXPOSURES WITH FORBEARANCE MEASURES		NON-PERFORMING FORBORNE		ACCUMULATED IMPAIRMENT, ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK AND PROVISIONS		COLLATERALS RECEIVED AND FINANCIAL GUARANTEES RECEIVED ON FORBORNE EXPOSURES		ON PERFORMING FORBORNE EXPOSURES		ON NON-PERFORMING FORBORNE EXPOSURES		OF WHICH COLLATERAL AND FINANCIAL GUARANTEES RECEIVED ON NON-PERFORMING EXPOSURES WITH FORBEARANCE MEASURES			
	PERFORMING FORBORNE		OF WHICH DEFAULTED	OF WHICH IMPAIRED												
005 Cash balances at central banks and other demand deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
010 Loans and advances	9,327	5,420	5,420	5,392	(842)	(2,606)	8,219	1,793								
020 Central banks	-	-	-	-	-	-	-	-								
030 General governments	2	15	15	15	(0)	(8)	1	-								
040 Credit institutions	-	-	-	-	-	-	-	-								
050 Other financial corporations	503	497	497	493	(21)	(146)	471	42								
060 Non-financial corporations	7,109	4,091	4,091	4,068	(643)	(2,170)	5,897	1,276								
070 Households	1,713	816	816	816	(178)	(282)	1,850	474								
080 Debt Securities	-	3	3	-	-	(2)	-	-								
090 Loan commitments given	724	294	294	294	(4)	(22)	433	104								
100 Total as at 31.12.2022	10,052	5,717	5,717	5,686	(847)	(2,629)	8,652	1,896								
Total as at 30.06.2022	10,083	6,907	6,907	6,868	(879)	(3,277)	8,991	2,369								

Note:

In coherence with the UniCredit group approach, the non-performing exposures are equal to defaulted.

Template EU CQ2 - Quality of forbearance

(€ million)

DESCRIPTION	a	
	GROSS CARRYING AMOUNT OF FORBORNE EXPOSURES AS AT 31.12.2022	GROSS CARRYING AMOUNT OF FORBORNE EXPOSURES AS AT 30.06.2022
010 Loans and advances that have been forborne more than twice	1,381	1,891
020 Non-performing forborne loans and advances that failed to meet the non-performing exit criteria	666	639

Credit risk

Template EU CQ3 - Credit quality of performing and non-performing exposures by past due days

(€ million)

DESCRIPTION	GROSS CARRYING AMOUNT/NOMINAL AMOUNT					
	PERFORMING EXPOSURES			NON-PERFORMING EXPOSURES		
		NOT PAST DUE OR PAST DUE <= 30 DAYS	PAST DUE > 30 DAYS <= 90 DAYS		UNLIKELY TO PAY THAT ARE NOT PAST-DUE OR	
					PAST DUE <= 90 DAYS	PAST DUE > 90 DAYS <= 180 DAYS
005 Cash balances at central banks and other demand deposits	127,483	127,483	-	63	63	-
010 Loans and advances	481,812	480,656	1,156	12,648	7,789	1,007
020 Central banks	6,363	6,363	0	-	-	-
030 General governments	23,564	23,523	42	556	232	78
040 Credit institutions	20,039	20,034	5	73	2	66
050 Other financial corporations	63,229	63,226	3	703	624	9
060 Non-financial corporations	236,665	235,995	670	8,624	5,558	590
070 of which SMEs	74,584	74,373	211	3,585	2,260	167
080 Households	131,952	131,516	436	2,692	1,373	263
090 Debt securities	141,195	141,195	-	91	90	2
100 Central banks	-	-	-	-	-	-
110 General governments	96,999	96,999	-	5	5	-
120 Credit institutions	22,330	22,330	-	-	-	-
130 Other financial corporations	17,117	17,117	-	83	82	2
140 Non-financial corporations	4,749	4,749	-	3	3	-
150 Off balance sheet exposures	364,265			2,730		
160 Central banks	586			-		
170 General governments	9,825			47		
180 Credit institutions	23,171			60		
190 Other financial corporations	51,123			82		
200 Non-financial corporations	262,646			2,483		
210 Households	16,914			58		
220 Total as at 31.12.2022	1,114,755	749,334	1,156	15,533	7,942	1,009
Total as at 30.06.2022	1,195,541	820,300	1,415	16,816	8,900	1,059

continued: Template EU CQ3 - Credit quality of performing and non-performing exposures by past due days

(€ million)

DESCRIPTION	GROSS CARRYING AMOUNT/NOMINAL AMOUNT					
	NON-PERFORMING EXPOSURES					
	PAST DUE > 180 DAYS <= 1 YEAR	PAST DUE > 1 YEAR <= 2 YEARS	PAST DUE > 2 YEAR <= 5 YEARS	PAST DUE > 5 YEAR <= 7 YEARS	PAST DUE > 7 YEARS	OF WHICH DEFAULTED
005 Cash balances at central banks and other demand deposits	-	-	-	-	-	63
010 Loans and advances	1,122	624	998	428	681	12,648
020 Central banks	-	-	-	-	-	-
030 General governments	99	86	52	3	6	556
040 Credit institutions	-	1	0	4	0	73
050 Other financial corporations	38	2	26	3	1	703
060 Non-financial corporations	727	344	608	358	439	8,624
070 of which SMEs	237	193	372	111	245	3,585
080 Households	257	192	311	61	235	2,692
090 Debt securities	-	-	-	-	-	91
100 Central banks	-	-	-	-	-	-
110 General governments	-	-	-	-	-	5
120 Credit institutions	-	-	-	-	-	-
130 Other financial corporations	-	-	-	-	-	83
140 Non-financial corporations	-	-	-	-	-	3
150 Off balance sheet exposures						2,730
160 Central banks						-
170 General governments						47
180 Credit institutions						60
190 Other financial corporations						82
200 Non-financial corporations						2,483
210 Households						58
220 Total as at 31.12.2022	1,122	624	998	428	681	15,533
Total as at 30.06.2022	707	713	1,459	456	930	16,816

Note:

The template above does not include the Held for Trading portfolio.

Credit risk

Template EU CQ4 - Quality of non-performing exposures by geography

(€ million)

DESCRIPTION	a	b	c	d	e	f	g
	GROSS CARRYING/NOMINAL AMOUNT OF WHICH NON-PERFORMING			OF WHICH SUBJECT TO IMPAIRMENT	ACCUMULATED IMPAIRMENT	PROVISIONS ON OFF-BALANCE SHEET COMMITMENTS AND FINANCIAL GUARANTEES GIVEN	ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK ON NON- PERFORMING EXPOSURES
			OF WHICH DEFAULTED				
010 On balance sheet exposures	635,746	12,739	12,739	629,243	(11,982)		(89)
020 Italy	237,104	4,512	4,512	236,437	(4,507)		(78)
030 Germany	120,157	1,814	1,814	116,705	(1,160)		(4)
040 Austria	58,584	1,614	1,614	57,837	(1,297)		-
050 Russia	10,212	675	675	10,212	(1,348)		-
060 Turkey	2,608	545	545	2,608	(360)		-
070 Other Countries	207,081	3,580	3,580	205,444	(3,309)		(7)
080 Off balance sheet exposures	366,996	2,730	2,730			1,402	
090 Italy	131,705	1,476	1,476			409	
100 Germany	82,535	573	573			273	
110 Austria	31,875	310	310			158	
120 Russia	8,274	74	74			212	
130 Croatia	3,417	62	62			90	
140 Other Countries	109,189	236	236			260	
150 Total as at 31.12.2022	1,002,742	15,470	15,470	629,243	(11,982)	1,402	(89)
Total as at 30.06.2022	1,048,541	16,753	16,753	664,254	(12,995)	1,513	(90)

Notes:

- In coherence with the UniCredit group approach, the non-performing exposures are equal to defaulted.
- The template above:
 - does not include the Held for Trading portfolio;
 - does not include the item "Cash balances at central banks and other demand deposits".
- Countries included are the ones with higher non performing exposures in the UniCredit group.

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

(€ million)

DESCRIPTION	a	b		c	d	e	f
		GROSS CARRYING AMOUNT					
		OF WHICH NON-PERFORMING					
			OF WHICH DEFAULTED				
010	Agriculture, forestry and fishing	4,009	168	168	4,009	(165)	-
020	Mining and quarrying	2,820	19	19	2,820	(553)	-
030	Manufacturing	63,685	2,020	2,020	63,630	(2,286)	(0)
040	Electricity, gas, steam and air conditioning supply	12,800	239	239	12,751	(284)	-
050	Water supply	2,412	53	53	2,412	(81)	-
060	Construction	14,433	941	941	14,144	(738)	(14)
070	Wholesale and retail trade	41,499	1,214	1,214	41,468	(1,063)	(1)
080	Transport and storage	11,815	406	406	11,814	(460)	-
090	Accommodation and food service activities	4,772	434	434	4,767	(334)	-
100	Information and communication	8,766	159	159	8,668	(169)	(1)
110	Real estate activities	44,075	1,433	1,433	44,019	(1,246)	(4)
120	Financial and insurance activities	2,498	135	135	2,456	(103)	-
130	Professional, scientific and technical activities	16,456	333	333	16,423	(258)	-
140	Administrative and support service activities	5,435	515	515	5,435	(190)	-
150	Public administration and defense, compulsory social security	836	1	1	836	(0)	-
160	Education	270	2	2	270	(4)	-
170	Human health services and social work activities	3,994	289	289	3,993	(155)	-
180	Arts, entertainment and recreation	1,315	65	65	1,315	(63)	-
190	Other services	3,400	199	199	3,245	(68)	-
200	Total as at 31.12.2022	245,289	8,624	8,624	244,478	(8,219)	(20)
	Total as at 30.06.2022	252,821	9,396	9,396	252,167	(8,685)	(18)

Notes:

- In coherence with the UniCredit group approach, the non-performing exposures are equal to defaulted.
- The template above does not include the Held for Trading portfolio.

Credit risk

Template EU CQ6 - Collateral valuation - loans and advances

(€ million)							
		a	b	c	d	e	f
		LOANS AND ADVANCES					
		PERFORMING			NON PERFORMING		
		OF WHICH: PAST DUE > 30 DAYS <= 90 DAYS			UNLIKELY TO PAY THAT ARE NOT PAST DUE OR PAST DUE <= 90 DAYS		PAST DUE > 90 DAYS
DESCRIPTION							
010	Gross carrying amount	494,460	481,812	1,156	12,648	7,789	4,859
020	of which: Secured	319,076	311,239	770	7,837	5,056	2,781
030	of which: Secured with immovable property	176,371	172,333	368	4,038	2,793	1,246
040	of which: Instruments with LTV higher than 60% and lower than 80%	38,500	37,863		637	464	173
050	of which: Instruments with LTV higher than 80% and lower or equal to 100%	33,618	32,965		652	462	190
060	of which: Instruments with LTV higher than 100%	31,763	30,255		1,507	864	644
070	Accumulated impairment for secured assets	6,483	3,198	58	3,285	1,777	1,508
080	Collateral						
090	of which: Value capped at the value of exposure	216,984	214,642	399	2,342	1,788	554
100	of which: Immovable property	152,284	150,225	311	2,059	1,552	507
110	of which: Value above the cap	138,631	134,415	1,920	4,216	2,816	1,400
120	of which: Immovable property	119,495	115,740	1,730	3,755	2,495	1,261
130	Financial guarantees received	64,486	62,697	301	1,789	1,148	641
140	Accumulated partial write-off	1,032	-	-	1,032	256	776

Credit risk

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

(€ million)

		a	b
		COLLATERAL OBTAINED BY TAKING POSSESSION	
DESCRIPTION		VALUE AT INITIAL RECOGNITION	ACCUMULATED NEGATIVE CHANGES
010	Property Plant and Equipment (PP&E)	1	(1)
020	Other than PP&E	1,212	(671)
030	Residential immovable property	23	(2)
040	Commercial immovable property	589	(64)
050	Movable property	2	(1)
060	Equity and debt instruments	598	(605)
070	Other collateral	-	-
080	Total as at 31.12.2022	1,213	(672)
	Total as at 30.06.2022	1,187	(693)

Template EU CQ8 - Collateral obtained by taking possession and execution processes - vintage breakdown

(€ million)

DESCRIPTION		a		b		c		d		e		f	
		DEBT BALANCE REDUCTION		TOTAL COLLATERAL OBTAINED BY TAKING POSSESSION									
				FORECLOSED <=2 YEARS									
		GROSS CARRYING AMOUNT		ACCUMULATED NEGATIVE CHANGES		VALUE AT INITIAL RECOGNITION		ACCUMULATED NEGATIVE CHANGES		VALUE AT INITIAL RECOGNITION		ACCUMULATED NEGATIVE CHANGES	
010	Collateral obtained by taking possession classified as PP&E	1	(1)	1	(1)								
020	Collateral obtained by taking possession other than classified as PP&E	3,384	(2,060)	1,212	(671)	551	(470)						
030	Residential immovable property	7	(3)	23	(2)	2	(0)						
040	Commercial immovable property	1,120	(513)	589	(64)	28	(2)						
050	Movable property	2	(1)	2	(1)	1	(0)						
060	Equity and debt instruments	2,254	(1,543)	598	(605)	520	(468)						
070	Other collateral	-	-	-	-	-	-						
080	Total as at 31.12.2022	3,385	(2,061)	1,213	(672)	551	(470)						
	Total as at 30.06.2022	3.448	(2.087)	1.187	(693)	573	(464)						

continued: Template EU CQ8 - Collateral obtained by taking possession and execution processes - vintage breakdown

(€ million)

DESCRIPTION		g		h		i		j		k		l	
		TOTAL COLLATERAL OBTAINED BY TAKING POSSESSION											
		FORECLOSED >2 YEARS <=5 YEARS				FORECLOSED >5 YEARS				OF WHICH: NON-CURRENT ASSETS HELD-FOR-SALE			
		VALUE AT INITIAL RECOGNITION	ACCUMULATED NEGATIVE CHANGES	VALUE AT INITIAL RECOGNITION	ACCUMULATED NEGATIVE CHANGES	VALUE AT INITIAL RECOGNITION	ACCUMULATED NEGATIVE CHANGES	VALUE AT INITIAL RECOGNITION	ACCUMULATED NEGATIVE CHANGES				
010	Collateral obtained by taking possession classified as PP&E	-	-	-	-								
020	Collateral obtained by taking possession other than classified as PP&E	501	(51)	159	(150)	14	-						
030	Residential immovable property	18	(0)	3	(1)	-	-						
040	Commercial immovable property	480	(48)	81	(13)	14	-						
050	Movable property	1	(0)	0	(0)	-	-						
060	Equity and debt instruments	3	(3)	75	(135)	-	-						
070	Other collateral	-	-	-	-	-	-						
080	Total as at 31.12.2022	501	(51)	159	(150)	14	-						
	Total as at 30.06.2022	456	(57)	157	(172)	-	-						

Credit risk

Template EU CR1 - Performing and non-performing exposures and related provisions

(€ million)						
DESCRIPTION	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	127,483	125,580	1,903	63		30
010 Loans and advances	481,812	393,104	86,668	12,648		12,600
020 Central banks	6,363	5,438	925	-		-
030 General governments	23,564	21,873	1,014	556		556
040 Credit institutions	20,039	19,621	326	73		73
050 Other financial corporations	63,229	58,712	4,472	703		698
060 Non-financial corporations	236,665	183,839	52,034	8,624		8,587
070 of which SMEs	74,584	55,087	19,375	3,585		3,555
080 Households	131,952	103,622	27,897	2,692		2,686
090 Debt securities	141,195	135,038	1,801	91		3
100 Central banks	-	-	-	-		-
110 General governments	96,999	93,272	1,394	5		-
120 Credit institutions	22,330	20,577	77	-		-
130 Other financial corporations	17,117	16,707	80	83		3
140 Non-financial corporations	4,749	4,483	250	3		-
150 Off-balance sheet exposures	364,265	200,124	36,811	2,730		2,099
160 Central banks	586	18	1	-		-
170 General governments	9,825	6,835	806	47		47
180 Credit institutions	23,171	8,137	627	60		59
190 Other financial corporations	51,123	30,879	3,139	82		45
200 Non-financial corporations	262,646	145,091	29,950	2,483		1,921
210 Households	16,914	9,163	2,289	58		27
220 Total as at 31.12.2022	1,114,755	853,846	127,183	15,533		14,731
Total as at 30.06.2022	1,195,541	896,861	151,893	16,816		16,176

continued: Template EU CR1 - Performing and non-performing exposures and related provisions

(€ million)									
DESCRIPTION	ACCUMULATED IMPAIRMENT, ACCUMULATED IMPAIRMENT NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK AND PROVISIONS						COLLATERALS AND FINANCIAL GUARANTEES RECEIVED		
	PERFORMING EXPOSURES - ACCUMULATED IMPAIRMENT AND PROVISIONS			NON-PERFORMING EXPOSURES - ACCUMULATED IMPAIRMENT, ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK AND PROVISIONS			ACCUMULATED PARTIAL WRITE-OFF	ON PERFORMING EXPOSURES	ON NON-PERFORMING EXPOSURES
	OF WHICH: STAGE 1	OF WHICH: STAGE 2		OF WHICH: STAGE 2	OF WHICH: STAGE 3				
005 Cash balances at central banks and other demand deposits	(9)	(3)	(6)	(25)		(16)		-	-
010 Loans and advances	(5,658)	(1,353)	(4,305)	(6,058)		(6,028)	(1,032)	277,339	4,131
020 Central banks	(2)	(0)	(2)	0		0	-	4,095	-
030 General governments	(39)	(9)	(30)	(35)		(35)	(0)	4,993	461
040 Credit institutions	(50)	(6)	(44)	(9)		(9)	-	13,495	60
050 Other financial corporations	(239)	(94)	(146)	(230)		(225)	(22)	33,831	64
060 Non-financial corporations	(3,689)	(907)	(2,782)	(4,550)		(4,526)	(875)	121,944	2,436
070 of which SMEs	(1,457)	(343)	(1,114)	(1,984)		(1,961)	(515)	55,046	1,183
080 Households	(1,638)	(337)	(1,301)	(1,234)		(1,233)	(134)	98,980	1,111
090 Debt securities	(289)	(74)	(215)	(67)		(2)	-	150	-
100 Central banks	-	-	-	-		-	-	-	-
110 General governments	(204)	(6)	(198)	(5)		-	-	-	-
120 Credit institutions	(5)	(1)	(4)	-		-	-	-	-
130 Other financial corporations	(61)	(60)	(0)	(61)		(2)	-	-	-
140 Non-financial corporations	(20)	(7)	(13)	(2)		-	-	150	-
150 Off-balance sheet exposures	(614)	(216)	(373)	(788)		(705)	-	53,781	511
160 Central banks	(0)	(0)	(0)	-		-	-	3	-
170 General governments	(2)	(0)	(1)	(9)		(9)	-	1,324	8
180 Credit institutions	(20)	(5)	(15)	(21)		(21)	-	3,206	-
190 Other financial corporations	(37)	(20)	(15)	(27)		(17)	-	16,213	6
200 Non-financial corporations	(517)	(178)	(317)	(727)		(654)	-	31,047	487
210 Households	(38)	(13)	(25)	(5)		(5)	-	1,988	11
220 Total as at 31.12.2022	(6,570)	(1,646)	(4,899)	(6,938)		(6,752)		331,270	4,642
Total as at 30.06.2022	(6,670)	(1,169)	(5,462)	(7,955)		(7,761)		343,202	5,018

Note:
The template above does not include the Held for Trading portfolio.

Credit risk

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

(€ million)

DESCRIPTION	a	b
	GROSS CARRYING AMOUNT	RELATED NET CUMULATED RECOVERIES
010 Initial stock of non-performing loans and advances as at 31.12.2021	16,430	
020 Inflows to non-performing portfolios	9,875	
030 Outflows from non-performing portfolios	(13,657)	
040 Outflow to performing portfolio	(1,307)	
050 Outflow due to loan repayment, partial or total	(1,955)	
060 Outflow due to collateral liquidations	(167)	132
070 Outflow due to taking possession of collateral	(21)	10
080 Outflow due to sale of instruments	(3,429)	1,674
090 Outflow due to risk transfers	-	-
100 Outflows due to write-offs	(830)	
110 Outflow due to other situations	(3,947)	
120 Outflow due to reclassification as held for sale	(1,999)	
130 Final stock of non-performing loans and advances as at 31.12.2022	12,648	

Note:

In alignment with EBA instructions on Finrep templates it should be noted that the amounts related to "Inflows to non-performing portfolios" and "Outflow due to other situations" also include changes due to reclassification effects between counterparty categories (e.g. Small Medium Enterprises and "Other non SME"), which inflates the in/out flows for the related categories.

Template EU CR1-A - Maturity of exposures

(€ million)

DESCRIPTION	a	b	c	d	e	f
	NET EXPOSURE VALUE					
	ON DEMAND	<= 1 YEAR	> 1 YEAR <= 5 YEARS	> 5 YEARS	NO STATED MATURITY	TOTAL
1 Loans and advances	52,144	106,881	130,359	196,582	3,705	489,670
2 Debt securities	1,434	21,891	68,406	59,653	-	151,383
3 Total as at 31.12.2022	53,578	128,771	198,765	256,234	3,705	641,053
Total as at 30.06.2022	60,072	156,515	208,695	254,967	3,587	683,836

Breakdown by counterparties geography (non-financial corporations and households)

(€ million)

DESCRIPTION	GROSS CARRYING AMOUNT/NOMINAL AMOUNT OF EXPOSURES WITH FORBEARANCE MEASURES
Debt securities	3
Non-financial corporations	3
of which:	
- Luxembourg	3
Loans and advances	13,729
Non-financial corporations	11,200
of which:	
- Italy	5,293
- Germany	1,087
- Austria	1,034
- Other countries	3,785
Households	2,529
of which:	
- Italy	1,918
- Austria	287
- Croatia	69
- Other countries	255

Note:

Template prepared in accordance to "Guidance to banks on non-performing loans" issued by ECB on March 2017.

Credit risk

The table below shows the geographical breakdown (the main five Countries reported in table FR.20.7.1 of FINREP consolidated reporting) for each NACE code according to Chapter 4 of Annex VII ECB guidance on NPE portfolio published in March 2017.

Breakdown of loans and advances other than held for trading to non-financial corporations by NACE codes

(€ million)

(€ million)

DESCRIPTION	NON-FINANCIAL CORPORATIONS				
		GROSS CARRYING AMOUNT	OF WHICH: LOANS AND ADVANCES SUBJECT TO IMPAIRMENT	OF WHICH: NON-PERFORMING	ACCUMULATED IMPAIRMENT
A. Agriculture, forestry and fishing	4,009	4,009	168	(165)	-
of which:					
- Italy	1,441	1,441	50	(56)	-
- Romania	511	511	25	(23)	-
- Germany	502	502	15	(7)	-
- Bulgaria	335	335	6	(14)	-
- Slovakia	270	270	18	(21)	-
- Other countries	950	950	53	(44)	-
B. Mining and quarrying	2,820	2,820	19	(553)	-
of which:					
- Russia (Federation of)	1,532	1,532	5	(493)	-
- Hungary	232	232	-	(0)	-
- Netherlands	183	183	-	(14)	-
- Egypt	130	130	-	(0)	-
- United Arab Emirates	125	125	-	(0)	-
- Other countries	618	618	14	(46)	-
C. Manufacturing	63,685	63,630	2,020	(2,286)	(0)
of which:					
- Italy	28,797	28,793	538	(885)	-
- Germany	10,505	10,504	550	(432)	-
- Austria	4,782	4,782	179	(131)	-
- Russia (Federation of)	2,784	2,784	346	(250)	-
- United States	2,348	2,348	25	(35)	-
- Other countries	14,469	14,419	382	(553)	(0)
D. Electricity, gas, steam and air conditioning supply	12,800	12,751	239	(284)	-
of which:					
- Italy	3,171	3,171	77	(94)	-
- Germany	1,871	1,829	1	(25)	-
- Austria	1,259	1,259	3	(6)	-
- Slovakia	1,084	1,084	12	(27)	-
- France	703	703	-	(5)	-
- Other countries	4,712	4,705	146	(127)	-
E. Water supply	2,412	2,412	53	(81)	-
of which:					
- Italy	1,250	1,250	38	(36)	-
- Austria	355	355	8	(3)	-
- Germany	345	345	0	(1)	-
- Saudi Arabia	131	131	-	(2)	-
- Croatia	101	101	0	(30)	-
- Other countries	230	230	7	(9)	-
F. Constructions	14,433	14,144	941	(738)	(14)
of which:					
- Italy	5,689	5,673	593	(429)	(14)
- Austria	3,235	2,963	70	(66)	-
- Germany	2,861	2,861	113	(42)	-
- Romania	391	391	44	(44)	-
- Bulgaria	311	311	31	(41)	-
- Other countries	1,946	1,945	90	(116)	-

Credit risk

continued: Breakdown of loans and advances other than held for trading to non-financial corporations by NACE codes

(€ million)

DESCRIPTION	NON-FINANCIAL CORPORATIONS				
		GROSS CARRYING AMOUNT	OF WHICH: NON-PERFORMING	ACCUMULATED IMPAIRMENT	ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK ON NON-PERFORMING EXPOSURES
G. Wholesale and retail trade	41,499	41,468	1,214	(1,063)	(1)
of which:					
- Italy	16,365	16,365	371	(336)	(1)
- Germany	10,290	10,290	216	(135)	-
- Austria	2,482	2,482	212	(108)	-
- Romania	1,662	1,662	25	(49)	-
- Bulgaria	1,484	1,454	48	(69)	-
- Other countries	9,216	9,215	342	(366)	(0)
H. Transport and storage	11,815	11,814	406	(460)	-
of which:					
- Italy	4,742	4,742	104	(138)	-
- Germany	1,728	1,728	17	(67)	-
- Austria	975	975	67	(52)	-
- Czech (Republic)	567	567	40	(17)	-
- Croatia	387	387	56	(35)	-
- Other countries	3,416	3,415	122	(151)	-
I. Accommodation and food service activities	4,772	4,767	434	(334)	-
of which:					
- Italy	2,692	2,686	102	(124)	-
- Germany	539	539	42	(9)	-
- Austria	389	389	64	(17)	-
- Croatia	381	381	38	(57)	-
- Bulgaria	151	151	30	(34)	-
- Other countries	620	621	157	(93)	-
J. Information and communication	8,766	8,668	159	(169)	(1)
of which:					
- Germany	3,063	3,063	41	(40)	-
- Italy	2,294	2,207	30	(26)	-
- United States	430	430	26	(18)	-
- Netherlands	427	427	0	(1)	-
- France	400	392	-	(9)	-
- Other countries	2,152	2,149	62	(75)	(1)
K. Financial and insurance activities	2,498	2,456	135	(103)	-
of which:					
- Austria	917	917	73	(39)	-
- Spain	356	356	-	(1)	-
- Panama (Republic of)	212	212	-	(0)	-
- Netherlands	202	202	0	(1)	-
- Italy	184	143	17	(14)	-
- Other countries	629	629	45	(48)	-
L. Real estate activities	44,075	44,019	1,433	(1,246)	(4)
of which:					
- Germany	21,974	21,974	91	(53)	-
- Austria	7,151	7,141	497	(488)	(4)
- Italy	6,899	6,854	79	(36)	-
- Czech (Republic)	2,604	2,604	68	(51)	-
- Hungary	896	896	5	(12)	-
- Other countries	4,551	4,550	693	(606)	-
M. Professional, scientific and technical activities	16,456	16,423	333	(258)	-
of which:					
- Italy	6,121	6,088	69	(80)	-
- Austria	3,897	3,897	159	(90)	-
- Germany	2,615	2,615	59	(33)	-
- Luxembourg	1,027	1,027	-	(1)	-
- Spain	579	579	-	(0)	-
- Other countries	2,217	2,217	46	(54)	-

Credit risk

continued: Breakdown of loans and advances other than held for trading to non-financial corporations by NACE codes

(€ million)

DESCRIPTION	NON-FINANCIAL CORPORATIONS				
		GROSS CARRYING AMOUNT		ACCUMULATED IMPAIRMENT	ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK ON NON-PERFORMING EXPOSURES
		OF WHICH: LOANS AND ADVANCES SUBJECT TO IMPAIRMENT	OF WHICH: NON-PERFORMING		
N. Administrative and support service activities	5,435	5,435	515	(190)	-
of which:					
- Italy	2,673	2,673	180	(130)	-
- Germany	1,164	1,164	287	(17)	-
- Austria	519	519	14	(12)	-
- France	220	220	-	(0)	-
- Czech (Republic)	159	159	1	(2)	-
- Other countries	700	700	33	(29)	-
O. Public administration and defence, compulsory social security	836	836	1	(0)	-
of which:					
- Germany	652	652	-	-	-
- Austria	145	145	-	-	-
- Bosnia and Herzegovina	34	34	-	-	-
- Czech (Republic)	1	1	-	-	-
- Serbia	1	1	1	-	-
- Other countries	3	3	0	(0)	-
P. Education	270	270	2	(4)	-
of which:					
- Italy	92	92	1	(2)	-
- Germany	67	67	0	(1)	-
- Spain	40	40	-	(1)	-
- United States	24	24	-	(0)	-
- Austria	8	8	0	(0)	-
- Other countries	39	39	1	(1)	-
Q. Human health services and social work activities	3,994	3,993	289	(155)	-
of which:					
- Germany	2,096	2,096	36	(17)	-
- Italy	1,069	1,069	28	(33)	-
- Austria	245	245	1	(2)	-
- Turkey	172	172	172	(73)	-
- Czech (Republic)	111	111	2	(1)	-
- Other countries	301	300	50	(29)	-
R. Arts, entertainment and recreation	1,315	1,315	65	(63)	-
of which:					
- Austria	442	442	41	(42)	-
- Italy	328	328	7	(8)	-
- Germany	256	256	13	(10)	-
- United Kingdom	76	76	-	(1)	-
- Czech (Republic)	74	74	0	(0)	-
- Other countries	139	139	4	(2)	-
S. Other services	3,400	3,245	199	(68)	-
of which:					
- Germany	1,198	1,052	92	(3)	-
- Italy	577	577	10	(10)	-
- Czech (Republic)	424	424	4	(4)	-
- Austria	412	412	2	(2)	-
- Russia (Federation of)	105	105	4	(3)	-
- Other countries	684	675	87	(46)	-
LOANS AND ADVANCES	245,289	244,478	8,624	(8,219)	(20)

Credit risk

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

(€ million)

	a	b	c	d	e	f	g
			GROSS CARRYING AMOUNT				
			PERFORMING	NON PERFORMING			
			OF WHICH: EXPOSURES WITH FORBEARANCE MEASURES	OF WHICH: INSTRUMENTS WITH SIGNIFICANT INCREASE IN CREDIT RISK SINCE INITIAL RECOGNITION BUT NOT CREDIT- IMPAIRED (STAGE2)		OF WHICH: EXPOSURES WITH FORBEARANCE MEASURES	OF WHICH: UNLIKELY TO PAY THAT ARE NOT PAST-DUE OR PAST- DUE <= 90 DAYS
1 Loans and advances subject to moratorium	0	0	-	-	-	-	-
2 of which: Households	0	0	-	-	-	-	-
3 of which: Collateralised by residential immovable property	-	-	-	-	-	-	-
4 of which: Non-financial corporations	-	-	-	-	-	-	-
5 of which: Small and Medium-sized Enterprises	-	-	-	-	-	-	-
6 of which: Collateralised by commercial immovable property	-	-	-	-	-	-	-

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

(€ million)

	h	i	j	k	l	m	n	o
			ACCUMULATED IMPAIRMENT, ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK					GROSS CARRYING AMOUNT
			PERFORMING	NON PERFORMING				
			OF WHICH: EXPOSURES WITH FORBEARANCE MEASURES	OF WHICH: INSTRUMENTS WITH SIGNIFICANT INCREASE IN CREDIT RISK SINCE INITIAL RECOGNITION BUT NOT CREDIT- IMPAIRED (STAGE2)		OF WHICH: EXPOSURES WITH FORBEARANCE MEASURES	OF WHICH: UNLIKELY TO PAY THAT ARE NOT PAST-DUE OR PAST- DUE <= 90 DAYS	INFLOWS TO NON- PERFORMING EXPOSURES
1 Loans and advances subject to moratorium	(0)	(0)	-	-	-	-	-	-
2 of which: Households	(0)	(0)	-	-	-	-	-	-
3 of which: Collateralised by residential immovable property	-	-	-	-	-	-	-	-
4 of which: Non-financial corporations	-	-	-	-	-	-	-	-
5 of which: Small and Medium-sized Enterprises	-	-	-	-	-	-	-	-
6 of which: Collateralised by commercial immovable property	-	-	-	-	-	-	-	-

Note:

The amounts are related only to legislative and non-legislative moratoria in force; as at 31 December 2022 the amounts are less than 0.5 million and, therefore, are shown with the value "0".

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

(€ million)

	a	b	c	d	e	f	g	h	i
			GROSS CARRYING AMOUNT						
			OF WHICH: LEGISLATIVE MORATORIA	OF WHICH: EXPIRED	RESIDUAL MATURITY OF MORATORIA				
	NUMBER OF OBLIGORS				<= 3 MONTHS	> 3 MONTHS <= 6 MONTHS	> 6 MONTHS <= 9 MONTHS	> 9 MONTHS <= 12 MONTHS	> 1 YEAR
1 Loans and advances for which moratorium was offered	284	21,216							
2 Loans and advances subject to moratorium (granted)	264	19,413	13,113	19,412	-	-	-	-	0
3 of which: Households		6,514	3,360	6,514	-	-	-	-	0
4 of which: Collateralised by residential immovable property		5,031	2,354	5,031	-	-	-	-	-
5 of which: Non-financial corporations		11,883	9,627	11,883	-	-	-	-	-
6 of which: Small and Medium-sized Enterprises		8,413	7,346	8,413	-	-	-	-	-
7 of which: Collateralised by commercial immovable property		7,944	6,525	7,944	-	-	-	-	-

Note:

The amount in column "Number of obligors" is represented in thousands.

Credit risk

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

(€ million)

	a		b		c		d	
			GROSS CARRYING AMOUNT		MAXIMUM AMOUNT OF THE GUARANTEE THAT CAN BE CONSIDERED		GROSS CARRYING AMOUNT	
			OF WHICH: FORBORNE		PUBLIC GUARANTEES RECEIVED		INFLOWS TO NON-PERFORMING EXPOSURES	
1	New originated loans and advances subject to public guarantee schemes		25,956	570	21,659		238	
2	<i>of which: Households</i>		1,769				24	
3	<i>of which: Collateralised by residential immovable property</i>		0				-	
4	<i>of which: Non-financial corporations</i>		23,974	553	19,833		207	
5	<i>of which: Small and Medium-sized Enterprises</i>		15,402				127	
6	<i>of which: Collateralised by commercial immovable property</i>		454				-	

Credit risk

Use of standardised approach

List of the ECAI (External Credit Assessment Institution) and ECA (Export Credit Agency) used in the standardised approach and of the credit portfolios on which the ratings supplied by these entities are applied.

PORTFOLIOS	ECA/ECAI	RATING CHARACTERISTICS ¹
Exposures to central governments or central banks	Fitch Ratings Moody's Investor Services Standard and Poor's Rating Services Cerved Rating Agency ²	Solicited and Unsolicited
Exposures to regional governments or local authorities		
Exposures to public sector entities		
Exposures to multilateral development banks		
Exposures to institutions		
Exposures to corporates		
Items representing securitisation positions		
Exposures to institutions and corporates with a short-term credit assessment		
Exposures in the form of units or shares in collective investment undertakings ("CIUs")		

Notes:

1. Solicited rating: shall mean a rating assigned for a fee following a request from the entity evaluated. Ratings assigned without such a request shall be treated as equivalent to solicited ratings if the entity had previously obtained a solicited rating from the same ECAI.

Unsolicited rating: shall mean a rating assigned without a request from the entity evaluated and without payment of a fee.

2. Only Unsolicited.

The process in use to transfer the issuance and issue rating follows the logic described in CRR article 139 and compares seniority of the claim and the resulting risk weight with and without the application of the issuance specific rating.

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

(€ million)

EXPOSURE CLASSES		EXPOSURES BEFORE CCF AND BEFORE CRM		EXPOSURES POST CCF AND POST CRM		RWEA AND RWEA DENSITY	
		ON-BALANCE SHEET EXPOSURES	OFF-BALANCE SHEET EXPOSURES	ON-BALANCE SHEET EXPOSURES	OFF-BALANCE SHEET EXPOSURES	RWEA	RWEA DENSITY (%)
		a	b	c	d	e	f
1	Central governments or central banks	206,044	6,698	244,878	5,701	16,486	6.58%
2	Regional government or local authorities	17,262	3,187	20,594	520	457	2.17%
3	Public sector entities	9,771	1,082	9,255	86	637	6.82%
4	Multilateral development banks	1,289	51	2,927	102	-	-
5	International organisations	3,198	0	3,198	0	-	-
6	Institutions	1,802	1,015	3,834	526	1,355	31.08%
7	Corporates	36,832	24,861	30,283	3,700	28,058	82.57%
8	Retail	15,471	4,260	13,706	611	9,845	68.76%
9	Exposures secured by mortgages on immovable property	10,600	220	10,600	59	4,397	41.26%
10	Exposures in default	1,328	126	1,231	22	1,380	110.21%
11	Exposures associated with particularly high risk	256	3	226	3	344	150.00%
12	Covered bonds	92	-	92	-	21	23.29%
13	Exposures to institutions and corporates with a short-term credit assessment	1,047	131	1,011	3	334	32.96%
14	Units or shares in collective investment undertakings	715	514	715	514	2,093	170.38%
15	Equity exposures	6,543	6	6,543	6	12,063	184.19%
16	Other items	12,918	0	12,918	0	10,277	79.56%
17	Total as at 31.12.2022	325,168	42,152	362,011	11,851	87,749	23.47%
	Total as at 30.06.2022	370,006	44,298	406,164	12,246	89,398	21.37%

Credit risk

Template EU CR5 - Standardised approach - Credit risk exposures by regulatory exposure class and risk weights

(€ million)

EXPOSURE CLASSES		RISK WEIGHT								
		0%	2%	4%	10%	20%	35%	50%	70%	75%
		a	b	c	d	e	f	g	h	i
1	Central governments or central banks	238,887	-	-	-	70	-	43	-	-
2	Regional government or local authorities	19,237	-	-	-	1,777	-	-	-	-
3	Public sector entities	7,689	-	-	-	1,013	-	408	-	-
4	Multilateral development banks	3,029	-	-	-	-	-	-	-	-
5	International organisations	3,198	-	-	-	-	-	-	-	-
6	Institutions	-	-	-	-	3,500	-	398	-	-
7	Corporates	-	-	-	-	5,526	25	2,532	48	-
8	Retail	-	-	-	-	-	94	-	-	14,223
9	Exposures secured by mortgages on immovable property	-	-	-	-	-	5,957	4,135	-	-
10	Exposures in default	-	-	-	-	-	-	-	-	-
11	Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-
12	Covered bonds	-	-	-	1	80	-	10	-	-
13	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	789	-	153	-	-
14	Units or shares in collective investment undertakings	109	-	-	-	0	-	0	-	7
15	Equity exposures	-	-	-	-	-	-	-	-	-
16	Other items	2,068	-	-	0	626	-	8	-	-
17	Total exposure value as at 31.12.2022	274,218	-	-	1	13,380	6,076	7,686	48	14,231
	Total exposure value as at 30.06.2022	315,661	194	-	1	12,532	6,200	8,043	94	14,882

Credit risk

continued: Template EU CR5 - Standardised approach - Credit risk exposures by regulatory exposure class and risk weights

(€ million)

EXPOSURE CLASSES		RISK WEIGHT						TOTAL EXPOSURE VALUE	OF WHICH UNRATED
		100%	150%	250%	370%	1250%	OTHERS		
		j	k	l	m	n	o	p	q
1	Central governments or central banks	7,788	817	2,975	-	-	-	250,579	2,553
2	Regional government or local authorities	96	4	-	-	-	-	21,114	87
3	Public sector entities	231	-	-	-	-	-	9,341	8
4	Multilateral development banks	-	-	-	-	-	-	3,029	-
5	International organisations	-	-	-	-	-	-	3,198	-
6	Institutions	462	-	-	-	-	-	4,359	2,267
7	Corporates	22,644	3,209	-	-	-	-	33,982	24,107
8	Retail	-	-	-	-	-	-	14,317	14,317
9	Exposures secured by mortgages on immovable property	567	-	-	-	-	-	10,659	10,659
10	Exposures in default	997	256	-	-	-	-	1,253	1,253
11	Exposures associated with particularly high risk	-	229	-	-	-	-	229	229
12	Covered bonds	-	-	-	-	-	-	92	10
13	Exposures to institutions and corporates with a short-term credit assessment	17	56	-	-	-	-	1,014	0
14	Units or shares in collective investment undertakings	403	239	-	1	37	432	1,229	1,217
15	Equity exposures	2,873	-	3,676	-	-	-	6,549	6,549
16	Other items	10,132	-	-	-	-	84	12,918	12,918
17	Total exposure value as at 31.12.2022	46,208	4,809	6,651	1	37	516	373,862	76,174
	Total exposure value as at 30.06.2022	51,685	1,608	6,942	1	22	545	418,410	79,988

Starting from June 2020, UniCredit group decided to apply the transitional regime connected to the introduction of IFRS9 accounting principle in accordance with the article 473a of Regulation (EU) 873/2020 that amends Regulation (EU) 876/2019 in recommendation to mitigate impacts in consideration of Covid-19 emergency.

The amount weighted at 250% reported in "Central Government or Central bank" and "Equity" exposure class template includes the effects related to the abovementioned transitional adjustments and in particular reflects the exclusion of the deferred tax assets that rely on future profitability and arise from temporary differences referred to IFRS9.

As at 31 December 2022, UniCredit group does not exceed the threshold of 17.65% of Common Equity Tier 1 Capital.

Credit risk

Use of the IRB approach

Banca d'Italia, with act No.365138 dated 28 March 2008, authorised UniCredit group to use IRB Advanced approach in order to determine capital requirements for credit and operational risks.

With reference to credit risk, the Group has been authorized to use internal estimations of PD, LGD and EAD parameters for Group Wide credit portfolios (Sovereign, Banks, Multinationals and Global Project Finance) and for local credit portfolios of relevant subsidiaries (corporate and retail). With reference to Italian mid-corporate and small business portfolios, regulatory EAD parameters are currently used.

The mentioned approach has been adopted by UniCredit S.p.A. (UCI S.p.A.), by UniCredit Bank AG (UCB AG) and UniCredit Bank Austria AG (UCBA AG). According to the Roll-out plan, providing a progressive extension of the IRB rating system, approved by the Group and shared with the Supervisory Authorities, these methods have been extended starting from 2008 to other Group entities currently, UniCredit Banka Slovenija dd, UniCredit Bulbank AD, UniCredit Bank Czech Republic and Slovakia a.s., UniCredit Bank Hungary Zrt., UniCredit Bank S.A. (Romania) and AO UniCredit Bank in Russia.

In October 2021, UniCredit Leasing GmbH and Subsidiaries were authorised to revert to the use of the Standardised Approach (Permanent Partial Use) for all former AIRB portfolios. From 1 November 2021, UniCredit Bank Ireland plc was merged in UCI S.p.A. and for exposures coming from UniCredit Bank Ireland the RWEA calculation approaches authorised in UCI S.p.A. were adopted.

This qualitative information provides the description of the rating systems authorized by Supervisory Authorities for each main exposure class. The following table summarizes the rating systems used by the Group with an indication of the related relevant exposure class and the entities where they are used.

PREVAILING EXPOSURE CLASS	RATING SYSTEM	LEGAL ENTITY
Central governments and central banks	Sovereign (PD, LGD, EAD)	UCI S.p.A., UCB AG, UCBA AG, UCB CZ, UCB SK, UCB RO (*)
Institutions	Financial Institutions & Banks (PD, LGD, EAD)	UCI S.p.A., UCB AG, UCBA AG, UCB Slo(*), UCB BG(*), UCB CZ, UCB HU(*) (**), UCB SK, UCB RO(*)
Corporate	Multinational (PD, LGD, EAD)	UCI S.p.A. (***), UCB AG, UCBA AG, UCB Slo(*), UCB BG, UCB CZ, UCB HU(*), UCB SK, UCB RO(*), AO UCB(*)
	Global Project Finance (PD, LGD, EAD)	UCI S.p.A., UCB AG, UCBA AG, UCB CZ, UCB SK
	Integrated Corporate Rating RIC (PD, LGD)	UCI S.p.A.
	Mid Corporate (PD, LGD, EAD)	UCB AG, UCBA AG, UCB CZ, UCB BG, UCB HU(*), UCB SK(*), UCB RO(*)
	Foreign Small and Medium Sized Enterprises (PD, LGD, EAD)	UCB AG
	Income Producing Real Estate (IPRE) (PD, LGD, EAD)	UCB AG, UCB CZ
	Acquisition and Leverage Finance (PD, LGD, EAD)	UCB AG
	Wind Project Finance (PD, LGD, EAD)	UCB AG
	Commercial Real Estate Finance (PD, LGD, EAD)	UCB AG
	Real Estate Customers (PD, LGD, EAD)	UCBA AG
	Income Producing Real Estate (IPRE) (Slotting criteria)	UCI S.p.A., UCBA AG, UCB BG, UCB SK
	Project Finance (Slotting Criteria)	UCB BG
	Integrated Small Business Rating RISB (PD, LGD)	UCI S.p.A.
	Integrated Private Rating (RIP-One) (PD, LGD, EAD) (****)	UCI S.p.A.
	Integrated Private Rating Mortgages (RIP-MI) (PD)(****)	UCI S.p.A.
	Small Business (PD, LGD, EAD)	UCB AG, UCBA AG, UCB CZ, UCB BG, UCB SK
Retail exposures	Private Individuals (PD, LGD, EAD)	UCB AG, UCBA AG, UCB CZ, UCB BG, UCB SK
	Asset Backed Commercial Paper (PD, LGD, EAD)	UCB AG
Securitisation		

Notes:

(*) These entities are currently authorized only to use the IRB Foundation, therefore use only PD internal estimations for determination of capital requirements.

(**) This entity has been authorized to adopt the Group Wide model Financial Institution & Banks (GW BANKS) only for Commercial Bank segment with the exclusion of the Securities Industry segment.

(***) Starting from 2012, the Group Wide Multinational Corporate (GW MNC) rating system (for the estimation of parameters PD, LGD and EAD) is also adopted for the Italian Large Corporate (ILC) portfolio, which includes Italian companies with an operating revenues/value between €250 and €500 million.

(****) New RIP-ONE model with a unique PD model for Private Individuals at counterparty level.

(*****) Applied to Natural Persons characterized by entrepreneurship risk ("Private-like") which are excluded from the scope of application of the RIP-One.

Credit risk

Keywords:

UCI S.p.A.: UniCredit S.p.A.

UCB AG: UniCredit Bank AG

UCBA AG: UniCredit Bank Austria AG

UCB Slo: UniCredit Banka Slovenija d.d.

UCB BG: UniCredit Bulbank AD

UCB CZ: Czech portfolio of UniCredit Bank Czech Republic and Slovakia a.s.

UCB HU: UniCredit Hungary Zrt.

UCB SK: Slovak portfolio of UniCredit Bank Czech Republic and Slovakia a.s.

UCB RO: UniCredit Bank SA (Romania)

AO UCB: AO UniCredit Bank (Russia)

A Group Master Scale, introduced in the Group governance rules, is adopted and updated in 2022 in order to have vision of the customer riskiness at Group level and to increase communication and management reporting.

The Group Rating Master Scale is based on the following assumptions:

- the investment grade/non-investment grade rating classes are clearly separated by a well-defined threshold that may change according to the PD changes identified in all group wide rating scales (which are directly derived from S&P migration matrices);
- the range of PD is sufficiently large (AAA to Default), the default classes correspond to those defined by EBA;
- the Group Rating Master Scale has been defined in order to have a level of granularity as the one of the Standard & Poor's rating scale in the best classes.

The Group Rating Master Scale is used for management reporting purposes only; thus, it has no impact on the Internal Rating Based (IRB) approach, on the regulatory requirements compliance of rating models and on the Roll-out plan. The Risk Weighted Asset, Expected Loss and Loan Loss Provision calculations do not change. There is also no impact on the pricing of loans, and it is not necessary to recalibrate existing rating models.

Based on the previous considerations, the correspondence between the PD rating classes provided by the Group Rating Master Scale and those of external agency (S&P's) are purely indicative and therefore they may change over time.

Credit risk

Rating Group Master Scale Template

Rating notch	Rating	PD_min	PD_max	S&P proxy rating equivalent
1	1A	0.000%	0.026%	AAA,AA+,AA,AA-,A+,A
2	1B	0.026%	0.035%	A, A-
3	1C	0.035%	0.048%	A-
4	2A	0.048%	0.065%	A-
5	2B	0.065%	0.089%	BBB+
6	2C	0.089%	0.121%	BBB+, BBB
7	3A	0.121%	0.165%	BBB
8	3B	0.165%	0.224%	BBB, BBB-
9	3C	0.224%	0.306%	BBB-
10	4A	0.306%	0.417%	BBB-, BB+
11	4B	0.417%	0.568%	BB+
12	4C	0.568%	0.775%	BB
13	5A	0.775%	1.056%	BB, BB-
14	5B	1.056%	1.439%	BB-
15	5C	1.439%	1.961%	BB-, B+
16	6A	1.961%	2.673%	B+
17	6B	2.673%	3.643%	B+, B
18	6C	3.643%	4.965%	B, B-
19	7A	4.965%	6.767%	B
20	7B	6.767%	9.222%	B, B-
21	7C	9.222%	12.570%	B-
22	8A	12.570%	17.131%	B-
23	8B	17.131%	23.349%	B-, CCC
24	8C	23.349%	31.823%	CCC
25	8D	31.823%	100.00%	CCC
26	9A	Past Due		D
27	9B	Unlikely to pay		D
28	9C	Unlikely to pay: distressed restructuring		D
29	9D	Unlikely to pay: sale of credit obligations		D
30	9E	Bad Loans		D

All the internal rating systems adopted by UniCredit group represent a fundamental component of credit decision-making and credit risk process. In particular internal rating systems and PD, LGD and EAD parameters are applied in the following areas:

- Different phases of the credit process:

- Approval/renewal. The assignment of an internal rating is a key component in the credit assessment of a counterparty/transaction and represents a mandatory step in providing/renewing credit lines. The rating assigned before the decision-making is an integrated part of the credit assessment and it is discussed in the credit proposal. Together with the loan exposure, the PD as calculated by the internal rating is also a component for defining the appropriate credit approval level;
- Monitoring. The main objective of the loan monitoring process is the early identification of deteriorating creditworthiness of a counterparty/transaction, and the timely definition of the most appropriate corrective actions, aiming to bring credit files back to regular status and avoiding the default classification. This activity mainly focuses on signs of potential or actual credit risk deterioration and taking adequate actions, including the potential reduction of exposure or even, disengaging from the customer. Possible options also include request of new or additional collateral, resulting in the reduction of LGD, and thus a positive impact on EAD and potentially in a subsequent recovery phase;
- Loan recovery. The assessment of the proposed strategy aims at defining the recovery plan, loan loss provisions, expected net cash flows (after levying on collaterals and guarantees) and all the other values for the calculation of the Net Present Value ("NPV"), on the basis of the related prudential collection hypothesis considering all the costs and the probability of the strategy to fail. The assessment results in the estimated LGD.

Credit risk

- Provision policies. For performing loan customers, starting from 1 January 2018, the IFRS 9 Expected Credit Loss (ECL) Model envisages that a credit event does not have to occur for a credit loss to be recognized. ECLs are recalculated at each reporting date in order to reflect changes in credit risk since initial recognition of a financial instrument. Forward-looking information and macro-economic factors are used for the determination of ECLs. Moreover, the measurement of the risk parameters for the expected credit losses calculation shall reflect an unbiased and probability-weighted amount determined by evaluating a range of possible outcomes rather than based on a best - or worst-case scenario. A stage approach is followed: i) Stage 1: covers all exposures that have not significantly deteriorated in credit quality since initial recognition. Financial instruments assigned to Stage 1 result in the recognition of a 12-month expected credit loss. ii) Stage 2 covers financial instruments that have significantly deteriorated in credit quality since initial recognition but that do not have objective evidence of a default event. Financial instruments assigned to Stage 2 result in the recognition of a lifetime expected credit losses. iii) For counterparties in the default category (stage 3), the estimated recoverable amount is the present value of future cash flows expected to be recovered, discounted at the original effective interest rate of the exposure. For financial instruments in Stage 3, lifetime expected credit losses shall be recorded.
- Capital management and allocation. Ratings are also an essential element in the process of managing and allocating capital that is performed on a risk-based perspective. Specifically, the output of rating systems feeds RWEA and Expected Loss calculation that are considered for allocating capital and for the quantification of "risk adjusted performance" measures (i.e., EVA, sEVA, ROAC and RACE)⁹.
- Reporting. The fundamental objective of the reporting and monitoring activities performed by the Group Risk Management function is the analysis of the main drivers and parameters of credit risk (exposure, portfolio mix, asset quality, cost of risk, shortfall, etc.) in order to promptly initiate any countermeasures on portfolios, sub-portfolios or individual counterparties. The reporting provides a managerial tool for supporting decision-making process in the management and mitigation of risks. Group Risk Management function performs credit risk reporting at portfolio level, producing reports at Group level, both recurring and specific (on demand of Top Management, Supervisors or external entities, e.g., rating agencies) with the objective of analysing the main risk components and their development over time, and thus to detect any signals of deterioration at an early stage and, subsequently, to put in place the appropriate corrective actions. Credit portfolio performance is analysed with reference to its main risk drivers (such as growth and risk indicators), customer segments, regions, industrial sectors, impaired credits performance and relevant coverage. The most relevant reports, at the Group level, are detailed below:
 - Integrated Risk Report is produced with a quarterly frequency, shared internally at Management/Board level and externally with Supervisory Authority;
 - A comprehensive Credit Risk Report harmonizing and integrating all major monitoring and reporting on Credit Risk present in Parent Company, providing a consistent and structured representation and steering of the overall performing credits portfolio both at Group and regional/divisional level from a managerial perspective. The report is produced on a quarterly basis and shared internally at Management level;
 - Reports from Internal Validation function informing periodically Management bodies on the significant weaknesses embedded in the internal models. The main validation reports are:
 - Validation Report: formalised by the competent Validation Function and sent to the competent Chief Risk Officer functions;
 - Annual Report of Internal Validation: formalized by Group Internal Validation (GIV) on an annual basis and including the result of all validation activities carried out during the year on Pillar I rating systems at the Group level. The report highlights the overall adequacy of each risk measurement system in scope by describing the main achievements and most important gaps and weaknesses to be properly addressed as well as the existing Supervisory findings within the validation scope. Furthermore, it provides a summary at rating systems level "as a whole", by aggregating the Overall Validation Assessment on the different components (model, process, data and IT). The report is submitted to: the Statutory Auditors, in charge of issuing a formal opinion; the Internal Audit function, for information; the Board of Directors, for approval and then to the Supervisory Authority;
 - Quarterly Validation Overview (QVO): formalized by the Group Validation Function on a quarterly basis and providing a picture of the status of recommendations and main topics to be addressed regarding all the validation phases as well as the Credit risk model monitoring on PD. The QVO is submitted by GIV to Group and local Chief Risk Officers for internal managerial alignment and sent to the Group Internal Audit function for information. In addition, annually a summary of the recommendations tracking is reported jointly with the "Annual Report of Internal Validation Function".
 - Annual Report of Parent Company Internal Audit function, presenting an assessment of the Internal Control System's overall functionality and describing, inter alia, audit outcomes and highlighting the main criticalities and shortcomings found, and recommending corrective measures.

The UniCredit group is firmly committed to satisfy the CRR requirements for recognition of Credit Risk Mitigation (CRM) techniques, according to the different approaches adopted (Standardised, Foundation IRB (F-IRB) or Advanced IRB (A-IRB)), both for internal use in operations and for regulatory capital purposes, as necessary for the calculation of credit risk capital requirement.

⁹ sEVA - Simplified Economic Value Added; RoAC - Return on Allocated Capital.

Credit risk

For more details on the Credit Risk Mitigation techniques, reference is made to the paragraph "2.4 Credit risk mitigation technique" of the Consolidated financial statements as at 31 December 2022, Notes to the consolidated accounts, Part E Information on risks and related hedging policies, Section 2 Risks of the prudential consolidated perimeter, 2.1 Credit risk, 2. Credit risk management policies.

The Governance framework for the management of IRB rating systems leverages on the presence of the "Credit Models & Risk Policies" function, within the Risk Management, responsible for guaranteeing at Group level the coordination and steering of the overall of IRB model landscape well as the related methodologies and underlying processes. In particular, the structure is responsible of defining Group Standards compliant with regulations and supervisory expectations as well as supporting local functions in their implementation.

In addition, the Parent Company and the entities that received the IRB authorization needed to establish a validation process of the rating systems as well as an extension of the internal audit activities with respect to such systems.

The purpose of the validation process is to express an evaluation concerning the proper functioning, predictive ability and overall performance of the IRB systems adopted and their consistency with regulatory requirements specifically through:

- the assessment of the model development process with a particular emphasis on the underlying approach and the methodological criteria supporting the estimate of risk parameters;
- the assessment of the accuracy of estimates of all major risk components through the rank ordering analysis and parameter calibration analyses, also through an adequate benchmarking practice;
- the check that the rating system is actually used in various management areas;
- the analysis of operating processes, monitoring safeguards, documentation and IT facilities related to the rating systems.

The validation process established within the Group, requires first of all for a distinction between the initial and on-going validation.

The purpose of the initial validation is to assess the positioning of the Group's rating systems in relation to minimum regulatory requirements, to Group's guidelines and standards concerning methodology, processes, data quality, quantitative and qualitative analyses, internal governance and technological environment while identifying any gaps or critical areas before the Supervisory Authority's approval or in case fundamental changes are introduced.

On the other hand, the purpose of on-going validation is to periodically assess the proper functioning of all components of the rating system and to monitor its compliance with internal and regulatory requirements.

The validation process foresees specific assignment of responsibilities for validating so-called Group Wide systems and Local systems. For Group Wide systems, the development methodology is unified at Group level and the validation activity is assigned to the Parent Company.

As a general rule, Parent Company is responsible for validating directly the Group Wide models and the models adopted by UniCredit S.p.A., for all the components and for all risks in Pillar I, Pillar II, managerial models and reporting. The validation of the local models is executed by the local validation functions, under Group Internal Validation (GIV) coordination and supervision.

In order to allow the objective assessment of the risk measurement systems, the department responsible for validation procedures is separate from the ones responsible for the development of the models, from the risk reporting ones and from the Internal Audit function¹⁰.

Since December 2017, at Group level Group Internal Validation reports directly to Group Chief Risk Officer and at local level the Local Validation functions mirror the Parent reporting to local Chief Risk Officers.

The validation process is mainly based on the following leading principles:

- introduction of validation planning prioritization criteria allowing to focus the efforts on the most value-added activities in terms of risk control;
- homogeneity across the Group of the recommendations importance assignment and the overall evaluation on the rating system according to the validation outcomes;
- the monitoring of the recommendations raised by the validation function.

The department responsible for the validation activities has established and maintains guidelines for validating rating systems aimed at a convergence towards standard validation procedures, thereby ensuring that the criteria for assessing results are shared also through the introduction of standard common thresholds and the comparison between the different systems. The use of thresholds makes it possible to depict test results using a traffic-light system whose colours are associated with various levels of severity of the phenomena reported.

A different set of validation tests is defined for each validation activities (initial or on-going).

¹⁰ Internal Audit is a function independent both from development and validation functions.

Credit risk

Additionally, validation tests are divided into qualitative and quantitative analyses:

- the qualitative section is used to assess the effectiveness of the methodology used to create the model, the inclusion of all significant factors and the ability to depict the data used during the development phase;
- the quantitative section assesses, among others, performance, stability and calibration of the overall model as well as its specific components and individual factors.

Focusing on quantitative analysis, for each area specific measures are adopted; a summary is reported in the following table:

PARAMETERS	AREA OF ANALYSIS	MEASURES
PD - LGD - EAD	Performance	Somers' D
PD	Calibration	Binomial Test and Wilcoxon
LGD - EAD	Calibration	T-Test and Wilcoxon
PD - LGD - EAD	Stability	Population Stability Index and Migration Matrix
PD - LGD - EAD	Representativeness	Population Stability Index

For Shadow Rating models the validation analyses are performed comparing internal estimation to external rating and PDs retrieved from rating agencies, while for internal default-based models the comparison is done towards default rate. For LGD, comparison is towards observed losses both through the cycle and under downturn condition; in case number of defaults is too low to ensure statistical robustness, validation assessment is based on benchmarking activities. For EAD models, assessment is always based on internal defaults.

Additional areas of analysis, related to the organizational requirements stated in the European regulation of reference are process, IT and data quality.

The data and documents related to the validation procedures done so far are saved in special storage areas ensuring rapid access to, and security of, the information as well as the ability to reproduce all analyses performed.

Aim of the Internal Audit activity is to check the functionality of the controls carried out on internal rating system. The activity consists in the verification of:

- the compliance of IRB systems with regulations;
- the effective use of rating systems for business purposes;
- the adequacy and completeness of the rating validation process.

The Parent Company Internal Audit (hereinafter UC IA) defined a common set of internal audit rules and guidelines, maintained updated on ongoing basis, to allow each Local Internal Audit function to assess the soundness of their Internal Control Systems.

These rules have been developed in order, to assess, among others, the accuracy of the conclusions of the risk control functions as well as the compliance with the regulatory requirements, envisaged for the internal validation process of internal rating and risk control systems. It should be noted that internal audit functions are not directly involved in the design or selection of the models.

In accordance with its mission UC IA directly audits UniCredit S.p.A. and, when needed, the Legal entities of the Group, also managing the coordination of the activity of subsidiaries internal audit functions.

The audits necessary to assess the functionality of the rating systems are given suitable space in the Group audit planning process. The planning activities at Group level are centrally monitored by UC IA.

Moreover, UC IA draws up an annual summary report which presents an assessment of the Internal Control System's overall functionality, describing, inter alia, audit outcomes and highlighting the main criticalities and shortcomings found, and recommending corrective measures.

Finally, UC IA regularly reports on its activity and results to the Parent's Board of Statutory Auditors, the Internal Controls & Risks Committee and the Board of Directors.

On the basis of validation activities and of the Board of Statutory Auditors opinion, the Board of Directors annually confirms that the requirements for the use of IRB systems in UniCredit group are fulfilled.

The following sections describe the rating systems used by the Group per each asset class and Group legal entities where they are used.

Concerning the Group Wide (GW) models, it is worth mentioning that the majority of them (Sovereigns, Banks, Multinational Corporate)¹¹ have been developed following a Shadow Rating approach, where the External Ratings, provided by the ECAI, play a fundamental role. The shadow rating approach is typically used when default data is scarce and external ratings of the major rating agencies (Standard and Poor's, Moody's or Fitch Ratings) are available for a significant portion of the portfolio. The common purpose to all quantitative methodologies developed for credit ratings is to identify risk factors that provide good information about the probability of default.

¹¹ While the Group Wide model for Global Project Finance is based on internal defaults.

Credit risk

The Shadow Rating approach does that indirectly by identifying the most important factors (quantitative and qualitative) and by estimating the relative weights of each of them in order to mimic external ratings as much as possible. Clearly, in order to make the estimated model useful for regulatory and for other credit risk management purposes, it is still necessary to calibrate it to an appropriate probability of default.

More in details, two main phases can be identified in during the model development in which the External Rating are involved:

- **risk differentiation phase:** in this phase quantitative (financials) and qualitative factors/drivers are regressed toward the External Rating (grade) in order to identify the most relevant factors (and relative weights) to predict the credit quality of the client and assign each client with a score. The aim of the model is to correctly order the clients from the best one to the worst one by allocating them, during the following risk quantification phase, into 17 rating classes (AAA-CCC) with the purpose of replicate, as much as possible, the ordering assigned by the External Rating Agencies;
- **risk quantification phase:** in this phase migration matrices from ECAI are used to determine the long run average default rate associated to each of the 17 grades in which the counterparts have been allocated in order to properly calibrate the model assigning them an adequate PD level.

External ratings are used only in the model development phase while they do not play any role in the model application phase (i.e.: once the weights of each relevant model factor/driver have been defined and the calibration function has been estimated).

New Definition of Default (DoD)

With reference to the quantification of the regulatory figures, the new Definition of Default classification process went live in January 2021 for all Group legal entities.

In 2021, with the goal to implement the regulatory change represented by the new Definition of Default (DoD) in the risk quantification phase, model recalibrations have been implemented and are described in each specific model section below.

Concerning GW models, in May 2021, a model recalibration has been implemented for GW Global Project Finance rating system (PD and LGD components). For GW Sovereigns, GW Banks and GW Multinational Corporates no recalibration was needed due to the shadow rating nature of those rating systems with the exception for LGD Defaulted Asset component, due to the fact that it leverages on local LGD models and therefore inherits the effect from the new Definition of Default recalibrations of local LGD estimates.

Sovereign (Central governments and central banks)

Group Wide models

Sovereigns' Rating model

The Sovereign PD & LGD model is in production since 2008, for regulatory purposes and internal use. The current version of the PD models has been implemented in May 2021, upon authorization of Supervisory Authority, while the LGD model is in place since 2014.

The model approach was made to replicate the ranking capabilities of external (ECAI) ratings using a combination of qualitative and quantitative factors. Two separated models were designed for emerging and developed countries (EM and DC respectively).

The quantitative module for the latter (DC) uses variables related to the balance of payment, monetary indicators, GDP (Gross Domestic Product) and some fiscal indicators. The qualitative module includes variables related to the quality of the financial system, the exchange rate policies, geo-political conditions, socio-political conditions, flexibility of the economic system, vulnerability to exogenous shocks and debt service.

The quantitative module for emerging countries (EM) uses variables related to the balance of payment, monetary indicators, per capita GDP, external solvency risk indicators, exports as a percentage of gross domestic product (GDP) and selected fiscal indicators. The qualitative module includes variables concerning the flexibility of the economic system, socio-political conditions, vulnerability to exogenous shocks, external financial support and debt service.

Sovereigns' LGD model

This model uses a regressive approach with the involvement of experts, starting with a set of macroeconomic variables and qualitative factors, of which eight were included in the final version. The dependent variable (LGD) was calculated using external historical LGD evidence and external (ECAI) recovery rate ratings. The model provides LGD only for unsecured exposure to sovereign counterparties.

For the quantitative module, the explanatory variables selected are as follows: the current account balance as a percentage of GDP, the fiscal gap, the excess budget revenue and the real effective exchange rate. The qualitative module includes variables concerning the stability of the financial system, socio-political conditions, debt service and geo-political risk.

Credit risk

Banks (Institutions)

Group Wide models

Banks Rating model

The Banks PD & LGD model is in production since 2008, for regulatory purposes and internal use. A last Banks PD model refinement has been deployed into production in July 2017.

In connection with the model release, a PD model recalibration activity has been performed upfront including the most updated time series.

The current PD model has been developed with four different sub-models, one for commercial banks resident in developed countries (DC), one for commercial banks in emerging markets (EM), one for pure securities industries (SI)¹² and the last one for hybrid banks (HY)¹³, given the different risk drivers for the four sub-segments.

The relevant risk drivers are defined as per several categories: asset quality, capitalization, liquidity, profitability, efficiency, stability, growth, size and funding. Specific adjustments to be applied to the PD resulting from all four sub-models are expected to consider the following aspects:

- the three types of support (if any) provided to banks, by the government, by the economic group to which they belong to, by an Institutional Protection Fund; these factors are treated separately, in a homogeneous (based on PD) and non-additive way (only the one with the highest mitigation effect is actually applied). The level of support for all three types of support depends on separate specific qualitative questionnaires;
- the country risk factor in general is considered in the calibration phase of the model; in this context, the model considers the country risk and the more specific transfer risk, i.e. the risk that the debtor is unable to obtain foreign currency to meet its obligations, even though it has the corresponding local currency;
- where required, an override is applied for the final rating assignment.

The PD rating scale is based on the default rates implied by ECAI external ratings. The model has been subject to TRIM investigation in 2019 and related outcomes have been embedded.

In February 2022 a material model change and extension on GW Banks PD model 5.0. has been submitted to ECB for approval and currently under assessment of the Supervisory Authority.

Banks' LGD model

The current model is mostly based on Business and Group Rating Desk expert input. Specific parameters with regards to asset haircuts are derived from external data. The model presents only some minor differences with regard to the model previously in production, while the overall methodological approach is kept constant following a balance-sheet evaluation. It applies to senior unsecured performing loan exposure, which represents the majority of exposures to banks.

The Senior Unsecured LGD value for a bank is calculated using its latest financial statement with the assumption that the Bank's assets will be liquidated following a default event. The methodology follows a waterfall approach where the seniority of creditors is also taken into account.

In order to obtain a realistic and conservative valuation of the bank's assets, "haircuts" have been established for each type of asset class (some of them based on external data), in order to take into account, the likely deterioration that might occur before default, as well as the differences between book value and realized earnings from sales.

In addition, based on the fact that the success of the recovery phase largely depends on the applicable legal/institutional environment, specific haircuts for legal risk on a country basis are applied on top of the asset haircuts.

Additional haircuts reflecting the costs of the recovery process are also taken into account based on the assessment of workout experts. Since the assets of the borrowing bank are stated in local currency, but the final recovery must be estimated in the currency of the creditor, in case the currency of the borrowing bank and creditor is different, an additional fixed currency volatility haircut is applied that is calculated based on historically observed exchange rate volatility, in order to take depreciation risk into account (i.e. regarding UniCredit group exposure, this haircut is applied to all counterparties that reside outside Eurozone).

Within the banks segment, the LGD framework has been improved to reflect more accurately the typically lower risk profile of some specific products (or transactions), in particular with respect to covered bonds and products with country risk mitigation.

¹² The SI sub-segment is represented by counterparties which perform activities of broker/dealer, merchant/investment banking, corporate finance, M&A and Wealth Management.

¹³ Hybrid Banks (HY) are companies equally dedicated to commercial and investment activities.

Credit risk

In relation with covered bonds, two different values of LGD have been defined to be applied on the basis of the country of the issuer and to confirmation by the responsible credit analyst that the specific covered bond issue is in line with local market standards.

For products with country risk mitigation, the counterparty LGD is reduced according to the contribution of country risk on the counterparty total PD, through the application on LGD unsecured of a recovery factor of the specific transaction (Transaction Specific Recovery factor). Within the banks segment, the reduction of LGD applies to a particular type of product, i.e. short-term commercial loans between banks (Short Term Commercial Financing).

The model has been subject to TRIM investigation in 2019 and related outcomes have been embedded.

Corporate (non-financial companies, including SMEs, specialised lending and purchased receivables)

Group Wide Models

Multinational Corporate Rating model

This rating model applies to multinational companies defined as companies with consolidated turnover or operating revenues greater than €500 million for at least 2 consecutive years.

The PD & LGD Group Wide Multinational Corporate rating model (GW MNC) is in production since 2008, for regulatory purposes and internal use. Starting from 2012, the Group Wide Multinational Corporate (MNC) rating system is adopted also for the Italian Large Corporate (ILC) portfolio, which includes Italian companies with an operating revenue between €250 million and €500 million.

A recalibration of the PD model has been implemented starting from May 2017, in order to improve the PD estimation with updated underlying history. A new redevelopment went live in 2021 after receipt of the ECB authorization, embedding also the outcomes of TRIM investigation held in 2019.

The approach used for the estimation of the Multinational rating, defined as a shadow rating, attempts to replicate the ability of ranking of external ratings (from ECAs) through a combination of quantitative and qualitative factors.

The quantitative module covers several categories of factors such as capital structure, profitability, interest coverage and size. The result of this module is a quantitative score.

The qualitative model consists of a set of questionnaires that analyse corporate aspects such as management quality, industry sector performance, availability of credit lines or liquid funds, market share, and exposure to macroeconomic risks. The result of this module is a qualitative score.

The quantitative and qualitative scores are then integrated and calibrated in order to fit the ECAs external ratings. Specific PD adjustments are applied in order to consider the following aspects:

- the support (if any) by the economic group to which the company belongs (based on an average of PD);
- the country risk; in this context, the model considers country risk and specific transfer risk, i.e. the risk that the debtor is not able to obtain foreign currency to meet its obligations even if in possession of relevant local currency.

The scope of the rating system also includes those subsidiaries that carry out corporate treasury activities (such as cash concentration, FX management and funding) or that are specialised funding vehicles (issuing MTN-Medium Term Notes, notes, bonds) whose creditworthiness is driven by the parent/group support in the form of an explicit guarantee for the counterparties or its issues or via some other support mechanism (e.g. an agreement with the Parent Company); the rating of these counterparties is calculated by the specific model of Corporate Treasuries and Funding Vehicles (CTFV).

Since in most cases, the default of a CTFV customer is caused by the default of the Group it belongs to, in the approach adopted, both for the PD and for the unsecured LGD, the distance in notches to the PD and the LGD of the Parent Company was estimated on the basis of the contributions and opinions by industry experts.

On the basis of a qualitative questionnaire, the downgrading notch in respect to the Parent Company's rating is determined to calculate the rating of the CTFV; with the same approach the increase of LGD is determined to be added to the Parent Company LGD to calculate that of the CTFV.

Multinational Corporate LGD model

Given the lack of historical time series of internal recovery rates for Multinational companies (since this is a portfolio with a low risk of default), a regressive-statistical model, mainly based on recovery data provided by an external provider has been developed.

The LGD model refers to senior unsecured exposures towards performing companies (advanced methodologies common to several segments of Group Wide are applied to junior exposures).

More in details, the LGD model consists of four main phases (in which is incorporated the add-on, that takes into account the negative phases of the economic cycle, downturn):

- in a first phase, a total of LGD counterparts (Overall LGD), independent from the seniority of creditors, is calculated on the basis of financial statements' quantitative factors;

Credit risk

- in a second phase, on the basis of a qualitative questionnaire, the variation on the increase of the senior unsecured Bond debts LGD is calculated, determining the Gross senior unsecured Bond LGD;
- then the LGD is adjusted to take into account the legal risks and costs related to the recovery process (Adjusted Senior Unsecured Bond LGD);
- to the final value of the unsecured Bond LGD (applicable to the bond debt) is applied a conversion factor that allows to obtain a Loan LGD (Final LGD Senior Unsecured Loan) which is lower, because it considers the probability and effects of the debt restructuring, typical of bank loans and similar products that are the most representative part of the UniCredit group portfolio.

Similar as with the PD parameter, also the LGD of the Multinational Corporate system has been extended to the Italian Large Corporate segment (ILC).

The LGD framework properly reflects the lower risk profile typical of some specific products (or transactions), in particular, products with risk mitigation. Within the scope of the MNC segment, a special class of transactions has been considered, those in which payment is guaranteed by the sale of assets to a third-party resident in a low-risk country (Only Delivery Risk).

The model has been subject to TRIM investigation in 2019 and related outcomes have been embedded.

Global Project Finance rating model (GPF)

The Group Wide rating model Global Project Finance (GPF) is dedicated to project finance transactions/clients with total volume of project debt (evaluated at origination) over €20 million.

The estimation approach is performed by pooling the risks of the project in 5 areas of interest: the risk connected to the sponsors (shareholders) of the project, the risk of completion for projects in construction phase, operational risk, "special" risks (e.g. force majeure risk, interest rate/FX risk) and the risk associated with cash flows expectations. The quantification of the risks in each area is based on specific qualitative questions.

The model was revised in 2011 with the aim to increase the statistical predictive power of the whole system.

The 2011 revision of GPF PD model aimed to optimize the following features of the model:

- statistical weights of single factors;
- limitation of manual adjustments on rating only to the practice of override;
- completion risk allowing to reduce weight factors along with the progress of construction and when the project begins to produce cash flows;
- explicit consideration of country-induced risk (general and transfer) implemented as an add-on on the intrinsic score/PD dependent on the PD of the country and with a different weight determined by a set of 6 specific questions;
- detailed description of risk factors in order to enhance the objectivity of the assessment.

A recalibration has been implemented in May 2021 to replace the last one adopted since 2019 in order to recognise within the model the new Definition of Default requirements.

The model has been subject to TRIM investigation in 2019 and related outcomes have been embedded.

Global Project Finance LGD model (GPF)

The internal model for estimating GPF LGD is applied to the total direct exposures for performing counterparts.

The LGD methodology is essentially based on the "distressed assets" method developed by S&P's, which examines the distribution tail of the project value, in the region where default has occurred and, thus, defines the LGD probability distribution as a distribution of "debt minus asset value" in this region.

This general framework has been adapted to real practices and to the business standard procedures in place in the Group, through the adoption of certain changes concerning: a) the calculation of the asset value, is replaced by direct calculation of the ratio between debt and the (maximum) value of "distressed assets" (DMDA) on the basis of a qualitative questionnaire and b) the determination of the default region.

Furthermore, a scenario of "extreme event", characterised by very high losses, has been introduced, in addition to the "standard" scenario based on the methodology "distressed assets". The probability of an "extreme event" is determined based on the responses to a qualitative questionnaire and it is used as "weight" to compute a "standard" and "extreme event" weighted average LGD: this average is the expected LGD.

Also, add-ons taking into account the negative phases of the business cycle (downturn add-on) and recovery costs are explicitly considered.

The current model structure allows a parallel calculation of LGD for senior tranches and for those junior.

In May 2021 a model calibration has been implemented in order to recognize within the model the new Definition of Default requirements.

The model has been subject to TRIM investigation in 2019 and related outcomes have been embedded.

Group Wide EAD model

The GW EAD model is in production since 2010. In 2021, ECB authorized the new version of the model submitted as material change in April 2019 and assessed during TRIM investigation. The new EAD Model, as highlighted also by the regulator, presents many relevant improvements in comparison to the old model.

The segmentation of this new version is based on the credit segment of the client and on the product family of the facility and due to these drivers 24 sub-models were identified.

Credit risk

The calculation leverages on six different model components. Firstly, the LEQ (Limit Equivalent Factor) measures the increase (within the limits) of the outstanding expected at default, the LOF (Limit Overdraft Factor) estimates the evolution of the exposures over the limits while the Q_DaD is a local dedicated parameter reflecting the drawing after default component. Moreover, it was introduced the SF (Scaling factor) that reflects the calibration adjustment for aligning the EAD to its long run average, the Downturn adjustment aimed at ensuring appropriate and conservative EAD estimates also in the negative phase of the economic cycle and a Margin of Conservatism buffer in order to covers the deficiencies emerged during the estimation phase of the model. Finally, it has to be mentioned that a dedicated defaulted asset component was introduced.

Local models, Italian perimeter

Italian Corporate Rating model

The Integrated Corporate Rating (RIC) model provides a rating for the counterparties of UniCredit S.p.A. afferent to the Mid-Corporate segment with revenue (or total assets if revenue information is not available) from €5 million to €250 million.

In 2019 the model has been subject to a broad revision (new RIC model) by extending the scope to Holdings & Financial Enterprises with total assets above €250 million, while carving out Income Producing Real Estate transactions for which an ad-hoc approach has been developed (refer to the paragraph "IPRE (Income Producing Real Estate) Slotting criteria").

The structure of the rating system consists of three basic modules, two of which are quantitative and one qualitative:

- the economic-financial module, that considers the financial statements information in the archives of the Central Financial Statements Archive ("Sistema Centrale Bilanci") (cash flow and profitability, financial charges, financial structure and composition of debt, financial stability and liquidity; growth, volatility and operational structure);
- the behavioural modules, the first developed on the basis of internal data sources while the second on the basis of external data provided by Central Credit Archive ("Centrale Rischio"), allowing customer's monitoring (cash loans, withdrawal, short term maturity, long term maturity, self-liquidating loans, loan guarantees);
- the qualitative module, that considers the answers to the questions of the qualitative questionnaire filled out during the application phase.

The model features of the new RIC have been enhanced also by developing dedicated modules for Real Estate¹⁴ and Holding & Financial Enterprises to take into account the various types and riskiness of these counterparties. Dedicated versions of the Financial, Behavioural and Qualitative modules have been developed for the three macro-segments covered by the new RIC model: Industrial, Real Estate and Holding & Financial.

The stand-alone evaluation of the counterparty is integrated with information of the Economic Group they belong to, where appropriate, taking into account the type of bond and the creditworthiness of all component companies.

The RIC model provides a rating updating process through a system of trigger events aimed at ensuring greater stability in the assessments, both with the timely update and the intervention of experts, where necessary (operators and rating desk).

The Definition of Default in the new RIC has been updated according to Capital Requirement Regulation overcoming the technical past due treatment.

The model revision has been authorized by ECB in January 2019 and implemented in May 2019 together with a recalibration including a time series extension up to end of 2017.

In April 2021, a recalibration of the RIC model consistent with the new Definition of Default was released in production.

Local Italian Corporate LGD models

The model for the calculation of the LGD risk parameter was firstly revised in 2013 developing the LGD estimation also for defaulted loans, differentiated by their default state. A further redevelopment of the LGD model has been submitted to the Supervisory Authority in September 2017, authorized by ECB in January 2019 and implemented in May 2019 together with a recalibration where the historical time series have been extended up to 2017.

In the new model, the estimated rate of loss continues to be based on a "workout LGD" approach by discounting the observed cash flows in every stage of recovery management using a current rates approach.

For "Defaulted Assets" LGD model for non-performing loans, doubtful loans, and past due, a statistical approach has been adopted that allowed to incorporate in the estimates the information related to the performance period in a defined state and to the trends of the previous recovery period. The "Defaulted Assets" LGD model estimates the loss rate referring to the vintage of the default classification, at the time in which the specific counterparty is located in default (so-called Time Dependency) taking into consideration, therefore, also available information after the moment of default itself.

¹⁴ The Real Estate corporate model is used for counterparties having the "05" balance structure (Real Estate Companies) according to the classification of "Centrale Bilanci" and total assets in excess of €5 million, consistent with the customer management segmentation adopted by the Bank and with its credit processes.

Credit risk

A further step towards greater functionality and representativeness of the model is the recognition of the mitigating effect of guarantees on the estimates of the loss rate obtained with the implementation of rating systems "Confidi" and "Guarantors". The Guarantors Individuals rating system expresses an overall opinion on the creditworthiness of the Guarantor that results from the integration of elementary modules that merge the information retrieved from internal and external information sources.

The new model includes the downturn effect into the danger rate module, the review of the Definition of Default, as an intermediate step toward the new Definition of Default defined according to Bank of Italy Circular 272 classification and to CRR past due definition (ensuring full consistency with PD models), the inclusion of all open positions with the estimation of future recoveries in line with EBA Guidelines on PD/LGD.

In February 2020 LGD has been recalibrated, envisaging an update of the historical time series. A further recalibration was implemented in April 2021 to support the inclusion of the new Definition of Default in the risk quantification phase.

In May 2022 a further re-development of the LGD Enterprises has been performed and submitted to ECB for approval and currently under assessment of the Supervisory Authority.

Local Italian Corporate EAD model

The development activities on EAD model for Enterprises segment has been started, consistently with the progressive Group IRB roll-out plan.

IPRE (Income Producing Real Estate) Slotting criteria

Since August 2019, UniCredit adopted the Income Producing Real Estate (henceforth "IPRE") assessment criteria for the risk weights assignment based on the Slotting approach framework finalized by the Bank.

The adoption of the new IPRE rating system is aimed at:

- addressing a specific request received from the Supervisory Authority to identify and carve out the portion of IPRE transactions currently included into Probability of Default (PD) Mid-Corporate (Rating Interno Corporate - RIC) model application perimeter, also required by Internal Control functions;
- complying with the classification rules for the definition of IPRE transactions and with the IPRE development methodological framework valid for the entire Group;
- extending the Internal Rating-Based (IRB) coverage to the portion of portfolio currently treated with Standardised Approach.

Given all the above, the approach is based on:

- a Group-level accepted definition of IPRE transactions based on the key characteristics defined by the Regulator (ref. to CRR article 147(8));
- the definition of the Methodological Standards for the development of IPRE (slotting and internal) models valid for the entire Group;
- the identification of the IPRE portfolio (from 2010 to 2017).

The IPRE slotting model consists of an expert assessment of the credit risk of the transaction performed through qualitative scorecards. The expert appraisal of the IPRE transactions against such assessment criteria and operating instructions determines the assignment of a level of risk used in order to attribute the regulatory risk category (Slot) to the transaction.

In April 2021 a recalibration of the IPRE model consistent with the new Definition of Default was released in production.

A recalibration of the IPRE model with the extension of the time series, went live in July 2022.

Local models, German perimeter

Mid-corporate rating model (MIT)

The "Mittelstandsrating" model applies to German corporate UCB AG customers with a reported turnover between €5 million and €500 million, excluding Specialised Lending and Real Estate customers. It comprises also public sector entities not guaranteed by public Authorities with valid financial statements.

In December 2019 a revised version of the model, that was authorized by ECB in November 2019, has been implemented mainly to address Group Internal Validation findings and Supervisory recommendations as well as to align the model to Group Standards.

The updated model is composed of a quantitative module using financial statements (Hard fact Module) and a qualitative module (Soft fact Module) and the Behavior Score.

More in detail, the quantitative module consisted of four different financial statement sub-modules (MAJA - "Maschinelle Analyse von Jahresabschlüssen") depending on the company's industry sector (Production, Trade, Construction, Services). Each of them combines a set of financial ratios that cover areas of analysis such as:

- asset and debt structure;
- cost structure, liquidity;
- profitability.

Credit risk

The qualitative module covered areas of analysis concerning:

- financial conditions;
- management qualification;
- planning and controlling;
- industry/market/products;
- special risk;
- industry sector rating.

In addition, adjustments to the model estimates are foreseen within the model framework in case of warning signals or rating aging. A manual correction of the calculated model PD in order to consider any circumstances not reflected by the automatically calculated PD/model, the so-called override, is possible as well. The use of overrides is clearly defined and described, subject to specific restrictions/constraints.

In July 2021, a recalibration of the new model including the new Definition of Default has been released.

With reference to the LGD model refer to the description in the paragraph "Local German portfolios LGD model".

Foreign Small and Medium Sized Enterprises Rating Model (FSME)

The Foreign Small and Medium Sized Enterprises Rating model (FSME) applies to corporate customers domiciled outside Germany with a reported turnover up to €500 million, excluding Specialised Lending, Real Estate customers, Financial Institutions and Public Sector entities.

The rating procedure was implemented in 2009 and authorized for regulatory capital purposes in 2011. The model comprises a quantitative and a qualitative module. The score resulting from the analysis of financial statements is based on externally developed hard fact models and complemented by internally developed qualitative module leveraging on experience with the German Mid Corporate segment. Currently, UniCredit Bank AG is using 24 mostly country specific external models to cover the relevant portfolio that refers to about 50 different countries. Adjustments to the model estimates are foreseen within the model framework in case of rating aging. A correction of the calculated model PD in order to consider any circumstances not reflected in the automatically calculated PD/model, the so-called override, is possible as well.

In July 2021, a recalibration of the model including new Definition of Default has been released.

With reference to the LGD model refer to the description in the paragraph "Local German portfolios LGD model".

Commercial Real Estate Finance Rating model (CREF)

The rating model for UniCredit Bank AG's Commercial Real Estate Finance (CREF) is used to assess exposure to:

- real estate developers with published financial statements: companies with income mainly derived from construction (or purchase) and subsequent sale of buildings for residential or commercial purposes (offices, stores);
- real estate investors with published financial statements: companies with income mainly derived from the lease of owned residential and commercial properties; this segment comprises building societies and open-end real estate funds;
- real estate investors without published financial statements: companies or individual customers with income originating mainly from the lease of own properties.

These clients are evaluated through models built combining four modules (with client group-specific weights):

- a qualitative module that aims to assess the quality and reliability of management, the abilities of the management team, the quality of organizational management and the bank's experience in managing relationships with the company;
- a real estate feature that aims to assess the asset/project to be financed or already financed (by the bank or other lender), including the quality and implicit risk of the company's properties/projects, its planning capabilities (based on past experience) and cash flows planned/projected for future years;
- a quantitative financial module based on the company's financial statements supplemented with a qualitative assessment of the quality, reliability and completeness of the financial statements;
- a behaviour module.

In July 2021, a revision of PD CREF model has been implemented upon ECB authorization with an updated calibration including the impact of new Definition of Default. The new model is in line with the new Group Methodological Standards in order to comply with the regulatory requirements as well as harmonize the modelling standards within the Group.

The PD model revision has been also extended to CREF customers with an approval limit below €50 thousand, currently unrated, and unauthorized overdrafts to receive a regulatory flat PD.

Credit risk

Main model changes include update of the customer segmentation, introduction of an internally developed behavioural score component; development of new qualitative module with focus on management, financial statement module (hard fact) and qualitative real estate features module; development of new integration function of the PD model for the four modules; recalibration of the model and update of age restriction rules. The new Definition of Default has been considered for the development/calibration of the model.

With reference to the LGD model refer to the description in the paragraph "Local German portfolios LGD model".

Acquisition and Leveraged Finance transactions rating model (ALF)

The "Acquisition and Leveraged Finance" (ALF) model is used for the assessment of projects to finance/refinance corporate acquisition transactions, in which additional bank liabilities are added to the normal operating debt of the company acquired in order to finance the acquisition.

The debt resulting from the acquisition is repaid out of the future cash flow of the company acquired, and, in certain cases (i.e., acquisitions that involve strategic investors), out of the cash flows of the acquiring company.

Acquisition transactions and their corporate and tax implications (often involving several jurisdictions) demand specific expertise during the audit phase, and require:

- appropriate risk-return relationships in addition to a loan structure based on a realistic cash flow simulation model;
- the adjustment of the acquired company's financial and debt repayment structure to future cash flows;
- the combined use of highly differentiated borrowing tools (senior debt, junior debt, mezzanine debt, etc.).

In terms of procedural aspects, the "ALF rating" is essentially a financial rating that calculates the acquired company's probability of default based on equity and financial ratios taken from the forecasted (budgeted) financial statements and income statement.

There is no qualitative module since in the preparation of the forecasted financial statements, a large amount of qualitative information based on experts' opinions is already implicitly taken into consideration. The forecasted financial statements are prepared through models that simulate future cash flows (INCAS, international financial model).

Also for this model rating ageing restriction rules are considered as well as possibilities of override.

A model recalibration of PD ALF model with the extension of the time series has been performed and implemented in the fourth quarter 2022.

For ALF a total LGD approach is applied where all the collateral is included in the LGD estimation and no explicit collateral reflection takes place.

There are two seniorities (senior and mezzanine) reflecting the two possible LGD values.

Within the new LGD model, which was submitted 2021 to Supervisory Authority and implemented in August 2022, ALF is included as a sub model to local LGD model. The main approach was kept as described, with some improvements like e.g. in the consideration of discounting, Margin of Conservatism, downturn add-on calculation, methodology for non-performing exposures (see description of Local German portfolios LGD model).

Income Producing Real Estate (IPRE) rating model

The model applies to special purpose vehicles (SPVs) specifically founded in order to invest in a real estate portfolio. The companies are non-recourse to the investor and ring-fenced from other companies. Their loans are repaid/serviced exclusively from the income generated by the properties being. There is no size limit in place.

The IPRE rating model is a transaction-based rating model that assigns a PD to a transaction, not to the corporate customer or fund who initiates and structures the transaction.

The core of the IPRE model is a Monte Carlo based cash flow simulation. This approach is modelling the main drivers of the cash flows of a transaction by a stochastic process, where the parameters are estimated from historic data (market rents, interest rates, vacancy periods, etc.). The resulting cash flows are calculated quarterly until maturity and the PD is calculated from the ability to cover the debt service and further costs by the income generated from the financed real estate properties.

In order to capture additional aspects of the transaction the result of the simulation is adjusted based on:

- the assessment of the location and quality of the specific objects held by the SPV via the so called MoriX values¹⁵;
- a qualitative assessment of e.g. quality of the management, contractual design or review of customer relationship.

For this model too, rating aging restriction rules are considered as well as possibilities of override.

On a continuous base the model is subject to fine-tunings and parameter update to capture latest development in the portfolio.

¹⁵ MoriX values are obtained via a structured approach to assess the real estate properties' quality through the evaluation by real estate appraisers that apply bank internally developed criteria.

Credit risk

A model recalibration of PD IPRE model has been performed and implemented since June 2022.

With reference to the LGD model methodology, IPRE is included as a sub model to local LGD model (see description of Local German portfolios LGD model).

Global Shipping rating model for Ship financing (GLOS)

The model applies to ship financing transactions where the repayment primarily results from the earnings of the financed object. The vessels are pledged.

Both PD and LGD GLOS models have been decommissioned in March 2021 from IRB Approach due to the reduction of exposures and the permanent partial use of the standardised approach, granted by Supervisory Authority, is applied for the underlying portfolio.

Wind Project Finance transactions rating model (WIND)

The Wind model applies to wind energy projects in Germany (onshore), with a project volume of less than €20 million. Additionally, the industry code is clearly specified and due to the loan and collateral agreements, the bank must have a significant degree of control over the financed object.

The cash flow model has been introduced in June 2009. The Wind-rating model was approved IRBA compliant in January 2011 by Supervisory Authority.

The PD model is made up of a quantitative model, stemming from future cash flows' Monte Carlo simulations, whose outcome was adjusted by means of a qualitative component based on judgmental factors and weights.

Both modules (quantitative and qualitative) are mandatory for the final evaluation and the qualitative module can upgrade or downgrade by clearly defined notches. The resulting final PD is converted via master scale to the final rating of the transaction.

Also for this model rating aging restriction rules are considered as well as possibilities of override in clearly defined cases.

The Wind model has been recalibrated in September 2021 with the extension of the time series.

Regarding LGD parameter, UCB AG developed a method to evaluate the collateral value of the Wind Energy plants. This approach is mainly based on Monte Carlo simulations of future cash flows of the Wind Energy plants. The simulations are consistently used for PD and collateral evaluation. Additionally, a LGD on the unsecured exposure is provided.

Local German portfolios LGD model

The re-developed LGD model submitted to Supervisory Authority has been implemented since August 2022. The new model is in line with the Group Methodological Standard in order to comply with the most recent regulatory requirements as well as harmonize the modelling standards within the UniCredit group. The model has been fully redeveloped, with main changes like e.g. cash flow based discounting with regulatory given interest rate, changes in the collateral evaluation methodology, changed assumptions for resolution scenarios with LGD for cure cases greater than zero, changed inclusion of collateral mitigation effect, updated treatment of incomplete recovery processes, introduction of calibration step to long-run average LGD, improvements in calculation of Margin of Conservatism (MoC) to cope for deficiencies, new methodology for non-performing exposures and for downturn estimation, introduction of more risk drivers for the single LGD components.

The scope of application of the UCB AG Local German LGD model are all facilities related to corporate and retail customers, except for bonds, including ALF and all specialised lending.

The LGD represents the financial loss suffered by the bank on the individual transaction and is calculated as a percentage of the exposure to default. The LGD is calculated on obligor level and takes account of the fact that different types of default are possible:

- Liquidation: total liquidation and the relationship with the customer is terminated, the customer is removed from the portfolio;
- Cure: the customer returns to the performing portfolio after the probation period.

For all different types of default, a forced sale of collaterals is basically possible.

With regard to cure cases an overall LGD is estimated, whereas for liquidation cases an unsecured LGD is calculated and collateral values are taken into account in a second step. The LGD is determined by taking into account all recoveries and costs collected during the default period and discounted to the default date with the EBA requested discount rate of 3M EURIBOR plus 5%.

Personal guarantees and credit derivatives are not considered in the models, since the substitution approach is used for this type of guarantees.

In order to determine the final value of the LGD, the following factors are taken into consideration:

- minimum value that the LGD can assume according to legislative provisions (e.g. 10% for residential mortgages assigned to retail exposure, CRR article 164);
- the sum over all collaterals securing the loan;
- estimated probability of cure;
- estimated LGD Liquidation;
- estimated LGD Cure;

Credit risk

- estimated indirect cost factor;
- Margin of Conservatism;
- downturn adjustments.

With regard to the procedure for estimating the collateral value a loss component (LGD secured) and the market volatility are estimated. This has been obtained on the basis of a historical sample. The market volatility is taken into account by the market value forecast for real estate collaterals and ship vessels, whereas a haircut is estimated for the other collaterals.

The remaining LGD components (e.g. LGD cure, LGD liquidation, probability of cure) are estimated by sub-model relying on the different rating methods (the main categories are Mid Corporate Rating, Small Business Customer Rating, Commercial Real Estate Rating, Private Individual Rating, Foreign Small and Medium Sized Enterprises Rating) and customer segments.

Local German portfolios EAD model

The model is applied in UCB AG to all the credit products belonging to local partner that are IRB-A relevant (with the exclusion of the transactions belonging to partners with a Group Wide rating).

The EAD is defined as the exposure at the time of default. The exposure is the total outstanding amount before loan loss provisions and write-offs. The prediction horizon of the EAD model is one year. This means that, when the model is applied, the estimates refer to the expected exposure when default occurs within one-year time.

It is calculated for each individual transaction as the sum of two components, EAD on balance and EAD off balance, where the estimated part of the EAD is the off-balance EAD.

This EAD depends on the following elements:

- CEQ: Credit Equivalent Factor; this is the credit conversion factor for the credit and represents the portion of the commitment/guarantee issued by the bank that will be used;
- LEQ: Limit Equivalent Factor; this is the percentage of the amount unused 1, 2,...,12 months before the default that is expected to be used at the time of the default;
- LOF (Limit Overdraft Factor) is the parameter that estimate the expected amount of use that, at the time of the default, will exceed the allocated maximum limit (overdraft amount);
- Endorsement: amount of commitments issued to the bank's customer;
- External line: line of credit;
- Drawing: current use of the line of credit;
- Add-on for Drawings after Default for non-Retail Exposures.

The parameters defined above are then differentiated according to the product macro-typologies defined.

In 2022 no update of EAD parameters was necessary.

Local Models, UniCredit Leasing GmbH and Subsidiaries¹⁶ (UCLG)

Due to UCB AG's strategic decision to run down business of UniCredit Leasing, all UCLG IRB models have been decommissioned from IRB approach and the permanent partial use of the Standardised approach applies since December 2021 after the approval of the Supervisory Authority. Affected models are: German Mid Corporate, Small Business, Specialised Lending, Local LGD, Local EAD and Group Wide models.

Local Models, UniCredit Bank Austria AG

Mid Corporate rating model

The "Firmenkundenrating" rating (Mid Corporate PD rating model) is applied to customers domiciled in Austria or in any other country with annual turnover of more than €3 million and less than €500 million. The model consists of three components: a quantitative module, a qualitative module as well as a behaviour component and was last redeveloped in 2019, recalibrated in 2020 and is live since July 2021. The new development considered already the new Definition of Default.

The risk factors for the quantitative module have been selected on the basis of both statistical and expert criteria.

The principal risk factors included in the quantitative module generally cover the following areas of analysis:

- liquidity;
- structure of liabilities;
- dynamic factors (such as revenue trend);
- equity ratio.

The qualitative module covers the areas of analysis relating to:

- management quality;
- accounting and reporting;

¹⁶ UniCredit Leasing Finance GmbH, UniCredit Leasing Aviation GmbH.

Credit risk

- equipment, systems and organization;
- market and market position;
- level of orders/utilization of capacity;
- the behaviour module focuses on credit and overdraft behaviour, and is fully automatized via a monthly run, allowing a prompter analysis of customer risk.

The behavior component looks at the customer's credit line behavior within the bank, allowing a prompter analysis of customer risk:

- days past due;
- liquidity;
- inflows on current account.

The "qualitative rating", the "behavior rating" and the "financial rating" (quantitative rating after carrying out a first "override-proposal" on the basis of the information available) are combined to obtain the so-called "Combined Customer Rating".

The "warning signals" are applied to this rating in order to obtain the "Modified Customer Rating". It is also possible to verify or decline the proposed override stemming from the financial rating or apply a customer related override to this rating, thus producing the "Stand alone Customer Rating". If this rating is older than 12 months or the used information of the financial rating is older than 24 months, an "age restriction" is applied, resulting in a gradual downgrading.

The Mid Corporate rating model is calibrated on the UCBA AG's data sample (time series starting with 2006) and the model is based on logistic-regression concept.

Income Producing Real Estate (IPRE) and the Real Estate Customer (RECR) rating model

In September 2019 two material model changes have been submitted to Supervisory Authority consisting in the setup of a slotting model for IPRE transactions and model redevelopment for RECR PD, to comply with the new regulatory requirements as well as harmonize the modelling standards within the UniCredit group and with a further recalibration in 2020 only for RECR PD. The models went live since July 2021.

For the IPRE model the former transaction-based PD approach was decommissioned and is substituted by a slotting approach. The IPRE model is a customer-based rating applied to a particular type of specialised loans linked to "cash flow based" real estate projects in which the bank has direct access to the cash flows deriving from the transaction. On this type of customer, the essential question is whether the cash flows from the transaction are sufficient to repay the loans to the bank, if the client is an SPV as well as if the whole project is ring fenced.

For the IPRE model, new logic of weighting of transactions into slots and risk areas based on expert assessment is applied. IPRE is characterised in 4 segments (sales versus rent and under construction versus completed). Operating instructions are given for each slot and risk area to evaluate the riskiness of the project along the different areas. Responses are weighted with triple rounding and clustered into the categories from 1{Strong} to 4{Weak}. Special warning signals, ageing & override reasons allow adjustments of the calculated values.

The Real Estate Customer rating (RECR) is a "corporate rating" coping with "Real Estate Investors", "Real Estate Developers", and "Public Value Joint Building Associations". For all of these, a quantitative module (referring to the balance sheet data), a qualitative module as well as behavior module are used.

The RECR model is calibrated on the UCBA AG's data sample (time series starting with 2007). Each component of RECR model results in integration of qualitative, behavior and quantitative scores (based on logistic regression output).

After integration of the three components (based on logistic regression output) to a customer rating, further adjustments are applied to take account of warning signals, over rulings and "age restrictions" (according to the age of the rating).

Local Austria portfolios LGD model

The LGD model developed by UCBA applies to all facilities related to all local customer segments (both corporate and retail).

The LGD represents the financial loss suffered by the bank and is calculated as a percentage of the exposure at default. The local LGD model is based on average calculation of the internal data of defaulted borrowers and represents a transaction-specific workout LGD approach.

The methodology accounts for three potential default events as outcome of the workout process for defaulted clients:

- Cure/Re-aging: return of the client to the performing portfolio without relevant loss for the bank;
- Settlement/Restructuring: re-entering of the client in restructured form to the performing portfolio with a loss (> €100) for the bank;
- Liquidation: complete collateral realization and debt enforcement with termination of credit relationship.

Credit risk

After closure of the workout process all defaults can be associated to one of the three default events and an ex-post LGD is calculated, based on the realized revenues and costs. In doing this, all single cash flows are discounted to the moment of default.

The general scheme of the LGD model in BA provides separate estimation of the recoveries deriving from collateral and those deriving from the unsecured part of the exposure. Personal guarantees and credit derivatives are not taken into account in the models, since the substitution approach is used for this type of guarantees.

In order to determine the final value of the LGD, the following quantities are taken into consideration:

- EAD;
- expected recovery rate of the collateral net of direct costs (especially regarding estimation of specific collateral haircuts based on realized recoveries and depending on collateral type);
- expected recovery rate of the unsecured portion of the transaction net of direct costs;
- recovery process duration;
- discounting factors;
- indirect expenses rate (as result of the internal bank processes in the workout units);
- certain margins of conservatism and general conservatism to cover possible estimation inaccuracies;
- downturn factor.

With regard to the procedure for estimating the recovery rate of collateral, this has been obtained on the basis of a historical sample and calculated differently for the following main collateral types with possible consideration of additional segmentation criteria:

- residential real estate;
- commercial real estate;
- other real estate;
- financial collateral;
- life assurance policies;
- receivables;
- other physical collateral.

Concerning securities, an internal model for own volatility estimates (internal haircut model) has been implemented.

With regard to the procedure for estimating the “unsecured” part, on the other hand, this has been carried out separately for eight local categories primarily based on customer segments (the three main categories are private individuals, small business and corporate) in addition to applied Group Wide models (especially for Sovereigns, Banks and Multinational Corporates). For private individuals and small business, a further drill-down into exposure class and currency is in place.

Furthermore, for the defaulted portfolio the “best estimate LGD” with a further drill-down by time-buckets for all eight local customer segments is in use.

Local LGD model is estimated on the UCBA AG's data sample (time series starting with 2008) and the model is based on average values, the LGD values are re-estimated regularly to include the latest observations.

The downturn LGD component is based on the Austrian GDP, which is used as a predictor for systemic risk. UCBA AG's downturn methodology analyses the correlation between the negative trend of GDP (recession) and the subsequent increase of LGD values (NRR vintages).

In 2021 an annual re-estimation of LGD, including the New Definition of Default, to recalculate the local LGD parameter based on a longer time series (up to 2019) was implemented.

In January 2021 a model redevelopment for LGD has been submitted to the Supervisory Authority to comply with the new regulatory requirements as well as harmonize the modelling standards within the UniCredit group, for which the authorization process is ongoing.

Main changes vs. the currently implemented model include: (i) perimeter of new model incorporating the scope of the new rating models for RECR submitted in Sept 2019 and Mid Corporate, Small Business and Private Individuals submitted in June 2019, and excluding in the scope the IPRE PD, since a dedicated material change requiring for IRB Slotting approach was submitted in September 2019; (ii) the model is developed for Regulatory purposes following the Secured/Unsecured approach, embedding all steps characterizing the risk differentiation and risk quantification phases; (iii) application of the Regulatory Haircut for financial collateral; (iv) new methodology for the ELBE calibration; (v) new methodology for Downturn calibration; (vi) minor changes on the methodology for the new DoD adjustment and extension of new DoD adjustment on Defaulted Assets model; (vii) new methodology for the computation of Margins of Conservatism.

New LGD model is based on recent PD and LGD models recalibration performed and submitted as ex-ante changes in 2020; the calibration already includes the changes due to the new DoD (EBA/GL/2016/07, EBA RTS/2016/06).

In 2022 the redeveloped local LGD model was recalibrated including the most recent years and submitted to the Supervisory Authority.

Credit risk

Local Austria portfolios EAD model

The EAD model determines the expected exposure on a transaction at the time of default. It is estimated for each individual transaction by using the following information:

- effective exposure at the time of the estimation;
- amount of guarantees/commitments issued by the bank to the counterparty;
- allocated maximum credit limit;
- currency (EUR or non-EUR).

The estimated parameters are as follows:

- CEQ (Credit Equivalent Factor): this is the credit conversion factor for contingent liabilities, and represents the portion of the commitment/guarantee issued by the bank that will be used;
- LEQ (Limit Equivalent Factor): this is the percentage of the amount unused 12 months before default that is expected to be used at the time of default;
- LOF (Limit Overdraft Factor): estimates the expected used amount at the time of default that will exceed the allocated maximum limit (overdraft amount) in relation to the external line size;
- BO (Base overdraft): an absolute amount (EUR) that estimates the overdraft independent of external line size (in particular relevant for "small" external lines).

Up to 12 monthly snapshots for each transaction were used and the parameters have been estimated by calculating averages for each segment.

This segmentation is based on the product and customer categories.

EAD model is estimated on the UCBA AG's data sample (time series starting with 2005). The EAD parameters are re-estimated regularly on a regular basis to include the latest observations.

In 2019 an annual re-estimation for the local EAD model has been conducted by extending the time series by another year (ranging from October 2005 to December 2017) spanning a period of more than 10 years.

A redevelopment activity has been started in line with Group Methodological Standards in order to comply with most recent regulatory requirements as well as harmonize the modelling standards within UniCredit group.

Local Models Central and Eastern European Countries

With reference to the Group perimeter in the Central and Eastern Europe (CEE) area, the Group was authorized since 2011 to use the F-IRB approach for measuring the capital requirements for credit risk in Czech Republic, Bulgaria, Slovenia and Hungary, and starting from 2012 also in Romania and Slovakia.

Beside this, the use of A-IRB approach has been authorized in Czech Republic, starting from September 2014, with specific reference to the local Czech portfolio, and from June 2020 with specific reference to Retail Slovak portfolio. In Bulgaria the use of A-IRB approach has been authorized starting from July 2016.

PREVAILING EXPOSURE CLASS	RATING SYSTEM	LEGAL ENTITY
Corporate	CZ Mid-Corporate (PD, LGD, EAD)	UCB CZ, UCB SK(*)
	SK Mid-Corporate (PD)	
	CZ IPRE (PD, LGD, EAD)	
	SK IPRE Slotting Criteria	
Retail	SK Small Business (PD, LGD, EAD), CZ Small Business (PD, LGD, EAD)	UCB BG
	SK Private Individuals (PD, LGD, EAD), CZ Private Individuals (PD, LGD, EAD)	
Corporate	Mid -Corporate (PD, LGD, EAD)	UCB HU(*)
	IPRE Slotting Criteria	
	Project Finance Slotting Criteria	
Retail	Small Business (PD, LGD, EAD)	UCB RO(*)
	Private Individuals (PD, LGD, EAD)	
Corporate	Mid-Corporate (PD)	UCB HU(*)
Corporate	Mid-Corporate (PD)	UCB RO(*)

Note:

(*) These Banks are currently authorized only to use the IRB Foundation approach, therefore they only use PD internal estimations for determination of capital requirements.

Credit risk

The existing framework for the local Corporate/Retail exposures consists of:

- the Mid-Corporate rating model generally based on the combination of:
 - the financial module;
 - the qualitative module;
 - the behavioural module (only for some Legal Entities);
 - the definition of a warning signals set and an override system.
- the IPRE (Income Producing Real Estate) rating model, developed alternatively using the supervisory Slotting Criteria approach or an internal cash flows simulation approach;
- the Small Business rating model, generally foreseeing the following component:
 - socio-demographic (only for some Legal Entities);
 - financial (based on client type: Full accountancy, Simplified accountancy, Freelancers, etc.);
 - qualitative;
 - behavioural.
- the rating system for Private Individuals usually foreseeing several scorecards developed at product level for both application and behavioural phase.

Specific details are provided below.

Czech Republic and Slovakia

Since December 2013, UniCredit Bank Czech Republic a.s. is named UniCredit Bank Czech Republic and Slovakia a.s. (UCB CZ&SK) following the merger with UniCredit Bank Slovakia a.s. However, different IRB authorized local models have been maintained for the treatment of exposures respectively in Czech Republic and Slovakia.

UCB CZ&SK was authorized since 2011 to use the F-IRB approach for measuring the capital requirements for credit risk for Czech part of portfolio and from 2012 for the Slovakian part. The use of A-IRB approach has been authorized in Czech Republic, starting from September 2014, with specific reference to the local Czech portfolio, and from June 2020 with specific reference to retail Slovak portfolio.

Following the new Group Methodological Standards as well as to harmonize the modelling standards within the Group and include the changes due to the new Definition of Default, the following material model changes have been performed:

- a unique PD model for CZ and SK Mid-Corporate portfolios, in order to replace the two previous separate models, including also a material model extension of the range of its application to CZ Leasing portfolio with the consequent decommissioning of the authorized internal model CZ PD Leasing (submission in September 2019), authorized by Supervisory Authority and implemented since February 2022;
- a unique cross-countries model for both CZ and SK IPRE portfolios to replace the two separate models currently in production (a slotting one for SK) applying also a stricter definition of IPRE segment, resulting in a shift of some customers into Real Estate segment treated with the Mid Corporate PD model and reducing the scope of the IPRE model (authorization process ongoing);
- a unique PD model for CZ and SK Private Individuals, to replace the two separate models currently in production, reworking and integrating several distinct informational areas (modules and sub-modules) resulting into common CZ&SK ones with exception of Credit Bureau sub-module with dedicated Czech and Slovak scorecards and credit cards with application module on Czech side and flat PD on Slovak side (authorization process ongoing);
- a unique EAD model for CZ and SK portfolios, in order to replace several separate models currently in production, introducing also the “drawings after default” component and an EAD Defaulted Asset model (authorization process ongoing);
- a unique PD model for CZ and SK Small Business, to replace the two separate models currently in production (authorization process ongoing);
- a unique LGD model for both CZ and SK portfolios with the aim to replace several separate models currently in production (authorization process ongoing).

Bulgaria

Starting from January 2011, UniCredit Bulbank has been authorized to the PD Mid- Corporate model as well as to the estimation of specialised lending exposures using the “supervisory slotting criteria”.

Moreover, also the Private Individual and Small Business PD models, together with the LGD and EAD models for both local Corporate and Retail exposures have been approved as A-IRB compliant since July 2016.

Credit risk

Following the new Group Methodological Standards as well as harmonize the modelling standards within the Group and including the changes due to the new Definition of Default, the following material model changes have been performed:

- PD Mid Corporate and PD Small Business models, where the main changes include the revision of: segmentation criteria; Financial module (in line with Group Common Long list); Application module (by including Socio-demographic and External Bureau modules); Behavioural module (on client level and based on Group Common Long list); integration logic between Application and Behavioural modules. The revised model, including an extension of the time series, was implemented since February 2022;
- IPRE Slotting model, where the main changes include the revision of segmentation criteria; the introduction of additional assessment factors as well as 4 scorecards based on the Exit strategy and Construction phase; the update of the weights on each assessment factors and the calibration of the IPRE slotting criteria model to a Central Tendency (CT) based on long run average default rate. The revised model, including an extension of the time series, was implemented since February 2022;
- PD Private Individuals where the main changes include the revision of the segmentation criteria and of the model structure by introducing additional modules and specific modules combination to assign final customer rating; recalibration of the Central Tendency based on 2008-2016 default time frame and calibration methodology revision; introduction of an overall Margin of Conservatism (authorization process ongoing);
- LGD model where the main changes consist in transition to the new definition of default, transition from Secured/Unsecured to Overall (Gross) LGD estimation approach, update of the historical time series, adjustment of downturn concept to fulfil the regulatory requirements and MoCs, and development of LGD Defaulted Asset and ELBE models (authorization process ongoing).

Romania

Between 2010 and March 2011, the "Mid-Corporate" rating model was refined, implying a deep customization of both financial and qualitative modules according to country specific default experience and a new calibration process was carried out.

In 2015 a further revised model was authorized with improved Financial and Qualitative modules and ensure a more comprehensive model design through the introduction of a behavioral component and using a longer time series.

In 2017 a further revision of the Mid-Corporate model, aiming at extending the time series, used for behavioral module development, was performed during 2017, submitted to the Supervisory Authority in December 2017, authorized in May 2020 and implemented in June 2020.

In July 2021 a recalibration has been implemented to support the inclusion of the new Definition of Default in the risk quantification phase.

In January 2021 a redevelopment of the new Mid Corporate model has been submitted to the Supervisory Authority driven by the necessity to comply with new EBA Guidelines, TRIM Guidelines and regulatory changes on the New DoD as well as to address Supervisory Authority recommendations; it is currently waiting for Supervisory Authority authorization.

Slovenia

Since April 2022 the Slovenian Mid Corporate portfolio, previously reported under F-IRB approach, has been reverted to the use of the Standardised approach.

Hungary

The Mid Corporate Hungarian PD model was refined in 2017 in order to enhance its discriminatory power and, following the Supervisory Authority's authorization in February 2019, the model has been implemented for regulatory reporting purposes from March 2019.

In November 2021 a new PD Mid Corporate model, upon authorization by Supervisory Authority, was implemented, following the new Group Methodological Standards and including the changes due to the new Definition of Default.

The main changes include the update of the qualitative and financial modules, the introduction of a new behavioral component, a new Central Tendency (CT) computation methodology, the extension of times series and the updated of Margin of Conservatism (MoC) methodology.

A model calibration of PD Mid Corporate of Hungary has been implemented since September 2022.

Retail exposures (exposures secured by residential property; qualifying revolving retail exposures; other retail exposures)

Local Model, Italian Legal Entities

Italian Small Business Rating model

The Integrated Small Business Rating (RISB) provides a rating for the counterparties of UniCredit S.p.A. with revenues (or total assets if revenue information is not available) up to €5 million, according to the segmentation used by the constitution of UniCredit S.p.A.

Credit risk

The model has been structured in order to optimize the aggregation of different informative sources, both internal (qualitative, financial, customer data and behavioural) and external (Banca d'Italia Centrale dei Rischi - "CE.RI" - data flows and other private providers), differentiating lending between new or existent customers and on a corporate segmentation that reflects the company size and seniority within the market. The modules underlying the model are the following:

- customer data;
- external behavioural module (CE.RI - Centrale Rischi/SIA S.p.A.¹⁷);
- financial module not applied for NEOC (companies established from less than 21 months) and POE (small agents counterparties);
- credit bureau modules¹⁸;
- qualitative module;
- internal behavioural module.

Regarding the counterparties related to Real Estate Small Business segment, the model is derived from the integration of a financial module defined specifically for this type of counterparties and the set of modules in use as part of the Small Business Integrated Rating (RISB), except for the module related to customer data. See RIC model section for more details on Real Estate segment.

Also, with reference to the perimeter Small Business, the bank has adopted an "ad hoc" approach to assess the creditworthiness of Corporate Customers belonging to an economic group in analogy to what is indicated for the Mid- Corporate model.

In January 2019 a revised PD model has been authorized by ECB and implemented in May 2019, including further enhancement (e.g., the model recalibration on updated time series up to December 2016 and the update of Definition of Default according to Capital Requirement Regulation (CRR) overcoming the technical past due treatment).

In 2019 the historical time series have been extended up to 2017 and implemented corrective actions requested by Group Internal Validation.

In April 2021, a recalibration of the RISB model consistent with the new Definition of Default was released in production.

In May 2022 a material model change and extension of the PD RISB has been submitted to ECB and currently under assessment of the Supervisory Authority. The model has been redeveloped in order to comply to regulatory requirements and the Group Methodological Standards and it has been extended to self-employed workers namely "Private-like". For Real Estate counterparties an ad hoc model has been developed.

Italian Small Business LGD model

In reference to the LGD model for the small business segment, see the description under "Local Italian Corporate LGD Models".

Private individuals Rating model

New PD model at counterparty level (RIP-One).

Starting from November 2021, after approval by the Regulator, the bank has adopted the new IRB RIP-One system for estimating credit parameters (PD; LGD; EAD) of the Private Individuals perimeter.

With reference to the PD parameter, the new rating system completely modifies the paradigm of the previous models by replacing the product approach with a counterparty approach. The statistical model therefore assigns a PD parameter to the debtor in its entirety, also taking into account the mix of products in its credit portfolio.

The operating logics of the model are summarized in the following points:

- each exposure to the debtor is valued separately on the basis of his seniority:
 - exposures with less than 6 months of seniority, or exposures in the origination phase, are assessed by the application component which considers the following information:
 - socio-demographic information (educational qualification, type of occupation, etc.);
 - characteristics of the credit product underlying the exposure - these information depends on the type of product aggregated into the macro-categories Mortgage Loans, Personal Loans, CQS, Overdraft, Credit Card;
 - information provided by the CRIF and Experian databases;
 - exposures with more than 6 months of seniority are instead evaluated through the behavioral component which considers the following main information:
 - equity of the debtor (Financial assets);
 - presence of unpaid instalments on loans;
 - percentage of outstanding debt to be repaid on loans;
 - presence of any past-due periods on credit lines;
 - draw level on credit lines.

When each exposure has been assessed by the appropriate score, these are summarized at the debtor level in a single score value.

¹⁷ Company that manages the Interbank Alarm Center.

¹⁸ Credit Bureau managed by the companies Experian and CRIF.

Credit risk

The debtor's score is finally transformed into PD through the calibration process; the model recognizes the EBA requirements for the new Definition of Default right from the model development activities and obviously in the risk quantification phase.

The model forces PD to more conservative levels when the following events are detected:

- evidence found on particularly negative external databases (CRIF, Experian, Ce.Ri);
- in case of assignment of the rating to a joint account, negative evidence found on the co-obligors;
- forbore classification of the debtor.

The RIP-One provides for an automatic update of the Rating on a monthly basis across the entire reference portfolio.

It is important to underline that Natural Persons model characterized by entrepreneurship risk ("Private-like") are excluded from the scope of application of the RIP-One, these debtors are included into the broader Small Business segment as a sub-model of the overall new RISB model, currently under assessment of Supervisory Authority. Until the adoption of the new RISB model, the old rating models based on the "by product" approach (Mortgages RIP-MI, Overdraft & Credit Cards and Personal Loans) will continue to be applied to these debtors, for which a brief description is provided below:

- **Mortgages (RIP-MI):** the target portfolio of the Integrated Individual Rating (RIP-MI) model consists of all categories of mortgages handled at UniCredit S.p.A. which are used for the purchase, construction and re-modelling of residential properties by individual customers and for the purchase of properties for business purposes carried out by individuals included in the Family Firm sector. The RIP-MI rating model uses different information as risk driver depending on whether the calculation is referred to the loan approval phase or to the monthly monitoring during the life of the mortgage. The score used for the evaluation of the mortgage lending phase is based on the information reported below, divided into similar groups:

- demographic information, income and Credit Bureau (Experian, and CRIF) figures relating to the loan requestor (holders);
- characteristics of the loan required (duration, Loan to Value, etc.);
- financial asset evaluation of the holders and their family;
- information related to the company performance to which the holders are connected (if present);
- Central Credit Register (if present).

The RIP-MI rating model used in post-delivery phase calculates on a monthly basis the mortgage rating of loan massively on the entire portfolio residential mortgages.

The information modules underlying the model for the behavioural phase are the following:

- behavioural information of loan (severity, presence of historical accidents, length of the loan, any historical insolvency trend);
- balance sheet of the holders and their nucleus (financial assets and current accounts);
- information related to the company performance to which the holders are connected (if present).

- **Overdraft, Credit Cards and Personal Loans¹⁹:** the Integrated Individual Rating (RIP) for Overdraft and Credit Cards is aimed to estimate credit worthiness of private individuals within current account facilities (overdraft, guarantee/endorsement loan, credit cards) and it derives from the integration of several basic score modules that use internal information (balance sheet, behavioral and customer data information) and external Credit Bureau information.

The integration of the different modules produces: (i) an underwriting score, used to estimate the credit worthiness both in granting and in renewal phase, and (ii) a monitoring score, used to evaluate the client who already has a relationship with the bank. For both phases there are specific models based on the type of credit line and customer.

The information underlying the financial/personal data module, collected during the underwriting process and rarely updated during the monitoring of the loan, are progressively underweighted in the model. On the contrary, the behavioral variables, potentially absent in the underwriting phase (new client), are explicative and monthly updated during the monitoring activities. The behavioral information provided by CRIF are updated on a quarterly basis.

The PD rating system for Personal Loans (RIP PP) is composed by different models according to the purpose of use (underwriting or monitoring), the underwriting channel and the application portfolio, in order to identify the peculiarities of the different segments in terms of business management, risk and statistical properties.

The model examines the same information assets evaluated for the granting of mortgage considering the peculiar characteristics the financing in question.

¹⁹ The Overdraft & Credit Cards and Personal Loans rating systems are authorized since 2010 but reported under Standardised approach for regulatory purposes.

Credit risk

Local Italian retail LGD model

Since November 2021, a new development of Private Individuals LGD model (covering the whole product portfolio), consistently with the RIP-ONE Rating Model revision, has been released in production upon the Supervisory Authority authorization.

The LGD model design is still based on the so-called workout LGD approach and the final LGD estimates are obtained combining several model components (LGD Litigation, Danger Rate and Delta Exposure).

The granularity of the model is at product level (mortgage loans, personal loans and overdraft/credit cards) and it is specialised by status of the counterpart (Performing and Defaulted Assets).

The main changes regard:

- the new definition of Default, in force starting from 2021;
- the compliance to the new EBA guidelines Regulation, in force starting from 2022 (e.g. discounting interest rate, new DT methodology, MOCs overarching framework, etc).

Local Italian EAD individuals model

As for the PD and LGD parameters, starting from November 2021 after approval by the Supervisory Authority, the bank has adopted the new EAD model RIP-One for the counterparties belonging to Private Individuals segment of UniCredit S.p.A.

EAD model is based on different model component that are combined to obtain final EAD estimates. These components are partly estimated via statistical analysis within the so-called risk differentiation phase, where the relation between a target variable and various potential risk drivers is assessed, in order to select the best predictive variables. Other components that concur to the final EAD estimates are computed within the risk quantification phase that aims at calibrating the estimates to the observed long-run average of the parameter as well as reflecting downturn conditions and including appropriate Margin of Conservatism (MoC).

The adopted approach is the 12-month fixed horizon approach, in line with article 245 of Basel III which envisages the identification, for each obligor, of both the default entry date and the reference date corresponding to twelve months prior to the default entry date.

The perimeter of EAD model application/estimation has been defined taking into account the specific features of the facility, as represented by the following macro-categories:

- Banking Credit Exposures with the possibility of drawing a Credit Limit, including traditional credit lines;
- Banking Credit Exposures with predefined maturity and without Credit Limit to be drawn- only work in progress mortgages can be considered;
- Multipurpose credit lines (MPCL).

The methodological approach foresees the estimation of two different model components to define the Exposure at Default: the Limit Equivalent Factor (LEF) and the Limit Overdraft Factor (LOF).

LEF focuses on the behavior of drawings within the granted amount; this component aims at forecasting the share of the exposure within the credit limit that will be drawn in the timespan between the reference date and the date of default.

LOF focuses on the overdraft component; this component aims at forecasting the share of the exposure above the credit limit that will be drawn in the timespan between the reference date and the date of default.

A recalibration of the EAD RIP One model (including the extension of the historical time series) has been implemented since May 2022.

Local Model, German Legal Entities

Small Business rating model

The "SBC" rating model applies to German customers with a reported production value/turnover up to €5 million and private individuals with main income from self-employment (Freelancers/Individual entrepreneurs/Full-liability single-person company business), excluding Specialised Lending and Real Estate Customer.

In November 2021 a redevelopment of the Small Business PD model has been implemented following ECB authorization. The new model complies with Group Methodological Standards and new regulatory requirements.

Main changes include: the update of customer segmentation, development of new socio-demographic, financial and behavioural score modules (replacing the current ones), development of new integration function of the three modules, introduction of automatic monthly re-rating process, elimination of unrated customers and re-calibration of the model as well as consideration of a new Margin of Conservatism (MoC) concept according to the Group Methodological Standards.

For risk differentiation purposes, the portfolio is divided into new clients and existing clients. Based on the customer's characteristics and segmentation (e.g. new clients or existing client, type of product, exposure and legal form), the model determines which modules (socio-demographic, financial, behaviour, or external credit bureau module) are relevant for the rating of the customer and computes the corresponding scores. These single scores are then aggregated by using an integration function to a sub-model from which the final rating of the customer is finally derived.

Credit risk

According to new rating model, a client either receives an Application Score, a Monitoring Score or, during a transition period, a weighted combination of the two. For two segments with special kind of obligations and with a low materiality, one constant PD is used for all obligors within the segment (so-called flat PD segment). The segmentation used for calibration differentiates the legal form of the client (natural vs. legal persons) and considers a special segment for unauthorized overdrafts.

A recalibration for Small Business PD model to support the inclusion of the new Definition of Default in the risk quantification phase was applied with the go-live of the new model in November 2021.

With reference to the LGD model refer to the description in the paragraph "Local German portfolios LGD model".

Private Individual rating model

The "Private Individuals" rating model applies to German customers whose main source of income is "private income", e.g. employment income, capital income, pensions and income from real estate. Individuals with high property lease income are excluded as they are considered as part of the "Commercial Real Estate" portfolio and assessed using the appropriate rating system.

In November 2021 a redevelopment of the model has been implemented following the ECB authorization. The new model complies with Group Methodological Standards and new regulatory requirements. Main changes include: the update of customer segmentation, development of new socio-demographic, product-financial and behavioural internal score modules (replacing the current product scorecard model structure), development of new integration function of the three modules plus an external (credit bureau) module, introduction of automatic monthly re-rating process and re-calibration of the model as well as consideration of a new Margin of Conservatism (MoC) concept according to the Group Methodological Standards.

This rating model calculates the model PD on client level and comprises several scores, called Application Scores and Monitoring Scores. The Application Scores are composed of modules covering product-specific information, a socio-demographic module based on client information and external information. The Monitoring Score is composed of a behavioural module and external information. According to new rating model, a client either receives an Application Score, a Monitoring Score or, during a transition period, a weighted combination of the two. The application phase starts with the assignment of an Application Score appropriate for the requested product. After six months, it starts to phase in the Monitoring Score.

A recalibration for Private Individuals PD model to support the inclusion of the new Definition of Default in the risk quantification phase was applied with the go-live of the new model in November 2021.

With reference to the LGD model refer to the description in the paragraph "Local German portfolios LGD model".

Local Model, Bank Austria

Small Business rating model

This rating model is applicable to small business clients up to €3 million annual turnover or to clients using cash-based accounting. It includes both client's types: with full accounting balance sheet and cash-based accounting.

The general design of the model consists in a Socio Demographic module, a Balance sheet module, for customers with full accounting, and dependent if the customers is new or existing either an External module or a Behaviour Scoring component.

The External application module is applied principally if no behaviour score can be calculated, so for completely new clients or clients with a credit history less than 6 months on book. If the customer's transaction is older than 6 months, the behaviour module is calculated automatically on a monthly basis.

The up to three modules (socio-demographic, balance sheet and external or behaviour) are combined using different weights depending on the modules used to evaluate the riskiness of the client in order to obtain a combined PD, which, once mapped to the master scale, determines the "calculated rating". The final "valid rating" is obtained by modifying the calculated rating on the basis of any available negative information or of "warning signals" in general.

Small Business rating model is calibrated on the UCBA AG's data sample (time series starting from 2007) and the model is based on logistic-regression concept.

The model was last redeveloped in 2019, recalibrated in 2020 and is live since July 2021. The new development considered already the new Definition of Default.

Regarding to the LGD/EAD model see as described in paragraphs "Local Austrian portfolios LGD model" and "Local Austrian portfolios EAD model".

Private Individuals rating model

The Private Individuals rating model is applicable to all individuals other than self-employed professionals and freelancers.

The BA Private Individuals' rating comprises of statistically derived models for: application and behaviour modules.

The whole system was estimated through logistic regressions.

Credit risk

For the Application module an external source, CRIF, is incorporated, enhancing the information of a client. Moreover Socio-Demographic Information as well as behaviour components are used to define the final customer-PD. An application scoring is done in case if the customer applies for a new loan. If the customer's transaction is older than 6 months, the behaviour module is calculated automatically on a monthly basis. Depending on the product mix of the client different calibration segments are applied.

The model was last redeveloped in 2019, recalibrated in 2020 and is live since July 2021. The new development considered already the new Definition of Default. Regarding to the LGD/EAD model see as described in paragraphs "Local Austrian portfolios LGD model" and "Local Austrian portfolios EAD model".

Local Models Central and Eastern European Countries (CEE)

With reference to Retail local models of CEE Legal Entities see paragraph "Local Models Central and Eastern European Countries".

Asset Backed Commercial Paper (Securitisation)

With respect to UCB AG Internal Assessment Approach (IAA) rating model for securitisations, reference is made to the dedicated chapter "Securitisations exposures".

Credit risk

Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - AIRB

(€ million)

	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	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-IRB	a	b	c	d	e	f	g	h	i	j	k	l	m
Central governments or central banks	0.00 to <0.15	23,432	566	1.52%	23,559	0.03%	50	20.69%	3.16	1,250	5.31%	1	(5)
	0.00 to <0.10	23,387	562	1.42%	23,434	0.03%	46	20.66%	3.16	1,217	5.19%	1	(5)
	0.10 to <0.15	45	3	17.64%	125	0.14%	4	25.71%	3.46	33	26.13%	0	(0)
	0.15 to <0.25	358	60	51.36%	0	0.20%	5	26.43%	1.70	0	22.47%	0	(0)
	0.25 to <0.50	110	103	60.72%	4	0.32%	4	33.63%	4.54	2	61.09%	0	(0)
	0.50 to <0.75	13	0	10.00%	0	0.71%	1	39.54%	1.00	0	57.48%	0	(0)
	0.75 to <2.50	397	248	58.26%	34	1.21%	16	37.86%	3.00	31	92.95%	0	(0)
	0.75 to <1.75	342	248	58.26%	34	1.21%	14	37.86%	3.00	31	92.95%	0	(0)
	1.75 to <2.50	55	0	-	-	-	2	-	-	-	-	-	(0)
	2.50 to <10.00	346	278	46.27%	21	4.31%	12	45.08%	3.97	36	170.25%	0	(2)
	2.50 to <5.00	329	278	46.27%	20	4.14%	9	44.79%	4.08	34	169.00%	0	(2)
	5.00 to <10.00	17	0	-	1	8.60%	3	52.22%	1.02	2	201.63%	0	(0)
	10.00 to <100.00	339	331	144.75%	4	32.27%	10	39.82%	3.33	8	211.86%	0	(1)
	10.00 to <20.00	203	330	145.36%	2	13.57%	5	39.29%	2.84	4	204.32%	0	(0)
	20.00 to <30.00	0	-	-	0	24.08%	1	42.23%	1.30	0	233.64%	0	(0)
	30.00 to <100.00	136	1	-	2	50.31%	4	40.26%	3.84	4	218.53%	0	(0)
	100.00 (Default)	487	8	68.37%	29	100.00%	11	73.52%	1.72	4	13.30%	21	(12)
	Subtotal	25,483	1,593	53.95%	23,651	0.16%	109	20.80%	3.16	1,332	5.63%	23	(20)
Institutions	0.00 to <0.15	20,451	9,344	13.30%	21,915	0.07%	367	20.55%	2.66	3,872	17.67%	4	(9)
	0.00 to <0.10	15,239	7,703	14.94%	16,517	0.06%	261	20.44%	2.79	2,861	17.32%	3	(3)
	0.10 to <0.15	5,212	1,641	5.59%	5,398	0.12%	106	20.89%	2.26	1,011	18.73%	2	(7)
	0.15 to <0.25	2,059	1,227	27.37%	1,901	0.18%	71	23.73%	2.74	454	23.89%	1	(1)
	0.25 to <0.50	664	1,242	10.61%	979	0.30%	76	42.43%	1.66	434	44.32%	1	(26)
	0.50 to <0.75	240	276	6.05%	303	0.63%	56	24.74%	2.93	144	47.51%	0	(0)
	0.75 to <2.50	373	527	5.00%	432	1.66%	87	28.29%	1.14	356	82.39%	3	(8)
	0.75 to <1.75	185	373	6.14%	221	1.26%	60	31.55%	1.42	162	73.61%	1	(8)
	1.75 to <2.50	188	154	2.23%	211	2.08%	27	24.89%	0.85	193	91.55%	2	(1)
	2.50 to <10.00	162	595	5.14%	284	3.54%	75	44.07%	1.31	345	121.42%	4	(4)
	2.50 to <5.00	152	575	4.13%	264	3.18%	61	45.12%	1.33	322	121.81%	4	(4)
	5.00 to <10.00	10	20	33.74%	20	8.31%	14	30.38%	0.97	24	116.42%	1	(0)
	10.00 to <100.00	7	9	0.35%	8	18.58%	29	35.56%	2.29	14	172.45%	1	(0)
	10.00 to <20.00	5	0	-	6	13.20%	8	36.93%	2.76	9	150.90%	0	(0)
	20.00 to <30.00	1	4	-	1	27.32%	6	36.00%	0.50	3	213.31%	0	(0)
	30.00 to <100.00	0	6	0.60%	1	38.56%	15	26.84%	1.99	2	244.44%	0	(0)
	100.00 (Default)	2	1	-	3	100.00%	10	75.12%	1.17	1	41.09%	2	(2)
	Subtotal	23,958	13,221	13.50%	25,824	0.18%	771	22.06%	2.59	5,619	21.76%	16	(51)

Credit risk

continued: Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - AIRB

(€ million)														
A-IRB	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	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	ADJUSTMENTS AND PROVISIONS	VALUE
	a	b	c	d	e	f	g	h	i	j	k	l	m	
Corporates - SME	0.00 to <0.15	1,981	2,857	40.29%	3,165	0.09%	3,282	17.62%	2.58	241	7.63%	0	(3)	
	0.00 to <0.10	1,085	1,155	53.98%	1,903	0.06%	1,510	17.68%	2.66	128	6.72%	0	(0)	
	0.10 to <0.15	895	1,702	31.00%	1,263	0.12%	1,772	17.53%	2.47	114	8.99%	0	(2)	
	0.15 to <0.25	3,060	3,139	15.52%	3,393	0.20%	3,961	21.44%	2.33	465	13.69%	2	(9)	
	0.25 to <0.50	8,392	5,667	17.22%	8,913	0.37%	8,111	18.27%	2.43	1,496	16.79%	6	(34)	
	0.50 to <0.75	5,810	3,378	16.67%	6,099	0.61%	5,659	17.95%	2.44	1,258	20.63%	7	(32)	
	0.75 to <2.50	14,696	7,285	21.91%	14,770	1.34%	15,731	22.40%	2.42	5,116	34.63%	46	(144)	
	0.75 to <1.75	11,479	5,426	21.30%	11,734	1.14%	11,554	21.36%	2.42	3,711	31.63%	29	(104)	
	1.75 to <2.50	3,217	1,859	23.70%	3,036	2.11%	4,177	26.40%	2.41	1,404	46.26%	17	(40)	
	2.50 to <10.00	8,276	3,993	16.83%	7,481	4.61%	10,816	27.62%	2.42	4,520	60.43%	97	(218)	
	2.50 to <5.00	5,604	2,985	15.26%	5,158	3.55%	6,393	26.61%	2.43	2,787	54.04%	48	(114)	
	5.00 to <10.00	2,672	1,008	21.49%	2,323	6.97%	4,423	29.85%	2.41	1,733	74.61%	48	(104)	
	10.00 to <100.00	1,846	483	33.23%	1,750	26.31%	3,457	28.98%	2.20	1,700	97.14%	138	(272)	
	10.00 to <20.00	1,211	335	31.34%	1,125	14.48%	2,408	27.22%	2.31	1,023	90.90%	43	(65)	
	20.00 to <30.00	204	87	20.22%	189	24.22%	405	35.51%	2.29	257	136.03%	16	(20)	
	30.00 to <100.00	431	61	62.31%	437	57.69%	644	30.71%	1.87	421	96.39%	78	(188)	
	100.00 (Default)	2,167	335	38.12%	2,098	100.00%	2,201	50.61%	2.17	850	40.52%	1,113	(1,215)	
	Subtotal	46,227	27,137	21.13%	47,669	6.67%	53,218	22.97%	2.41	15,647	32.82%	1,408	(1,927)	
Corporates - Specialised lending	0.00 to <0.15	1,341	2,142	39.80%	2,236	0.11%	58	22.17%	2.91	323	14.45%	1	(4)	
	0.00 to <0.10	637	190	38.69%	717	0.07%	26	20.93%	3.96	95	13.23%	0	(0)	
	0.10 to <0.15	704	1,952	39.91%	1,519	0.13%	32	22.76%	2.41	228	15.02%	0	(4)	
	0.15 to <0.25	2,007	299	43.25%	2,379	0.20%	145	19.26%	3.38	472	19.84%	1	(16)	
	0.25 to <0.50	3,191	978	42.15%	3,371	0.38%	190	25.55%	3.52	1,180	35.00%	3	(33)	
	0.50 to <0.75	1,134	749	41.78%	1,225	0.63%	106	30.14%	3.42	575	46.91%	2	(7)	
	0.75 to <2.50	2,313	1,607	23.98%	2,885	1.26%	194	31.79%	3.19	1,909	66.18%	12	(38)	
	0.75 to <1.75	2,059	1,456	22.91%	2,546	1.13%	156	32.18%	3.26	1,711	67.20%	9	(34)	
	1.75 to <2.50	254	151	34.27%	339	2.25%	38	28.92%	2.63	198	58.46%	2	(4)	
	2.50 to <10.00	1,189	781	60.26%	993	3.85%	72	27.57%	3.34	797	80.31%	11	(33)	
	2.50 to <5.00	865	762	60.69%	840	3.26%	55	27.39%	3.30	652	77.62%	8	(23)	
	5.00 to <10.00	324	19	43.44%	152	7.12%	17	28.56%	3.55	145	95.13%	3	(9)	
	10.00 to <100.00	153	1	35.53%	114	12.81%	14	18.25%	3.26	93	81.24%	3	(9)	
	10.00 to <20.00	152	1	35.53%	114	12.74%	13	18.14%	3.26	92	80.99%	3	(9)	
	20.00 to <30.00	1	-	-	1	24.08%	1	34.61%	2.50	1	121.62%	0	(0)	
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-	
	100.00 (Default)	435	29	0.00%	312	100.00%	24	63.38%	4.06	161	51.60%	195	(170)	
	Subtotal	11,763	6,587	38.92%	13,515	3.17%	803	26.59%	3.31	5,510	40.77%	227	(310)	

Credit risk

continued: Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - AIRB

														(€ million)
A-IRB	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	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	b	c	d	e	f	g	h	i	j	k	l	m	
Corporates - Other	0.00 to <0.15	45,026	118,757	23.54%	73,048	0.08%	3,558	39.39%	2.15	15,028	20.57%	22	(165)	
	0.00 to <0.10	31,714	89,301	24.23%	53,265	0.06%	1,873	40.08%	2.12	9,878	18.54%	13	(91)	
	0.10 to <0.15	13,312	29,456	21.46%	19,783	0.12%	1,685	37.53%	2.22	5,150	26.03%	9	(74)	
	0.15 to <0.25	14,043	26,135	20.98%	19,331	0.20%	2,770	34.39%	2.26	6,234	32.25%	13	(71)	
	0.25 to <0.50	22,421	29,804	24.14%	28,573	0.36%	4,954	32.88%	2.46	12,824	44.88%	34	(165)	
	0.50 to <0.75	12,464	11,596	23.91%	14,294	0.64%	2,905	26.75%	2.69	6,907	48.32%	25	(93)	
	0.75 to <2.50	22,193	21,828	22.21%	24,566	1.38%	6,829	32.40%	2.33	18,381	74.82%	111	(819)	
	0.75 to <1.75	16,839	16,711	21.71%	18,750	1.16%	5,110	32.57%	2.32	13,393	71.43%	72	(711)	
	1.75 to <2.50	5,354	5,117	23.82%	5,816	2.11%	1,719	31.85%	2.35	4,988	85.77%	39	(108)	
	2.50 to <10.00	8,790	7,337	22.27%	8,610	4.38%	7,890	32.12%	2.48	9,212	106.99%	126	(301)	
	2.50 to <5.00	5,943	4,842	21.41%	5,994	3.41%	3,902	31.57%	2.58	5,912	98.63%	65	(180)	
	5.00 to <10.00	2,847	2,496	23.93%	2,616	6.63%	3,988	33.38%	2.28	3,301	126.16%	61	(121)	
	10.00 to <100.00	2,085	1,757	20.66%	2,021	22.62%	6,330	32.85%	2.12	3,942	195.00%	168	(279)	
	10.00 to <20.00	1,256	832	24.42%	1,110	14.70%	1,924	30.20%	2.16	1,743	157.03%	49	(105)	
	20.00 to <30.00	377	599	14.27%	502	24.54%	2,533	36.16%	1.96	1,406	280.07%	56	(114)	
	30.00 to <100.00	451	326	22.82%	409	41.76%	1,873	36.01%	2.18	792	193.62%	62	(60)	
	100.00 (Default)	3,363	1,973	23.49%	3,279	100.00%	1,465	55.49%	1.95	955	29.11%	1,824	(1,838)	
	Subtotal	130,385	219,186	23.14%	173,722	2.73%	36,701	35.60%	2.29	73,482	42.30%	2,323	(3,732)	
Retail - of which Secured by immovable property SMEs	0.00 to <0.15	91	4	54.90%	95	0.09%	690	17.87%		3	3.42%	0	(0)	
	0.00 to <0.10	45	2	65.25%	47	0.05%	246	15.03%		1	1.80%	0	(0)	
	0.10 to <0.15	46	2	45.71%	48	0.13%	444	20.61%		2	4.99%	0	(0)	
	0.15 to <0.25	239	6	46.51%	242	0.21%	2,892	21.62%		18	7.27%	0	(2)	
	0.25 to <0.50	453	20	58.27%	464	0.39%	3,914	21.46%		53	11.41%	0	(6)	
	0.50 to <0.75	330	48	58.55%	356	0.63%	3,062	17.97%		48	13.57%	0	(7)	
	0.75 to <2.50	1,819	181	60.72%	1,949	1.51%	14,825	11.62%		291	14.93%	3	(20)	
	0.75 to <1.75	1,212	132	61.56%	1,307	1.21%	10,281	12.41%		186	14.22%	2	(14)	
	1.75 to <2.50	607	48	58.41%	642	2.10%	4,544	10.00%		105	16.38%	1	(6)	
	2.50 to <10.00	1,016	70	73.57%	1,071	4.46%	7,469	12.34%		337	31.47%	6	(25)	
	2.50 to <5.00	713	47	72.10%	753	3.40%	5,073	11.45%		190	25.22%	3	(14)	
	5.00 to <10.00	304	23	76.68%	319	6.95%	2,396	14.44%		147	46.24%	3	(11)	
	10.00 to <100.00	359	32	248.37%	384	21.87%	3,009	13.76%		233	60.74%	12	(22)	
	10.00 to <20.00	237	21	94.94%	250	15.26%	1,826	13.21%		142	56.68%	5	(12)	
	20.00 to <30.00	45	2	147.35%	47	24.12%	362	15.93%		35	76.19%	2	(4)	
	30.00 to <100.00	77	8	671.98%	88	39.51%	821	14.19%		56	64.08%	5	(6)	
	100.00 (Default)	187	4	74.78%	189	100.00%	1,438	27.39%		52	27.66%	50	(56)	
	Subtotal	4,495	364	78.94%	4,750	7.46%	37,299	14.65%		1,036	21.80%	72	(139)	

Credit risk

continued: Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - AIRB

(€ million)

	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	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	ADJUSTMENTS AND PROVISIONS
A-IRB	a	b	c	d	e	f	g	h	i	j	k	l	m
Retail - of which Secured by immovable property non SMEs	0.00 to <0.15	15,101	263	28.43%	15,126	0.08%	168,656	17.50%		576	3.81%	2	(13)
	0.00 to <0.10	9,228	199	23.64%	9,258	0.05%	87,427	17.11%		250	2.70%	1	(5)
	0.10 to <0.15	5,874	64	43.41%	5,868	0.13%	81,229	18.12%		327	5.57%	1	(8)
	0.15 to <0.25	10,132	95	39.47%	10,080	0.20%	112,939	18.92%		812	8.06%	4	(13)
	0.25 to <0.50	19,319	142	44.46%	19,057	0.36%	199,356	19.80%		2,471	12.97%	14	(35)
	0.50 to <0.75	8,999	99	45.86%	8,840	0.61%	92,673	19.12%		1,602	18.12%	10	(23)
	0.75 to <2.50	21,922	270	47.37%	21,404	1.32%	243,445	18.38%		5,975	27.92%	50	(122)
	0.75 to <1.75	17,328	214	46.65%	16,851	1.12%	201,172	19.52%		4,613	27.38%	36	(79)
	1.75 to <2.50	4,594	56	50.11%	4,552	2.07%	42,273	14.13%		1,362	29.91%	13	(42)
	2.50 to <10.00	4,665	45	53.51%	4,587	4.71%	58,001	19.22%		2,923	63.73%	43	(144)
	2.50 to <5.00	3,031	34	51.09%	2,986	3.45%	35,292	18.31%		1,551	51.93%	19	(73)
	5.00 to <10.00	1,634	11	60.88%	1,601	7.05%	22,709	20.85%		1,373	85.73%	24	(70)
	10.00 to <100.00	2,525	9	507.74%	2,480	27.27%	31,719	24.66%		3,507	141.43%	170	(279)
	10.00 to <20.00	1,013	6	69.29%	990	13.99%	13,582	22.76%		1,212	122.43%	32	(75)
	20.00 to <30.00	341	2	1,836.27%	331	24.21%	4,668	24.52%		496	149.84%	20	(38)
	30.00 to <100.00	1,171	2	810.75%	1,158	39.49%	13,469	26.33%		1,798	155.26%	119	(166)
	100.00 (Default)	1,236	4	53.29%	1,234	100.00%	16,343	31.59%		863	69.90%	331	(271)
	Subtotal	83,899	927	45.49%	82,808	3.10%	923,132	19.12%		18,730	22.62%	624	(899)
Retail - Qualifying revolving	0.00 to <0.15	53	2,545	69.49%	1,822	0.07%	519,363	93.37%		78	4.26%	1	(1)
	0.00 to <0.10	33	2,019	69.69%	1,440	0.06%	363,734	95.96%		53	3.71%	1	(1)
	0.10 to <0.15	21	526	68.72%	382	0.12%	155,629	83.58%		24	6.31%	0	(0)
	0.15 to <0.25	35	556	62.33%	382	0.19%	160,532	76.69%		32	8.41%	1	(1)
	0.25 to <0.50	75	1,112	49.13%	622	0.38%	299,933	60.01%		69	11.17%	1	(2)
	0.50 to <0.75	75	1,802	42.33%	838	0.61%	408,482	50.44%		116	13.87%	3	(3)
	0.75 to <2.50	270	1,116	44.15%	764	1.27%	389,457	47.37%		174	22.84%	5	(8)
	0.75 to <1.75	203	1,002	43.43%	638	1.11%	330,222	47.20%		132	20.67%	3	(5)
	1.75 to <2.50	68	114	50.47%	126	2.09%	59,235	48.24%		43	33.84%	1	(2)
	2.50 to <10.00	112	106	71.25%	189	4.23%	115,963	52.06%		109	58.02%	4	(9)
	2.50 to <5.00	82	86	69.19%	142	3.38%	80,466	53.10%		73	51.77%	3	(6)
	5.00 to <10.00	30	21	79.85%	47	6.81%	35,497	48.89%		36	76.97%	2	(3)
	10.00 to <100.00	23	11	104.18%	34	20.98%	50,671	51.49%		45	130.09%	4	(7)
	10.00 to <20.00	15	7	109.48%	23	13.96%	37,014	54.75%		29	128.28%	2	(3)
	20.00 to <30.00	4	1	133.96%	5	24.09%	5,557	49.47%		7	146.34%	1	(1)
	30.00 to <100.00	4	3	83.40%	7	42.29%	8,100	42.06%		8	123.90%	1	(2)
	100.00 (Default)	224	5	76.69%	229	100.00%	31,654	89.34%		109	47.67%	216	(194)
	Subtotal	868	7,253	55.25%	4,879	5.39%	1,976,055	71.16%		733	15.02%	234	(223)

Credit risk

continued: Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - AIRB

(€ million)

A-IRB	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	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	b	c	d	e	f	g	h	i	j	k	l	m
Retail - of which Other SME	0.00 to <0.15	33	38	36.76%	36	0.09%	4,592	57.10%		4	10.29%	0	(0)
	0.00 to <0.10	13	14	53.21%	18	0.06%	1,318	64.28%		2	8.56%	0	(0)
	0.10 to <0.15	20	24	27.04%	18	0.13%	3,274	49.69%		2	12.08%	0	(0)
	0.15 to <0.25	553	910	3.04%	273	0.21%	9,234	40.92%		37	13.75%	0	(6)
	0.25 to <0.50	2,170	2,466	3.52%	1,096	0.37%	32,451	40.97%		221	20.13%	2	(25)
	0.50 to <0.75	1,883	1,603	6.43%	993	0.62%	29,708	39.45%		261	26.26%	2	(24)
	0.75 to <2.50	5,220	3,507	13.96%	3,039	1.40%	132,653	37.45%		1,051	34.58%	16	(66)
	0.75 to <1.75	3,890	2,782	14.03%	2,277	1.17%	93,126	37.61%		751	33.00%	10	(48)
	1.75 to <2.50	1,330	724	13.68%	762	2.09%	39,527	36.95%		299	39.31%	6	(17)
	2.50 to <10.00	3,186	1,237	10.83%	1,723	4.70%	101,691	37.42%		777	45.08%	31	(61)
	2.50 to <5.00	2,013	864	11.41%	1,105	3.52%	62,242	37.11%		478	43.27%	14	(35)
	5.00 to <10.00	1,173	373	9.49%	618	6.83%	39,449	37.97%		299	48.30%	16	(27)
	10.00 to <100.00	1,087	326	11.99%	581	23.91%	49,466	38.08%		399	68.59%	54	(60)
	10.00 to <20.00	675	188	10.49%	341	14.59%	23,859	37.99%		208	60.84%	19	(26)
	20.00 to <30.00	168	54	7.61%	85	24.21%	15,210	38.65%		67	78.65%	8	(9)
	30.00 to <100.00	244	85	18.07%	155	44.33%	10,397	37.97%		124	80.15%	27	(24)
	100.00 (Default)	689	76	16.05%	521	100.00%	18,455	74.72%		192	36.91%	384	(370)
	Subtotal	14,821	10,162	8.92%	8,262	9.61%	378,250	40.74%		2,941	35.60%	489	(612)
Retail - of which Other non SME	0.00 to <0.15	2,293	1,533	27.93%	2,744	0.07%	427,264	39.77%		223	8.12%	1	(1)
	0.00 to <0.10	1,660	1,015	26.34%	1,936	0.05%	337,498	38.64%		118	6.08%	0	(1)
	0.10 to <0.15	633	518	31.05%	808	0.12%	89,766	42.47%		105	13.03%	0	(1)
	0.15 to <0.25	1,258	602	36.78%	1,490	0.20%	117,517	41.20%		265	17.77%	1	(2)
	0.25 to <0.50	2,618	815	37.96%	2,948	0.37%	187,389	40.25%		755	25.60%	4	(10)
	0.50 to <0.75	1,914	546	39.48%	2,129	0.62%	128,952	40.41%		735	34.51%	5	(10)
	0.75 to <2.50	7,956	1,699	35.58%	8,504	1.49%	450,007	41.62%		4,325	50.86%	53	(128)
	0.75 to <1.75	5,245	1,291	34.95%	5,666	1.18%	312,148	40.99%		2,644	46.67%	27	(53)
	1.75 to <2.50	2,711	408	37.57%	2,838	2.10%	137,859	42.89%		1,681	59.23%	26	(75)
	2.50 to <10.00	5,731	603	41.43%	5,963	4.73%	382,903	36.89%		3,401	57.04%	102	(189)
	2.50 to <5.00	3,744	454	39.75%	3,901	3.58%	250,100	38.37%		2,254	57.77%	53	(110)
	5.00 to <10.00	1,986	149	46.54%	2,061	6.92%	132,803	34.08%		1,148	55.68%	49	(79)
	10.00 to <100.00	1,160	102	56.12%	1,225	25.05%	176,183	39.63%		1,096	89.47%	123	(186)
	10.00 to <20.00	650	61	50.20%	684	13.91%	118,866	39.46%		545	79.75%	38	(67)
	20.00 to <30.00	179	14	62.72%	189	24.43%	19,811	39.61%		190	100.50%	18	(29)
	30.00 to <100.00	331	28	65.95%	352	47.01%	37,506	39.98%		361	102.41%	67	(90)
	100.00 (Default)	502	31	12.51%	500	100.00%	51,667	57.10%		365	73.06%	263	(269)
	Subtotal	23,432	5,931	35.24%	25,503	4.88%	1,921,882	40.24%		11,165	43.78%	553	(796)
Total (all exposures classes) AIRB as at 31.12.2022		365,331	292,360	23.73%	410,583	3.33%	5,328,220	29.73%	1.70	136,195	33.17%	5,968	(8,709)
Total (all exposures classes) AIRB as at 30.06.2022		379,148	280,955	23.89%	413,772	3.37%	5,465,782	30.60%	1.68	141,581	34.22%	6,177	(8,967)

With reference to the AIRB portfolio evolution as at 31 December 2022, compared to 30 June 2022, refer to the comment reported below the following template "FIRB".

Credit risk

Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - FIRB

(€ million)

F-IRB	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	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	b	c	d	e	f	g	h	i	j	k	l	m
Central governments or central banks	0.00 to <0.15	-	0	75.00%	75	0.02%	1	37.69%	2.50	0	0.23%	0	-
	0.00 to <0.10	-	0	75.00%	75	0.02%	1	37.69%	2.50	0	0.23%	0	-
	0.10 to <0.15	-	-	-	-	-	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	-	0	75.00%	75	0.02%	1	37.69%	2.50	0	0.23%	0	-
Institutions	0.00 to <0.15	513	493	1.96%	465	0.08%	74	40.58%	2.50	140	30.00%	0	(0)
	0.00 to <0.10	239	277	3.47%	317	0.06%	52	38.57%	2.50	84	26.31%	0	(0)
	0.10 to <0.15	274	215	-	148	0.12%	22	44.90%	2.50	56	37.90%	0	(0)
	0.15 to <0.25	169	74	0.40%	184	0.21%	22	14.09%	2.50	28	15.34%	0	(0)
	0.25 to <0.50	27	17	-	31	0.37%	13	42.27%	2.50	19	62.40%	0	(0)
	0.50 to <0.75	1	1	-	4	0.70%	4	44.70%	2.50	4	80.42%	0	(0)
	0.75 to <2.50	15	4	-	21	1.75%	10	26.59%	2.50	13	61.58%	0	(1)
	0.75 to <1.75	2	1	-	5	1.00%	4	44.95%	2.50	5	83.53%	0	(0)
	1.75 to <2.50	13	4	-	15	2.01%	6	20.08%	2.50	8	53.80%	0	(1)
	2.50 to <10.00	5	6	-	6	2.80%	4	43.64%	2.54	8	129.14%	0	(0)
	2.50 to <5.00	5	6	-	6	2.80%	4	43.64%	2.54	8	129.14%	0	(0)
	5.00 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	0	-	-	0	37.71%	1	-	2.50	0	280.00%	0	(0)
	10.00 to <20.00	-	-	-	-	-	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	0	-	-	0	37.71%	1	-	2.50	0	280.00%	0	(0)
	100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	730	595	1.67%	711	0.20%	128	33.45%	2.50	211	29.70%	0	(1)

Credit risk

continued: Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - FIRB

(€ million)													
F-IRB	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	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	b	c	d	e	f	g	h	i	j	k	l	m
Corporates - SME	0.00 to <0.15	93	127	10.77%	163	0.10%	209	43.17%	2.50	32	19.30%	0	(0)
	0.00 to <0.10	53	70	5.87%	57	0.06%	125	42.65%	2.50	9	15.92%	0	(0)
	0.10 to <0.15	40	58	16.72%	106	0.12%	84	43.44%	2.50	22	21.13%	0	(0)
	0.15 to <0.25	99	105	5.35%	102	0.19%	157	41.60%	2.50	31	30.53%	0	(1)
	0.25 to <0.50	298	436	18.03%	325	0.39%	499	43.64%	2.50	142	43.85%	1	(3)
	0.50 to <0.75	298	248	7.47%	265	0.63%	391	43.41%	2.50	143	54.01%	1	(3)
	0.75 to <2.50	1,486	925	9.94%	1,303	1.56%	1,659	43.57%	2.50	952	73.10%	9	(24)
	0.75 to <1.75	1,030	686	7.76%	896	1.24%	1,188	43.59%	2.50	623	69.52%	5	(13)
	1.75 to <2.50	456	239	16.22%	407	2.25%	471	43.51%	2.50	329	80.98%	4	(11)
	2.50 to <10.00	1,050	380	14.42%	900	4.41%	1,272	41.87%	2.50	829	92.07%	16	(51)
	2.50 to <5.00	772	296	14.55%	669	3.68%	837	41.65%	2.50	587	87.71%	10	(28)
	5.00 to <10.00	279	83	13.94%	231	6.50%	435	42.51%	2.50	242	104.71%	6	(23)
	10.00 to <100.00	141	32	27.21%	129	17.35%	232	43.03%	2.50	195	151.01%	10	(19)
	10.00 to <20.00	110	29	25.57%	103	13.75%	145	43.09%	2.50	153	147.68%	6	(11)
	20.00 to <30.00	21	2	7.14%	16	27.77%	20	42.64%	2.50	26	164.99%	2	(5)
	30.00 to <100.00	10	2	67.41%	10	37.76%	67	42.92%	2.50	17	163.37%	2	(2)
	100.00 (Default)	138	33	1.74%	126	100.00%	442	43.27%	2.50	-	-	55	(115)
	Subtotal	3,605	2,286	11.92%	3,313	6.39%	4,861	42.99%	2.50	2,324	70.15%	91	(215)
Corporates - Specialised lending	0.00 to <0.15	-	-	-	-	-	-	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	-	-	-	-	-	-	-	-	-	-	-	-

Credit risk

continued: Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range - FIRB

(€ million)

F-IRB	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	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	b	c	d	e	f	g	h	i	j	k	l	m
Corporates - Other	0.00 to <0.15	1,154	2,122	11.91%	1,568	0.08%	350	44.71%	2.50	431	27.49%	1	(4)
	0.00 to <0.10	685	910	3.97%	865	0.05%	221	44.57%	2.50	180	20.86%	0	(2)
	0.10 to <0.15	469	1,211	17.88%	704	0.12%	129	44.88%	2.50	251	35.64%	0	(2)
	0.15 to <0.25	476	757	3.64%	530	0.21%	118	44.89%	2.50	255	48.20%	1	(6)
	0.25 to <0.50	636	963	3.49%	737	0.38%	208	43.95%	2.50	469	63.63%	1	(5)
	0.50 to <0.75	377	347	24.85%	466	0.65%	109	43.73%	2.50	373	80.04%	1	(4)
	0.75 to <2.50	2,009	1,732	5.88%	2,207	1.26%	337	44.58%	2.50	2,263	102.54%	12	(51)
	0.75 to <1.75	1,695	1,608	5.81%	1,874	1.08%	274	44.64%	2.50	1,850	98.72%	9	(41)
	1.75 to <2.50	314	123	6.83%	333	2.26%	63	44.25%	2.50	413	124.10%	3	(10)
	2.50 to <10.00	1,590	2,363	3.37%	1,724	4.58%	217	44.63%	2.50	2,661	154.37%	35	(143)
	2.50 to <5.00	1,093	2,008	2.18%	1,195	4.18%	150	44.54%	2.50	1,806	151.14%	23	(109)
	5.00 to <10.00	497	356	10.03%	529	5.50%	67	44.84%	2.50	855	161.69%	13	(34)
	10.00 to <100.00	100	845	0.76%	147	20.65%	123	44.64%	2.50	347	236.07%	14	(91)
	10.00 to <20.00	45	249	0.08%	79	11.72%	30	44.34%	2.50	169	213.43%	4	(25)
	20.00 to <30.00	26	13	-	28	26.02%	6	44.99%	2.50	74	263.09%	3	(6)
	30.00 to <100.00	29	583	1.07%	40	34.55%	87	44.99%	2.50	105	261.90%	6	(60)
	100.00 (Default)	349	37	0.42%	350	100.00%	620	44.29%	2.50	-	-	155	(190)
	Subtotal	6,690	9,166	6.42%	7,729	6.42%	2,082	44.52%	2.50	6,799	87.97%	220	(494)
Total (all exposures classes) FIRB as at 31.12.2022		11,025	12,048	7.45%	11,828	6.00%	7,072		2.50	9,335	78.92%	312	(710)
Total (all exposures classes) FIRB as at 30.06.2022		12,257	13,051	9.11%	13,824	5.53%	7,110		2.50	10,580	76.53%	338	(624)

Note:

The templates "CR6" show above refer to the Credit risk, excluding the Counterparty risk (which is reported in the "CCR4" tables in the next paragraph "Counterparty Risk exposure").

The overall Group credit risk AIRB portfolio over the reporting period (December 2022 - June 2022) records the following evolution:

- the performing portfolio shows an exposure decrease of -€3,023 million explained primarily the asset classes "Institutions" (-€4,995 million) driven by exposures in Austria and "Retail - secured by Real Estate non-SME" (-€3,234 million) mainly due to new securitisations in Italy. Trend was only partially offset by asset class "Corporates - SME" (€4,417 million) impacted principally by EBA Guideline models implementation in Germany;
- the average risk density of the performing portfolio shows a decrease of -114 basis points, largely thanks to active portfolio management initiatives across the regions and risk parameters evolutions;
- the overall Group defaulted portfolio reports a stable trend - €167 million.

Credit risk

Template EU CR6-A – Scope of the use of IRB and SA approaches

(€ million)

		EXPOSURE VALUE AS DEFINED IN ARTICLE 166 CRR FOR EXPOSURES SUBJECT TO IRB APPROACH	TOTAL EXPOSURE VALUE FOR EXPOSURES SUBJECT TO THE STANDARDISED APPROACH AND TO THE IRB APPROACH	PERCENTAGE OF TOTAL EXPOSURE VALUE SUBJECT TO THE PERMANENT PARTIAL USE OF THE SA (%)	PERCENTAGE OF TOTAL EXPOSURE VALUE SUBJECT TO A ROLL-OUT PLAN (%)	PERCENTAGE OF TOTAL EXPOSURE VALUE SUBJECT TO IRB APPROACH (%)
EXPOSURE CLASSES		a	b	c	d	e
1	Central governments or central banks	25,937	243,101	88.33%	1.14%	10.53%
1.1	of which Regional governments or local authorities		15,852	100.00%	-	0.00%
1.2	of which Public sector entities		5,819	99.99%	-	0.01%
2	Institutions	29,040	34,751	6.85%	8.92%	84.23%
3	Corporates	279,717	287,084	1.90%	4.42%	93.69%
3.1	of which Corporates - Specialised lending, excluding slotting approach		14,559	0.11%	3.63%	96.26%
3.2	of which Corporates - Specialised lending under slotting approach		6,605	-	4.39%	95.61%
4	Retail	135,780	137,588	1.18%	5.07%	93.75%
4.1	of which Retail – Secured by immovable property SMEs		4,548	0.01%	1.85%	98.14%
4.2	of which Retail – Secured by immovable property non-SMEs		87,023	0.01%	4.16%	95.83%
4.3	of which Retail – Qualifying revolving		1,557	-	9.40%	90.60%
4.4	of which Retail – Other SMEs		15,926	0.19%	3.13%	96.67%
4.5	of which Retail – Other non-SMEs		28,534	5.56%	9.20%	85.24%
5	Equity	716	3,824	13.20%	61.01%	25.79%
6	Other non-credit obligation assets	5,153	13,125	60.05%	0.75%	39.20%
7	Total as at 31.12.2022	476,342	719,474	32.32%	3.89%	63.79%
	Total as at 31.12.2021	481,006	774,385	34.37%	4.07%	61.56%

Credit risk

Template EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - AIRB

EXPOSURE CLASS	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	h
Central governments or central banks	0.00 to <0.15	52	-	-	0.01%	0.02%	-
	0.00 to <0.10	51	-	-	0.01%	0.02%	-
	0.10 to <0.15	1	-	-	0.14%	0.12%	-
	0.15 to <0.25	6	-	-	0.19%	0.20%	-
	0.25 to <0.50	4	-	-	0.34%	0.36%	-
	0.50 to <0.75	3	-	-	0.54%	0.58%	-
	0.75 to <2.50	14	-	-	1.56%	1.70%	1.74%
	0.75 to <1.75	9	-	-	1.56%	1.45%	1.82%
	1.75 to <2.50	5	-	-	1.79%	2.16%	-
	2.50 to <10.00	13	1	7.69%	4.48%	5.63%	4.04%
	2.50 to <5.00	8	1	12.50%	4.41%	3.91%	2.50%
	5.00 to <10.00	5	-	-	5.83%	8.38%	5.00%
	10.00 to <100.00	8	1	12.50%	38.80%	42.45%	15.99%
	10.00 to <20.00	2	-	-	10.38%	10.66%	10.00%
	20.00 to <30.00	1	1	100.00%	-	26.29%	20.00%
	30.00 to <100.00	5	-	-	38.86%	58.41%	17.00%
	100.00 (Default)	9	-	-	100.00%	100.00%	-
Institutions	0.00 to <0.15	342	1	0.29%	0.07%	0.08%	0.41%
	0.00 to <0.10	226	1	0.44%	0.06%	0.06%	0.52%
	0.10 to <0.15	116	-	-	0.12%	0.12%	0.16%
	0.15 to <0.25	81	-	-	0.18%	0.19%	0.44%
	0.25 to <0.50	91	-	-	0.35%	0.34%	-
	0.50 to <0.75	40	-	-	0.66%	0.66%	-
	0.75 to <2.50	83	1	1.20%	1.60%	1.44%	0.24%
	0.75 to <1.75	57	1	1.75%	1.10%	1.13%	0.35%
	1.75 to <2.50	26	-	-	2.10%	2.13%	-
	2.50 to <10.00	52	-	-	2.96%	4.79%	-
	2.50 to <5.00	32	-	-	2.82%	3.43%	-
	5.00 to <10.00	20	-	-	6.74%	6.97%	-
	10.00 to <100.00	22	-	-	23.30%	28.01%	1.44%
	10.00 to <20.00	8	-	-	18.48%	15.68%	1.54%
	20.00 to <30.00	3	-	-	21.76%	21.29%	1.82%
	30.00 to <100.00	11	-	-	38.56%	38.81%	-
	100.00 (Default)	8	-	-	100.00%	100.00%	-
Corporates - SME	0.00 to <0.15	2,974	8	0.27%	0.09%	0.10%	0.17%
	0.00 to <0.10	1,397	4	0.29%	0.06%	0.06%	0.15%
	0.10 to <0.15	1,577	4	0.25%	0.13%	0.13%	0.20%
	0.15 to <0.25	3,452	7	0.20%	0.20%	0.20%	0.15%
	0.25 to <0.50	7,580	16	0.21%	0.37%	0.37%	0.28%
	0.50 to <0.75	5,247	17	0.32%	0.62%	0.61%	0.49%
	0.75 to <2.50	15,143	114	0.75%	1.43%	1.42%	1.09%
	0.75 to <1.75	11,063	63	0.57%	1.17%	1.17%	0.97%
	1.75 to <2.50	4,080	51	1.25%	2.08%	2.09%	1.40%
	2.50 to <10.00	10,825	225	2.08%	4.69%	4.85%	3.42%
	2.50 to <5.00	6,600	98	1.48%	3.48%	3.54%	2.40%
	5.00 to <10.00	4,225	127	3.01%	6.86%	6.91%	5.29%
	10.00 to <100.00	3,535	232	6.56%	23.40%	20.09%	11.01%
	10.00 to <20.00	2,575	139	5.40%	14.48%	15.08%	8.25%
	20.00 to <30.00	434	42	9.68%	24.39%	24.27%	12.80%
	30.00 to <100.00	526	51	9.70%	46.56%	41.15%	20.20%
	100.00 (Default)	3,225	-	-	100.00%	100.00%	-

Credit risk

continued: Template EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - AIRB

EXPOSURE CLASS	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	h
Corporates - Specialised lending	0.00 to <0.15	55	-	-	0.11%	0.10%	-
	0.00 to <0.10	22	-	-	0.07%	0.07%	-
	0.10 to <0.15	33	-	-	0.13%	0.13%	-
	0.15 to <0.25	156	-	-	0.19%	0.20%	0.39%
	0.25 to <0.50	193	1	0.52%	0.36%	0.36%	0.34%
	0.50 to <0.75	120	-	-	0.64%	0.63%	0.36%
	0.75 to <2.50	203	1	0.49%	1.36%	1.38%	0.57%
	0.75 to <1.75	168	1	0.60%	1.25%	1.21%	0.64%
	1.75 to <2.50	35	-	-	2.22%	2.20%	0.32%
	2.50 to <10.00	63	1	1.59%	4.21%	4.52%	1.59%
	2.50 to <5.00	46	-	-	3.43%	3.70%	0.94%
	5.00 to <10.00	17	1	5.88%	6.43%	6.75%	3.36%
	10.00 to <100.00	14	-	-	15.48%	17.55%	2.49%
	10.00 to <20.00	12	-	-	15.40%	16.86%	2.35%
	20.00 to <30.00	2	-	-	21.76%	21.65%	4.00%
	30.00 to <100.00	-	-	-	-	-	-
Corporates - Other	100.00 (Default)	29	-	-	100.00%	100.00%	-
	0.00 to <0.15	3,127	6	0.19%	0.08%	0.09%	0.13%
	0.00 to <0.10	1,737	3	0.17%	0.06%	0.06%	0.12%
	0.10 to <0.15	1,390	3	0.22%	0.12%	0.12%	0.15%
	0.15 to <0.25	2,564	5	0.20%	0.19%	0.20%	0.23%
	0.25 to <0.50	4,447	6	0.13%	0.36%	0.36%	0.36%
	0.50 to <0.75	2,970	16	0.54%	0.62%	0.63%	0.62%
	0.75 to <2.50	6,361	43	0.68%	1.37%	1.40%	1.18%
	0.75 to <1.75	4,689	30	0.64%	1.17%	1.15%	1.09%
	1.75 to <2.50	1,672	13	0.78%	2.09%	2.11%	1.42%
	2.50 to <10.00	7,995	80	1.00%	4.64%	5.14%	3.13%
	2.50 to <5.00	3,862	25	0.65%	3.53%	3.51%	1.93%
	5.00 to <10.00	4,133	55	1.33%	6.84%	6.67%	4.30%
	10.00 to <100.00	6,257	712	11.38%	18.46%	25.97%	15.01%
	10.00 to <20.00	2,097	66	3.15%	14.40%	14.86%	10.46%
	20.00 to <30.00	2,887	517	17.91%	23.96%	25.64%	14.90%
	30.00 to <100.00	1,273	129	10.13%	37.96%	45.01%	20.90%
	100.00 (Default)	2,150	-	-	100.00%	100.00%	-
Retail - secured by immovable property SME	0.00 to <0.15	603	2	0.33%	0.12%	0.13%	0.18%
	0.00 to <0.10	101	-	-	0.07%	0.07%	-
	0.10 to <0.15	502	2	0.40%	0.13%	0.14%	0.21%
	0.15 to <0.25	2,971	7	0.24%	0.19%	0.21%	0.21%
	0.25 to <0.50	3,622	15	0.41%	0.39%	0.39%	0.38%
	0.50 to <0.75	2,650	13	0.49%	0.63%	0.62%	0.55%
	0.75 to <2.50	12,348	67	0.54%	1.51%	1.47%	0.97%
	0.75 to <1.75	8,625	41	0.48%	1.21%	1.20%	0.80%
	1.75 to <2.50	3,723	26	0.70%	2.11%	2.09%	1.38%
	2.50 to <10.00	6,692	136	2.03%	4.50%	4.65%	3.12%
	2.50 to <5.00	4,441	63	1.42%	3.41%	3.45%	2.30%
	5.00 to <10.00	2,251	73	3.24%	6.99%	7.02%	4.67%
	10.00 to <100.00	3,115	281	9.02%	22.39%	24.68%	15.11%
	10.00 to <20.00	1,720	106	6.16%	15.39%	14.95%	8.73%
	20.00 to <30.00	421	41	9.74%	23.94%	24.01%	15.30%
	30.00 to <100.00	974	134	13.76%	41.44%	42.15%	23.13%
	100.00 (Default)	2,163	-	-	100.00%	100.00%	-

Credit risk

continued: Template EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - AIRB

EXPOSURE CLASS	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	h
Retail - secured by immovable property non SME	0.00 to <0.15	155,778	64	0.04%	0.08%	0.09%	0.07%
	0.00 to <0.10	79,889	23	0.03%	0.05%	0.06%	0.03%
	0.10 to <0.15	75,889	41	0.05%	0.13%	0.13%	0.08%
	0.15 to <0.25	104,828	75	0.07%	0.20%	0.20%	0.11%
	0.25 to <0.50	189,591	235	0.12%	0.36%	0.36%	0.21%
	0.50 to <0.75	85,613	146	0.17%	0.62%	0.61%	0.30%
	0.75 to <2.50	225,328	661	0.29%	1.37%	1.30%	0.62%
	0.75 to <1.75	184,547	491	0.27%	1.15%	1.12%	0.48%
	1.75 to <2.50	40,781	170	0.42%	2.09%	2.10%	1.16%
	2.50 to <10.00	60,379	1,061	1.76%	4.65%	4.93%	2.81%
	2.50 to <5.00	36,460	470	1.29%	3.45%	3.50%	2.19%
	5.00 to <10.00	23,919	591	2.47%	7.05%	7.10%	4.08%
	10.00 to <100.00	31,288	2,966	9.48%	25.01%	24.89%	19.26%
	10.00 to <20.00	15,227	762	5.00%	13.92%	13.96%	10.22%
	20.00 to <30.00	5,227	513	9.81%	24.32%	24.29%	19.54%
	30.00 to <100.00	10,834	1,691	15.61%	39.44%	40.53%	25.86%
	100.00 (Default)	25,833	-	-	100.00%	100.00%	-
Retail - Qualifying revolving	0.00 to <0.15	471,604	275	0.06%	0.06%	0.07%	0.05%
	0.00 to <0.10	357,411	72	0.02%	0.05%	0.05%	0.02%
	0.10 to <0.15	114,193	203	0.18%	0.12%	0.12%	0.14%
	0.15 to <0.25	171,174	190	0.11%	0.20%	0.21%	0.16%
	0.25 to <0.50	204,270	329	0.16%	0.38%	0.38%	0.35%
	0.50 to <0.75	303,201	362	0.12%	0.61%	0.61%	0.60%
	0.75 to <2.50	301,169	2,373	0.79%	1.29%	1.25%	1.53%
	0.75 to <1.75	253,046	1,629	0.64%	1.14%	1.10%	1.24%
	1.75 to <2.50	48,123	744	1.55%	2.07%	2.06%	2.45%
	2.50 to <10.00	85,168	2,565	3.01%	4.29%	4.57%	4.76%
	2.50 to <5.00	57,154	1,286	2.25%	3.40%	3.39%	3.79%
	5.00 to <10.00	28,014	1,279	4.57%	6.78%	6.97%	6.46%
	10.00 to <100.00	49,662	5,033	10.13%	19.96%	26.62%	16.31%
	10.00 to <20.00	34,069	3,144	9.23%	14.08%	12.58%	12.82%
	20.00 to <30.00	4,862	1,103	22.69%	24.13%	24.15%	28.72%
	30.00 to <100.00	10,731	786	7.32%	48.65%	72.30%	25.60%
	100.00 (Default)	40,854	-	-	100.00%	100.00%	-
Retail – other SME	0.00 to <0.15	5,181	26	0.50%	0.11%	0.11%	0.19%
	0.00 to <0.10	871	-	-	0.06%	0.05%	0.04%
	0.10 to <0.15	4,310	26	0.60%	0.12%	0.12%	0.23%
	0.15 to <0.25	8,267	9	0.11%	0.21%	0.21%	0.12%
	0.25 to <0.50	30,222	36	0.12%	0.38%	0.37%	0.25%
	0.50 to <0.75	28,419	74	0.26%	0.62%	0.62%	0.40%
	0.75 to <2.50	123,218	751	0.61%	1.40%	1.46%	0.88%
	0.75 to <1.75	86,854	451	0.52%	1.17%	1.20%	0.72%
	1.75 to <2.50	36,364	300	0.82%	2.09%	2.10%	1.32%
	2.50 to <10.00	97,063	1,955	2.01%	4.70%	4.95%	3.41%
	2.50 to <5.00	57,729	840	1.46%	3.51%	3.53%	2.29%
	5.00 to <10.00	39,334	1,115	2.83%	6.89%	7.05%	5.04%
	10.00 to <100.00	48,067	7,162	14.90%	22.26%	24.03%	20.16%
	10.00 to <20.00	25,165	1,672	6.64%	14.65%	14.02%	12.36%
	20.00 to <30.00	13,966	3,055	21.87%	24.18%	25.17%	22.81%
	30.00 to <100.00	8,936	2,435	27.25%	45.59%	50.46%	32.95%
	100.00 (Default)	28,321	-	-	100.00%	100.00%	-

Credit risk

continued: Template EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - AIRB

EXPOSURE CLASS	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	h
Retail - other non SME	0.00 to <0.15	403,371	202	0.05%	0.08%	0.06%	0.07%
	0.00 to <0.10	326,987	151	0.05%	0.05%	0.05%	0.05%
	0.10 to <0.15	76,384	51	0.07%	0.12%	0.13%	0.10%
	0.15 to <0.25	103,412	118	0.11%	0.20%	0.21%	0.12%
	0.25 to <0.50	170,520	364	0.21%	0.37%	0.36%	0.21%
	0.50 to <0.75	124,415	358	0.29%	0.62%	0.61%	0.30%
	0.75 to <2.50	459,628	2,598	0.57%	1.45%	1.44%	0.70%
	0.75 to <1.75	327,605	1,551	0.47%	1.18%	1.18%	0.58%
	1.75 to <2.50	132,023	1,047	0.79%	2.09%	2.08%	1.05%
	2.50 to <10.00	322,091	4,953	1.54%	4.68%	4.63%	2.30%
	2.50 to <5.00	224,995	2,523	1.12%	3.55%	3.70%	1.77%
	5.00 to <10.00	97,096	2,430	2.50%	7.03%	6.79%	3.36%
	10.00 to <100.00	184,844	14,436	7.81%	26.99%	24.63%	11.05%
	10.00 to <20.00	124,693	4,566	3.66%	13.99%	17.60%	7.14%
	20.00 to <30.00	20,383	2,183	10.71%	24.60%	24.60%	17.39%
	30.00 to <100.00	39,768	7,687	19.33%	48.59%	46.67%	23.48%
	100.00 (Default)	60,278	-	-	100.00%	100.00%	-

Note:
The number of obligors at the end of the previous year (column c) is related to the original exposures pre-conversion factor assigned to each obligor grade or pool without taking into account the effect of CRM techniques, while the average PD (in to column f) is weighted by exposure value after CRM.

Credit risk

Template EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - FIRB

		NUMBER OF OBLIGORS AT THE END OF THE PREVIOUS YEAR					
		OF WHICH: NUMBER OF OBLIGORS WHICH DEFAULTED DURING THE YEAR		OBSERVED AVERAGE DEFAULT RATE (%)	EXPOSURES WEIGHTED AVERAGE PD (%)	AVERAGE PD (%)	AVERAGE HISTORICAL ANNUAL DEFAULT RATE (%)
EXPOSURE CLASS	PD RANGE						
a	b	c	d	e	f	g	h
Central governments or central banks	0.00 to <0.15	-	-	-	0.00%	-	-
	0.00 to <0.10	-	-	-	0.00%	-	-
	0.10 to <0.15	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	-	-	-	-	-	-	
100.00 (Default)	-	-	-	-	-	-	
Institutions	0.00 to <0.15	85	1	1.18%	0.09%	0.09%	0.24%
	0.00 to <0.10	48	1	2.08%	0.08%	0.07%	0.42%
	0.10 to <0.15	37	-	-	0.12%	0.12%	-
	0.15 to <0.25	19	-	-	0.18%	0.19%	-
	0.25 to <0.50	17	-	-	0.32%	0.32%	0.91%
	0.50 to <0.75	3	-	-	0.66%	0.59%	-
	0.75 to <2.50	13	-	-	1.40%	1.59%	-
	0.75 to <1.75	7	-	-	1.15%	1.26%	-
	1.75 to <2.50	6	-	-	2.05%	1.99%	-
	2.50 to <10.00	5	-	-	4.98%	3.84%	-
	2.50 to <5.00	4	-	-	4.62%	3.37%	-
	5.00 to <10.00	1	-	-	5.90%	5.73%	-
	10.00 to <100.00	4	-	-	52.54%	52.61%	-
	10.00 to <20.00	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-
30.00 to <100.00	4	-	-	52.54%	52.61%	-	
100.00 (Default)	-	-	-	-	-	-	
Corporates - SME	0.00 to <0.15	175	-	-	0.10%	0.07%	-
	0.00 to <0.10	125	-	-	0.04%	0.05%	-
	0.10 to <0.15	50	-	-	0.11%	0.13%	-
	0.15 to <0.25	154	-	-	0.19%	0.19%	-
	0.25 to <0.50	581	-	-	0.38%	0.39%	0.49%
	0.50 to <0.75	412	-	-	0.64%	0.63%	0.37%
	0.75 to <2.50	1,958	7	0.36%	1.60%	1.58%	0.94%
	0.75 to <1.75	1,283	3	0.23%	1.30%	1.27%	0.85%
	1.75 to <2.50	675	4	0.59%	2.15%	2.17%	1.10%
	2.50 to <10.00	1,703	29	1.70%	4.34%	4.69%	2.78%
	2.50 to <5.00	1,140	17	1.49%	3.45%	3.60%	2.23%
	5.00 to <10.00	563	12	2.13%	6.93%	6.89%	4.21%
	10.00 to <100.00	444	17	3.83%	14.91%	46.63%	7.46%
	10.00 to <20.00	208	17	8.17%	13.39%	13.76%	8.00%
	20.00 to <30.00	24	-	-	26.92%	26.25%	9.58%
30.00 to <100.00	212	-	-	44.03%	81.19%	1.57%	
100.00 (Default)	599	-	-	100.00%	100.00%	-	

Credit risk

continued: Template EU CR9 – IRB approach – Back-testing of PD per exposure class (fixed PD scale) - FIRB

EXPOSURE CLASS	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	h
Corporates - Specialised lending	0.00 to <0.15	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-
Corporates - Other	0.00 to <0.15	643	-	-	0.10%	0.07%	0.07%
	0.00 to <0.10	502	-	-	0.06%	0.05%	0.12%
	0.10 to <0.15	141	-	-	0.13%	0.12%	-
	0.15 to <0.25	192	-	-	0.19%	0.19%	-
	0.25 to <0.50	287	1	0.35%	0.36%	0.37%	0.36%
	0.50 to <0.75	138	-	-	0.63%	0.62%	0.53%
	0.75 to <2.50	454	1	0.22%	1.37%	1.52%	0.62%
	0.75 to <1.75	304	1	0.33%	1.16%	1.22%	0.49%
	1.75 to <2.50	150	-	-	2.07%	2.13%	0.86%
	2.50 to <10.00	215	5	2.33%	3.72%	4.41%	2.08%
	2.50 to <5.00	153	4	2.61%	3.34%	3.45%	1.55%
	5.00 to <10.00	62	1	1.61%	6.12%	6.81%	3.54%
	10.00 to <100.00	1,267	7	0.55%	12.47%	82.88%	1.11%
	10.00 to <20.00	50	7	14.00%	12.19%	12.97%	3.50%
	20.00 to <30.00	2	-	-	21.76%	23.58%	4.00%
	30.00 to <100.00	1,215	-	-	44.26%	85.85%	8.16%
	100.00 (Default)	705	-	-	100.00%	100.00%	-

Note:
The number of obligors at the end of the previous year (column c) is related to the original exposures pre-conversion factor assigned to each obligor grade or pool without taking into account the effect of CRM techniques, while the average PD (in column f) is weighted by exposure value after CRM.

Credit risk

Expected loss versus actual loss comparison

Within this section it is described the comparison between the expected loss calculated at beginning of the year ("Expected Loss") and the actual losses ("Write-down on loans") incurred at year-end, on the Group's main credit portfolios.

To properly assess the result of the comparison, it should be noted that the variables mentioned above, although in principle comparable, derive from different calculation methods.

The expected loss, used in this comparison, is the forecast of credit losses due to default of the counterparties with a horizon of one year, calculated on the portfolio of exposures treated under the IRB approach which were classified as performing at the beginning of the period. It is calculated using parameter for capital requirements calculation as result of the product of PD, LGD and EAD on performing loans as at 31 December of the previous year, compared to the reference analysis date. Particularly, the internal PD parameter, used for expected loss comparison, is calibrated "through-the-cycle" to take in account the expansion and recession phases of an entire economic cycle. Furthermore, the LGD parameter refers to a time horizon that covers the entire life of the loan.

The actual loss is defined as the amount of write-down on loans incurred in the year and referred to the exposures treated under IRB approach as described above, which were classified as defaulted during the period and charged to the income statement in the reference year of the analysis.

The actual loss charged to income statement, calculated following IFRS international accounting principle, represent the write-down on loans incurred in the impairment loan portfolio and are based on the present value of expected cash flows; basic elements for the assessment are represented by the identification of estimated collections, timing of payments and the interest rate used. Recovery times are estimated based on the repayment schedule agreed with the borrower or included in a business plan or in forecasts based on historical recovery experience observed for similar classes of loans, considering the type of loan, the geographical location, the type of guarantees and collaterals and any other factor considered relevant.

Considering what described, the following scheme outlines a comparison of the expected loss related to calendar years 2020, 2021 and 2022 with actual losses recorded in the same financial years for major Group regulatory portfolios. The scope of the analysis includes exposures treated with Advanced IRB approach (except derivatives positions and securitisations) of UniCredit S.p.A., UniCredit Bank AG, UniCredit Bank Austria AG, UniCredit Bank Czech Republic & Slovakia and UniCredit BulBank.

(€ million)

ASSET CLASS	Expected Loss (Dec 2019)	Actual Loss (Dec 2020)	Delta %	Expected Loss (Dec 2020)	Actual Loss (Dec 2021)	Delta %	Expected Loss (Dec 2021)	Actual Loss (Dec 2022)	Delta %
Corporate	906.5	1,389.5	53.3%	892.1	711.5	-20.2%	961.4	698.0	-27.4%
o/w Large Corporates	493.6	956.5	93.8%	522.1	355.8	-31.9%	549.0	438.7	-20.1%
Italy	296.8	294.8	-0.7%	281.3	150.3	-46.6%	285.3	156.5	-45.2%
Germany	135.9	465.6	242.6%	180.5	145.3	-19.5%	184.9	159.0	-14.0%
Other LEs ⁽¹⁾	60.8	196.1	222.4%	60.4	60.2	-0.3%	78.8	123.2	56.3%
Retail	647.7	309.9	-52.2%	544.2	241.0	-55.7%	725.3	249.2	-65.6%
o/w Individual Mortgages	345.0	99.7	-71.1%	291.0	47.2	-83.8%	296.7	39.0	-86.9%
Italy	292.9	82.6	-71.8%	239.6	34.8	-85.5%	250.7	20.8	-91.7%
Germany	31.0	8.0	-74.4%	28.7	5.0	-82.6%	22.5	4.1	-81.8%
Other LEs	21.0	9.2	-56.4%	22.7	7.4	-67.5%	23.5	14.1	-40.2%
Other⁽²⁾	22.7	1.1	-95.2%	20.8	0.1	-99.5%	22.4	0.6	-97.2%
TOTAL	1,576.8	1,700.5	7.8%	1,457.1	952.6	-34.6%	1,709.1	947.8	-44.5%

Notes:

1. Other LEs including Austria, Bulgaria and Czech Republic.
2. Administrations and central banks, Supervised institutions, Others.

The overall Actual Losses occurred during the year of 2022 are below the Expected Losses, looking at the Group level. Trend is explained both by retail and corporate portfolio, confirming the outcome observed in the previous year.

In the "Corporate" segment, overall Actual Losses were below the Expected Losses, mostly driven by Italy and Germany thanks to lower default rate compared to the estimated Regulatory PD at the beginning of the period. Overall trend was only partially offset by Other Legal entities of the Group, caused principally by the default of several clients in Austria and Bulgaria.

Similar trend confirmed in the "Retail" segment as well, with the overall Actual Losses below the Expected Losses, visible in all regions (i.e., Italy, Germany, and other Legal entities) and primarily explained by the following reasons:

- Lower default rate compared to the estimated Regulatory PD at the beginning of the period
- Regulatory PD and expected loss calculated "through the cycle" and therefore not fully reflecting the specific conditions occurred during the year.

Credit risk

RWEAs flow statements - IRB method

In the fourth quarter of 2022, credit risk exposures under IRB approach record a decrease of -€10,710 million versus the third quarter of 2022 driven primarily by the following items:

- “Asset size” shows a decrease of -€7,939 million due to exposure dynamics, explained by lower commercial volumes in Italy, Russia and Eastern Europe, and benefits coming from active portfolio management initiatives in Italy, Germany and Bulgaria, including new synthetic securitisation finalized in the quarter;
- “Foreign exchange movements” records a decrease of -€1,497 million mostly impacted by RUB and USD depreciation;
- “Model updates” shows an immaterial decrease since the impact driven by new LGD model in Austria for €4.464 million is not included in the template below (refer to EU OV1 template).

Template EU CR8 - RWEA flow statements of credit risk exposures under the IRB approach

		(€ million)	
		QUARTER CLOSING AS AT 31.12.2022	CUMULATIVE YTD AS AT 31.12.2022
		RWEA	RWEA
DESCRIPTION	a		
1 RWEA as at the end of the previous reporting period		165,600	168,613
2 Asset size (+/-)		(7,939)	(13,227)
3 Asset quality (+/-)		(440)	(2,646)
4 Model updates (+/-)		(5)	4,970
5 Methodology and policy (+/-)		-	(109)
6 Acquisitions and disposals (+/-)		-	-
7 Foreign exchange movements (+/-)		(1,497)	327
8 Other (+/-)		(830)	(3,038)
9 RWEA as at the end of the current reporting period		154,891	154,891

Credit risk

Template EU CR7 - IRB approach - Effect on the RWEAs of credit derivatives used as CRM techniques

(€ million)

EXPOSURE CLASSES		PRE-CREDIT DERIVATIVES RISK WEIGHTED EXPOSURE AMOUNT	ACTUAL RISK WEIGHTED EXPOSURE AMOUNT
		a	b
1	Exposures under F-IRB	10,490	10,490
2	Central governments or central banks	0	0
3	Institutions	211	211
4	Corporates	10,279	10,279
4.1	of which Corporates - SMEs	2,324	2,324
4.2	of which Corporates - Specialised lending	1,155	1,155
5	Exposures under A-IRB	139,891	139,891
6	Central governments or central banks	1,334	1,334
7	Institutions	5,621	5,621
8	Corporates	98,332	98,332
8.1	of which Corporates - SMEs	15,647	15,647
8.2	of which Corporates - Specialised lending	9,203	9,203
9	Retail	34,604	34,604
9.1	of which Retail – Secured by immovable property SMEs	1,036	1,036
9.2	of which Retail – Secured by immovable property non-SMEs	18,730	18,730
9.3	of which Retail – Qualifying revolving	733	733
9.4	of which Retail – Other SMEs	2,941	2,941
9.5	of which Retail – Other non-SMEs	11,165	11,165
10	Total as at 31.12.2022 (including F-IRB exposures and A-IRB exposures)	150,381	150,381
	Total as at 30.06.2022 (including F-IRB exposures and A-IRB exposures)	157,122	157,122

Template EU CR7-A - IRB approach - Disclosure of the extent of the use of CRM techniques - AIRB

(€ million)

		CREDIT RISK MITIGATION TECHNIQUES					
		FUNDED CREDIT PROTECTION (FCP)					
		TOTAL EXPOSURE VALUE	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-IRB		a	b	c	d	e	f
1	Central governments or central banks	23,653	0.00%	-	-	-	-
2	Institutions	27,190	3.69%	0.35%	0.25%	0.10%	-
3	Corporates	240,162	1.51%	18.30%	17.90%	0.11%	0.28%
3.1	of which Corporates – SMEs	47,669	2.48%	38.31%	38.16%	0.09%	0.07%
3.2	of which Corporates – Specialised lending	18,770	0.73%	17.71%	17.32%	-	0.38%
3.3	of which Corporates – Other	173,723	1.33%	12.87%	12.41%	0.14%	0.33%
4	Retail	126,201	1.46%	64.84%	64.83%	0.01%	0.00%
4.1	of which Retail – Secured by immovable property SMEs	4,750	1.71%	92.66%	92.64%	0.02%	0.00%
4.2	of which Retail – Secured by immovable property non-SMEs	82,808	0.65%	93.49%	93.49%	0.00%	0.00%
4.3	of which Retail – Qualifying revolving	4,879	-	-	-	-	-
4.4	of which Retail – Other SMEs	8,262	3.23%	0.05%	0.00%	0.05%	0.00%
4.5	of which Retail – Other non-SMEs	25,503	3.78%	0.03%	0.00%	0.03%	0.00%
5	Total as at 31.12.2022	417,206	1.55%	30.17%	29.93%	0.08%	0.16%
	Total as at 30.06.2022	421,401	1.62%	31.03%	30.60%	0.12%	0.30%

Credit risk

Counterparty risk exposure

Counterparty Credit Risk (CCR) is defined as the risk that the counterparty of a transaction may default before the settlement of the transaction cash flows.

The CCR is a particular case of general credit risk (e.g. loans). Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty of the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.

Counterparty Credit Risk exposure is estimated considering the effect of a period of stress (Stressed Expected Positive Exposure) and the collateral management practices.

The financial products falling into the scope of CCR are:

- over the counter derivative instruments (contracts not traded on an exchange);
- security financing transaction (repurchase transactions, securities or commodities lending or borrowing transactions based on securities or commodities and margin lending transactions based on securities or commodities);
- long settlement transactions, where the counterparty to the transaction has a contractual obligation to deliver a security, a commodity, or a foreign currency amount against cash, other financial instruments, or commodities, or vice versa, at a settlement or delivery date (that is later than the earliest of the market standard for the particular transaction);
- exchange traded derivatives.

Counterparty Credit Risk governance principles

In order to design a framework of methodology, policies and processes for the management of Counterparty Credit Risk that is conceptually sound, implemented with integrity and consistent with Supervisory Authorities instructions, the following general principles have been defined:

- CCR is a particular type of credit risk and as such the processes and policies governing CCR activities have to follow the same logic as the ones of credit activities, to ensure a comprehensive view on counterparty exposure;
- CCR management must consider the risk limits and comply with the Global Rules issued by Group Risk Management and must fit into Group legal entities limit systems and processes;
- the oversight of CCR will be assured by dedicated risk functions in the Group legal entities and the Parent Company, together with the senior management, relevant Committees and Board of Directors;
- a robust process to ensure the capture and analysis of both Specific and General Wrong Way Risks has to be set up;
- for Group legal entities under Internal Model Method (IMM), a group counterparty credit risk model for CCR measurement has to be implemented and maintained by Parent Company Methodology function. A rigorous and comprehensive stress testing program has to be set up, considering also local relevant scenarios, based on the output of the CCR measurement;
- a legal framework must be set up to grant the enforceability of risk mitigation practices, such as Netting and Collateral Agreements. Proper Legal opinion must be collected and considered in using such agreements in CCR exposure calculation.

Starting from these principles, the Parent Company has been developed the Counterparty Credit Risk Governance approved by Group Financial Risk Committee. Below the key points.

Counterparty Credit Risk measurement methodology

UniCredit group Counterparty Credit Risk Management framework is centered on the daily control of risk exposure, defined by using an approach based on the calculation of the distribution of future values of relevant exchange traded, OTC derivatives, long settlement transactions and SFT transactions at single counterparty-level.

Parent Company Risk Methodology Function has articulated into three steps the estimation of counterparty-level credit exposure distribution, these are:

- scenario generation. Future market scenarios are simulated for a fixed set of simulation dates, using evolution models of the risk factors;
- instrument valuation. For each simulation date and for each realization of the underlying Market Risk factors, instrument valuation is performed;
- aggregation. For each simulation date and for each realization of the underlying market risk factors, instrument values are added to obtain counterparty portfolio value.

For managerial purposes the counterparty-level exposure of transactions within the Internal Model Method (IMM) is measured using the Potential Future Exposure (PFE). For transactions not included in the scope of the CCR IMM, exposures are estimated using Simplified Exposure Measures (i.e. CCFs). The calibration of Simplified Exposure Measures (SEMs) results in a prudential estimation of PFE.

The internal models that generate daily pre-settlement exposure also generate exposure measures that are used in the Risk Weighted Asset calculation, for which UniCredit S.p.A., UniCredit Bank AG and UniCredit Bank Austria AG received the following authorization: on April 2014 Regulatory authorization; on June 2016 Regulatory authorization to extend the internal model to security financial transactions, certain equity and commodity OTC derivatives and exchange traded derivatives; on May 2017 the further Regulatory authorization to enhance the Internal Model by removing the zero floor from interest rate scenarios.

Credit risk

In March 2019 UniCredit received the Regulatory authorization to extend for the legal entity UniCredit S.p.A. the use of the Internal model for Bond Lending transactions, already authorised for UniCredit Bank AG and UniCredit Bank Austria AG.

In March 2021, UniCredit received approval to change the internal model from a historical calibration to a calibration based on market data.

The same internal models also generate stressed simulations which are submitted into ICAAP process and provide Risk Management with counterparty, country and industry analysis and highlight potential General Wrong Way risks in the portfolio. In the Risk Weighted Exposures calculation, no estimate of alpha is done, instead the fixed value of 1.45 is used.

Group Legal entities not authorised to use the Internal Model Method (IMM) for the calculation of risk-weighted exposures use the SA-CCR (Standardised Approach - Counterparty Credit Risk) method applying either the Full SA-CCR or Simplified SA-CCR (if the conditions provided by CRR2 Regulation are met). The SA-CCR method (for which alpha factor of 1.4 provided by the Regulator is used) is also applied to transactions of UniCredit S.p.A., UniCredit Bank AG and UniCredit Bank Austria AG not covered by the Internal Model Method.

Counterparty credit risk framework

Limits, set by UniCredit in accordance with the risk appetite of the Bank, allows a consolidated view of exposure with each counterparty and represent a first step in portfolio counterparty risk management.

The approach is aimed at defining the potential future exposure (PFE) to a counterparty over time and ensure that this does not exceed a certain value.

UniCredit adopt several processes for the control and mitigation of the CCR including:

- manage collateral;
- pre deal check;
- exposure calculation and validation;
- overdraft management;
- reporting and information to Parent Company and Local Senior management.

Furthermore, UniCredit mitigates Counterparty Credit risk from derivatives and other transactions exposed to CCR through the use of netting agreements, collateral exchange and use of Central Counterparties (CCP).

Netting agreements allows for the aggregation of positive and negative Mark-to-Market derivative transactions with the same counterparty to be offset, reducing the exposure. The enforcement and enforceability of these netting agreements is monitored by UniCredit's Legal Department on an on-going basis and captured in the daily exposure calculation.

Collateral agreements (if legally enforceable in the jurisdiction) might be required, depending on the creditworthiness of the counterparty and the nature of the transaction. As a rule, FX derivatives, interest rate derivatives, equity derivatives, credit derivatives, commodity derivatives, EU-emissions-allowance transactions, weather derivatives and other OTC derivative transactions must be collateralised by a collateral agreement, according to Delegated Regulation (EU) 2251/2016 (Regulatory Technical standards for risk-mitigation techniques for OTC derivative).

Such Regulation requires the exchange both of Variation Margin and Initial Margin if pre-defined thresholds of Notional amount of OTC derivatives bilaterally exchanged are breached; UniCredit is subject to Initial Margin exchange starting from the 1 September 2018 with major counterparties also affected by such Regulation.

As anticipated, UniCredit uses Central Counterparties (CCP's) to mitigate the Counterparty Credit Risk of eligible OTC derivatives. By acting as an intermediary to an OTC derivative transaction a CCP replaces the bilateral counterparty of a trade, leaving UniCredit to manage the market risk of the trade.

Collateral management

Collateral Management is a fundamental activity for mitigating CCR that is operatively carried out on a daily basis. The collateral management framework in UniCredit group encompasses three main distinct set of activities which are carried out accordingly by the respective Group legal entities and Parent Company functions:

- Risk Management: Group and Local Reporting to Senior Management with regards to Collateral pool composition, Reuse, Margin disputes; collateral framework definition;
- Risk Control: Monitoring of non-Eligible collateral and Re-use of collateral if allowed;
- Operations: daily valuation of trades in terms of SFTs and OTC Derivatives and collateral; monitoring of liquidity score of collateral; collateral substitution in case of non-eligible collateral accepted; portfolio reconciliation and dispute management, daily margin calls management.

Eligibility criteria of received collateral are defined at Group level for ensuring the on-going compliance with the binding regulations. The eligibility criteria for the acceptable collaterals, which ensures collateral agreed to be taken, exhibit characteristics such as price transparency, liquidity, enforceability, independence, and eligibility for regulatory purposes.

Credit risk

Cash and non-cash collateral collected as initial margin for non-centrally cleared OTC transactions cannot be re-hypothecated, re-pledged or re-used, and must be segregated by a Triparty Custodian or Triparty Agent, into a segregated account. The segregation must be certified by an independent legal opinion.

Group legal entities allowed to trade OTC Derivatives with Financial Counterparties can leverage on the Group Implementation of Initial Margin ISDA SIMM™ Model, designed at industry level to comply with Margin Requirements on non-centrally cleared derivatives and harmonise the calculation to reduce potential disputes in Collateral Exchange.

The use of ISDA SIMM™ Model required dedicated processes to be in place to rule:

- ISDA SIMM™ Model Governance;
- concept of “materiality of disputes” with regards to Initial Margin exchanges, to avoid unnecessary efforts in matching low disputes on Operations side;
- Model Maintenance;
- Model Back-testing;
- intragroup transactions treatment;
- non nettable third countries transactions treatment.

Stress testing

According to Parent Company's general rules, a rigorous and comprehensive stress testing is implemented that considers both Group relevant and Legal Entity specific scenarios based on the output of the CCR measurement.

The CCR Stress Testing process aims at identifying emerging vulnerabilities and analyzing pre-emptive risk mitigating actions, as well as facilitating a better understanding of complex, non-directional portfolio risks such as correlations and wrong way risks, illiquidity, and non-linearity. Stress Testing therefore represents a complement to the statistical measures of risk (such as peak-, expected- and potential future exposure) employed as part of the day-to-day risk management process.

Single factor CCR stress tests allow to assess the broad effect and magnitude of the sensitivity of the exposure profile to a change in key risk-factors, thus representing a simple but effective tool for identifying portfolio vulnerabilities and concentrations to specific risk factors. The single risk factor stress testing is performed both on current exposure and future exposure.

An assessment of the risk factors relevance and scenarios definition for current and future exposure single factor stress testing is performed at least annually by Group legal entities CCR control functions supported by the Risk Methodology function.

Multi factor CCR stress tests allow to assess combined impacts, at Group legal entity and Group Portfolios, of different risk factors shocks (e.g., interest rates, foreign exchange and CDS spreads).

On a yearly basis a reverse Stress test is carried out in order to identify linkages and hypothetical scenarios which could ultimately result in the failure of the bank's business model.

Wrong Way Risk management

Wrong Way Risk arises when the risk factors driving the exposure to a counterparty are positively correlated with the credit worthiness of that same counterparty. Wrong way Risk is distinguished in Specific Wrong Way Risk (SWWR) and General Wrong Way Risk (GWWR).

SWWR arises when the exposure on a transaction is positively correlated with the counterparty's creditworthiness for a reason that is specific to the counterparty. Most commonly this kind of correlation is seen where there is similar material legal/economic ownership between collateral/reference entity and counterparty.

SWWR can arise by a legal or economic connection and in case of high correlation between the trade exposure and the counterparty (e.g., the underlying or the underlying issuer is a company of the same industry sector of the counterparty). The business functions must identify trades affected by economic connection and to obtain a pre-approval prior to entering into the transaction. SWWR transactions are closely monitored and controlled as part of regular risk management procedures. UniCredit has appropriate procedures in place to identify, monitor and control cases of SWWR and to apply separate capital rules to transactions where SWWR arises from a legal connection between the counterparty and a trade underlying.

GWWR arises when the likelihood of default by any counterparty is correlated with general market risk factors. In case of GWWR the credit quality of the counterparty is correlated with a risk factor which also affects the value of the transaction with the Group.

To identify possible GWWR scenarios, two complementary approaches are used: (i) quantitative (allows the identification of GWWR-relevant combinations of risk factor and counterparty) and (ii) qualitative (allows the identification of GWWR scenarios by Countries/industries/product types). Parent Company Global Rules aim at defining the framework for analyzing, monitoring, and managing the potential impact of GWWR risk by product, region and industry and it also seeks to add additional levels of control to General Wrong Way Risk transactions.

Credit risk

Financial Institutions, Banks and Sovereign ("FIBS") counterparts are subject to a centralised credit process, based on the presence of competent Credit Teams distributed over the main legal entities of the Group. This ensures a homogeneous approach to credit business with FIBS counterparts over all phases of the credit process. The credit process aims at the definition of a Group-wide Plafond, representing the maximum risk appetite of UniCredit group with regards to any Economic Group. The Group-Wide plafond is split into Plafond categories, expressing specific risks, including Counterparty Credit Risk (Pre-settlement risk plafond). Plafonds are sized based on the assessment of expected business volumes and risk considerations and are approved by the relevant competent approval body. Credit limits, univocally linked to specific plafond categories, may then be set. Such credit limits drive the ordinary operative credit management activity in the local credit systems.

With regard to Counterparty Credit Risk plafond category assigned to Group legal entities allowed to use Internal Model Method for Counterparty Credit Risk (UniCredit Bank AG, UniCredit S.p.A., UniCredit Bank Austria AG), the credit process explicitly requires that effects of stress scenarios on existing pre-settlement exposure are assessed and duly reflected in the quantification and management of the related credit limits. Furthermore, allocation of pre-settlement credit limits is conditional to minimum requirements for Master Agreements, established based on the credit profile of the counterparty, the products targeted, the nature and tenor of the underlying Pre-Settlement limits.

Against the backdrop of the business activity conducted within the credit limits set forth coherently with the approved plafonds, total exposure is further subject to Bulk Risk limits. Such limits are set according to the creditworthiness of the Economic Group in Net Exposure at Default ("NEAD") terms and are reviewed annually through a dedicated approval process. All risks (including pre-settlement, but excluding Clearing Houses) contribute to the determination of the measure.

Central Clearing Counterparts ("CCPs") are subject to an additional, specific risk framework, encompassing explicit thresholds in terms of Additional Economic Exposure ("AEE").

In particular, for each individual CCP a specific AEE is calculated, being the sum of (i) default contributions (funded and unfunded) and (ii) any further contributions callable under Capital Calls or Default Fund Replenishment Mechanisms. The former represents the amount of cash and securities posted towards a CCP as a contractual obligation deriving from the membership to the Clearing House, callable in event of a Clearing Member(s) default, where the defaulting Clearing Member(s) Initial Margin and Default Fund contributions were insufficient to satisfy the loss. The latter is instead related to contingent liabilities that UniCredit could be liable for, under clearing membership agreements based on a CCP's power of assessment, in case a CCP's pre-funded Default Fund is exhausted.

The components of the AEE are calculated, advised and subject to changes unilaterally by the CCP, according to the size of UniCredit group's business volumes generated as Clearing Member.

The framework ensures that contributions and commitments to any given Default Waterfall Mechanism, applicable to specific CCPs, are subject to specific quantitative thresholds. In fact, quantification and monitoring the AEE is fundamental in understanding the potential economic loss in the event of a CCP distress. Considering that such exposures are largely set unilaterally by the CCP, the AEE is not managed through counterparty credit limits within the risk plafond structure, but within a specific monitoring threshold, segregated from the remaining risk types.

The AEE thresholds are defined internally by UniCredit group at CCP level. The definition of the thresholds towards each CCP is performed and approved in bulk annually in the context of the definition of the Credit Risk Strategies. Any intra-annual changes are delegated to the competent credit approval body of the Group the CCP belongs to.

The framework also features:

- an AEE Portfolio threshold, tracking aggregate AEE exposure and being set lower than the sum of the AEE thresholds approved for individual CCPs;
- a CCP Concentration Risk Metric, monitoring and setting a threshold to the risk that UniCredit group takes in a given CCP. Such metric is calculated on default fund/service line level as the Default Fund contributed by UniCredit group to the Total Default Fund of the CCP. The CCP concentration risk is defined based on the importance of each CCP's business line for UCG and historical data.

Credit risk

Template EU CCR1 - Analysis of CCR exposure by approach

(€ million)

		a	b	c	d	e	f	g	h
		REPLACEMENT COST (RC)	POTENTIAL FUTURE EXPOSURE (PFE)	EEPE	ALPHA USED FOR COMPUTING REGULATORY EXPOSURE VALUE	EXPOSURE VALUE PRE-CRM	EXPOSURE VALUE POST-CRM	EXPOSURE VALUE	RWEA
DESCRIPTION									
EU-1	EU - Original Exposure Method (for derivatives)	-	-		1.4	-	-	-	-
EU-2	EU - Simplified SA-CCR (for derivatives)	-	0		1.4	-	0	0	0
1	SA-CCR (for derivatives)	1,005	1,408		1.4	5,224	3,319	3,299	1,700
2	IMM (for derivatives and SFTs)			18,895	1.45	41,134	28,540	28,302	7,534
2a	of which securities financing transactions netting sets			5,930		11,439	8,598	8,598	1,983
2b	of which derivatives and long settlement transactions netting sets			12,966		29,694	19,941	19,704	5,550
2c	of which from contractual cross-product netting sets			-		-	-	-	-
3	Financial collateral simple method (for SFTs)					-	-	-	-
4	Financial collateral comprehensive method (for SFTs)					4,432	3,852	3,852	21
5	VaR for SFTs					-	-	-	-
6	Total as at 31.12.2022					50,790	35,711	35,453	9,254
	Total as at 30.06.2022					70,242	52,551	52,112	10,345

Note:

The EU CCR1 template above doesn't include the Central Clearing Counterparts exposure ("CCPs") that are reported in the following EU CCR8 template.

As at fourth quarter 2022, the total exposure value is equal to €35 billion, showing a decrease with reference to 30 June 2022 for approximately €17 billion, mainly due to the decrease of repurchase agreements with (i) Czech National Bank, (ii) Ministry of Finance of the Czech Republic and (iii) Moscow Stock Exchange (Moex).

Template EU CCR2 - Transactions subject to own funds requirements for CVA risk

(€ million)

		a	b
DESCRIPTION		EXPOSURE VALUE	RWEA
1	Total transactions subject to the Advanced method	2,941	747
2	(i) VaR component (including the 3× multiplier)		202
3	(ii) stressed VaR component (including the 3× multiplier)		545
4	Transactions subject to the Standardised method	1,243	488
EU-4	Transactions subject to the Alternative approach (based on the Original Exposure method)	-	-
5	Total transactions subject to own funds requirements for CVA risk as at 31.12.2022	4,184	1,235
	Total transactions subject to own funds requirements for CVA risk as at 30.06.2022	4,806	1,137

Template EU CCR3 - Standardised approach – CCR exposures by regulatory exposure class and risk weights

(€ million)

		RISK WEIGHT					
		a	b	c	d	e	f
EXPOSURE CLASSES		0%	2%	4%	10%	20%	50%
1	Central governments or central banks	2,596	-	-	-	-	-
2	Regional government or local authorities	529	-	-	-	37	-
3	Public sector entities	248	-	-	-	0	0
4	Multilateral development banks	1,224	-	-	-	-	-
5	International organisations	-	-	-	-	-	-
6	Institutions	-	5,385	-	-	21	3
7	Corporates	-	4,186	-	-	122	55
8	Retail	-	-	-	-	-	-
9	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	40	1
10	Other items	-	-	-	-	-	-
11	Total exposure value as at 31.12.2022	4,596	9,571	-	-	220	60
	Total exposure value as at 30.06.2022	5,171	10,180	-	-	230	119

Credit risk

continued: Template EU CCR3 - Standardised approach - CCR exposures by regulatory exposure class and risk weights

(€ million)

		RISK WEIGHT					TOTAL EXPOSURE VALUE
		g	h	i	j	k	
EXPOSURE CLASSES		70%	75%	100%	150%	OTHERS	
1	Central governments or central banks	-	-	0	-	-	2,597
2	Regional government or local authorities	-	-	-	-	-	566
3	Public sector entities	-	-	-	-	-	248
4	Multilateral development banks	-	-	-	-	-	1,224
5	International organisations	-	-	-	-	-	-
6	Institutions	-	-	6	-	-	5,415
7	Corporates	-	-	891	45	-	5,300
8	Retail	-	2	-	-	-	2
9	Exposures to institutions and corporates with a short-term credit assessment	-	-	0	-	-	41
10	Other items	-	-	-	1	-	1
11	Total exposure value as at 31.12.2022	-	2	898	46	-	15,393
	Total exposure value as at 30.06.2022	-	2	1,078	20	-	16,802

Template EU CCR8 - Exposures to CCPs

(€ million)

DESCRIPTION	EXPOSURE VALUE		RWEA
	a	b	
1	Exposures to QCCPs Total as at 31.12.2022	11,715	305
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	9,273	185
3	(i) OTC derivatives	265	5
4	(ii) Exchange-traded derivatives	6,766	135
5	(iii) SFTs	2,242	45
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	1,184	119
10	Unfunded default fund contributions	1,258	-
11	Exposures to non-QCCPs Total as at 31.12.2022	12	24
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	12	17
13	(i) OTC derivatives	0	0
14	(ii) Exchange-traded derivatives	-	-
15	(iii) SFTs	11	17
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	1	6
20	Unfunded default fund contributions	-	-
	Exposures to QCCPs Total as at 30.06.2022	12,100	322
	Exposures to non-QCCPs Total as at 30.06.2022	-	-

Credit risk

Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale - AIRB

(€ million)								
AIRB	PD SCALE	a	b	c	d	e	f	g
		EXPOSURE POST CCF AND POST CRM	EXPOSURE WEIGHTED AVERAGE PD (%)	NUMBER OF OBLIGORS	EXPOSURE WEIGHTED AVERAGE LGD (%)	EXPOSURE WEIGHTED AVERAGE MATURITY (YEARS)	RWEA	DENSITY OF RISK WEIGHTED EXPOSURE AMOUNTS
Central governments or central banks	0.00 to <0.15	3,010	0.02%	2	24.61%	0.03	2	0.06%
	0.00 to <0.10	3,010	0.02%	2	24.61%	0.03	2	0.06%
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-
	0.25 to <0.50	1	0.31%	1	32.74%	5.00	1	62.59%
	0.50 to <0.75	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	3,011	0.02%	3	24.61%	0.03	3	0.09%
Institutions	0.00 to <0.15	7,136	0.09%	194	40.81%	1.59	1,856	26.01%
	0.00 to <0.10	3,987	0.06%	132	33.53%	2.27	1,013	25.42%
	0.10 to <0.15	3,149	0.13%	62	50.04%	0.74	843	26.77%
	0.15 to <0.25	2,599	0.17%	44	30.49%	0.50	795	30.59%
	0.25 to <0.50	60	0.31%	24	47.18%	2.14	36	60.69%
	0.50 to <0.75	29	0.59%	25	37.89%	2.97	24	83.61%
	0.75 to <2.50	21	1.46%	30	36.55%	2.14	26	125.07%
	0.75 to <1.75	13	1.10%	22	43.00%	1.60	12	88.19%
	1.75 to <2.50	8	2.09%	8	25.20%	3.08	15	190.00%
	2.50 to <10.00	11	3.91%	14	40.01%	4.16	28	254.46%
	2.50 to <5.00	10	3.37%	11	34.09%	4.50	24	242.11%
	5.00 to <10.00	1	8.87%	3	94.84%	1.00	4	368.97%
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	9,856	0.12%	331	38.11%	1.32	2,766	28.07%
Corporates - SME	0.00 to <0.15	32	0.10%	206	42.38%	2.07	6	18.13%
	0.00 to <0.10	15	0.07%	99	35.61%	1.79	2	10.04%
	0.10 to <0.15	17	0.13%	107	48.48%	2.32	4	25.41%
	0.15 to <0.25	10	0.20%	323	38.87%	1.82	2	20.93%
	0.25 to <0.50	44	0.38%	903	41.73%	2.04	16	37.28%
	0.50 to <0.75	13	0.62%	623	41.96%	2.23	6	48.02%
	0.75 to <2.50	46	1.37%	1,636	40.27%	2.43	30	65.11%
	0.75 to <1.75	37	1.21%	1,220	39.25%	2.45	23	62.23%
	1.75 to <2.50	8	2.07%	416	44.80%	2.37	7	77.83%
	2.50 to <10.00	31	4.68%	975	32.25%	2.28	22	70.00%
	2.50 to <5.00	22	3.48%	633	30.68%	2.31	14	61.24%
	5.00 to <10.00	9	7.63%	342	36.11%	2.19	8	91.59%
	10.00 to <100.00	11	16.36%	125	21.87%	2.62	8	77.28%
	10.00 to <20.00	10	14.81%	94	21.39%	2.64	7	74.81%
	20.00 to <30.00	0	23.19%	16	48.87%	1.87	0	184.91%
	30.00 to <100.00	1	35.04%	15	26.60%	2.44	1	102.89%
	100.00 (Default)	2	100.00%	70	45.42%	1.67	0	12.48%
	Sub-total	188	3.35%	4,861	38.72%	2.21	90	48.01%

Credit risk

continued: Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale - AIRB

(€ million)								
AIRB	PD SCALE	a	b	c	d	e	f	g
		EXPOSURE POST CCF AND POST CRM	EXPOSURE WEIGHTED AVERAGE PD (%)	NUMBER OF OBLIGORS	EXPOSURE WEIGHTED AVERAGE LGD (%)	EXPOSURE WEIGHTED AVERAGE MATURITY (YEARS)	RWEA	DENSITY OF RISK WEIGHTED EXPOSURE AMOUNTS
Corporates - Specialised lending	0.00 to <0.15	9	0.05%	17	24.34%	4.93	1	10.88%
	0.00 to <0.10	9	0.05%	10	24.42%	4.97	1	10.90%
	0.10 to <0.15	0	0.14%	7	18.84%	2.52	0	9.33%
	0.15 to <0.25	11	0.22%	45	26.60%	2.61	2	21.86%
	0.25 to <0.50	17	0.37%	106	21.51%	4.09	6	34.10%
	0.50 to <0.75	6	0.60%	58	23.09%	4.11	3	39.73%
	0.75 to <2.50	96	0.90%	86	21.36%	4.04	43	44.69%
	0.75 to <1.75	96	0.89%	75	21.29%	4.05	43	44.58%
	1.75 to <2.50	0	2.35%	11	38.28%	2.83	0	74.25%
	2.50 to <10.00	2	3.82%	23	32.50%	3.10	1	74.70%
	2.50 to <5.00	2	3.77%	19	32.35%	3.10	1	74.10%
	5.00 to <10.00	0	7.05%	4	42.34%	3.36	0	112.86%
	10.00 to <100.00	0	10.37%	1	17.07%	2.50	0	50.74%
	10.00 to <20.00	0	10.37%	1	17.07%	2.50	0	50.74%
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	4	100.00%	12	65.22%	3.55	2	51.96%
	Sub-total	145	3.81%	348	23.50%	3.97	58	40.03%
Corporates - Other	0.00 to <0.15	11,887	0.08%	616	47.43%	1.84	3,076	25.88%
	0.00 to <0.10	9,452	0.07%	347	47.57%	2.00	2,435	25.76%
	0.10 to <0.15	2,435	0.12%	269	46.92%	1.20	641	26.33%
	0.15 to <0.25	1,632	0.17%	430	41.89%	1.46	510	31.23%
	0.25 to <0.50	644	0.35%	776	40.14%	1.70	309	48.03%
	0.50 to <0.75	203	0.65%	404	42.74%	1.46	134	65.91%
	0.75 to <2.50	625	1.11%	1,038	43.63%	1.78	543	86.83%
	0.75 to <1.75	542	0.95%	799	44.11%	1.79	457	84.47%
	1.75 to <2.50	83	2.16%	239	40.56%	1.69	85	102.18%
	2.50 to <10.00	136	4.19%	389	41.26%	1.91	176	129.59%
	2.50 to <5.00	108	3.58%	271	40.18%	1.97	130	120.43%
	5.00 to <10.00	28	6.59%	118	45.49%	1.66	46	165.47%
	10.00 to <100.00	4	24.61%	48	40.05%	1.95	8	209.70%
	10.00 to <20.00	2	13.84%	36	35.49%	1.70	4	169.57%
	20.00 to <30.00	0	20.40%	2	61.05%	1.30	0	325.49%
	30.00 to <100.00	2	38.27%	10	45.11%	2.29	4	256.37%
	100.00 (Default)	13	100.00%	50	56.31%	1.37	2	13.15%
	Sub-total	15,144	0.28%	3,751	46.26%	1.78	4,757	31.42%
Retail - of which Secured by immovable property SMEs	0.00 to <0.15	-	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	-	-	-	-	-	-	-

Credit risk

continued: Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale - AIRB

		(€ million)						
AIRB	PD SCALE	a	b	c	d	e	f	g
		EXPOSURE POST CCF AND POST CRM	EXPOSURE WEIGHTED AVERAGE PD (%)	NUMBER OF OBLIGORS	EXPOSURE WEIGHTED AVERAGE LGD (%)	EXPOSURE WEIGHTED AVERAGE MATURITY (YEARS)	RWEA	DENSITY OF RISK WEIGHTED EXPOSURE AMOUNTS
Retail - of which Secured by immovable property non SMEs	0.00 to <0.15	-	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	-	-	-	-	-	-	-
Retail - Qualifying revolving	0.00 to <0.15	-	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	-	-	-	-	-	-	-
Retail - of which Other SME	0.00 to <0.15	0	0.09%	1	100.50%	-	0	19.67%
	0.00 to <0.10	0	0.09%	1	100.50%	-	0	19.67%
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	0	0.22%	60	48.34%	-	0	16.94%
	0.25 to <0.50	1	0.36%	202	49.93%	-	0	22.99%
	0.50 to <0.75	0	0.62%	141	39.80%	-	0	26.29%
	0.75 to <2.50	3	2.01%	254	32.32%	-	1	32.71%
	0.75 to <1.75	1	1.24%	197	38.85%	-	0	33.96%
	1.75 to <2.50	2	2.32%	57	29.69%	-	1	32.21%
	2.50 to <10.00	7	2.95%	96	27.48%	-	2	30.79%
	2.50 to <5.00	7	2.84%	58	27.27%	-	2	30.38%
	5.00 to <10.00	0	6.16%	38	33.77%	-	0	42.57%
	10.00 to <100.00	0	15.70%	29	41.45%	-	0	65.83%
	10.00 to <20.00	0	15.35%	24	41.55%	-	0	65.57%
	20.00 to <30.00	0	25.95%	2	51.09%	-	0	100.76%
	30.00 to <100.00	0	33.97%	3	20.91%	-	0	44.25%
	100.00 (Default)	0	100.00%	9	69.67%	-	0	91.65%
	Sub-total	11	2.66%	792	30.72%	-	3	30.81%

Credit risk

continued: Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale - AIRB

(€ million)

AIRB	PD SCALE	a	b	c	d	e	f	g
		EXPOSURE POST CCF AND POST CRM	EXPOSURE WEIGHTED AVERAGE PD (%)	NUMBER OF OBLIGORS	EXPOSURE WEIGHTED AVERAGE LGD (%)	EXPOSURE WEIGHTED AVERAGE MATURITY (YEARS)	RWEA	DENSITY OF RISK WEIGHTED EXPOSURE AMOUNTS
Retail - of which Other non SME	0.00 to <0.15	59	0.05%	85	13.34%		2	2.77%
	0.00 to <0.10	54	0.04%	70	14.19%		2	2.92%
	0.10 to <0.15	5	0.13%	15	3.11%		0	0.96%
	0.15 to <0.25	1	0.20%	17	25.65%		0	12.08%
	0.25 to <0.50	22	0.44%	28	22.56%		3	15.81%
	0.50 to <0.75	6	0.62%	57	36.72%		2	31.86%
	0.75 to <2.50	15	1.19%	86	35.82%		6	38.94%
	0.75 to <1.75	13	1.03%	75	37.44%		5	39.03%
	1.75 to <2.50	3	1.95%	11	28.29%		1	38.53%
	2.50 to <10.00	1	3.22%	19	28.55%		0	42.63%
	2.50 to <5.00	1	3.05%	15	28.88%		0	42.85%
	5.00 to <10.00	0	6.04%	4	23.15%		0	38.99%
	10.00 to <100.00	0	37.71%	1	63.14%		0	177.27%
	10.00 to <20.00	-	-	-	-		-	-
	20.00 to <30.00	-	-	-	-		-	-
	30.00 to <100.00	0	37.71%	1	63.14%		0	177.27%
	100.00 (Default)	0	100.00%	3	33.87%		0	32.22%
	Sub-total	104	0.47%	296	20.26%		14	13.00%
Total (all CCR relevant exposure classes)								
AIRB as at 31.12.2022		28,458	0.24%	10,382	42.68%	1.44	7,691	27.03%
Total (all CCR relevant exposure classes)								
AIRB as at 30.06.2022		44,658	0.23%	12,336	28.51%	0.92	8,438	18.89%

With reference to the AIRB portfolio evolution as at 31 December 2022, compared to 30 June 2022, refer to the comment reported below the following template "FIRB".

Credit risk

Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale - FIRB

(€ million)

FIRB	PD SCALE	a	b	c	d	e	f	g
		EXPOSURE POST CCF AND POST CRM	EXPOSURE WEIGHTED AVERAGE PD (%)	NUMBER OF OBLIGORS	EXPOSURE WEIGHTED AVERAGE LGD (%)	EXPOSURE WEIGHTED AVERAGE MATURITY (YEARS)	RWEA	DENSITY OF RISK WEIGHTED EXPOSURE AMOUNTS
Central governments or central banks	0.00 to <0.15	-	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	-	-	-	-	-	-	-
Institutions	0.00 to <0.15	275	0.09%	15	4.60%	0.91	27	9.98%
	0.00 to <0.10	252	0.08%	11	1.19%	0.83	17	6.74%
	0.10 to <0.15	22	0.13%	4	43.14%	1.87	10	46.53%
	0.15 to <0.25	232	0.17%	3	1.15%	0.50	3	1.09%
	0.25 to <0.50	6	0.36%	3	45.00%	2.50	4	61.61%
	0.50 to <0.75	3	0.71%	1	45.00%	2.50	3	87.66%
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	517	0.13%	22	3.80%	0.76	37	7.10%
Corporates - SME	0.00 to <0.15	1	0.11%	12	45.00%	2.50	0	22.82%
	0.00 to <0.10	0	0.07%	5	45.00%	2.50	0	17.82%
	0.10 to <0.15	1	0.11%	7	45.00%	2.50	0	23.51%
	0.15 to <0.25	1	0.18%	7	45.00%	2.50	0	30.40%
	0.25 to <0.50	1	0.41%	25	45.00%	2.50	0	47.85%
	0.50 to <0.75	1	0.65%	15	45.00%	2.50	1	62.63%
	0.75 to <2.50	3	1.39%	80	45.00%	2.50	2	74.93%
	0.75 to <1.75	2	1.12%	58	45.00%	2.50	2	68.21%
	1.75 to <2.50	1	2.12%	22	45.00%	2.50	1	93.23%
	2.50 to <10.00	2	2.79%	69	45.00%	2.50	2	82.78%
	2.50 to <5.00	2	2.72%	51	45.00%	2.50	2	82.28%
	5.00 to <10.00	0	6.23%	18	45.00%	2.50	0	108.93%
	10.00 to <100.00	0	25.80%	5	45.00%	2.50	0	158.66%
	10.00 to <20.00	0	16.89%	3	45.00%	2.50	0	145.78%
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	0	37.71%	2	45.00%	2.50	0	175.89%
	100.00 (Default)	0	100.00%	9	45.00%	2.50	-	-
	Sub-total	9	1.66%	222	45.00%	2.50	6	65.02%

Credit risk

continued: Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale - FIRB

(€ million)								
FIRB	PD SCALE	a	b	c	d	e	f	g
		EXPOSURE POST CCF AND POST CRM	EXPOSURE WEIGHTED AVERAGE PD (%)	NUMBER OF OBLIGORS	EXPOSURE WEIGHTED AVERAGE LGD (%)	EXPOSURE WEIGHTED AVERAGE MATURITY (YEARS)	RWEA	DENSITY OF RISK WEIGHTED EXPOSURE AMOUNTS
Corporates - Specialised lending	0.00 to <0.15	-	-	-	-	-	-	-
	0.00 to <0.10	-	-	-	-	-	-	-
	0.10 to <0.15	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-
	1.75 to <2.50	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-
	2.50 to <5.00	-	-	-	-	-	-	-
	5.00 to <10.00	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-
	10.00 to <20.00	-	-	-	-	-	-	-
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-
	Sub-total	-	-	-	-	-	-	-
Corporates - Other	0.00 to <0.15	6	0.09%	12	40.85%	2.50	2	33.24%
	0.00 to <0.10	5	0.08%	6	40.18%	2.50	2	32.29%
	0.10 to <0.15	1	0.13%	6	45.00%	2.50	0	39.09%
	0.15 to <0.25	1	0.21%	6	45.00%	2.50	0	48.02%
	0.25 to <0.50	9	0.34%	15	45.00%	2.50	6	60.72%
	0.50 to <0.75	5	0.69%	13	45.00%	2.50	4	84.18%
	0.75 to <2.50	62	0.92%	24	44.99%	2.50	58	93.62%
	0.75 to <1.75	61	0.91%	19	45.00%	2.50	58	93.60%
	1.75 to <2.50	0	2.10%	5	31.01%	2.50	0	131.96%
	2.50 to <10.00	264	4.95%	21	45.00%	2.50	419	158.60%
	2.50 to <5.00	264	4.95%	18	45.00%	2.50	419	158.60%
	5.00 to <10.00	0	5.51%	3	45.00%	2.50	0	164.27%
	10.00 to <100.00	0	12.22%	4	45.00%	2.50	0	211.65%
	10.00 to <20.00	0	11.61%	3	45.00%	2.50	0	210.27%
	20.00 to <30.00	-	-	-	-	-	-	-
	30.00 to <100.00	0	34.36%	1	45.00%	2.50	0	262.00%
	100.00 (Default)	9	100.00%	1	45.00%	2.50	-	-
	Sub-total	356	6.27%	96	44.92%	2.50	489	137.49%
Total (all CCR relevant exposure classes) FIRB as at 31.12.2022		882	2.62%	340	32.86%	1.48	532	60.30%
Total (all CCR relevant exposure classes) FIRB as at 30.06.2022		574	10.45%	381	35.69%	1.87	688	119.83%

The evolution of the overall Group counterparty credit risk AIRB portfolio over the reporting period (December 2022 - June 2022) is principally driven by the following trends:

- the asset class "Central governments and central banks" shows an exposure decrease of -€14.867 million, concentrated in the performing portfolio, fully explained by the trend of securities financing transactions in Central Europe (Czech Republic);
- the asset class "Corporates - other" shows an exposure decrease of -€1,374 million, concentrated in the performing portfolio, explained principally by the evolution of derivatives transactions in Italy.

Credit risk

RWEAs flow statements - IMM method

Counterparty credit risk exposures under IMM approach decreased by -€2,135 million in the fourth quarter of 2022 compared with the third quarter of 2022. The trend is explained principally by the following items:

- “Asset size” shows a decrease of -€2,088 million, principally driven by derivative exposures in Germany and Italy;
- “Foreign exchange movements” records a decrease of -€106 million mostly impacted USD depreciation.

Template EU CCR7 - RWEA flow statements of CCR exposures under the IMM

			(€ million)
		QUARTER CLOSING AS AT 31.12.2022	CUMULATIVE YTD AS AT 31.12.2022
		RWEA	RWEA
DESCRIPTION		a	
1	RWEA as at the end of the previous reporting period	9,668	9,215
2	Asset size	(2,088)	(762)
3	Credit quality of counterparties	66	(823)
4	Model updates (IMM only)	-	-
5	Methodology and policy (IMM only)	-	-
6	Acquisitions and disposals	-	-
7	Foreign exchange movements	(106)	(106)
8	Other	(7)	9
9	RWEA as at the end of the current reporting period	7,534	7,534

Credit risk

Template EU CCR5 - Composition of collateral for CCR exposures

(€ million)

COLLATERAL TYPE		a		b		c		d		e		f		g		h	
		COLLATERAL USED IN DERIVATIVE TRANSACTIONS								COLLATERAL USED IN SFTs							
		FAIR VALUE OF COLLATERAL RECEIVED				FAIR VALUE OF POSTED COLLATERAL				FAIR VALUE OF COLLATERAL RECEIVED				FAIR VALUE OF POSTED COLLATERAL			
		SEGREGATED	UNSEGREGATED	SEGREGATED	UNSEGREGATED	SEGREGATED	UNSEGREGATED	SEGREGATED	UNSEGREGATED	SEGREGATED	UNSEGREGATED	SEGREGATED	UNSEGREGATED				
1	Cash – domestic currency	0	10,314	50	10,797	-	2,233	478	299								
2	Cash – other currencies	12	897	28	3,248	-	21	0	149								
3	Domestic sovereign debt	97	-	-	-	-	27,950	701	23,582								
4	Other sovereign debt	715	294	3,501	2,440	3	14,373	221	19,955								
5	Government agency debt	6	-	1,773	-	-	733	419	3,822								
6	Corporate bonds	2	-	37	-	-	832	-	679								
7	Equity securities	-	3	-	-	15	851	-	1,792								
8	Other collateral	9	12	1,778	-	-	7,417	73	3,625								
9	Total as at 31.12.2022	841	11,519	7,168	16,486	18	54,411	1,892	53,903								
	Total as at 30.06.2022	864	11,310	9,496	16,644	25	93,639	2,742	105,363								

The collateral received used in derivatives transactions (both segregated and unsegregated component) is quite stable, always driven by UniCredit Bank AG that covers the 93% of the total amount, mainly for the operativity with Financial Institutions.

With regard to the collateral posted used in derivatives transactions, the main variation is in the segregated component (-25%) driven by UniCredit Bank AG and mainly due to counterparties trading in Commodity Derivatives.

Regarding the Fair value of collateral received used in SFTs, the reduction in segregated component (-28%) is driven by UniCredit Bank AG due to trading activities with Financial Institutions, while the decrease in unsegregated component (-42%) is mainly due to expired Reverse Repo operativity in UniCredit Bank AG and UniCredit Czech Republic and Slovakia AS.

In terms of collateral posted for SFTs, the main variation is driven by the decrease in unsegregated component (-49%), mainly due to expired operativity in UniCredit Bank AG and UniCredit S.p.A. with Central Clearing Counterparties and in UniCredit Czech Republic and Slovakia AS with Sovereign counterparties.

Whereas the decrease in segregated component (-31%) is mainly due to expired trades in UniCredit Bank AG with financial institutions.

Template EU CCR6 - Credit derivatives exposures

(€ million)

DESCRIPTION		31.12.2022		30.06.2022	
		a	b	a	b
		PROTECTION BOUGHT	PROTECTION SOLD	PROTECTION BOUGHT	PROTECTION SOLD
Notionals					
1 Single-name credit default swaps		518	756	766	900
2 Index credit default swaps		12,433	11,483	10,313	9,195
3 Total return swaps		64	522	64	489
4 Credit options		-	-	-	-
5 Other credit derivatives		-	-	-	-
6 Total notionals		13,016	12,760	11,144	10,584
Fair values					
7 Positive fair value (asset)		6	116	65	16
8 Negative fair value (liability)		(144)	(144)	(31)	(156)

Comparing to volumes as at 30 June 2022, there is an increase of 19% on the overall total notionals, observed on the portfolio of the subsidiary UniCredit Bank AG, which holds the entire stock of credit derivatives as at 31 December 2022.

Credit risk

Information on Sovereign exposures²⁰

With reference to the Group's Sovereign exposures²¹, the book value of sovereign debt securities as at 31 December 2022 amounted to €99,103 million, of which over the 80% concentrated in eight Countries; Italy, with €34,826 million, represents over 35% of the total. For each of the eight Countries, the following table shows the nominal value, the book value and the fair value of the exposures broken down by portfolio as at 31 December 2022.

Breakdown of sovereign debt securities by country and portfolio

COUNTRY/PORTFOLIO	AMOUNTS AS AT 31.12.2022		
	NOMINAL VALUE	BOOK VALUE	FAIR VALUE
- Italy	37,133	34,826	34,679
financial assets/liabilities held for trading (net exposure*)	(1,259)	(1,162)	(1,162)
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	50	51	51
financial assets at fair value through other comprehensive income	15,357	14,606	14,606
financial assets at amortised cost	22,985	21,331	21,184
- Spain	14,620	13,767	13,526
financial assets/liabilities held for trading (net exposure*)	665	501	501
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	-	-	-
financial assets at fair value through other comprehensive income	3,176	2,923	2,923
financial assets at amortised cost	10,779	10,343	10,102
- Japan	10,342	10,310	10,324
financial assets/liabilities held for trading (net exposure*)	-	-	-
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	-	-	-
financial assets at fair value through other comprehensive income	7,072	6,976	6,976
financial assets at amortised cost	3,270	3,334	3,348
- Germany	7,308	7,146	6,929
financial assets/liabilities held for trading (net exposure*)	487	335	335
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	1,769	1,765	1,765
financial assets at fair value through other comprehensive income	1,534	1,475	1,475
financial assets at amortised cost	3,518	3,571	3,354
- United States of America	7,133	6,120	6,113
financial assets/liabilities held for trading (net exposure*)	1,156	839	839
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	-	-	-
financial assets at fair value through other comprehensive income	3,904	3,726	3,726
financial assets at amortised cost	2,073	1,555	1,548
- France	2,950	2,678	2,548
financial assets/liabilities held for trading (net exposure*)	846	724	724
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	-	-	-
financial assets at fair value through other comprehensive income	1,445	1,289	1,289
financial assets at amortised cost	659	665	535
- Romania	2,546	2,525	2,305
financial assets/liabilities held for trading (net exposure*)	56	47	47
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	-	-	-
financial assets at fair value through other comprehensive income	747	689	689
financial assets at amortised cost	1,743	1,789	1,569
- Bulgaria	2,415	2,305	2,145
financial assets/liabilities held for trading (net exposure*)	6	5	5
financial assets designated at fair value	-	-	-
financial assets mandatorily at fair value	-	-	-
financial assets at fair value through other comprehensive income	1,286	1,194	1,194
financial assets at amortised cost	1,123	1,106	946
Total on-balance sheet exposures	84,447	79,677	78,569

Notes:

(*) Including exposures in Credit Derivatives.

Negative amount, if any indicates the prevalence of liabilities positions.

20 The disclosure relating to the Sovereign exposures here reported refers to the regulatory consolidation scope, which is determined according to the prudential regulations and, while maintaining a general alignment, differs, with regard to the methods applied, from the consolidation scope of the Consolidated Financial Statements, which is instead determined according to the IAS/IFRS standards.

It should also be noted that this information may differ from that relating to Sovereign exposures required in other reports with statistical (Financial Reporting - FINREP) and prudential (Common Reporting - CoRep) purposes, due to the different rules applicable according to the various regulations in force.

21 Sovereign exposures are bonds issued by and loans given to central and local governments and governmental bodies. To the purpose of this risk exposure are not included:

- Sovereign exposures and Group's Legal entities classified as held for sale as at 31 December 2022;
- ABSs.

Credit risk

The weighted duration of the sovereign bonds shown in the table above, divided by the banking²² and trading book, is the following:

Weighted duration

(years)

	BANKING BOOK	TRADING BOOK	
		ASSETS POSITIONS	LIABILITIES POSITIONS
- Italy	4.01	5.91	5.70
- Spain	3.59	14.78	7.74
- Japan	4.16	-	-
- Germany	3.52	12.75	5.30
- United States of America	6.95	19.68	-
- France	5.16	18.89	13.25
- Romania	3.92	5.82	6.85
- Bulgaria	4.60	9.27	-

The remaining 20% of the total of sovereign debt securities, amounting to €19,426 million with reference to the book values as at 31 December 2022, is divided into 34 countries, including Austria (€2,103 million), Czech Republic (€1,925 million), Croatia (€1,759 million), Portugal (€1,594 million), Hungary (€1,568 million), Israel (€1,131 million), Poland (€1,022 million), Ireland (€983 million), Serbia (€946 million), Russia (€822 million) and China (€685 million).

With respect to these exposures, as at 31 December 2022 there were no indications that default have occurred and the Group is closely monitoring the evolution of the situation.

With particular reference to the book value of the sovereign debt securities exposure to Russia it should be noted that €819 million are held by the Russian controlled bank in local currency and almost totally classified in the banking book. For more information on the criteria adopted for the evaluation of the Russian counterparties, refer to the paragraph "Section 5- Other matters" of the Consolidated report and accounts 2022 of the UniCredit group, Notes to the consolidated accounts, Part A - Accounting policies, A.1 - General.

It should also be noted that among the aforementioned remaining part of sovereign debt securities as at 31 December 2022 there are also debt securities towards Supranational Organisations such as the European Union, the European Financial Stability Facility and the European Stability Mechanism amounting to €3,241 million.

The table below shows the classification of bonds belonging to the banking book and their percentage proportion of the total of the portfolio under which they are classified.

Breakdown of sovereign debt securities by portfolio (banking book)

(€ million)

	AMOUNTS AS AT 31.12.2022				TOTAL
	FINANCIAL ASSETS DESIGNATED AT FAIR VALUE	FINANCIAL ASSETS MANDATORILY AT FAIR VALUE	FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME	FINANCIAL ASSETS AT AMORTISED COST	
Book value	272	2,071	41,453	53,013	96,809
% Portfolio	84.32%	25.33%	75.57%	9.09%	14.98%

²² The banking book includes financial assets designated at fair value, those mandatorily at fair value, those at fair value through other comprehensive income and those at amortised cost.

Credit risk

In addition to the exposures to sovereign debt securities, loans²³ given to central and local governments and governmental bodies must be taken into account.

The table below shows the total amount as at 31 December 2022 of loans booked in financial assets at amortised cost portfolio given to countries towards which the overall exposure exceeds €100 million, representing about 96% of the total.

Breakdown of sovereign loans by country

(€ million)

COUNTRY	AMOUNTS AS AT 31.12.2022
	BOOK VALUE
- Austria(*)	5,627
- Italy	5,198
- Germany(**)	5,044
- Croatia	2,351
- Czech Republic	1,151
- Qatar	768
- Hungary(***)	370
- Romania	326
- Egypt	300
- Slovakia	296
- Kenya	228
- Slovenia	224
- Turkey	188
- Bulgaria	181
- Indonesia	166
- Bosnia and Herzegovina	139
- Trinidad and Tobago	131
- Angola	116
- Laos	115
- Serbia	109
Total on-balance sheet exposures	23,028

Notes:

(*) of which €24 million in financial assets mandatorily at fair value;
 (**) of which €573 million in financial assets mandatorily at fair value;
 (***) of which €6 million in financial assets mandatorily at fair value.

It should also be noted that, as at 31 December 2022, there are in addition also loans to Supranational Organisations amounting to €1,193 million booked in financial assets held for trading portfolio.

Lastly, it should be noted that derivatives are traded within the ISDA master agreement and accompanied by Credit Support Annexes, which provide for the use of cash collaterals or low-risk eligible securities.

For more details on the sensitivity analysis of credit spreads and on the results of stress tests see the "Recession Scenario" and "Hawkish Scenario" in the paragraphs "Section 2.2 - Market risk (paragraph Stress Test)" and for liquidity management policies "Section 2.4 - Liquidity risk" of the Annual Reports and Accounts 2022 of the UniCredit group, Notes to the consolidated accounts, Part E - Information on risks and related hedging policies, Section 2 - Risks of prudential consolidated perimeter.

²³ Tax items are not included.

Market risk

Exposure and use of internal models

Risk measures

Link between market risk metrics and balance sheet items

The table below shows the linkages between items in the balance sheet of the Group's consolidated position that are subject to market risk and the most relevant metrics used for monitoring purpose. HFT Assets and Liabilities are mainly monitored through VaR/SVaR/IRC. In addition, granular market limits for most relevant sensitivities/exposures are defined and regularly monitored. Other Assets and Liabilities, though managed with different risk metrics (sensitivity to Interest Rates, Credit spread, FX, Equity, etc. further to parameters which are typical of the Banking book such as NII and Economic Value analysis), are in some cases (namely FVtPL and FVtOCI items) managed and monitored through VaR. Furthermore, even when not specified below, interest rate risk of Banking book is anyway covered under Interest Rate Risk of Banking book Framework.

Link between market risk metrics and balance sheet items

(€ million)				
	END OF DECEMBER 2022			SENSITIVITY
	BOOK VALUE	VaR PERIMETER ⁽¹⁾	OTHER RISK MEASURES ⁽²⁾	
MARKET RISK RELEVANT ASSETS				
10. Cash and cash balances	111,776	-	111,776	FX ⁽⁴⁾ IR
20. Financial assets at fair value through profit or loss:	72,959	-	9,575	FX EQ CS IR
a) financial assets held for trading	64,443	63,384	1,059 ⁽³⁾	FX EQ CS IR
b) financial assets designated at fair value	323	-	323	FX EQ CS IR
c) other financial assets mandatorily at fair value	8,193	-	8,193	FX EQ CS IR
30. Financial assets at fair value through other comprehensive income	54,887	-	54,887	FX EQ CS IR
40. Financial assets at amortised cost:	582,661	-	582,661	FX CS IR
a) loans and advances to banks	57,796	-	57,796	FX CS IR
b) loans and advances to customers	524,865	-	524,865	FX CS IR
50. Hedging derivatives	2,851	-	2,851	FX IR
60. Changes in fair value of portfolio hedged items (+/-)	(6,576)	-	(6,576)	N.R.
70. Equity investments	3,540	-	3,540	N.R.
90. Property, plant and equipment	9,164	-	9,164	N.R.
100. Intangible assets	2,350	-	2,350	N.R.
110. Tax assets	13,120	-	13,120	N.R.
120. Non-current assets and disposal groups classified as held for sale	1,229	-	1,229	N.R.
130. Other assets	9,812	-	9,812	N.R.
Total assets	857,773	63,384	794,389	
MARKET RISK RELEVANT LIABILITIES				
10. Financial liabilities at amortised cost:	727,473	-	727,473	FX
a) deposits from banks	131,341	-	131,341	FX
b) deposits from customers	511,925	-	511,925	FX
c) debt securities in issue	84,207	-	84,207	FX
20. Financial liabilities held for trading	51,234	50,597	637 ⁽³⁾	FX EQ CS IR
30. Financial liabilities designated at fair value	10,192	-	10,192	FX EQ CS IR
40. Hedging derivatives	3,403	-	3,403	FX IR
50. Value adjustment of hedged financial liabilities (+/-)	(21,504)	-	(21,504)	N.R.
60. Tax liabilities	1,680	-	1,680	N.R.
70. Liabilities associated with assets classified as held for sale	579	-	579	N.R.
80. Other liabilities	13,037	-	13,037	N.R.
90. Provision for employee severance pay	368	-	368	FX CS IR
100. Provisions for risks and charges	7,814	-	7,814	FX CS IR ⁽⁵⁾
Total liabilities	794,276	50,597	743,679	

Notes:

1. VaR Perimeter: main risk metric is VaR;
 2. Other risk measure: main risk metrics are sensitivity to different risk factors;
 3. Financial assets/liabilities held for trading classified as Banking book (MtM);
 4. Fx risk arising from Cash Positions is included in VaR computation in agreement with approved IMA scope;
 5. Pensions and other post-retirement benefit obligations only.
- N.R.: not relevant.

Market risk

RWEAs

The present section includes the templates related to Market risk RWEAs under I-mod (table MR2-A, MR2-B and MR3) reporting the values (maximum, minimum, average and at the end of December 2022) resulting from approved models used for computing the regulatory capital charge at the Group level.

After the increase shown in the third quarter, driven by market transactions, natural gas and base metal market movements and increased exposure towards interest rate risk, RWEAs decreased due to market transactions primarily affecting Equity Risk in the Trading book of UniCredit Bank AG and by the IRC capital reduction following the lower exposure towards Republic of Italy Credit Spread in the Trading book of UniCredit S.p.A.

Template EU MR2-A - Market risk under the Internal Model Approach (IMA)

		(€ million)	
		a	b
DESCRIPTION		RWEAs	OWN FUNDS REQUIREMENTS
1	VaR (higher of values a and b)	1,987	159
(a)	Previous day's VaR		52
(b)	Average of the daily VaR during the preceding 60 business days x multiplication factor		159
2	SVaR (higher of values a and b)	2,952	236
(a)	Latest SVaR		68
(b)	Average of the SVaR during the preceding 60 business days x multiplication factor		236
3	IRC (higher of values a and b)	1,015	81
(a)	Most recent IRC value		78
(b)	Average of the IRC number over the preceding 12 weeks		81
4	Comprehensive risk measure (higher of values a, b and c)	-	-
(a)	Most recent risk number for the correlation trading portfolio		-
(b)	Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		-
(c)	8% of the own funds requirement in the SA on the most recent risk number for the correlation trading portfolio		-
5	Other	-	-
6	Total as at 31.12.2022	5,954	476
	Total as at 30.06.2022	6,102	488

Template EU MR2-B - RWEA flow statements of market risk exposures under the IMA

		(€ million)						
		a	b	c	d	e	f	g
DESCRIPTION		VaR	SVaR	IRC	COMPREHENSIVE RISK MEASURE	OTHER	TOTAL RWEAs	TOTAL OWN FUNDS REQUIREMENTS
1	RWEAs as at 30.09.2022	2,123	3,402	1,430	-	-	6,956	556
1a	Regulatory adjustment	(1,158)	(2,093)	(267)	-	-	(3,518)	(281)
1b	RWEAs as at 30.09.2022 (end of the day)	965	1,309	1,163	-	-	3,437	275
2	Movement in risk levels	(312)	(453)	(185)	-	-	(950)	(76)
3	Model updates/changes	-	-	-	-	-	-	-
4	Methodology and policy	-	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-	-
6	Foreign exchange movements	-	-	-	-	-	-	-
7	Other	-	-	-	-	-	-	-
8a	RWEAs as at 31.12.2022 (end of the day)	653	856	978	-	-	2,487	199
8b	Regulatory adjustment	1,334	2,096	37	-	-	3,467	277
8	RWEAs as at 31.12.2022	1,987	2,952	1,015	-	-	5,954	476

Note:

The amount reported in row 2 and 3 explains the change in the RWEAs shown in row 1b and 8a.

Market risk

Template EU MR3 - IMA values for trading portfolios

		(€ million)	
DESCRIPTION		JULY-DECEMBER 2022	JANUARY-JUNE 2022
VaR (10 DAY 99%)			
1	Maximum value	96	62
2	Average value	55	42
3	Minimum value	35	28
4	Period end	51	35
SVaR (10 DAY 99%)			
5	Maximum value	107	118
6	Average value	85	84
7	Minimum value	60	53
8	Period end	68	58
IRC (99.9%)			
9	Maximum value	141	149
10	Average value	98	118
11	Minimum value	62	83
12	Period end	78	108
Comprehensive risk capital charge (99.9%)			
13	Maximum value	-	-
14	Average value	-	-
15	Minimum value	-	-
16	Period end	-	-

The VaR and SVaR increase observed during the third quarter of 2022 is mainly driven by market transactions primarily affecting Equity Risk in the Trading book of UniCredit Bank AG, that reversed back in the fourth quarter.

While the IRC decreasing trend observed during the second half of 2022 is mainly driven by lower exposure towards Republic of Italy Credit Spread in the Trading book of UniCredit S.p.A.

Market risk

Exposures to interest rate risk on positions not held in the trading book

General aspects, interest rate risk management processes and measurement methods

a) Interest rate risk refers to the current or future risk to the bank's capital and earnings arising from unfavorable movements in interest rates that affect the bank's positions. As interest rates change, the present value and timing of future cash flows change and this, in turn, changes the underlying value of a bank's assets, liabilities and off-balance sheet items and therefore its economic value. Changes in interest rates also affect the formation of the interest margin and, consequently, the bank's profits.

Interest rate risk monitoring and management procedures are applied to all positions sensitive to changes in interest rates, excluding:

- the trading book;
- Defined Benefit Obligations (DBO) portfolio.

b) The Group Financial and Credit Risk Committee is responsible for defining the operational strategy for managing the interest rate risk of the banking book, including the strategy for managing the capital and the structural gap between assets and liabilities not sensitive to the interest rate. The management of the interest rate risk of the banking book is aimed at guaranteeing the reduction of the negative impacts on the long-term interest margins, due to the volatility of interest rates, to achieve a flow of profits and a return on capital consistent with the strategic plan. The strategy does not envisage any directional or discretionary positioning aimed at generating additional profits, unless approved by the competent bodies and monitored separately. The only exception refers to the functions authorised to take positions on interest rates within the limits approved by the Risk Committees.

The treasury functions manage the interest rate risk deriving from commercial transactions while maintaining the exposure within the limits set by the Risk Committees.

Limits and alert thresholds are defined for each Bank or Legal Entity in terms of sensitivity to the economic value or interest margin.

The set of metrics is defined according to the level of complexity of the Company's business.

Each of the banks or companies of the Group is responsible for managing the exposure to interest rate risk within the defined limits. At consolidated level, the Group Risk Management function is responsible for measuring interest rate risk, which reports to the Group Financial and Credit Risk Committee the interest rate risk of the banking book exposures and analysis, on a monthly basis.

The interest rate risk management strategy is established considering also the main impacts deriving from the behavioral aspects of customers, which can impact on the value of interest margins and the economic value of the banking book, such as the example of early repayments of disbursed loans ("prepayment") and the stability of on demand items.

The monitoring activity is coupled with constant Stress Testing aimed at verifying compliance with the limits under more severe stress scenarios from those expected and present by the market. The calibration and monitoring of stress test scenarios takes place at least annually.

The Internal Validation functions periodically carries out an independent assessment of the correct application of the measurement methodology applied by the risk functions within the monitoring perimeter of the banking book including behavioral assumptions.

The Internal Audit functions ensure the adequacy and compliance with regulatory and internal regulations, at least with annual frequency.

c) The Group measures and monitors interest rate risk every day. The main sources of interest rate risk can be classified as follows:

- Gap risk: arises from the term structure of the banking book; this is the risk that is generated from different timings in the rate changes of the instruments. The extent of the change in the "gap" also depends on the linearity of the change in the term structure of rates, which can occur consistently across the entire rate curve (parallel risk) or differently from period to period of the curve (non-parallel risk). The gap risk also includes the repricing risk, i.e. the risk of changes in the interest margin which occurs when the rate of a financial contract resets; the same also refers to the yield curve risk, which occurs when a shift in an interest rate curve impacts the economic value of the assets and liabilities sensitive to interest rate risk;
- Basis risk: it can be divided into two types of risk:
 - "tenor" risk: derives from the mismatch between the maturity of the instrument and changes in interest rates;
 - currency risk: derives from the potential lack of compensation between interest rate sensitivities emerging from different currencies;
- Option risk: derives from positions in derivatives or from optional elements incorporated in many assets, liabilities and off-balance sheet items of the bank, where either the bank or the customer have the right to change the amount and timing of cash flows.

d) The measurement of interest rate risk includes:

- the sensitivity analysis of interest margins to changes in interest rates: a constant balance sheet analysis (under the assumption that positions remain constant during the period), and a simulation of the impact on the interest margin for the current period, that also considering the elasticity assumptions for items on demand.

Market risk

Furthermore, a simulation analysis aims to assess the impact on income of different shocks of the interest rate curves, including an instantaneous and parallel rate hike scenario of + 100bps and a rate fall scenario of -100bps or lower in a function of the level of rates in the individual currencies as required by the EBA regulations. Additional scenarios are simulated to consider basis risk and other non-parallel shocks;

- the analysis of the sensitivity of the Economic Value to changes in interest rates: it includes the calculation of duration measures, sensitivity of the economic value of the balance sheet items for the different points of the curve, as well as the impact on the economic value deriving from large changes in market rates, according to the scenarios of the Supervisory Outlier Test required by the EBA regulation (EBA/GL/2018/02).

The interest rate risk is monitored daily in terms of the sensitivity of the economic value, for an instantaneous and parallel shock of +1 basis point of the term structure of the interest rates. The function responsible for managing interest rate risk, checks on a daily basis the use of the limits for exposure to interest rate risk following a 1bp shock. The basis risk and the risk emerging from options are, respectively measured by the "IR Basis" and "IR Vega" metrics. On a monthly basis, the sensitivity of the Economic Value is monitored for more severe parallel and non-parallel shocks on the term structure of interest rates and that of the interest margin, as described in the previous paragraph.

- e) The assumptions and parameters of the behavioral models used for the internal measurement systems are the same used to generate the regulatory exposures published in EU IRRBB1 template.
- f) The mitigation of the interest rate risk and the hedging activities of the banking book are carried out through the use of regulated or Over the Counter (OTC) derivatives with an underlying interest rate. The optimization of the natural hedge of the assets with the bank's liabilities is managed by the Group Treasury function and the single legal entities. The interest rate risk is mainly transferred within the trading book of UniCredit Bank AG, which optimises the UniCredit group's hedging costs and outsources them to the market. Derivative contracts hedging the interest rate risk of the banking book not held for trading are recognised in the accounts as cash flow hedges or fair value hedges.
- g) The presence and effects of behavioral options in the balance sheet are taken into consideration through the development and application of behavioral models. The maturity profile as well as the average maturity of repricing of maturity deposits take into account the identification of the "stable" portion of the balances, or the amount of the deposit that could represent a stable source of financing despite the short contractual maturity, or the identification of the "core" part of the deposits, that is the amount of the deposits which is stable and difficult to revalue even in the presence of significant changes in the context of interest rates, determined through the statistical evaluation of the stability of the volume and elasticity of the customer rate (i.e. the beta parameter).
The maturity profile, as well as the average repricing maturity of mortgages and retail loans, both take into account the optionality of the advance payment, which is assessed through the statistical estimate of the CPR (conditional early repayment rate) on the loan portfolio.
- h) The scenarios used in the EU IRRBB1 template related to the change in economic value correspond to the scenarios of the Supervisory Outlier Test required by the EBA regulation (EBA/GL/2018/02). The scenarios used for the sensitivity of the interest margin reported in the EU IRRBB1 template were defined as follows:
- parallel up: parallel shock of + 100bps on all interest rate curves, for all currencies;
 - parallel down: parallel downward shock in interest rates of 100bps or lower depending on the level of interest rates in the individual currencies (CHF, EUR, BAM and BGN -25bps; JPY, HRK and HUF -50bps; RON -75bps).
- i) The average repricing maturity assigned to non-maturity deposits is 2.3 years.
- j) The longest repricing maturity assigned to non-maturity deposits is 20 years.

Market risk

The EU IRRBB1 template in the table below, contains the Interest rate risk exposure metrics on 31 December 2022 and 30 June 2022. For the descriptions of the scenarios refer to paragraph “h)” reported above.

Template EU IRRBB1 - Interest rate risks on positions not held in the trading book

(€ million)

SUPERVISORY SHOCK SCENARIOS		a	b	c	d
		CHANGES OF THE ECONOMIC VALUE OF EQUITY		CHANGES OF THE NET INTEREST INCOME	
		31.12.2022	30.06.2022	31.12.2022	30.06.2022
1	Parallel up	(5,141)	(4,756)	314	1,131
2	Parallel down	1,898	1,374	(129)	(203)
3	Steeper	577	214		
4	Flattener	(1,628)	(1,022)		
5	Short rates up	(2,874)	(2,257)		
6	Short rates down	1,137	699		

The changes in the sensitivity of the Economic Value in the second half of 2022, observable in the table EU IRRBB1 above, are driven by the execution of TLTRO hedges in third quarter 2022 and by the review of TLTRO rate, following ECB decision, in November 2022.

The following template reflects the impact on the interest margin of the “Parallel up” scenario as of 31 December 2022 and 30 June 2022, broken down by the main currencies.

Template Sensitivity of the net interest income to the Parallel Up scenario

		(€ million)	
SCENARIO PER CURRENCY		a	b
		CHANGES OF THE NET INTEREST INCOME	
		31.12.2022	30.06.2022
1	Total	314	1,131
2	Euro	205	1,078
3	Czech Koruna	1	4
4	Croatian Kuna	38	33
5	Hungarian Forint	14	12
6	Other currencies	57	4

The decrease in the sensitivity of the net interest income (“NII Sensitivity”) between 30 June 2022 and 31 December 2022, is also driven by the execution of TLTRO hedges and by the review of TLTRO rate.

As at 31 December 2022, the sensitivity of the economic value of shareholders’ equity to an instant parallel shift of interest rates of +200bps and -200bp, across all currencies, was respectively equal to -€5,069 million and +€1,925 million.

The following template reflects the impact on the economic value of the “+200bps” scenario as of 31 December 2022, broken down by the main currencies.

(€ million)

ECONOMIC VALUE BANKING BOOK INTEREST RATE RISK	
CURRENCY	+200 bps
Euro	(4,628)
Czech Koruna	(334)
Hungarian Forint	(43)
Croatian Kuna	9
United States Dollars	39
United Kingdom Pounds	(2)
Switzerland Francs	(32)
Japan Yen	3
Russian Ruble	(60)
Others	(22)
TOTAL	(5,069)

Market risk

The above measures consider modelled maturity assumptions for balance sheet items with an expected profile different from the contractual one, for example mortgages, or with no specific time bucketing, such as sight items.

(€ million)

BANKING BOOK INTEREST RATE RISK						
CURRENCY	+1BP LESS THAN 3 MONTH	+1BP 3 MONTHS TO 1 YEAR	+1BP 1 YEAR TO 3 YEARS	+1BP 3 YEARS TO 10 YEARS	+1BP OVER 10 YEARS	TOTAL
Euro	(0.7)	(3.8)	(2.9)	(7.6)	(2.2)	(17.2)
Czech Koruna	(0.0)	(0.1)	(0.4)	(0.8)	0.1	(1.2)
Hungarian Forint	0.0	(0.0)	(0.1)	(0.1)	(0.1)	(0.2)
Croatian Kuna	0.0	(0.0)	(0.1)	0.4	(0.0)	0.2
United States Dollars	(0.0)	(0.1)	(0.0)	0.2	0.3	0.4
United Kingdom Pounds	0.0	(0.0)	0.0	(0.0)	(0.0)	(0.0)
Switzerland Francs	(0.0)	(0.0)	0.0	(0.1)	(0.1)	(0.2)
Japan Yen	0.0	(0.0)	0.0	0.0	(0.0)	0.0
Russian Ruble	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)	(0.3)
Others	(0.0)	(0.0)	(0.2)	0.4	(0.0)	0.1
TOTAL	(0.8)	(4.1)	(3.7)	(7.7)	(2.0)	(18.4)

The template above lists the economic value sensitivity for a parallel shift of +1 basis point of interest-rate curves. This sensitivity is calculated at Group level for a series of time-buckets and currencies.

Group exposure insists mainly on Euro curves. The highest exposure, with negative sign, is concentrated in the bucket 3Y-10Y.

Securitisation exposures

The Group acts as originator and sponsor of securitisations as well as investor, according to the definitions provided by Basel 3 and implemented in the CRR, subsequently updated with CRR2.

The Group as originator

The Group's origination of traditional transactions consists of the sale of on-balance sheet receivables portfolios to vehicles set up as securitisation companies under Law 130/99 or similar non-Italian legislation.

The buyer finances the purchase of the receivables portfolios by issuing bonds of varying seniority and transfers its issue proceeds²⁴ to the Group. The yield and maturity of the bonds issued by the buyer therefore mainly depend on the cash flow expected from the assets being sold.

As a further form of guarantee to bondholders, these transactions may include special types of credit enhancement, as subordinated loans, financial guarantees, standby letters of credit, over-collateralization, etc.

The Group's objectives when carrying out these transactions are usually the following:

- to originate securities that can be used to secure refinancing transactions with Banca d'Italia and the ECB (counterbalancing capacity);
- to obtain funding through the placement of securities on the market. This also allows a diversification of the funding sources and of the investors' basis with improvement in reducing the cost of Group's funding;
- to free up economic and regulatory capital by carrying out transactions that reduce capital requirements under current rules by reducing credit risk of the underlying portfolio;
- to reduce the exposures toward non-performing customers;
- to optimise the recoveries of exposures portfolios towards non-performing customers, referring to specific asset classes (e.g. Pillarstone and Sandokan transactions);
- other purposes related for example to corporate re-organization, M&A or divestment's assets where the true sale securitisation is instrumental to the deleveraging and assets transfer.

The Group carries out both traditional securitisations, whereby the receivables portfolio is sold to the SPV, and synthetic securitisations which use financial guarantees to purchase protection over all or part of the underlying risk of the portfolio. The latter, on the contrary to traditional securitisations, is not sold to vehicles but remains also legally within the Group. In this case, moreover, the financial guarantees purchased as protection of such loans are also booked on the balance sheet as well as the impacts on the income statement related to them.

The amount of loans securitized²⁵, net of transactions in which the Group has purchased all liabilities issued by the vehicles (so-called self-securitisations), accounts for 2.45% of the Group's total loan portfolio as at 31 December 2022. Self-securitisations account for 4.69% of the loan portfolio.

For more information on both traditional and synthetic securitisations originated by Group's legal entities during the year 2022 refer to paragraph "C.1 Securitisation transactions - Developments of the period", of the Consolidated financial statement, Notes to the consolidated accounts, Part E - Information of risks and related hedging policies, Section 2 - Risks on the prudential consolidated perimeter, 2.1 Credit risk, Quantitative information.

A first Covered Bond (OBG - Obbligazioni Bancarie Garantite) Programme was launched in 2008 under the provisions of Italian Law 130/99. The underlying residential mortgage loans were transferred to an SPE set up for this purpose and included in the banking group.

Moreover, in order to create counterbalancing capacity, at the end of January 2012 UniCredit S.p.A. initiated a second Covered Bonds (OBG or Obbligazioni Bancarie Garantite) programme ("New OBG Programme"), without specific ratings and having residential mortgage loans and commercial mortgage loans as underlyings.

Under these programmes:

- UniCredit S.p.A. is issuer and also acts as transferor of suitable assets and servicer;
- UniCredit BpC Mortgage S.r.l. and UniCredit OBG S.r.l. (special purpose vehicles set up within the banking group as expressly authorised by Banca d'Italia) are guarantors of the OBG holders of the first and the second programme respectively, within the limits of the cover pools; and
- the auditing firm BDO Italia S.p.A. is Asset Monitor for both the programmes.

²⁴ The legislation also foresees other securitisation structures in which the proceeds deriving from the issue of a single class or classes of securities (or from other alternative forms of funding, such as through the taking of deposits), are used by the vehicle for the granting of a loan to the Originator of the assets; in any case, however, the repayment of the loan is guaranteed by the proceeds of the same assets, which are returned to the vehicle.

²⁵ It is referred to loans sold, also synthetically, but not derecognised from the balance sheet.

Securitisation exposures

The first programme, guaranteed by UniCredit BpC Mortgage S.r.l., is characterised by a Soft Bullet method²⁶ of reimbursement and is rated by Fitch (AA), S&P (AA-), Moody's (Aa3).

The second programme, guaranteed by UniCredit OBG S.r.l., previously characterised by a Conditional Pass-Through method²⁷ of reimbursement, subsequently to contractual amendments finalized in May 2022, is currently characterised by a Soft Bullet method of repayment and is rated by Moody's (Aa3).

At 31 December 2022 the series of covered bonds issued under the two programmes totalled 24 and were worth €20,856 million, of which €16,200 million was repurchased by UniCredit S.p.A.

At 31 December 2022 similar covered bonds under German, Austrian (Pfandbriefe), Czech and Hungarian law amounted to €29,234 million, of which €26,388 million were backed by mortgage loans and €2,846 million by loans to the public sector.

Accounting Policies - Derecognition

According to IFRS9, the derecognition is the removal of a previously recognised financial asset from an entity's balance sheet.

An entity shall derecognise a financial asset when the contractual rights to the cash flows from the financial asset expire or it transfers the contractual rights to receive the cash flows of the financial asset to a non-Group counterparty.

Rights to cash flow are considered to be transferred even if contractual rights to receive the asset's cash flow are retained but there is an obligation to pay this cash flow to one or more entities and all the following conditions are fulfilled (pass-through agreement):

- there is no obligation on the Group to pay amounts not received from the original asset;
- sale or pledge of the original asset is not allowed, unless it secures the obligation to pay cash flow;
- the Group is obliged to transfer forthwith all cash flows received and may not invest them, except for liquidity invested for the short period between the date of receipt and that of payment, provided that the interest accrued in that period is paid on.

Derecognition is also subject to verification of effective transfer (true sale) of all the risks and rewards of ownership of the financial asset. If the entity transfers substantially all the risks and rewards of ownership of the financial asset, the entity shall derecognise the asset (or group of assets) and recognize separately as assets or liabilities any rights and obligations created or retained in the transfer.

Conversely, if the entity substantially retains all the risks and rewards of ownership of the asset (or group of assets), the entity shall continue to recognize the transferred asset(s). In this case it is necessary to recognize a liability corresponding to the amount received under the transfer and subsequently recognize all income accruing on the asset or expense accruing on the liability.

Under traditional securitisations, the Group assesses the derecognition of the portfolio in light of the risks and rewards retained and control on the underlying loan portfolio.

In particular, the originator performs the derecognition when:

- the originator had transferred basically all the risks and rewards; or
- the originator has not transferred neither retained substantially all the risks and rewards but transferred the control.

In the assessment of risks and benefits retained, all the exposures in form of securities, guarantees and receivables which the originator owns toward the SPV, are considered applying, if the case, specific models which assess its exposure to the variability of the cash flows before and after the transfer.

On the contrary, if such conditions are not met, the underlying credit portfolio is not derecognised and a financial liability is recognised for an amount equal to the risk kept.

Furtherly, under traditional securitisations the Group might keep the first loss in the form of junior bonds or similar exposure and in some cases provides further credit enhancement as described above. This enables the Group to benefit from the portion of the sold receivables' yield in excess of the yield due to the senior and mezzanine tranches.

For such transactions, retention by the Group of the first loss risk and the corresponding yield means that most of the risk and return on the portfolio is retained. Such transactions are recognised in the accounts as financings and no profits arising out of the transfer of the assets are recognised and the sold receivables are not derecognised.

Synthetic securitisations also entail retention of the receivables subject to credit default protection on the balance sheet. The swap is recognised in the accounts, as well as any other purchased interest.

²⁶ Soft Bullet repayment method: in case the issuer is insolvent and the OBG guarantor has insufficient funds to repay in full the OBG at the maturity date, the maturity date is automatically extended by 1 year and any unpaid and due amount shall be payable by such date. In case the OBG guarantor is not able to redeem the OBG at the extended maturity all the outstanding OBG become due and payable and the guarantor has to sale the whole underlying portfolio.

²⁷ Conditional pass-through repayment method: in case the issuer is insolvent and the OBG guarantor has insufficient funds to repay in full the OBG at the maturity date, the OBG turns in to "pass-through" and the maturity date is extended by 38 years. During the extended period the OBG guarantor has the option to attempt a selected sale of the underlying portfolio every 6 months in order to redeem the pass-through OBG.

Securitisation exposures

In this context, credit derivatives, under which the issuer must make agreed payments to indemnify the insured for an actual loss suffered as a result of a debtor's failure to pay a debt instrument at maturity, are classified as purchased financial guarantees.

As a consequence, the credit risk mitigation effects, associated with the purchase of protection, are taken into account when assessing the underlying receivables. Any premiums paid for the purchase of protection are classified as other assets and amortized in the income statement over the life of the contract.

Credit enhancement, in addition to the most subordinated tranches of each securitisation, can also consist in subordinated loans or deferred purchase prices (DPP).

The value of these instruments, in the case of traditional securitisations, is shown as a reduction in the value of liabilities associated with assets sold but not derecognised, while in the case of synthetic securitisations, credit enhancements are recognised as financial assets and valued according to their portfolio.

For the tables showing the features both of traditional (including self-securitisations) and synthetic securitisations originated by entities belonging to the Group and effective as at 31 December 2022 refer to - Annex 3 - Securitisations - qualitative tables of the Consolidated financial statements as at 31 December 2022.

The Group as sponsor

UniCredit group has many years of experience in securitizing its assets, as well as in structuring securitisations for its customers (banks, financial firms, and businesses). In this context and with reference to trade receivables the Group acts as a sponsor of asset-backed commercial paper (ABCP) conduits.

UniCredit group has long been active in the market for the refinancing of its Clients' trade receivables, on both a recourse and a non-recourse basis, and has also acted for its Clients in structuring securitisations under the Italian securitisation legislation contained in Law 130/1999. The securitisation of trade receivables represents an important alternative way for businesses to obtain funding from the banking system. It often serves a complementary role to more traditional bank lending and is often more than competitive.

The Group set up as multi-seller customer conduits set-up for the sole purpose of financing selected core-clients of UniCredit giving them the access to the securitisation market at lower cost.

The legal and financial scheme that UniCredit group has used for securitisations of trade receivables under Law 130/1999 adheres to the standard structure under the legislation and has the following principal features: (i) stand-alone securitisation for a single client: each client has a separate securitisation conducted on a stand-alone basis, with its own specific structure and contractual documentation; (ii) receivables are assigned directly to the SPV: the client agrees to assign, on an ongoing and non-recourse basis, the receivables that satisfy particular eligibility criteria, to a second level special-purpose securitisation vehicle that has been incorporated pursuant to Law 130/1999 (each Purchase Company, "PC") and which typically is available only for the particular transaction; (iii) issuance of the notes: In order to obtain the funds necessary to pay the purchase price for such receivables, the second level SPV issues a series of notes pursuant to Law 130/1999, divided into two or more tranches, with different degrees of subordination (senior and junior notes, where there are two tranches, or senior, junior and mezzanine notes, where there are more tranches); (iv) subscription of the notes: senior notes are subscribed within the conduit programme sponsored by UniCredit Bank AG known as "Arabella" through the issuance of Commercial Papers Notes while junior notes (and the mezzanine notes, where issued) are subscribed by specialist professional investors and/or by the client.

Payment of interest and redemption of the securities issued by the conduit therefore depends on cash flow from the receivables purchased (credit risk) and the ability of the conduit to roll over or replace its market funding on maturity (liquidity risk).

Due to the activity performed, including also the direct purchase of part of the outstanding commercial papers, the Group bears most of the risk and receives most of the return on conduit business and also has control of the conduits. Consequently, as required by IFRS10, the Group have consolidated the above-mentioned SPVs.

Adopting the line-by-line consolidation method, the following items are recognised in the consolidated accounts:

- assets held by consolidated vehicles in place of the loans provided to them or the liabilities subscribed by Group companies, now eliminated on consolidation;
- loans to purchase companies for non-consolidated subordinated vehicles.

With respect to non-consolidated Purchase companies, the Consolidated financial statements, while not including the assets recorded in their books, show the maximum amount of the risk borne by the Group which, with respect to purchase companies wholly financed by the consolidated conduits, corresponds to the value of the assets of these purchase companies.

At regulatory point of view the risk is measured on liquidity facility provided to each purchase companies within the ABCP Conduit Programme.

Securitisation exposures

Conduit Program

At December 2022 the Conduit Program comprises one Customer Conduit: Arabella Finance.

The Conduit program business aims to finance the clients through the purchase of their portfolio by second level vehicles (Purchase Companies) financing them by the issuance of ABCP. Following the restructuring of Conduit Program took place on 2012, UniCredit Bank AG grants full support facilities directly to each Purchase Company. Each Liquidity facility has to be available to cover in full the payment of the principal amount and the interests on the ABCP: the amount of this liquidity support has to be at least 102% of the underlying asset purchase commitment, covering both liquidity and credit risk. Arabella has no exposure to mark-to-market risk as investments in arbitrage products and ABS Security are not permitted.

Under a regulatory perspective, Risk Weighted Exposure Amounts quantification for Arabella is realized through the application of the Internal Assessment Approach (IAA) or of the SEC-CA, according to the regulation in force for exposures related to ABCP Conduit Programs (CRR)²⁸ updated by Regulation (EU) of the European Parliament and of the Council 2401/2017 on prudential requirements for credit institutions and investment firms entered.

Arabella Finance

Arabella is a multi-seller customer conduit with two separate legal entities: Arabella Finance DAC Dublin in Europe and Arabella Finance Delaware LLC in the USA.

The underlying portfolio of Arabella is constituted mainly by Trade receivables (66%), Car Leases (21%), Car residual values (9%) and Equipment Lease (3%).

The majority of assets are concentrated in Germany (40%), Italy (29%) and Switzerland (10%).

As at 31 December 2022 the total portfolio is composed by 39 Pools (37 as at December 2021) and total amount is €5.0 billion. The total Committed liquidity activities amount is €6.0 billion.

The ABCP issued as at 31 December 2022 amount to €4.7 billion (from €4.8 billion as at 31 December 2021), of which €3.1 billion were purchased by UniCredit Bank AG and the remaining placed on the market.

The Group as investor

The Group also invests in structured credit products issued by special-purpose entities that are not consolidated pursuant to the accounting rules in force, insofar as such instruments do not bear most of the risk or receive most of the returns associated with the activity carried out by these special-purpose entities.

With regard to these activities, the Group holds within the Global ABS portfolio exposures of securitisations (both Simple, Transparent, Standardised - STS and non-STS) established by third-parties such as RMBS, CMBS, CDO, CBO/CLO and other ABS.

In line with the development of the financial markets and, specifically, the securitisation market, the Global ABS Portfolio was transformed from a separate portfolio in liquidation to strategic investment portfolio for the Group in 2011 and was integrated into the Markets Strategic Portfolio ("MSP"), managed with a view to generating a profit margin and creating an appreciable capital return through long-term investments in fixed-income securities.

The development of client-related operations is also an integral part of MSP activities and includes actions to strengthen the customer base and support securitisations. This portfolio is subject to monitoring and reporting by the business and risk management functions. All activities relating to the MSP are carried out in conformity with established policies and procedures, specifically credit approval procedures.

The analysis of investments in ABS focuses specifically on the following elements:

- structural analysis of all internal and external risks inherent to a similar investment, e.g. Default Risk, Dilution Risk, Residual Value Risk, Servicer Risk, Interest Rate Risk, Liquidity Risk, Commingling Risk, Legal Risk, Adequacy of performance triggers, etc. These risks may differ according to the underlying assets class;
- analysis of the underlying portfolio, including the analysis of all performance indicators significant for each underlying asset class;
- cash flows/quantitative analysis/modelling;
- credit rating and experience of the participants e.g. vendor/servicer - financial soundness, capacity and availability to service assets.

²⁸ UniCredit Bank AG has continuously retained a material net economic interest in the CP Program of at least 5% pursuant to the new regulation on securitisations Regulation (EU) 2017/2402.

Securitisation exposures

Any interests acquired are financial assets classified in one of the portfolios provided for by the applicable international accounting standard, depending on the nature of the contract and the purpose for which they are acquired. These assets are therefore evaluated according to the portfolio in which they are classified, on the basis of the performance of the underlying portfolio and taking account of their tranching. These exposures are therefore measured at amortised cost less cumulated impairment in case they are classified in the portfolio “financial assets at amortised cost”, at fair value recognizing the differences in fair value through profit or loss in case these exposures are classified as “financial assets held for trading”, “financial assets designated at fair value” or “financial assets mandatorily at fair value”, at fair value recognizing the differences in fair value through other comprehensive income in case these exposures are classified as “financial assets at fair value through other comprehensive income”.

Moreover, it should be noted that as at 31 December 2022 there were 4 SPVs of third parties securitisations, Ice Creek Pool No.1 DAC, Ice Creek Pool No.3 DAC, Ice Creek Pool No.5 DAC and PaDel Finance 01 DAC where the Group acts as lender or investor, and subject to consolidation. Exposures to these vehicles amount to €1,202 million of cash exposures and €42 million of credit lines.

At the end of December 2022, the Group has not provided financial support to any non-consolidated securitisation vehicle in absence of contractual obligation to do so. Moreover, the Group has not the current intention to provide such support.

The Group does not provide securitisation-related services (such as advisory, asset servicing or management services) to securitisation special purpose entities other than those which acquire exposures originated and those which are sponsored or consolidated by the Group.

Finally, it should be noted that there are no exposures in Asset Backed Securities as at 31 December 2022 related to re-securitisation exposures, i.e. transactions in which at least one of the underlying assets is in turn a securitisation position.

Securitisation exposures

The following tables show the information required by CRR2 article 449 (d), (e) and (f).

Securitisation Special Purpose Entities (SSPE) which acquire exposures originated by the institution

NAME OF THE ENTITY	TYPES OF EXPOSURES	INCLUDED IN THE INSTITUTION' REGULATORY SCOPE OF CONSOLIDATION	LEGAL ENTITY AFFILIATED WITH THE INSTITUTION THAT PROVIDES SUPPORT (*)
Capital Mortgage S.r.l. - CAP. MORTGAGE 2007 - 1	Debt securities Loans Derivative contracts	Yes	-
Cordusio RMBS Securitisation S.r.l.	Debt securities Loans Derivative contracts	Yes	-
F-E Mortgages S.r.l. - 2005	Debt securities Loans	Yes	-
SUCCESS 2015 B.V.	Debt securities Loans	Yes	-
ALTEA SPV S.r.l.	Debt securities	No	-
ARTS Consumer S.r.l.	Debt securities Loans	No	-
ARTS LARGE CORPORATE S.r.l.	Debt securities	No	-
FINO 1 SECURITISATION S.r.l.	Debt securities Loans	No	-
FINO 2 SECURITISATION S.r.l.	Debt securities Loans	No	-
ITACA SPV S.r.l.	Debt securities Loans	No	-
OLYMPIA SPV S.r.l.	Debt securities Loans	No	-
ONIF FINANCE S.r.l.	Debt securities	No	-
Pillarstone Italy SPV S.r.l. - Premuda	Debt securities Loans	No	-
Pillarstone Italy SPV S.r.l. - Rainbow	Debt securities	No	-
PRISMA SPV S.r.l.	Debt securities Loans	No	-
RELAIS SPV S.r.l.	Debt securities Loans	No	-
YANEZ SPV S.r.l. - Sandokan	Debt securities Loans	No	-
YANEZ SPV S.r.l. - Sandokan 2	Debt securities Loans	No	-

Note:

(*) For the notion of support refer to CRR article 248.

It should be noted that the exposure type "Loans" includes the excess spread accrued but not yet settled by the Special Purpose Entity, if any.

Securitisation exposures

Securitisation Special Purpose Entities (SSPE) sponsored by the institution

NAME OF THE ENTITY	TYPES OF EXPOSURES	INCLUDED IN THE INSTITUTION' REGULATORY SCOPE OF CONSOLIDATION	LEGAL ENTITY AFFILIATED WITH THE INSTITUTION THAT PROVIDES SUPPORT (*)
Arabella Finance DAC	Debt securities (ABCP) Loans Derivative contracts Credit line	Yes	-
Elektra Purchase No. 28 DAC	Credit line	Yes	-
Elektra Purchase No. 31 DAC	Credit line	Yes	-
Elektra Purchase No. 32 S.A. - Compartment 1	Credit line	Yes	-
Elektra Purchase No. 33 DAC	Credit line	Yes	-
Elektra Purchase No. 36 DAC	Credit line	Yes	-
Elektra Purchase No. 37 DAC	Credit line	Yes	-
Elektra Purchase No. 38 DAC	Credit line	Yes	-
Elektra Purchase No. 43 DAC	Credit line	Yes	-
Elektra Purchase No. 46 DAC	Credit line	Yes	-
Elektra Purchase No. 54 DAC	Credit line	Yes	-
Elektra Purchase No. 56 DAC	Loans Credit line	Yes	-
Elektra Purchase No. 57 DAC	Loans Credit line	Yes	-
Elektra Purchase No. 64 DAC	Credit line	Yes	-
Elektra Purchase No. 69 DAC	Credit line	Yes	-
Elektra Purchase No. 71 DAC	Credit line	Yes	-
Elektra Purchase No. 74 DAC	Credit line	Yes	-
Elektra Purchase No. 350 DAC	Credit line	Yes	-
Elektra Purchase No. 911 DAC	Credit line	Yes	-
Elektra Purchase No. 8 DAC	Credit line	No	-
Elektra Purchase 17 S.A. RE COMPARTMENT 14	Credit line	No	-
Elektra Purchase No. 17 S.A. (Re Compartment 18)	Credit line	No	-
Elektra Purchase No. 25 DAC	Credit line	No	-
Elektra Purchase No. 29 DAC	Credit line	No	-
Elektra Purchase No. 41 DAC	Credit line	No	-
Elektra Purchase No. 45 DAC	Credit line	No	-
Elektra Purchase No. 60 DAC	Credit line	No	-
Elektra Purchase No. 61 DAC	Credit line	No	-
Elektra Purchase No. 62 DAC	Credit line	No	-
Elektra Purchase No. 65 DAC	Credit line	No	-
Elektra Purchase No. 66 DAC	Credit line	No	-
Elektra Purchase No. 68 DAC	Credit line	No	-
Elektra Purchase No. 70 DAC	Credit line	No	-
Elektra Purchase No. 72 DAC	Credit line	No	-
Elektra Purchase No. 73 DAC	Credit line	No	-
Elektra Purchase No. 75 DAC	Credit line	No	-
Elektra Purchase No. 76 DAC	Credit line	No	-
Elektra Purchase No. 77 DAC	Credit line	No	-

Note:

(*) For the notion of support refer to CRR article 248.

Securitisation exposures

Legal entities affiliated with the institution and that invest in securitisations originated by the institution or in securitisation positions issued by SSPEs sponsored by the institution

NAME OF THE ENTITY	SECURITISATIONS ORIGINATED BY THE INSTITUTION IN WHICH THE ENTITY INVESTS	SECURITISATIONS SPONSORED BY THE INSTITUTION IN WHICH THE ENTITY INVESTS
UniCredit Bank AG	Capital Mortgage S.r.l. - CAP. MORTGAGE 2007 - 1	Arabella Finance DAC
	Cordusio RMBS Securitisation S.r.l.	Elektra Purchase No. 28 DAC
	F-E Mortgages S.r.l. - 2005	Elektra Purchase No. 31 DAC
	ITACA SPV S.r.l.	Elektra Purchase No. 32 S.A. - Compartment 1
	OLYMPIA SPV S.r.l.	Elektra Purchase No. 33 DAC
	PRISMA SPV S.r.l.	Elektra Purchase No. 36 DAC
	RELAIS SPV S.r.l.	Elektra Purchase No. 37 DAC
		Elektra Purchase No. 38 DAC
		Elektra Purchase No. 43 DAC
		Elektra Purchase No. 46 DAC
		Elektra Purchase No. 54 DAC
		Elektra Purchase No. 56 DAC
		Elektra Purchase No. 57 DAC
		Elektra Purchase No. 64 DAC
		Elektra Purchase No. 69 DAC
		Elektra Purchase No. 71 DAC
		Elektra Purchase No. 74 DAC
		Elektra Purchase No. 350 DAC
		Elektra Purchase No. 911 DAC
		Elektra Purchase No. 8 DAC
		Elektra Purchase 17 S.A. RE COMPARTMENT 14
		Elektra Purchase No. 17 S.A. (Re Compartment 18)
		Elektra Purchase No. 25 DAC
		Elektra Purchase No. 29 DAC
		Elektra Purchase No. 41 DAC
		Elektra Purchase No. 45 DAC
		Elektra Purchase No. 60 DAC
		Elektra Purchase No. 61 DAC
		Elektra Purchase No. 62 DAC
		Elektra Purchase No. 65 DAC
		Elektra Purchase No. 66 DAC
		Elektra Purchase No. 68 DAC
		Elektra Purchase No. 70 DAC
		Elektra Purchase No. 72 DAC
		Elektra Purchase No. 73 DAC
		Elektra Purchase No. 75 DAC
		Elektra Purchase No. 76 DAC
		Elektra Purchase No. 77 DAC

Securitisation exposures

The methods of calculation of the risk weighted exposures amounts used by the bank for securitisations

According to the definition provided by CRR Regulation (and the subsequent amendments) the securitisation is “a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranching, having all of the following characteristics: a) payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; b) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme; c) the transaction or scheme does not create exposures which possess all of the characteristics listed in article 147(8) of CRR” Regulation (UE) 575/2013.

Securitisation is an important element of well-functioning financial markets. A structured securitisation is an important channel for diversifying funding sources and bank's risk, generating regulatory capital that can be allocated to further lending to the economy.

In recent years, the securitisation market has been heavily impacted by the numerous regulations that led the banks to review all the framework for the application of healthy, prudent, and transparent rules. These rules were included in the Regulation (EU) 2017/2401 and Regulation (EU) 2017/2402 of 12 December 2017 that amend CRR Regulation.

The new securitisation framework in force since 1 January 2019 defines the criteria to identify simple, transparent, and standardised (“STS”) securitisations and a system of supervision to monitor the correct application of those criteria by originators, sponsors, issuers and institutional investors. Furthermore, that regulation provides for the methods of capital requirements calculation, a set of common requirements on risk retention, due diligence, and disclosure for all financial services sectors.

In the current economic context, with the aim to mitigate the Coronavirus pandemic effects, the European Commission has adopted various actions in order to contribute to economic recovery in Europe through the securitizations. Among the several measures proposed many actions have been taken with regard to the Non Performing (NPL) and Unlikely-to-Pay (UTP) securitizations for which a dedicated prudential treatment of Senior Note has been set out.

In this overall framework the Guarantee on Securitisation of Non-Performing Loans (GACS) provided by Ministero delle Economia e Finanze (MEF) plays a key role in facing the huge number of Non Performing exposures in the balance sheet of the banks and in facilitating their disposal.

GACS guarantees only the senior tranches of securitisations, namely, the more secure tranches that support the least likely losses from less-than-expected credit recovery.

In addition, and with reference to the qualifying traditional NPE securitization (NPE) where the portfolio non-refundable purchase price discount is at least 50% of the total outstanding portfolio amount, the European Parliament has changed the regulation assigning a fixed risk weight for the senior tranches equal to 100% aiming to sustain the real economy in response to the Covid-19 crisis.

Securitisations affect banks' balance sheets, whether they are sellers of assets or risks, or acquire the securities issued by a third-party vehicle. In particular, the originator may, subject to certain conditions listed in the regulations, exclude securitized assets from capital requirements and, if IRB methods are available, the expected losses as well.

The regulatory capital requirement methodology has been subject to amendments in accordance with the new Regulation (EU) 2017/2401 and further updates, that has introduced a new hierarchy of regulatory approaches to be adopted: SEC-IRBA, SEC-SA, SEC-ERBA and 1250%. The CRR allows the possibility to change the order of approaches application. As of now UniCredit group has notified to the competent authority to use the SEC-ERBA instead of SEC-SA for all rated securitisation positions. For the calculation of regulatory capital requirements where UniCredit is able to use an internal method approach based (“IRB”) the SEC-IRBA is applied otherwise for the securitisation position that have an external rating the approach to be used is SEC-ERBA. When the first two approaches are not available, UniCredit calculates its capital requirement adopting the standardized Approach SEC-SA.

SEC-IRBA and SEC-SA require the adoption of an ad hoc formula while for the SEC-ERBA the capital requirements is assigned to securitisation tranches based on their external rating provided by ECAI (External Credit Assessment Institution). The tables to be used are different for STS and non-STS securitisation.

The following risk weights are those applied to non-STS securitisation according to the SEC-ERBA.

Securitisation exposures

Template 1 - Securitisation positions

CREDIT QUALITY STEP	SENIOR TRANCHE		NON SENIOR (THIN) TRANCHE	
	TRANCHE MATURITY (M _T)		TRANCHE MATURITY (M _T)	
	1 year	5 years	1 year	5 years
1	15%	20%	15%	70%
2	15%	30%	15%	90%
3	25%	40%	30%	120%
4	30%	45%	40%	140%
5	40%	50%	60%	160%
6	50%	65%	80%	180%
7	60%	70%	120%	210%
8	75%	90%	170%	260%
9	90%	105%	220%	310%
10	120%	140%	330%	420%
11	140%	160%	470%	580%
12	160%	180%	620%	760%
13	200%	225%	750%	860%
14	250%	280%	900%	950%
15	310%	340%	1050%	1050%
16	380%	420%	1130%	1130%
17	460%	505%	1250%	1250%
All other	1250%	1250%	1250%	1250%

The following risk weights are those applied to STS securitisation according to the SEC-ERBA.

Template 2 - Securitisation positions

CREDIT QUALITY STEP	SENIOR TRANCHE		NON SENIOR (THIN) TRANCHE	
	TRANCHE MATURITY (M _T)		TRANCHE MATURITY (M _T)	
	1 year	5 years	1 year	5 years
1	10%	10%	15%	40%
2	10%	15%	15%	55%
3	15%	20%	10%	70%
4	15%	25%	25%	80%
5	20%	30%	35%	95%
6	30%	40%	60%	135%
7	35%	70%	95%	170%
8	45%	90%	150%	225%
9	55%	105%	180%	255%
10	70%	140%	270%	345%
11	120%	160%	405%	500%
12	135%	180%	535%	655%
13	170%	225%	645%	740%
14	225%	280%	810%	855%
15	280%	340%	945%	945%
16	340%	420%	1015%	1015%
17	415%	505%	1250%	1250%
All other	1250%	1250%	1250%	1250%

Securitisation exposures

Internal Assessment Approach (“IAA”)

UniCredit calculates a risk weight based on the internal assessment approach (“IAA”) for unrated securitisation positions which are related to Asset-Backed Commercial Papers (ABCP) programs.

The model output according to this approach are used for various purposes such as regulatory risk calculation, expected loss and economic capital calculation, credit decisions as well as in the monitoring process.

The model IAA was developed by replicating the approach of the external rating agencies and assigns a rating to the credit liquidity lines and derivatives provided by UniCredit Bank AG in order to support the issuing of ABCP by the conduit.

In line with regulatory requirements, the model is differentiated according to the type of the exposure underlying the securitisation operation.

Currently the following IAA models are in place:

- Trade Receivables used for trade, consumer and healthcare receivables;
- Loans and Leases used for auto loans/leases, unsecured consumer and small business loans, and equipment leases;
- “Blended liquidity facilities rating” used to evaluate the risk of the programme-wide exposures.

The asset-specific sub-models consist of a quantitative module which aims to quantify the potential loss to the transaction (virtual tranching) and a qualitative module which determines an up notch/down notch factor due to additional, not-quantifiable aspects. Given the qualitative factor the virtual tranching is adjusted upwards or downwards, respectively.

For the quantitative module the following principal methodologies are used according to the type of underlying exposure:

- “Reserve based” approach: typically used for assets with a short maturity like trade/consumer receivables. For this type of transactions, a point in time valuation is carried out in order to determine the expected loss of the underlying assets;
- “Cashflow-based” approach: typically used for medium-term asset portfolios of loans and leases. The evaluation of the assets is based on modelling of the expected cash flows to determine the loss at the end of the transaction’s life.

The qualitative module was developed mainly on the basis of the expert opinion.

The “Blended liquidity facilities rating” tool derives the rating of the programme-wide facilities from the exposure-weighted average rating of the underlying transactions.

As the liquidity facilities are provided on the transaction level, the credit risk of the programme-wide facilities is fully reflected in the transaction-specific ratings, i.e. the credit risk of the programme-wide facilities cannot be larger than the one of the underlying transactions.

The model rating assignment process foresees three main actors: business unit, risk unit (responsible credit analyst - “RCA” and deputy credit analyst - “DCA”) and model development unit.

The rating assignment process can be summarized in the following macro steps:

- the business together with the RCA ensures that the IAA eligibility requirements are fulfilled;
- the RCA in coordination with the business unit selects the proper IAA model on the basis of the applicability criteria described in the working guideline;
- in case of new transactions the model applicability has to be confirmed by the model development unit, unless the new transaction is in any aspect identical to other existing transaction which is currently rated with the same IAA rating model;
- RCA fills the model input (supported by the working guidelines) and proposes the rating for the approval (no override is allowed). The rating is shared with business; in case the business unit raises objections to the rating result, the rating decision is escalated in line with the policies and guidelines applicable in force;
- DCA checks the model inputs for completeness and correctness. If the rating was carried out properly, the DCA approves the rating (no override is allowed). In case the rating was not carried out properly, a new rating for approval is requested. The four eyes principle is ensured since it is technically checked that the RCA and DCA are two different persons;
- business unit agrees on the final rating and enters the results to the risk engine. RCA verifies the correctness of the data entry;
- the approved rating has to be attached to the credit request.

Second level controls performed by local validation function of UniCredit Bank AG, in co-ordination with Group Internal Validation, are made by two main areas of assessment:

- Model validation (model design and performance);
- Process validation (usage, technical implementation, reporting & model evolution).

Securitisation exposures

The models are reviewed on a regular basis in line with the Group Internal Validation Policy. Full ongoing validation of the model in 2018 and processes in 2022 confirmed that, in general, both methodological background and processes are suitable.

Follow-up annual validation activities focusing mainly on selected model validation topics confirmed that all addressed deficiencies regarding the model were adequately remediated and resulted in an adequate assessment. Remediation of some process deficiencies addressed in 2022 is still ongoing.

Here below the recent overall portfolio amount covers by IAA model ratings, compared with the last period available.

(€ million)			
EXPOSURE TYPE	EXPOSURE AS AT 31.12.2022	EXPOSURE AS AT 31.12.2021	EXPOSURE AS AT 31.12.2020
Letter of credit	-	-	-
Liquidity facility	5,986	5,865	5,087
Currency & Interest rate Swap (*)	11	42	45
TOTAL	5,997	5,907	5,132

Note:

(*) The exposure was calculated as the current market value plus add-on.

The IAA model falls under the Regulation (EU) 2017/2401 and it is compliant with Art. 265 CRR. The underlying methodology replicates the asset-specific rating criteria of ECAs; the stressed factors taken into account by each model are reported below:

- Trade Receivables (Model Type - Reserve requirement test):

- Credit Loss reserve;
- Dilution reserve;
- Concentration loss reserve;
- Carrying cost reserve;
- Commingling reserve;
- Fx reserve;

- Loans and Leases (Model Type - Cash flow model):

- Default rate;
- Recovery rate;
- Residual value;
- Prepayments;
- Commingling of cash;
- Servicer fee;
- Interest rate.

The above-mentioned factors are stressed in a quantitative rating for each tranche, a rating adjustment is determined by a qualitative module.

Calculation of regulatory requirement: SEC-IRBA, SEC-ERBA and SEC-SA approaches

For securitisation transactions originated by the Group (excluding self-securitisation), the Group performs on a quarterly basis the calculation of the risk weighted amount of the exposure towards securitisations transactions, according to the CRR.

If the Bank has the permission to apply the Internal Ratings Based Approach ("IRB") on the underlying of the securitisation and it is able to calculate the regulatory capital requirements as if this had not been securitised ("K irb"), SEC-IRBA approach is applied.

Where the Bank cannot use SEC-IRBA, if the securitisation is externally rated the approach to be applied is SEC-ERBA otherwise SEC-SA which relies on a formula that has as input the Standardised Approach parameters used for the credit risk calculation as the portfolio had not been securitised ("K SA").

As at 31 December 2022 No.48 transactions, of which No.37 synthetic securitisations and No.11 true sale securitisations, are recognised for risk transfer obtaining benefit in terms of regulatory capital.

The synthetic securitisations on performing portfolios are ACT Toscana, Agribond, Agribond 2, ARTS - Italian Mid Cap 2015-2, ARTS - Italian Mid Cap 2016-1, ARTS - Italian Mid Cap 2016-2, ARTS Large Corporate 2022, ARTS MidCap 2021, ARTS MidCap 2022, ARTS ReMo 2021, ARTS ReMo 2022, ARTS ReMo 2022-2, Bond Del Mezzogiorno, Bond Del Mezzogiorno 2, Bond Italia 1 Investimenti, Bond Italia 2 Investimenti, Bond Italia 3 Investimenti, Bond Italia 3 Misto, Bond Italia 4 Investimenti, Bond Italia 4 Misto, Bond Italia 5 BIS, Bond Italia 5 Investimenti, Bond Italia 5 Misto, Bond Italia 6 Investimenti, Bond Italia 6 Misto, Bond Italia 7, Bond Italia 8 Investimenti, Bond Italia 8 Misto, EaSI MicroCredito 2, EaSI MicroCredito19, F.I.L.S.E. Liguria, FinPiemonte, Puglia Sviluppo, Puglia Sviluppo 2021 all originated by UniCredit S.p.A.; EIF Jeremie and Silver originated by UniCredit Bulbank AD and Tucherpark originated by UniCredit Bank AG.

Securitisation exposures

The True sale transactions originated by UniCredit S.p.A. on performing portfolio are: Basket Bond Puglia, ARTS Large Corporate e ARTS Consumer 2022 while the transactions on non-performing portfolio are: FINO1 Securitisation S.r.l., FINO2 Securitisation S.r.l., ONIF Finance S.r.l., Prisma S.r.l., Olympia Spv S.r.l., ITACA SPV, ALTEA SPV and Relais SPV S.r.l. originated by UniCredit leasing S.p.A.

In particular with reference to the securitizations listed above, UniCredit during 2022 has structured No.3 securitisations which meet the requirements foreseen by UE 2017/2402 Art.242, point 10 and art 18 referred to simple, transparent and standardised securitisations (STS regulation). These refer to: ARTS Consumer 2022 (by UniCredit S.p.A.), Silver (by UniCredit Bulbank AD) and Tucherpark (by UniCredit AG). The last two transactions are included in the European Guarantee Fund ("EGF") Programme launched by European Investment Fund in March 2022 in order to support the economic recovery post Covid-19, granting to the member states enough liquidity to promote the medium/long term economic development of small and medium enterprises

In accordance with CRR and the amendments EU 2017/2401 and 2017/2402, the Group evaluates the Significant Risk Transfer ("SRT") through the Mezzanine/Junior test, commensurateness test and verifying the absence of the contractual conditions that could affect the recognition of the SRT. In order to verify the commensurateness test on performing transactions, the Group has adopted an internal method that compares two indicators to demonstrate that the own fund requirement reduction obtained through the securitisation is commensurate with the risk transferred to third parties. The transactions that do not meet the Significant Risk Transfer tests are excluded from the Securitisation Framework losing the regulatory capital requirements benefits.

In order to support the evidences arising from the comparison of regulatory requirements related to securitisation transactions, as stated above, Group Risk Management set up an ad hoc credit process to analyse, monitor and control the aforementioned transactions in order to confirm the compliance with the qualitative and quantitative requirements set by the CRR (and subsequent amendments), as well as the Public Guidance on the Recognition of Significant Credit Risk Transfer issued on 24 March 2016 by the European Central Bank.

In particular, the transactions are analysed in order to verify:

- the obligation of the originator (or sponsor) to retain a portion of risk in the securitisation transaction in order to ensure the absences of interests' misalignment between the originator and the final investor;
- the absence of potential connections between the originator and the final investor that could be considered as economic support;
- the eligibility of guarantee obtained by third parties;
- the absence of contractual clauses that could affect the SRT;
- that the internal risk measures support the obtained regulatory evidences.

Securitisation portfolio is subject to a quarterly monitoring process in order to check the portfolio performance and all the regulatory credit risk parameters that can affect the achieved Significant Risk Transfer, such as: the evolution of portfolio (amortisation), the prepayment, the substitution and/or the replenishment. The size of these factors has to be constantly monitored as they can interfere with the persistence of the SRT.

For this reason, on a quarterly basis, the Group performs appropriate controls on the portfolios and on its components during all the life cycle of the transactions.

The securitisation transactions originated by the Group have been included within the Group portfolios in order to calculate the internal risk measures (for credit risk, market risk, interest rate risk and liquidity risk).

Regarding the net positions obtained based on the compensation principle application and allocated in the regulatory trading portfolio, starting from December 2011, the risk weighted exposures amount is calculated applying the prudential rules used for the banking portfolio (standardised or rating based methods). The capital requirement applied is the same and it is equal to 8% of risk-weighted exposures.

As regards the abovementioned portfolio, the Group operates a continuous monitoring of both the fair value and the economic value of securitisation portfolio.

For this purpose, in relation with the structured products portfolios in which the Group invests an IPV (Independent Price Validation) process has been approved and implemented to all the legal entities belonging to UniCredit group on a monthly basis. This process was implemented with the coordination of Group Risk Management function.

The IPV process aims at defining a proper evaluation and classification of securities according to the Fair Value level hierarchy. The hierarchy is split into 3 classes based on the progressive levels of reliability of the observed market prices. The evaluation model takes into account also the mark-to-model hypothesis and proxy whereas the prices seem opaque.

With reference to the carrying value and fair value as at 31 December 2022 of the potential reclassified ABS, it shall be referred to Section A.3 - Information on transfers between portfolios of financial assets, Consolidated financial statements, Notes to the consolidated accounts, Part A - Accounting policies.

Securitisation exposures

Indication of the methods that the Group applies to securitisation activity for the management and mitigation of following risks

Liquidity risk

As regards the management of impacts generated by securitisation transactions that can affect the Group liquidity (hence the traditional securitisation and self-securitisations for which the Group acts as originator), UniCredit:

- monitors and includes the impacts of these positions on the basis of mapping rules defined by internal regulations;
- verifies the eligibility of senior positions granted by the European Central Bank included in the Counterbalancing Capacity, evaluating them based on the price provided by European Central Bank and their haircuts;
- monitors and estimates the effects on the Group liquidity caused by possible rating downgrade of the notes or of the Group (originator).

The Group can act as Swap counterparty, Account Bank and Servicer for its originated securitizations and for its OBG1 Program. For this aim the Group calculates the liquidity to be posted for the maintenance of these roles both in a base and in a stressed scenario. For the latter UniCredit simulates the rating downgrade of UniCredit group and/or of Italy in order to verify any additional liquidity.

As at 31 December 2022 no liquidity has been posted neither for OBG1 Program nor for ARTS Consumer 2022. In case of stress, the outflow amount depends on the rating agency.

For OBG1: UniCredit is required to pay the vehicle an amount of €109.4 million in case of Fitch 1 notch downgrade and €111.6 million in case of Moody's 2 notches downgrade.

For ARTS Consumer 2022: UniCredit is required to pay the vehicle an amount of €13.5 million in case of DBRS 1 notch downgrade and €33.2 million in case of Moody's 2 notches downgrade.

Interest Rate risk

As far as the management of interest rate risk of securitisation transactions originated by the Group is concerned, this is done through the structuring of interest rate swaps. The Group acts as IRS counterpart in order to mitigate the interest rate risk of the securitised portfolio. The Group holds, calculates and monitors this risk as if the portfolio had not been securitised.

Concerning the management of interest rate risk of the positions for which the Group is investor or sponsor, they are usually included in the reference portfolio and managed according to standard Group procedures.

Currency risk

This risk arises when the securitized exposures are denominated in a different currency with respect to the notes issued or the received guarantee.

The management of this risk is performed through Cross Currency Swaps (CCS) where one party pays variable or fixed amounts in a specified currency calculated on an established notional amount expressed in the same currency and a second party pays fixed or variable amounts calculated in another currency on the same notional amount converted. This instrument allows the hedging of long-term currency risks. Interest payments and notional amounts are exchanged to hedge against exchange rate fluctuations.

Credit risk

As far as the management of credit risk on securitisation is concerned, in addition to the qualitative and quantitative analyses for Pillar I requirements defined by the regulation in force (CRR), the Group includes the securitisation exposures in the calculation of Credit Risk Economic Capital, including the obtained results in the ICAAP contribution.

Among the credit risk mitigation actions, the Group acquires credit protection on credit portfolios through the structuring of synthetic securitisations. The guarantee received by third party can be financial (funded guarantee, a cash collateral) and/or not financial (personal guarantee). The difference between them is the deposit of cash collateral by the guarantor. In case of unfunded guarantee, the obligor undertakes the obligation to pay an amount (contractually defined) in the event of default on the portfolio without any cash deposit as collateral. In case of funded guarantee, the obligation to pay is generally collateralized by a liquidity deposit. The Group acts as protection buyer in a Credit Default Swap in order to manage the default event.

Securitisation exposures

Template EU SEC2 - Securitisation exposures in the trading book

With reference to the template SEC2 "Securitisation exposure in the trading book", Group doesn't have securitisation positions in the trading book as at 31 December 2022.

Template EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor

(€ million)											
DESCRIPTION		a	b	c	d	e	f	g	h	i	
		EXPOSURE VALUES (BY RW BANDS/DEDUCTIONS)					EXPOSURE VALUES (BY REGULATORY APPROACH)				
		≤20% RW	>20% TO 50% RW	>50% TO 100% RW	>100% TO <1250% RW	1250% RW/ DEDUCTIONS	SEC-IRBA	SEC-ERBA (INCLUDING IAA)	SEC-SA	1250% RW/ DEDUCTIONS	
1	Total exposures as at 31.12.2022	15,763	2,719	111	640	86	12,651	6,078	505	86	
2	Retail (total)	4,905	2,204	-	598	23	1,124	6,078	505	23	
3	Securitisation	4,905	2,204	-	598	23	1,124	6,078	505	23	
4	Retail	10	84	-	598	19	103	84	505	19	
5	Of which STS	10	-	-	-	18	10	-	-	18	
6	Wholesale	4,896	2,120	-	-	4	1,022	5,994	-	4	
7	Of which STS	3,398	886	-	-	2	-	4,284	-	2	
8	Re-securitisation	-	-	-	-	-	-	-	-	-	
9	Wholesale (total)	10,858	515	111	42	63	11,526	-	-	63	
10	Securitisation	10,858	515	111	42	63	11,526	-	-	63	
11	Retail	5,564	515	111	42	63	6,232	-	-	63	
12	Wholesale	5,294	-	-	-	-	5,294	-	-	-	
13	Re-securitisation	-	-	-	-	-	-	-	-	-	
	Total exposures as at 30.06.2022	10.517	3.716	222	824	40	8.710	6.009	561	40	

Securitisation exposures

continued: Template EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor

(€ million)

DESCRIPTION	j	k	l	m	n	o	p	q
	RWEA (BY REGULATORY APPROACH)				CAPITAL CHARGE AFTER CAP			
	SEC-IRBA	SEC-ERBA (INCLUDING IAA)	SEC-SA	1250% RW/ DEDUCTIONS	SEC-IRBA	SEC-ERBA (INCLUDING IAA)	SEC-SA	1250% RW/ DEDUCTIONS
1 Total exposures as at 31.12.2022	2,288	1,108	569	-	183	89	46	-
2 Retail (total)	493	1,108	569	-	39	89	46	-
3 Securitisation	493	1,108	569	-	39	89	46	-
4 Retail	340	25	569	-	27	2	46	-
5 Of which STS	1	-	-	-	0	-	-	-
6 Wholesale	153	1,083	-	-	12	87	-	-
7 Of which STS	-	662	-	-	-	53	-	-
8 Re-securitisation	-	-	-	-	-	-	-	-
9 Wholesale (total)	1,795	-	-	-	144	-	-	-
10 Securitisation	1,795	-	-	-	144	-	-	-
11 Retail	1,134	-	-	-	91	-	-	-
12 Wholesale	661	-	-	-	53	-	-	-
13 Re-securitisation	-	-	-	-	-	-	-	-
Total exposures as at 30.06.2022	2,021	1,271	637	-	162	102	51	-

Template EU SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

(€ million)

DESCRIPTION	a	b	c	d	e	f	g	h	i
	EXPOSURE VALUES (BY RW BANDS/DEDUCTIONS)					EXPOSURE VALUES (BY REGULATORY APPROACH)			
	≤20% RW	>20% TO 50% RW	>50% TO 100% RW	>100% TO <1250% RW	1250% RW/ DEDUCTIONS	SEC-IRBA	SEC-ERBA (INCLUDING IAA)	SEC-SA	1250% RW/ DEDUCTIONS
1 Total exposures as at 31.12.2022	12,987	634	180	328	26	-	12,061	2,069	26
2 Retail (total)	12,987	634	180	328	26	-	12,061	2,069	26
3 Securitisation	12,987	634	180	328	26	-	12,061	2,069	26
4 Retail	12,014	634	23	70	25	-	11,825	917	25
5 Of which STS	7,277	355	-	-	-	-	7,053	579	-
6 Wholesale	973	-	157	258	1	-	237	1,152	1
7 Of which STS	861	-	-	-	-	-	130	731	-
8 Re-securitisation	-	-	-	-	-	-	-	-	-
9 Wholesale (total)	-	-	-	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-	-	-	-
11 Retail	-	-	-	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-	-	-	-
Total exposures as at 30.06.2022	9,433	793	95	473	29	-	9,116	1,677	29

Securitisation exposures

continued: Template EU SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

(€ million)								
DESCRIPTION	j	k	l	m	n	o	p	q
	RWEA (BY REGULATORY APPROACH)				CAPITAL CHARGE AFTER CAP			
	SEC-IRBA	SEC-ERBA (INCLUDING IAA)	SEC-SA	1250% RW/ DEDUCTIONS	SEC-IRBA	SEC-ERBA (INCLUDING IAA)	SEC-SA	1250% RW/ DEDUCTIONS
1 Total exposures as at 31.12.2022	-	1,953	1,643	-	-	156	131	-
2 Retail (total)	-	1,953	1,643	-	-	156	131	-
3 Securitisation	-	1,953	1,643	-	-	156	131	-
4 Retail	-	1,839	109	-	-	147	9	-
5 Of which STS	-	808	58	-	-	65	5	-
6 Wholesale	-	114	1,534	-	-	9	123	-
7 Of which STS	-	13	73	-	-	1	6	-
8 Re-securitisation	-	-	-	-	-	-	-	-
9 Wholesale (total)	-	-	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-	-	-
11 Retail	-	-	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-	-	-
Total exposures as at 30.06.2022	-	1,711	2,277	-	-	137	182	-

Template EU SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments

(€ million)			
DESCRIPTION	a	b	c
	EXPOSURES SECURITISED BY THE INSTITUTION - INSTITUTION ACTS AS ORIGINATOR OR AS SPONSOR		
	TOTAL OUTSTANDING NOMINAL AMOUNT	OF WHICH EXPOSURES IN DEFAULT	TOTAL AMOUNT OF SPECIFIC CREDIT RISK ADJUSTMENTS MADE DURING THE PERIOD
1 Total exposures as at 31.12.2022	89,327	8,726	(602)
2 Retail (total)	29,105	5,524	(587)
3 Residential mortgage	12,434	2,065	(177)
4 Credit card	-	-	-
5 Other retail exposures	16,671	3,459	(409)
6 Re-securitisation	-	-	-
7 Wholesale (total)	60,222	3,202	(15)
8 Loans to corporates	27,484	478	(14)
9 Commercial mortgage	-	-	-
10 Lease and receivables	32,738	2,724	(0)
11 Other wholesale	-	-	-
12 Re-securitisation	-	-	-
Total exposures as at 30.06.2022	77,595	9,442	1,789

Note:
The column "Total amount of specific credit risk adjustments made during the period" represents a flow variable, i.e. the change in credit risk adjustments during the current period. Therefore, any increase in credit risk adjustments shall be reported as a positive amount whereas any decrease in credit risk adjustments during the current period shall be reported as a negative amount.

Operational risk

Template EU OR1 - Operational risk, Own Funds requirements and risk-weighted exposure amount

(€ million)

		a	b	c	d	e
		RELEVANT INDICATOR			OWN FUNDS REQUIREMENT	RISK WEIGHTED EXPOSURE AMOUNT
		31.12.2020	31.12.2021	31.12.2022		
BANKING ACTIVITIES						
1	Banking activities subject to basic indicator approach (BIA)	451	408	470	66	831
2	Banking activities subject to standardised (TSA)/alternative standardised (ASA) approaches	1,381	1,362	2,012	227	2,835
3	Subject to TSA	1,381	1,362	2,012		
4	Subject to ASA	-	-	-		
5	Banking activities subject to advanced measurement approaches (AMA)	14,658	16,099	16,278	2,204	27,552
	Total	16,490	17,869	18,761	2,497	31,218

The significant increase recorded in 2022 versus 2021 for TSA is due to AO UniCredit Bank (Russia) revenues booked in FY2022.

Liquidity risk

Liquidity Coverage Ratio

The Liquidity Coverage Ratio (LCR), introduced by Basel 3 prudential regulation, is a short time indicator which aims to ensure that credit institutions maintain an adequate liquidity buffer to cover the net liquidity outflows under severe conditions of stress over a period of 30 days.

The regulatory framework applied is represented by:

- with reference to the requirements to be met:
 - CRR article 412 "Liquidity coverage requirement";
 - Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 that lays down rules that specify in detail the liquidity coverage requirement provided for in CRR article 412(1). In particular, the requirement that all institutions authorised has to meet is equal to 100%;
 - Commission Delegated Regulation (EU) 2018/1620 of 13 July 2018 amending Delegated Regulation (EU) 2015/61 to supplement Regulation (EU) 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for credit institutions;
 - Commission Implementing Regulation (EU) 2021/451 of 17 December 2020 laying down implementing technical standards for the application of Regulation (EU) 575/2013 of the European Parliament and of the Council with regard to supervisory reporting of institutions and repealing Implementing Regulation (EU) 680/2014 (Text with EEA relevance);
- with reference to the disclosure information to be published:
 - CRR article 435 which defines the disclosure requirements for each separate category of risk, including the key ratios (letter f);
 - Commission Implementing Regulation (EU) 2021/637 of 15 March 2021, laying down implementing technical standards with regard to public disclosures by institutions of the information referred to in Titles II and III of Part Eight of Regulation (EU) 575/2013 of the European Parliament and of the Council and repealing Commission Implementing Regulation (EU) 1423/2013, Commission Delegated Regulation (EU) 2015/1555, Commission Implementing Regulation (EU) 2016/200 and Commission Delegated Regulation (EU) 2017/2295.

Therefore, the information outlined in the present section is disclosed according to the regulatory framework mentioned above.

Liquidity risk

Template EU LIQ1 - Quantitative information of LCR

(€ million)

		a	b	c	d	e	f	g	h
SCOPE OF CONSOLIDATION (CONSOLIDATED)		TOTAL UNWEIGHTED VALUE (AVERAGE)				TOTAL WEIGHTED VALUE (AVERAGE)			
CURRENCY AND UNITS (EURO MILLION)									
EU 1a	QUARTER ENDING ON	31.12.2022	30.09.2022	30.06.2022	31.03.2022	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	12	12	12	12
HIGH-QUALITY LIQUID ASSETS									
1	Total high-quality liquid assets (HQLA)					190,318	194,525	199,801	202,092
CASH-OUTFLOWS									
2	Retail deposits and deposits from small business customers, of which:	270,491	269,253	267,278	264,641	19,174	19,097	18,961	18,807
3	Stable deposits	164,399	162,885	161,060	158,783	8,220	8,144	8,053	7,939
4	Less stable deposits	90,691	91,626	91,729	91,608	10,538	10,607	10,594	10,588
5	Unsecured wholesale funding	205,225	203,444	199,889	194,492	84,928	84,334	83,050	81,176
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	72,614	74,449	74,519	73,271	17,139	17,584	17,588	17,263
7	Non-operational deposits (all counterparties)	127,851	123,867	120,293	116,058	63,029	61,622	60,384	58,750
8	Unsecured debt	4,760	5,128	5,078	5,164	4,760	5,128	5,078	5,164
9	Secured wholesale funding					7,731	9,107	9,889	10,339
10	Additional requirements	144,954	143,432	142,466	139,155	51,896	51,941	52,084	51,196
11	Outflows related to derivative exposures and other collateral requirements	37,147	37,085	37,271	36,326	36,199	36,349	36,636	35,781
12	Outflows related to loss of funding on debt products	421	450	461	478	421	450	461	478
13	Credit and liquidity facilities	107,386	105,897	104,734	102,352	15,276	15,142	14,987	14,938
14	Other contractual funding obligations	8,629	9,073	9,542	9,135	8,488	8,931	9,399	8,990
15	Other contingent funding obligations	207,914	205,606	202,419	201,118	10,139	10,073	10,009	9,522
16	TOTAL CASH OUTFLOWS					182,356	183,484	183,391	180,031
CASH-INFLOWS									
17	Secured lending (eg reverse repos)	48,733	50,751	51,081	50,587	11,940	13,258	13,972	13,959
18	Inflows from fully performing exposures	34,479	34,546	34,385	33,925	23,655	24,077	24,434	24,131
19	Other cash inflows	40,054	39,911	39,488	38,404	28,301	28,445	28,527	27,817
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	123,266	125,208	124,954	122,916	63,895	65,779	66,933	65,907
EU-20a	Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b	Inflows Subject to 90% Cap	-	-	-	-	-	-	-	-
EU-20c	Inflows Subject to 75% Cap	110,981	110,772	109,006	106,469	63,895	65,779	66,933	65,907
TOTAL ADJUSTED VALUE									
EU-21	LIQUIDITY BUFFER					190,318	194,525	199,801	202,092
22	TOTAL NET CASH OUTFLOWS					118,461	117,705	116,458	114,124
23	LIQUIDITY COVERAGE RATIO (%)					161%	165%	172%	177%

Note:

With reference to periods in the table above, please note that data are reported in line with the document "EBA updates mapping between technical standards on Pillar 3 disclosures and technical standards on supervisory reporting (v3.0)" (mapping tool published in EBA/ITS/2020/04), therefore the sum of row 3 "Stable deposits" and row 4 "Less stable deposits" does not represent the total amount of row 2 "Retail deposits and deposits from small business customers" which includes also deposits exempted from the calculation of outflows and deposits where the payout has been agreed within the following 30 days.

Liquidity risk

Table EU LIQB - Qualitative information on LCR, which complements template EU LIQ1

Evolution of LCR results

In the fourth quarter of 2022 the LCR (calculated as the average value over the last 12 monthly indicators) has highlighted a slightly decreasing trend compared to the average value reported in the third quarter of 2022. This trend is mainly due to commercial dynamics in UniCredit S.p.A.

Description of the composition of the liquidity buffer and net liquidity outflows

At the end of December 2022, liquidity buffer is still mainly made of withdrawable reserves deposited at central banks and governments bonds. These two exposures have represented 88% of the buffer, while the remaining part has been mostly made of cash.

For what concerns the net liquidity outflows, the outgoing flows due to i) retail deposits, ii) wholesale funding and iii) potential cash outflows from the committed credit lines are still the main components.

Concentration of funding and liquidity sources

Funding Concentration Risk can arise when the bank leverages on a limited number of funding sources, that they become of such significance that the withdrawal of one or few could trigger liquidity problems.

In the Group the governance and control of funding concentration risk is mainly performed through the setting and monitoring of metrics, managerial and regulatory, aimed at preventing potential vulnerabilities in the bank's ability to meet its liquidity obligations when the funding contracts expire. At this purpose, the metrics in place to steer this risk are the concentration funding by products and counterparties.

Derivative exposures and potential collateral calls

Regarding potential collateral calls, monthly reporting is conducted to measure the impact in terms of additionally required collateral that the bank may be required to provide given a downgrade of its own credit rating or adverse market scenario on derivatives transactions. All relevant rating agencies are considered. The testing is carried out on a Legal Entity level, but consolidated reporting is available to analyze the impact on Group wide basis. Specific attention is dedicated to exposures towards Special Purpose Vehicles.

Quantification of potential liquidity outflows, raised by the necessity of additional guarantees in case of adverse market scenarios, is measured leveraging on the historical analysis of net collateral posted (Historical Look Back Approach).

Currency mismatch in the LCR

As far as the currency mismatch is concerned, a regular monitoring of the relevant currencies (e.g., where liabilities > 5% of total liabilities) and related liquid assets and net cash outflows is performed. So far only EUR and USD resulted to be relevant at Group level. Assessment performed on potential currency mismatches between liquid assets and net outflows shows that the liquidity surplus in EUR is sufficient to cover the gap in USD. A buffer of HQLA (High Quality Liquid Assets) in USD is maintained to face the potential risk related with the conversion of the currency.

Other items relevant for the liquidity profile

The intraday liquidity risk appears when a bank is not able "to meet payment and settlement obligations on a timely basis under both normal and stressed conditions"²⁹.

The intraday liquidity risk is monitored through the intraday liquidity monitoring tool prescribed by Basel Committee on Banking Supervision (BCBS). In order to meet the payments falling due in different timing during the business day and avoid possible shortfalls due to missing/delayed inflows, a liquidity buffer is kept on a continuous basis by each Group legal entities' Treasury.

²⁹ Principle 8 of Principles for Sound Liquidity Risk Management and Supervision published in September 2008 by the Basel Committee on Banking Supervision.

Liquidity risk

Net Stable Funding Ratio

Template EU LIQ2 - Net Stable Funding Ratio

(€ million)

DESCRIPTION		a	b	c	d	e
		UNWEIGHTED VALUE BY RESIDUAL MATURITY				WEIGHTED VALUE
		NO MATURITY	< 6 MONTHS	6 MONTHS TO < 1YR	≥ 1YR	
Available stable funding (ASF) Items						
1	Capital items and instruments	59,607	1,240	-	11,021	70,628
2	Own funds	59,607	1,240	-	9,087	68,694
3	Other capital instruments		-	-	1,934	1,934
4	Retail deposits		271,732	1,987	7,224	262,313
5	Stable deposits		174,484	360	42	166,144
6	Less stable deposits		97,248	1,626	7,182	96,170
7	Wholesale funding:		324,698	18,695	101,116	204,881
8	Operational deposits		62,354	1	-	2,864
9	Other wholesale funding		262,344	18,695	101,116	202,017
10	Interdependent liabilities		-	-	-	-
11	Other liabilities:	20,116	2,589	-	7,858	7,858
12	NSFR derivative liabilities	20,116				
13	All other liabilities and capital instruments not included in the above categories		2,589	-	7,858	7,858
14	Total available stable funding (ASF)					545,681
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					10,952
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		15	16	31,623	26,906
16	Deposits held at other financial institutions for operational purposes		215	-	0	108
17	Performing loans and securities:		131,084	38,577	293,497	311,809
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		25,218	1,344	3,715	4,929
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		13,918	3,133	15,281	18,204
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		81,338	28,428	167,192	267,458
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		26,583	10,909	54,156	103,501
22	Performing residential mortgages, of which:		4,724	4,737	84,285	-
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		2,958	2,936	57,845	-
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		5,886	935	23,025	21,217
25	Interdependent assets		-	-	-	-
26	Other assets:	-	44,477	3,228	42,105	48,453
27	Physical traded commodities				81	69
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		-	-	11,945	10,154
29	NSFR derivative assets		1,323			1,323
30	NSFR derivative liabilities before deduction of variation margin posted		25,922			1,296
31	All other assets not included in the above categories		17,232	3,228	30,078	35,611
32	Off-balance sheet items		156,561	8,335	160,247	22,002
33	Total RSF					420,231
34	Net Stable Funding Ratio (%)					130%

Liquidity risk

Liquidity buffer and funding strategies

Liquidity buffer

The main tool through which the Group meets its liquidity needs is the Funding Plan, defined for 2022 at Group, Liquidity Reference Bank and relevant legal entity level. The Funding Plan includes the set of medium long term funding instruments to be issued in order to cover the expected funding needs deriving from the evolution of the liquidity uses and sources (including also commercial growth generated by business functions), avoiding pressure on the short-term interbank position.

Parent Company Finance function is responsible for the execution of the medium long term Group's funding strategy (including securitization operations), coordinating the access to national and international capital markets for all the Liquidity Reference Banks exploiting local market opportunities in order to reduce the costs of funding and diversify the financing sources.

Parent Company Treasury function is responsible for the financial stability and liquidity of the Group. Its primary objective is to fulfil ordinary and extraordinary payment obligations on the short-term period, managing the liquidity risk generated by possible unbalances in the Group financial structure, as well as settlement, rate and FX risks. It accesses money markets and coordinates the treasury functions within the Parent Company international branches and Liquidity Reference Banks, also for the purpose of making refinancing transactions with the European Central Bank. Moreover, the Parent company Treasury function acts also as the sole party in the management of the intra-group financial flows linked to net liquidity requirements/surpluses of the banks and companies in the Group.

In order to avoid that short-term liquidity crunch or other unexpected events leading to potentially serious consequences, the Group constantly maintains a liquidity reserve. This is a cushion represented by an appropriate amount of cash, or other highly liquid assets, in relation to the amount of liabilities and expected stress results. According to the updated version of the Group internal process for Contingency Liquidity Management, if necessary to restore the liquidity positions, the Group Treasury in its role of operative liquidity management function is entitled to monetize the securities belonging to the trading and the banking book, prevailing on any existing business or risk management strategies, as per Article 8(3(b)) of the Delegated Act of 10 October 2014 for Liquidity Coverage Requirement for Credit Institutions.

By maintaining cash reserves in money market instruments, unexpected demand on cash does not require the immediate sale of other less liquid securities, which in most cases would not be in the business's or individual's best interest. As reported in the table below, UniCredit group had €188.2 billion of aggregate liquidity resources as of 31 December 2022 that represented around 22% of the total balance sheet.

Among the total liquidity reserves €61 billion (32% of the total liquidity resources) were in the form of unencumbered unsecured bonds eligible at Central Bank, of which €58.5 billion is in the form of bonds issued or guaranteed by sovereigns, quasi-sovereigns, or multinational institutions. A large portion of the sovereign portfolio consists mainly of bonds issued by the Republic of Italy, the Kingdom of Spain, the Kingdom of Japan and the Czech Republic. These bonds are highly liquid and therefore even in a stressed scenario the Group would be able to rapidly obtain cash either via repurchase agreements or outright sales.

In addition, within this liquidity buffer, the Group holds a portfolio of highly liquid non-sovereign bonds issued by credit worthy financial institutions, both in senior and covered format, as well as by corporates and public sector entities. This category cumulatively represents close to €11.9 billion and is eligible for financing with the European Central Bank.

The final major category in the Group liquidity buffer is represented by the retained covered bonds and asset backed securities issued by the Bank. These represent €0.3 billion of liquidity equivalent counterbalancing capacity as they are eligible for the European Central Bank refinancing operations.

Total cash stands at €117.5 billion, part of it, equal to €8 billion, is restricted to being held at the Central Banks in the form of minimum required reserves (MRR).

The bulk of the liquidity buffer is in Italy (44% of the total). The liquidity available at country level may be transferred to other legal entities within the Group perimeter. The intra-group transfer of liquidity is subject to a set of legal, regulatory and political restrictions (for further details, refer to the Section 2.4 Liquidity risk, Consolidated financial statements as at 31 December 2022, Notes to the consolidated account, Part E - Information on risks and related hedging policies, Section 2 - Risks of the prudential consolidated perimeter). The constraints are minor for downstream loans within the same country; they become more stringent for downstream loans with foreign counterparties; and grow further in intensity for upstream loans with foreign counterparties.

Liquidity risk

Liquidity value (market value and applicable Central Bank haircut)

(€ million)

INSTRUMENT TYPE	UNICREDIT GROUP AMOUNT	% ON TOTAL	ITALY AMOUNT	% ON TOTAL	GERMANY AMOUNT	% ON TOTAL	CENTRAL EUROPE AMOUNT	% ON TOTAL	EASTERN EUROPE AMOUNT	% ON TOTAL
Cash and Balances with Central Banks	117,497	62.4%	53,931	65.5%	37,583	69.8%	15,440	44.9%	10,544	60.2%
of which Compulsory Reserve	7,983	4.2%	2,065	2.5%	1,665	3.1%	1,040	3.0%	3,214	18.4%
Unsecured Bonds eligible at Central Bank	60,998	32.4%	27,537	33.4%	12,147	22.5%	15,582	45.3%	5,731	32.7%
of which issued or guaranteed by Sovereign, Central Banks or Multilateral Development Banks	58,487	31.1%	26,813	32.6%	11,003	20.4%	14,950	43.4%	5,721	32.7%
of which issued or guaranteed by municipalities or other public sector entities	56	0.0%	-	-	52	0.1%	-	-	4	0.0%
of which issued by financial institutions excluding covered bonds	2,061	1.1%	724	0.9%	955	1.8%	382	1.1%	0	0.0%
of which issued by non financial institutions	394	0.2%	0	0.0%	137	0.3%	250	0.7%	6	0.0%
Covered Bonds eligible at Central Bank	6,600	3.5%	696	0.8%	2,507	4.7%	3,397	9.9%	-	-
of which issued by other banks or financial institutions	6,421	3.4%	514	0.6%	2,510	4.7%	3,397	9.9%	-	-
of which issued by their own bank or related unit (retained Covered Bond)	179	0.1%	182	0.2%	(3)	-0.0%	0	0.0%	-	-
ABS eligible at Central Bank	1,834	1.0%	198	0.2%	1,636	3.0%	-	-	-	-
of which issued by other banks or financial institutions	1,740	0.9%	104	0.1%	1,636	3.0%	-	-	-	-
of which issued by their own bank or related unit (self securitisations)	94	0.1%	94	0.1%	-	-	-	-	-	-
Other asset eligible at Central Bank	1,239	0.7%	-	-	-	-	-	-	1,239	7.1%
TOTAL	188,167		82,362		53,873		34,418		17,513	

Liquidity risk

Funding strategies

Short-term funding

In the fourth quarter of 2022 the ECB raised its three reference rates (Main Refinancing Operations "MRO", Marginal Lending Facility "MLFR" and Deposit Facility "DF") two times: 75 basis points in October and 50 basis points in December. Similar action was taken by the Central banks of most of the major world economies.

Among the significant events of the period, in the month of October the ECB decided to change the remuneration of minimum reserves: from a rate equal to the MRO rate, to one equal to the DF rate, which means a 50 basis points decrease. The change came into effect at the beginning of the next reserve maintenance period starting on 21 December 2022. The ECB projects HICP inflation to decrease from 9.2% to 6.3% in 2023, to 3.4% in 2024 and to 2.3% in 2025. Compared to the previous quarter, there was less investors' concern about national and international geopolitical issues as their liquidity placement did not concentrate in the shortest tenors anymore. Clients, even non-financial ones, show a revived interest in investing in liquidity placements.

The fourth quarter of 2022 started with ongoing collateral pressures on the back of same dynamics recorded during the year, such as extremely high excess of liquidity, demand for margins, high volatility in the bond market. Additionally, downward pressures on repo rates were recorded for trades maturing after the year-end due to shrinking balance-sheet dynamics of banks. During October 3-months repo levels reached their lower levels versus euro short-term rate "€STR" Overnight Index Swap "OIS" curve, with 3M Germany at €STR - 35 basis points while 3M Italy at €STR - 18 basis points. In October the ECB announced a modification to terms and conditions of TLTROs operations, generating €856 billion of repayments by European banks. This had contributed to the increase of available collateral in the system and to the relaxation of pressures on repo rates, with the retracement bringing 3M Germany at €STR - 15 basis points and 3M Italy at €STR + 5 basis points. For further details on TLTRO, reference is made to paragraph "TLTRO" in Consolidated financial statements as at 31 December 2022, Notes to consolidated accounts, Part A - Accounting policies, A.1 General, Section 5 - Other matters.

An important contribution to the retracement of collateral pressures was given by ECB and national government which increased their repo facilities to avoid scarcity of collateral.

Medium/Long-term funding

The Funding Plan has been designed adopting the usual approach of using a variety structures/instruments issued with different tenors with the aim to:

- avoid maturities concentration risk, exploiting potential favorable market conditions to extend duration;
- achieve an adequate level of diversification;
- ensure an appropriate level of liquidity;
- comply with various applicable regulatory requirements and internal limits and triggers.

Its execution is being implemented accordingly to reported above.

In 2022 the Group executed medium/long-term funding for a total amount of €20,707 million, of which €9,121 million of Senior funding, €5,538 million of Covered Bonds, €810 million of Securitization and €5,169 million of bilateral funding from Agencies/Supranational Entities.

UniCredit contribution to Senior funding of the Group has been €7,727 million, with ample usage of private placements and network distribution capacity and including a Dual Tranche Senior Preferred transaction for which refer to Press Release as of 11 January 2022 and a Senior Non Preferred Green transaction for which refer to Press Release as of 8 November 2022.

In line with the Group-wide Sustainability Bond Framework, in May 2022 UniCredit Bank Austria placed an Inaugural Green Covered Bond with a total volume of €500 million (6 year maturity) and in September 2022 UniCredit Bank AG placed a Green Covered Bond with a total volume of €500 million (5 year maturity).

The Group has also leveraged on being able to access markets out of different legal entities, enjoying for all of them a large degree of name recognition with local institutional investors. In 2022 the combined amount issued by the subsidiaries of the Group has been €10,685 million.

Liquidity risk

Deposits from customers and banks, senior bonds and own funds represent our most stable funding sources, with deposits from customers representing 69% of the liability structure by the end of 2022.

Liabilities structure breakdown by maturity

(€ million)

INSTRUMENT TYPE	OUTSTANDING	% ON TOTAL	1 MONTH	3 MONTHS	6 MONTHS	9 MONTHS	1 YEAR	2 YEARS	OVER 2 YEARS
Depos from Banks	133,061	18%	25,785	4,540	67,973	2,040	1,110	16,336	15,278
<i>of which Secured</i>	14,099	2%	11,027	1,568	324	979	-	200	-
Depos from Customers	514,884	69%	454,210	29,403	9,855	6,137	5,504	3,145	6,630
<i>of which Secured</i>	18,315	2%	17,891	424	-	-	-	-	-
Subordinated	7,804	1%	-	106	-	-	-	2,262	5,436
<i>of which Retail</i>	-	0%	-	-	-	-	-	-	-
Senior Unsecured	49,849	7%	2,218	2,538	2,542	488	3,683	5,133	33,246
<i>of which Retail</i>	11,642	2%	27	109	1,322	165	197	1,499	8,323
CD/CP	3,542	0%	4	2,422	1,073	-	19	24	-
<i>of which Retail</i>	27	0%	4	-	-	-	-	24	-
Covered Bonds	33,868	5%	10	14	1,250	574	914	3,154	27,951
ABS	-	0%	-	-	-	-	-	-	-
Other	-	0%	-	-	-	-	-	-	-
TOTAL	743,008		482,227	39,024	82,693	9,239	11,231	30,054	88,541

Liabilities structure breakdown by currency

(€ million)

INSTRUMENT TYPE	OUTSTANDING	% ON TOTAL	EUR	USD	CZK	HRK	BGN	OTHER
Deposits from Banks	133,061	18%	123,100	6,909	205	93	80	2,674
<i>of which Secured</i>	14,099	2%	11,967	2,049	-	-	33	50
Deposits from Customers	514,884	69%	438,492	23,568	13,465	8,754	7,598	23,007
<i>of which Secured</i>	18,315	2%	18,092	223	-	-	-	-
Subordinated	7,804	1%	4,250	3,553	-	-	-	-
<i>of which Retail</i>	-	0%	-	-	-	-	-	-
Senior Unsecured	49,849	7%	41,555	7,610	193	-	-	490
<i>of which Retail</i>	11,642	2%	11,317	206	103	-	-	15
CD/CP	3,542	0%	3,542	-	-	-	-	-
<i>of which Retail</i>	27	0%	27	-	-	-	-	-
Covered Bonds	33,868	5%	33,183	-	172	-	-	513
ABS	-	0%	-	-	-	-	-	-
Other	-	0%	-	-	-	-	-	-
TOTAL	743,008		644,123	41,641	14,036	8,847	7,678	26,684

Liquidity risk

Encumbered and unencumbered assets

Template EU AE1 - Encumbered and unencumbered assets

(€ million)

DESCRIPTION	CARRYING AMOUNT OF ENCUMBERED ASSETS		FAIR VALUE OF ENCUMBERED ASSETS		CARRYING AMOUNT OF UNENCUMBERED ASSETS		FAIR VALUE OF UNENCUMBERED ASSETS	
	010	OF WHICH NOTIONALLY ELIGIBLE EHQLA AND HQLA 030	040	OF WHICH NOTIONALLY ELIGIBLE EHQLA AND HQLA 050	060	OF WHICH EHQLA AND HQLA 080	090	OF WHICH EHQLA AND HQLA 100
010 Assets of the reporting institution as at 31.12.2022	291,129	106,359			653,214	174,939		
030 Equity instruments	3,879	2,150	3,466	1,943	7,343	1,137	7,713	891
040 Debt securities	104,033	98,852	102,362	97,297	56,083	44,530	55,047	43,846
050 of which: covered bonds	5,458	4,582	5,393	4,537	1,064	1,001	1,058	994
060 of which: securitisations	3,347	2,094	3,130	1,965	10,201	3,278	9,957	3,211
070 of which: issued by general governments	78,803	78,002	78,135	77,348	35,538	34,066	34,889	33,472
080 of which: issued by financial corporations	20,549	16,807	20,047	16,417	18,640	9,449	18,193	9,366
090 of which: issued by non-financial corporations	3,118	2,316	3,021	2,220	2,483	1,085	2,469	1,080
120 Other assets	183,218	5,063			590,004	129,133		
Assets of the reporting institution as at 31.12.2021	291,725	104,604			647,934	183,760		

The encumbered assets mainly relate to UniCredit S.p.A., UniCredit Bank AG and UniCredit Bank Austria AG.

The main sources of encumbrance are the Repo activity, the Covered Bonds in issue and ECB refinancing (TLTRO), which account for most of the total amount.

The evolution of the percentage of encumbered assets during the 2022 remains broadly stable, with a slight decrease in December related to the partial repayment of ECB funding (i.e. TLTRO), and it is mostly due to the dynamic of debt securities and term loans (included in the item "Other assets").

As far as the "Debt securities" is concerned, EHQLA and HQLA represent the major part, both in term of encumbered and unencumbered assets. With regards to the unencumbered assets, the main item is referred to the "Other assets" (equal to 90%). Non-EHQLA and non-HQLA amount to 78% of the overall "Other assets".

Liquidity risk

Template EU AE2 - Collateral received and own debt securities issued

(€ million)

DESCRIPTION	FAIR VALUE OF ENCUMBERED COLLATERAL RECEIVED OR OWN DEBT SECURITIES ISSUED		UNENCUMBERED FAIR VALUE OF COLLATERAL RECEIVED OR OWN DEBT SECURITIES ISSUED AVAILABLE FOR ENCUMBRANCE	
	010	030 OF WHICH NOTIONALLY ELIGIBLE EHQLA AND HQLA	040	060 OF WHICH EHQLA AND HQLA
130 Collateral received by the disclosing institution	63,477	60,393	16,992	14,480
140 Loans on demand	-	-	-	-
150 Equity instruments	732	291	114	38
160 Debt securities	62,598	60,102	16,013	13,591
170 of which: covered bonds	2,928	2,914	1,256	1,255
180 of which: securitisations	729	-	506	-
190 of which: issued by general governments	52,863	52,045	13,564	12,170
200 of which: issued by financial corporations	6,062	4,564	2,214	1,489
210 of which: issued by non-financial corporations	1,426	1,408	347	99
220 Loans and advances other than loans on demand	-	-	32	-
230 Other collateral received	-	-	851	851
240 Own debt securities issued other than own covered bonds or securitisations	-	-	18,086	-
241 Own covered bonds and securitization issued and not yet pledged			13	-
250 Total collateral received and own debt securities issued as at 31.12.2022	355,840	168,105		
Total collateral received and own debt securities issued as at 31.12.2021	353,979	166,870		

With regards to the collateral received, the median percentage which results encumbered is equal to 79%, mainly relating to debt securities received as collateral in repo and similar operations which were then re-used.

Template EU AE3 - Sources of encumbrance

(€ million)

DESCRIPTION	ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED OTHER THAN COVERED BONDS AND SECURITISATIONS ENCUMBERED	
	010 MATCHING LIABILITIES, CONTINGENT LIABILITIES OR SECURITIES LENT	030
010 Carrying amount of selected financial liabilities as at 31.12.2022	254,760	301,931
Carrying amount of selected financial liabilities as at 31.12.2021	263,159	290,076

The ratio between the "Assets, collateral received and own Debt Securities issued other than Covered Bonds and Securitisation encumbered" and the relevant "Matching liabilities, contingent liabilities and securities lent" amounts to 119%, which is mainly related to overcollateralisation agreements on repos and Covered Bonds issued.

Notes to the previous tables:

- In terms of median, the percentage of encumbered assets to the total assets amount is equal to 31%, mainly due to term loans (included in the item "Other assets") and debt securities (considering also the collateral the percentage amounts to 35%).
- Values reported in the tables above relate to the median value calculated on the basis of punctual data for the four reference quarters of 2022. These figures refer to the prudential scope of consolidation.

Leverage

The Basel 3 prudential regulation introduced the requirement of calculation, reporting, and publication of leverage ratio that is an additional regulatory requirement to risk-based indicators.

The main leverage ratio objectives are:

- restricting the build-up of leverage in the banking sector;
- enhancing the capital ratios with a further, simple and not risk based measure.

The ratio is calculated according to the rules of the CRR2 and in particular Article 429, complying with "Basel III: Finalising post-crisis reforms"³⁰, issued in December 2017.

In the session of 15 April 2019, the European Parliament approved 3% minimum requirement for the leveraging ratio in the first pillar. An additional buffer is provided for the G-SII banks, calculated as 50% of the G-SII buffer rate in accordance with article 131(4) of Directive 2013/36/EU. According to the Regulation (EU) 2020/873 (CRR "Quick fix") of 26 June 2020, making targeted amendments to the CRR and to the CRR2, the new G-SIIs requirement shall apply from 1 January 2023.

The present disclosure follows the Commission Implementing Regulation (EU) 2021/637 of 15 March 2021 laying down implementing technical standards with regard to disclosure by Institutions of the leverage ratio, according to CRR, as amended by the Regulation (EU) 2019/876.

Content

CRR article 429 defined the leverage ratio as the Bank's capital measure divided by the total exposure and it is expressed as percentage between:

- Tier 1 Capital;
- the total exposure, calculated as sum of all assets and off-balance sheet items not deducted when determining the Tier 1 capital measure.

The total exposure includes (the below mentioned articles refer to CRR):

- Derivatives - calculated according to the Standardised Approach for Counterparty Credit Risk as per Section 3 of Chapter 6 of Title II of the Part 3, or, as an alternative, the Original Exposure Method as per article 295 of the CRR. For Written Credit Derivatives, additionally the Fully Effective Notional amount reduced by the fair value changes that have been incorporated in Tier 1 Capital is included. If specific conditions are met the resulting exposure value may be further reduced by the effective notional amount of purchased credit derivatives;
- Security Financing Transactions (SFT³¹) - calculated as sum of two components: the counterparty credit risk exposure, i.e. the exposure net of collateral (and not including the haircut), and the accounting value of the SFT asset; if specific conditions set by CRR2 are met, it is possible to determine the exposure value of cash receivable and cash payables on a net basis;
- Off-balance Sheet Exposure - calculated, according to article 111 as nominal amount not reduced by specific credit risk adjustments and by applying the Standardised Approach for RWEA calculation credit conversion factors;
- Other Asset - calculated, according to article 111, as accounting value reduced by specific credit risk adjustments, additional value adjustments and other own funds reductions related to the asset item; if specific conditions set by CRR2 are met, cash variation margins provided for derivatives transactions can be excluded from the exposure;
- Exempted Exposures according to article 429a where applicable.

The following figures refer to the Leverage Ratio calculated by applying the transitional rules applied to Tier 1 Capital. The Tier 1 Capital including the positive IFRS9 transitional adjustment applied to CET1 as per article 473a(7a) of the amended CRR2 has been considered for the calculation of transitional Leverage Ratio.

Consistently, the Leverage Ratio exposure has been increased by the amount of the abovementioned transitional adjustment applied to CET1 (net of tax effects) calculated both on STD and IRB exposures.

The effect on the Leverage Ratio of the IFRS9 transitional adjustment is equal to +0.21% (rounded) as shown in "Template IFRS9-FL - Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS9 or analogous ECLs" reported in the Own Fund chapter.

³⁰ Refer to "Basel III: Finalising post-crisis reforms" https://www.bis.org/basel_framework/standard/LEV.htm.

³¹ Security Financing Transactions are repurchased transactions, securities or commodities lending or borrowing transactions and margin lending transactions.

Leverage

The following template shows the Leverage Ratio as of 31 December 2022 and the breakdown of the exposure by main categories, according to CRR2 articles 451(1)(a), 451(1)(b) and 451(1)(c).

Template EU LR2 - LRCom: Leverage ratio common disclosure

		(€ million)	
		CRR LEVERAGE RATIO EXPOSURES	
		a	b
DESCRIPTION		31.12.2022	30.06.2022
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	780,035	851,072
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)	(9,333)	(9,436)
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)	(3,052)	(1,863)
7	Total on-balance sheet exposures (excluding derivatives and SFTs)	767,650	839,774
Derivative exposures			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	22,575	24,008
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	-	0
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	21,516	22,906
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	0	0
EU-9b	Exposure determined under Original Exposure Method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(2,105)	-
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	12,303	10,158
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(10,975)	(8,790)
13	Total derivatives exposures	43,314	48,282
Securities financing transaction (SFT) exposures			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	40,676	63,142
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	(5,904)
16	Counterparty credit risk exposure for SFT assets	7,520	11,698
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	48,196	68,936
Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	349,053	340,696
20	(Adjustments for conversion to credit equivalent amounts)	(257,841)	(249,798)
21	(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	-	-
22	Off-balance sheet exposures	91,212	90,898
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)	(3,471)	(3,332)
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)	(3,471)	(3,332)

Leverage

continued: Template EU LR2 - LRCom: Leverage ratio common disclosure

		(€ million)	
		CRR LEVERAGE RATIO EXPOSURES	
DESCRIPTION		a 31.12.2022	b 30.06.2022
Capital and total exposure measure			
23	Tier 1 capital	57,521	58,003
24	Total exposure measure	946,901	1,044,558
Leverage ratio			
25	Leverage ratio	6.07%	5.55%
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	6.07%	5.55%
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	6.07%	5.55%
26	Regulatory minimum leverage ratio requirement (%)	3.00%	3.00%
EU-26a	Additional own funds requirements to address the risk of excessive leverage (%)	-	-
EU-26b	of which: to be made up of CET1 capital (percentage points)	-	-
27	Leverage ratio buffer requirement (%)	-	-
EU-27a	Overall leverage ratio requirement (%)	3.00%	3.00%
Choice on transitional arrangements and relevant exposures			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	Transitional	Transitional
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	55,335	56,305
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	40,676	57,238
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)	961,561	1,043,624
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)	961,561	1,043,624
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)	5.98%	5.56%
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)	5.98%	5.56%

The following template shows, for exposures other than derivatives and SFTs, the breakdown by exposure class, according to CRR2 article 451(1)(b).

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

		(€ million)	
DESCRIPTION		31.12.2022	30.06.2022
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	780,035	851,072
EU-2	Trading book exposures	23,633	31,547
EU-3	Banking book exposures, of which:	756,402	819,525
EU-4	Covered bonds	9,890	9,283
EU-5	Exposures treated as sovereigns	256,335	304,978
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	7,190	7,410
EU-7	Institutions	16,581	22,347
EU-8	Secured by mortgages of immovable properties	129,800	134,850
EU-9	Retail exposures	59,366	59,607
EU-10	Corporate	190,018	195,702
EU-11	Exposures in default	6,865	6,758
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	80,357	78,589

Leverage

The following template shows the reconciliation between the total Leverage Ratio Exposure (denominator) and the Accounting balance sheet values, according to the CRR2 article 451(1)(b).

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

		(€ million)	
		a	b
DESCRIPTION		31.12.2022	30.06.2022
1	Total assets as per published financial statements	857,773	945,756
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	64	64
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	(789)	-
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 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	17	119
8	Adjustments for derivative financial instruments	849	4,036
9	Adjustment for securities financing transactions (SFTs)	7,520	11,698
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	91,618	91,221
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 total exposure measure in accordance with point (c) of article 429a(1) CRR)	-	-
EU-11b	(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of article 429a(1) CRR)	-	-
12	Other adjustments	(10,151)	(8,336)
13	Total exposure measure	946,901	1,044,558

Notes:

- The item 2 includes also the adjustment for entities which are consolidated for regulatory purposes but are outside the scope of accounting consolidation.
- The item 12 "Other Adjustments" includes:
 - Regulatory Adjustments related to Tier 1 Capital regarding Balance sheet Assets (transitional definition);
 - Accounting and fiscal Off-setting on Other Asset.

Leverage

Table EU LRA: Disclosure of LR qualitative information

Description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers

The leverage ratio, calculated on a Transitional base applied to Tier 1 Capital, stands at 6.07% as at 31 December 2022, increasing by 0.52% from 5.55% as at 30 June 2022. In particular, the increase is due to:

- Tier 1 Capital decrease of €0.5 billion, with a negative impact on ratio of -0.05%;
- Total Exposure decrease of €97.7 billion, with a negative impact on ratio of +0.57%.

With regard to the evolution of the ratio:

- for Tier 1 Capital dynamics refer to the "Own Funds" chapter;
- for Total Exposure changes the main drivers are:
 - decrease of other on-balance sheet items (excluding derivatives and SFT) for €72.1 billion (+0.42%);
 - decrease of SFT for €20.7 billion (+0.12%);
 - decrease of derivatives for €5.0 billion (+0.03%).

Description of the processes used to manage the risk of excessive leverage

Group Risk Appetite Framework represents the foundation for risk management within UniCredit group. This framework envisages comprehensive governance, processes, tools, and procedures for the widespread management of risks. The Leverage risk is included in the Group Risk Appetite Framework, therefore the relevant procedures and resources are applied to this kind of risk.

The quantitative tools to assess the Leverage risk are part of the Group Risk Appetite framework that include the Leverage Ratio metric. This KPI has its own Target, Trigger and a Limit defined consistently with Group business strategies and considering regulatory requirements, peers' comparison, and stress test results. The results of the periodical monitoring this KPI are submitted, on a quarterly basis, to the Group Executive Committee, Internal Control & Risk Committee and to the Board of Directors.

The Group Risk Appetite process identifies the governance mechanism, managerial involvement, and escalation process under normal and stressed operating conditions. The defined escalation process is activated at relevant organizational levels to ensure an adequate reaction when triggers or limits are breached. Moreover, for certain capital metrics, including the Leverage Ratio, the Group has defined a specific internal policy (Capital Contingency Policy) that set the process for reacting to situations which require a timely reaction in term of increase of capital or reduction of exposures.

To ensure a timely identification of potential drivers of the risk of excessive leverage, maturity mismatches and asset encumbrance are closely monitored.

The risk generated by the maturity mismatch is monitored using the Net Stable Funding Ratio (NSFR), calculated monthly. This is the ratio between the available amount of stable funding and the required amount of stable funding that are calculated applying defined weighting factors to on and off-balance sheet items. The relevant instructions for its calculation are included in the Regulation (EU) 876/2019 of the European Parliament. The regulatory metric on the structural liquidity profile has been integrated with an internal metric called Structural Liquidity Ratio (SLR), that is the ratio between the liabilities and the assets with a contractual/behavioral maturity over 1 year. Both the NSFR and the SLR metric are inserted in the Risk Appetite Framework and in the set of granular liquidity limits and, as such, they are subject to a specific escalation process.

Asset encumbrance is monitored, through the counterbalancing capacity. The sum between the counterbalancing capacity and the cumulative sum of the cash inflows and outflows maturing between the overnight and one year (primary gap) represents the operative maturity ladder that indicates, for each time bucket, the excess of the unencumbered assets over the cumulated liquidity needs of the bank.

This operative maturity ladder is included in the set of granular liquidity limits and, as such, it is subject to a specific escalation process.

Additional metrics to specifically monitor the level of asset encumbrance are also present in the liquidity risk management framework. Among them, the Structural Encumbrance ratio indicates the portion of assets that is encumbered in funding schemes that have an original maturity of more than 1 year.

Environmental, Social and Governance risks (ESG)

Qualitative information on Environmental risk

Business strategy and processes

UniCredit's strategy is built on the so-called double materiality³² approach, taking into account both an inside-out perspective and an outside-in perspective. The Group acknowledges the impacts that our operations and lending have on the environment and prepares to measure the business consequences of ecological stress and the associated socio-economic transition.

From the inside-out perspective, impacts are considered according to a two-pronged approach to promoting and preserving natural capital:

DIRECT IMPACTS

The Group commits to containing its own environmental footprint:

- lowering our direct emissions towards Net Zero by 2030, procuring most of our electricity from renewable sources and improving the energy efficiency of premises and data centers;
- adopting circular solutions in resources management, having already removed single use plastic items in UniCredit buildings at the end of 2022.

INDIRECT IMPACTS

The Group offers support to businesses respectful of the environment while accompanying clients operating in climate-sensitive industries in their journey along the transition path:

- adopting a sector policy framework which takes into account both environmental and social aspects;
- defining the journey towards Net Zero on financed emissions by 2050.

On the other hand, the outside-in perspective requires a clear governance to manage any environment related risk and all the opportunities arising from environmental transition. At UniCredit group, dedicated committees and specialized functions at management level ensure the execution of the Group strategy, correctly managing environment and climate-related risks in line with the Risk Appetite Framework and the Credit, Financial and Non-financial risk strategies, while taking advantage of the opportunities arising from the transition to a low-carbon economy. These include both exploiting new business opportunities, energy efficiency, incentive schemes, and space management to lower the cost of the operation of our premises while reducing harmful emissions.

UniCredit remains committed to assessing and managing climate and environmental risk in order to achieve three main objectives:

- support our clients in a just and fair transition;
- meeting regulatory expectations on banks' business strategy and risk management processes;
- mitigating climate-related and environmental risks.

In October 2021 UniCredit signed up to the Net-Zero Banking Alliance, with the aim to achieve Net Zero by 2050. The bank is pursuing the implementation of the transition strategy which will include active engagement with clients, to support their alignment with net zero pathway. In line with UNEP FI Guidelines³³, UniCredit has disclosed its targets for the three most carbon intensive sectors within the bank's portfolio, which include Oil & Gas, Power Generation and Automotive sectors:

- Oil & Gas sector - UniCredit will target a 29% reduction in its Scope 3 financed emissions, starting from a baseline of 21.4Mt CO₂e in 2021;
- Power Generation - UniCredit will target a c. 47% reduction in its exposure to Scope 1 weighted physical intensity at 111 gCO₂e/kWh;
- Automotive - UniCredit will target a c. 41% reduction in its exposure to Scope 3 "Tank To Wheel" weighted physical intensity at 95 gCO₂/vkm.

In September 2022, UniCredit also signed the Sustainable Steel Principles (SSP), the first Climate Aligned Finance agreement for lenders to the steel industry. These principles were carefully designed over the course of a year by a working group composed of five banks, including UniCredit. The resulting framework positions lenders to facilitate the Net-Zero transition of the steel industry, providing the necessary tools for client engagement and advocacy.

Moreover, in December 2022, UniCredit put in place two other initiatives that represent another fundamental step in our Net Zero journey and ESG strategy, showing our continued commitment to driving the transition towards a better and a more sustainable future:

- UniCredit were the first Italian bank to sign up to the Finance for Biodiversity Pledge (FfB);
- UniCredit became member of the Ellen MacArthur Foundation's international charity Network to support our approach to accelerating the circular economy transition across its Countries.

More information are available in the Integrated Report 2022, "Our ESG Strategy" chapter.

UniCredit is designing a global framework for ESG related information that will be a key enabler for compliance to regulatory disclosure requirements needs as well as for accelerating Risk Management and Business Steering, with a view to doing everything necessary to collect the following information:

- data collected by external provider regarding all the environmental information published in the Non-Financial Disclosure, necessary to determine whether a counterparty is eligible/aligned with the EU Taxonomy;

³² Source: Report "Proposals for a relevant and dynamic eu sustainability reporting standard setting" by EFRAG, February 2021.

³³ The Guidelines for Climate Target Setting, developed by UNEP FI (United Nations Environment Programme Finance Initiative) outline key principles to underpin the setting of credible, robust, impactful and ambitious targets in line with achieving the objectives of the Paris Agreement.

Environmental, Social and Governance risks (ESG)

- data collected punctually through customer surveys to determine whether a transaction is eligible/aligned with the EU Taxonomy through the development of a dedicated tool.

The bank is investing in the deployment of an ESG global IT architecture to manage all relevant ESG data. Under this architecture, ESG data will be gathered for several monitoring purposes, including EU Taxonomy.

Governance

At management level, dedicated committees and specialised functions ensure the execution of the Group strategy, correctly managing climate-related risks in the line with the Risk Appetite Framework while taking advantage of the business opportunities arising from the transition to a low-carbon economy, supporting the clients in a just and fair transition.

- The Group Executive Committee (GEC) is the Group's most senior executive committee, chaired by the CEO. It ensures the effective steering, coordination, and control of the Group business as well as the alignment of the Parent Company with the different businesses and geographies regarding strategic topics, such as ESG issues. In dedicated Risk session, it supports the CEO in coordinating and monitoring all categories of risks and approves strategic risk topics, including ESG-related matters;
- The Group Strategy & ESG and the Group Stakeholder Engagement functions together serve as a CEO Office, dealing with all initiatives which are critical for the CEO, such as strategy, M&A, the further integration of ESG criteria in our business, stakeholder management, and regulatory affairs;
- The Group ESG function, part of Group Strategy & ESG, steers the definition and implementation of the Group's ESG strategy. It ensures the ESG framework is consistent with the Group's principles and purpose and with relevant international standards and practices. Moreover, the function is tasked with, inter alia, monitoring and disclosing the Group's ESG impacts and results and with overseeing the adoption of relevant policies and standards;
- The Group Management Risk function, through dedicated effort within existing risk pillars covering the different risk types and dedicated units oversees and steers the Risk Management Framework on climate and environmental risk. Functions fully dedicated to Climate and environmental topics are:
 - the Group Climate Risk and Risk Governance function oversees climate-related and environmental risks. It provides a central steering and coordination role to ensure alignment with ECB guidelines on climate and the execution of the related plan, promotes the definition of a strategic view on climate risk and supports climate risk - related methodologies definition;
 - the Climate & Environmental Credit Analysis function orchestrates the integration of climate and environmental (C&E) factors into the different dimensions and phases of the credit risk cycle (data taxonomy, strategies, process implementations, monitoring and reporting).
- The Group Financial and Credit Risk Committee defines strategies, policies, operational limits and methodologies for credit risk, market risks and financial risks;
- The Group Non-Financial Risks and Controls Committee (GNFRCC) supports the CEO in the role of steering and monitoring non-financial risks including the reputational risk on sensitive sectors and customer relationship;
- Transactional Committees at holding and local level evaluate counterparts considering also the C&E questionnaire results (Climate & Environmental);
- The Group Transactional Committee discusses and approves transactions within proper powers through two dedicated sessions at Group level on the basis of exposure;
- On the opportunity side the Sustainable Finance Advisory Team has the role of: increasing client engagement of ESG-related topics and facilitate their access to Europe's growing sustainable finance market, combining sustainability expertise with capital markets and loan markets capabilities; providing our clients with targeted advice regarding the implementation of sustainable finance instruments; offering a holistic and comprehensive ESG advisory approach that is a sustainable alternative to traditional finance advisory services; ensuring that relevant transaction in the Group comply with the Equator Principles, the financial industry benchmark for determining, assessing and managing environmental and social risk in projects.

2022 UniCredit remuneration policy has been developed to support the accomplishment of the UniCredit Unlocked strategic plan, of which the ESG strategy of the Group is a key component. In particular the KPI "Sustainability" refers to the support of our clients' green and social transition and promotion of people diversity, equity & inclusion. This is a commitment to a key lever for the bank's future business strategies and a critical component of success.

The targets for this KPI are the following:

- €140 billion by 2024 on "Environmental" volumes;
- €10 billion by 2024 on "Social" volumes (social lending);
- Gender parity ambition across organization;
- €100 million by 2024 to ensure equal pay for equal work.

So as to align the Group's management structure and reinforce managerial commitment to our ESG strategy, such objectives are cascaded to the CEO's reporting line and below involving all the Group Material Risk Taker population (i.e. those categories of staff whose professional activities have a material impact on an institution's risk profile). The Group Material Risk Taker (GMRT) population in UniCredit, according to the latest identification process, is composed of 1,121 employees of which approximately 450 belong to the Business Functions. All GMRT scorecards for the assessment of short-term performance include at least one ESG goal.

Environmental, Social and Governance risks (ESG)

ESG goals can be selected among a cluster of ESG KPIs included in the "KPI Bluebook", a catalogue of performance indicators annually certified by relevant Group key functions. Among the ESG KPI defined in the BlueBook catalogue there are ESG Strategy and Net Zero Project.

Risk management

Climate & Environmental (C&E) risks materialize through the traditional categories of credit risk, non-financial risk, market risk, liquidity and funding risks. In particular, the main transmission channels to its existing risk categories are the following:

- Credit (and counterparty) risk: C&E risks may impact all stages of the Group credit granting process;
- Non-financial Risks: C&E risks can drive operational risk, e.g. legal risk, and reputational risk that can arise as a result of the Group activities. The Group reputation could be impacted or subject to legal claims in case of financing activities that are publicly controversial (e.g. oil and gas non-conventional activities), or in case a "bad sentiment" in opinion-leading media (press, TV, on-line) due to C&E related issues;
- Market risk: C&E Risks are typically expected to materialize mainly through the worsening of the credit spread and the loss in equity value for corporate sectors whose revenues could be affected negatively in a disorderly low-carbon transition or in a significant physical risk scenario. Investors in financial markets could reward companies they believe will be resilient in the transition to a low carbon-intensive economy while increasing the risk premia they demand from carbon-intensive firms. The before mentioned scenario may result in price shocks and increase in market volatility. Moreover, markets dislocation could reduce the effectiveness of banks' hedging practices, due to break-down in correlations across different asset classes;
- Liquidity and funding: C&E risks can influence the value of financial assets, which in turn might affect the liquidity of that asset, thereby creating liquidity risk. This risk can also arise as the result of C&E events triggering a run on the bank: environmental crises can lead to higher withdrawals or put stress on the liquidity position of the institution in a specific geographical area. On the liability side of the balance sheet, C&E factors can affect the availability and/or stability of funding (e.g. hampered or more expensive access to market funding, unstable deposits due to changing customer preferences), thereby creating funding risk.

The Group over the past years has undertaken several actions to progressively integrate C&E risk considerations into the Risk Management Framework via the two drivers of transition and physical risk by setting methodologies and applying international standards.

The bank, to properly position itself in terms of strategic targets and to ensure proactive risk steering of the bank risk-return profile, has considered climate and environmental risk factors into the Risk Appetite Framework through clear Risk Appetite Statement, specific KPIs in the Risk Appetite Dashboard and the cascading to a more granular level (e.g. divisions, industries) via risk strategies.

In particular, the Climate Risk KPIs covering both Transition and Physical risk have been already included within Risk Appetite Framework since 2022.

The overall materiality assessment of C&E risk factors will be included within the ICAAP 2023 (through scenario analysis) encompassing an evaluation based on the forward-looking evolution foreseen by climate-related scenarios. The package will include the capital impact on normative and economic perspectives, on a short and medium-long term time horizon.

With regard to credit risk and specifically to transition risk the Group has designed and implemented a Climate and Environmental Risk Assessment questionnaire to determine clients' position on the transition pathway.

The questionnaire has been designed to assess transition risk exposure along three key dimensions: level of current exposure, level of future vulnerability and economic impact.

In so doing, UniCredit considered several topics that can lead to an increased credit risk, for example counterparties' revenues and asset value which is subject to transitioning to a low-carbon economy or production processes that are subject to significant changes to minimize non-atmospheric pollution. This methodology foresees:

- the filling in of a questionnaire addressing both high and low emissions clients in line with regulatory expectations;
- the generation of a Climate and Environmental Risk Scorecard summarizing the main KPIs and identifying the counterpart's positioning in one of the four risk areas (Low, Medium-Low, Medium-High, High) of the transition assessment matrix;
- the inclusion of this environmental scoring within the credit evaluation process within Credit granting Committees (Holding and Local).

Additionally, a dedicated climate strategy has been embedded in Credit Risk strategies (CRS) 2022 via dedicated climate steering signals (reflecting the level of transition risk) on specific sub-sectors: e.g., fossil fuel sub-industry. CRS 2023 have been further enriched via climate steering signals with regard to transition risk on all industries in scope.

Regarding Physical risk, the Group assessed the potential damage to mortgage portfolio collaterals at Group level due to extreme and acute climate-related events. A first, forward-looking and high-level assessment of how physical risk can impact on the overall fair value with particular focus on acute river flood and chronic sea-level rise hazards has been conducted.

On collateral valuation from a transition risk perspective a systematic collection and storing of Energy Performance Certificates (EPC) has been set-up and it is ongoing to fully cover the bank's portfolio for both collateral stock and new flows at origination phase with the aim to integrate related consideration into the collaterals' fair value.

Environmental, Social and Governance risks (ESG)

Regarding non-financial risk framework in the bank's controversial sector policies have been defined criteria for identifying the customers, the activities and the financial products and services in the scope of the policy, as well as process, roles and responsibilities for performing the requested reputational and ESG risk assessment. According to these criteria, we engage with our counterparties to accelerate the green energy transition.

From an Operational risks perspective, regarding the most part of data center operations and business continuity plans, has been also assessed considering potential impact of extreme physical risk climate related events. The Group has endeavored over the past years to decrease energy consumption in data centers and build resilience by anticipating and preparing for any adverse events, mainly cybercrime, by preventing data leakage and guaranteeing business continuity.

The accurate analysis performed has led to conclude that business continuity processes of UniCredit group are not affected by physical change in weather patterns or other chronic, climate related, environmental changes.

Regarding financial risks (Market Risk, Liquidity Risk and Counterparty Credit Risk) several concrete initiatives have been launched to integrate C&E risk into the financial risk management framework. Find below the key pillars of the approach followed:

- an overall methodological approach for inclusion of C&E drivers within Financial Risk framework have been defined also leveraging on the combination of the assessment methodologies the bank is currently applying;
- the assessment of C&E drivers is included in the process for evaluating of new financial products for which the Group legal entities have also to verify if any C&E risk is embedded in the payoff/structure of the product and ensure the consistency with Group ESG strategy by involving the local competent function if needed;
- the enhancement of monthly reporting and monitoring framework through the inclusion of Physical and Transition risks for Financial Risk relevant perimeter and inclusion of Market- and Counterparty Credit Risk Stress Tests.

In concrete terms the financial risk department monitors monthly and reports to competent corporate governing bodies the concentration towards Climate Policy Relevant Sectors with reference to equity risk and corporate bonds in the trading book, corporate bonds in the investment portfolio, counterparty credit risk exposures and counterbalancing capacity.

In addition, since April 2022, the Market risk stress testing program has been enhanced with a dedicated Climate risk scenario which extends the ECB short-term disorderly transition scenario in terms of scope of risk factors and perimeter. Moreover, starting with October 2022 the monthly reporting and monitoring framework has been enhanced through the inclusion of Physical and Transition risks and with December 2022 the Climate risk stress test scenarios have been further increased.

The outcomes of concentration analyses and stress scenarios, combined with qualitative considerations on the UniCredit trading business model, suggest a limited materiality of climate & environmental drivers on market risk exposures.

The access to reliable and consistent clients' climate and environmental data is one of the key challenges for banks as well as a crucial enabler to develop a sound risk management framework, to be compliant to regulatory disclosure and for accelerating Risk Management and Business Steering. To this purpose UniCredit is implementing a global framework for ESG information.

In 2022 the Group has started the grounding of data strategy which mixes different solutions leveraging both external providers and internal data collection/customer surveys. We chose the strategy to be applied according to the different characteristics and drivers of the portfolio, taking into account different needs: regulatory disclosures, managerial needs, Net Zero commitments.

The collection of information, through the support of the external provider, will be used in a complementary manner with respect to the data collected in a punctual way through the customer surveys. The Group is already collecting information on counterparts through C&E questionnaire. Bank, for business purposes and also for disclosure to the regulator for the Green Asset Ratio (GAR) calculation, needs to intercept also single green loans, regardless of the classification of the counterparty. For the identification of green transactions, according to taxonomic criteria, starting from the analysis of the delegated acts of the EU commission, a survey was designed to be submitted at loan level.

The bank is creating a new ESG ecosystem integrated into bank's existing architecture, in order to have a complete view of the climatic and credit risks associated to a counterparty/transaction, ensuring data uniqueness. The new ESG data architecture will allow a further enhancement of monitoring and reporting together with all data exploration activities.

Environmental, Social and Governance risks (ESG)

Qualitative information on Social risk

Business strategy and processes

At UniCredit, relevant social factors (e.g., inclusive finance, social housing) have been embedded starting from 2022 within regular Credit Risk Strategies process, via qualitative guidelines to be applied on both Corporate and Retail portfolio.

A internal global policy defines principles and rules for managing and controlling Reputational Risk in UniCredit group; each time there is a new initiative that could envisage a reputational risk for the Group legal entities or for the entire Group, a reputational risk evaluation must be conducted with the aim of assessing the presence of reputational risks associated to the initiative and/or to the subject.

All the subjects that establish a relationship with UniCredit group must satisfy at least a set of social minimum requisites (e.g., compliance with all locally effective host country social and environmental laws, regulations and permits and with the core labour standards as identified in the International Labour Organization conventions).

In addition, UniCredit group recognizes that there are sectors that can envisage a potential reputational risk because of the sensitivity of the sector itself. The provisions for each sensitive sector are ruled in dedicated sections of the specific policy and also in specific operative instructions.

These policies are published on our website, at the following link: <https://www.unicreditgroup.eu/en/esg-and-sustainability/esg-sustainability-policies-and-ratings.html>.

Governance

All the subjects that establish a relationship with a Group legal entities must comply with the following minimum set of social criteria:

- Compliance with all locally effective host country social and environmental laws, regulations and permits
- Compliance with the core labour standards as identified in the International Labour Organization (ILO) conventions. In particular:
 - No employment of children under 15 years of age;
 - No forced labour, no physical punishment or physical/psychological compulsory measures;
 - Freedom of association;
 - No discrimination on the basis of ethnicity, origin, race, gender, age, language, religious or political convictions;
 - Commitment to respecting the ten fundamental principles of the United Nations Global Compact.

All these requirements need to be verified by Business functions before submitting the annual review request for Group counterparties.

The bank leverages on the usual split of tasks/responsibilities for the management of social factors and risks (i.e., first, second and third level of controls), the cases with high reputational risk are escalated to the relevant decisional bodies.

Reputational Risk local offices, Non-financial risk local committees and Group bodies described above are all involved in several steps of Reputational Risk assessment.

Further information are available in Integrated Report 2022, Risk Management chapter.

Furthermore, the Group Non-Financial Risks and Controls Committee (GNFRCC) supports the CEO in the role of steering and monitoring non-financial risks including the valuation of counterparts with respect to the sector policies. It has a monthly frequency.

UniCredit Remuneration Policy 2022 has been developed to support the accomplishment of the UniCredit Unlocked plan, of which the ESG strategy of the Group is a key component. Refer to Governance section of Environmental risk above for further information.

Risk management

Social risk is mitigated by the Reputational Risk process currently in place.

Each time a Group legal entity is undertaking a new initiative that could envisage a reputational risk for the legal entity or for the entire Group, a Reputational Risk Evaluation must be conducted with the aim of assessing the presence of Reputational Risks associated to the initiative and/or to the subject and of triggering a proper Reputational Risk Assessment.

In particular a Reputational Risk Assessment is requested:

- On Event ("Single Deal Approval" when a customer, generally, but not exclusively, belonging to one or more "sensitive sectors" is requesting a financial support for a project or a general financing or "Reputational Clearance" whenever an event, related to a customer, occurs and the event itself could impact UniCredit group's reputation);
- On Schedule (annual clearance for assessing the risk and opportunity to maintain or to establish a relationship with a subject (e.g., customer, third party service provider).

As mentioned above, the bank recognises that there are several sectors that introduce additional conditions for subjects or specific projects (e.g., Defence, Coal, Oil&Gas). In the assessment of reputational risk, authorization is given by different bodies depending on the severity level of the reputational risk, which may be low, medium or high.

Environmental, Social and Governance risks (ESG)

High-risk cases are submitted to the relevant structures up to the Group Non-Financial Risk Committee when the risk appetite for the case has not been specifically set by the regulation or by previous Group NFR Committee decisions.

The bank's approach is based on the following methodologies/standards: International Finance Corporation (IFC) Performance Standards, Equator Principles (EP), Core Labour Standards (CLS) of the International Labour Organization (ILO).

UniCredit performs qualitative evaluations based on generic or specific bad news, final convictions or also ongoing legal proceedings for violations of applicable laws and sectorial International standards or connected to forbidden activities involving the customer, NGOs or activists' relevant initiatives. Reputational risk process also leverages on external tools, in particular RepRisk® Tool and ISS ESG.

The reputational risk evaluation is performed by the function or by the person of the Group legal entity responsible, by role, for the initiative that is going to be launched and therefore that must be assessed (e.g., relationship manager when on-boarding a customer or when renewing the credit lines during the year or when evaluating a request for providing a new financial support to a customer).

Further information on activities and commitments which can contribute to mitigate social risk are described in the Integrated Report, in the following chapters/sections:

- Our ESG Strategy;
- International and institutional initiatives;
- Social and Relationship Capital.

Qualitative information on Governance risk

Governance

According to the Reputational Risk process, the counterparties' governance performance is evaluated on a qualitative basis through the Reputational Risk annual clearance and the Reputational Risk Single Deal Assessment taking into consideration generic or specific bad news, final convictions or also ongoing legal proceedings for violations of applicable laws and sectorial International standards or connected to forbidden activities involving the customer, NGOs or activists' relevant initiatives.

The bank leverages on the usual split of tasks and responsibilities for the management of governance factors and risks (i.e., first, second and third level of controls), the cases with high reputational risk are escalated to the relevant decisional bodies.

UniCredit is aware that many counterparties fall in scope of National decrees issued according to EU Non-Financial Reporting Directive. In particular, Italian counterparties which fall under the scope of Legislative Decree 254/2016 are obliged to annually publish non-financial information, which needs to be approved by the Board of Directors. UniCredit leverages on this presidium in terms of governance.

Risk management

Further information on UniCredit approach to third-party assessment, conflict of interests and other considerations such as anti-corruption, are described in the Integrated Report 2022, Compliance - Supplement.

Environmental, Social and Governance risks (ESG)

Quantitative information on ESG risks

Perimeter

The perimeter of the templates represents a significant share of the UniCredit group portfolio and refers to the exposures of Non-Financial Corporations and individual mortgages.

Template 1 - Banking book - Indicators of potential climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity

Description

Template 1 shows information on the bank exposures to transition risks that institutions may face from the transition to a low-carbon and climate-resilient economy. Institutions must disclose information on their exposures towards non-financial corporates that operate in sectors that contribute highly to climate change and in carbon-related sectors, and on the quality of those exposures, including credit quality information on non performing exposures, stage 2 exposures and related impairments and provisions.

ESG metrics

The prudential information on environmental, social and governance (ESG) risks that are requested to be disclosed in template 1 are related to:

- Gross Carrying Amount (GCA) of which exposures towards companies excluded from EU Paris-aligned Benchmarks (PAB) as specified in Recital 6 of Commission Delegated Regulation (EU) 2020/1818 supplementing Regulation (EU) 2016/1011 as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks (column B);
- the other metrics (GCA of which environmentally sustainable (CCM), Greenhouse Gases (GHG) financed emissions, GHG emissions) are out of scope of the first disclosure as at 31 December 2022 (refer to details provided in the note below the template 1).

Reference regulation to meet regulatory requirements

With reference to the GCA PAB excluded, Commission Delegated Regulation (EU) 2020/1818 set out the categories of exclusions for EU Paris-aligned Benchmarks as specified in article 12(1), only for companies related to points (d) to (g), listed below:

- companies that derive 1% or more of their revenues from exploration, mining, 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, manufacturing 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.

UniCredit approach developed to address the regulatory requirements

UniCredit adopted the following methodology to identify the EU PAB benchmark excluded counterparties in line with the Regulation 2020/1818 using information reported by companies within Non-Financial Reporting Directive (NFRD). Otherwise the counterparties activities have been mapped according to the Regulation (EU) 2020/1818 categories, on the relevant counterparty NACE or by further investigation when additional information is provided by official documents.

With reference to letter (g) Delegated Regulation (EU) 2020/1818 (companies that derive 50% or more of their revenues from electricity generation with a GHG intensity of more than 100 g CO₂ e/kWh), in absence of public information on the GHG emissions produced for kWh, the counterparties were considered excluded from EU PAB benchmark when the activity is powered mainly by traditional thermoelectric sources (with a best effort assessment based on available information).

Environmental, Social and Governance risks (ESG)

Template 1 - Banking book - Indicators of potential climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity

(€ million)					
SECTOR/SUBSECTOR	a	b	d	e	
			GROSS CARRYING AMOUNT		
			OF WHICH EXPOSURES TOWARDS COMPANIES EXCLUDED FROM EU PARIS- ALIGNED BENCHMARKS (**)	OF WHICH STAGE 2 EXPOSURES	OF WHICH NON- PERFORMING EXPOSURES
1	Exposures towards sectors that highly contribute to climate change (*)	197,780	8,195	43,212	6,636
2	A - Agriculture, forestry and fishing	3,606	-	894	155
3	B - Mining and quarrying	2,915	1,691	1,905	18
4	B.05 - Mining of coal and lignite	11	10	7	-
5	B.06 - Extraction of crude petroleum and natural gas	1,531	1,212	1,313	-
6	B.07 - Mining of metal ores	256	-	232	10
7	B.08 - Other mining and quarrying	345	-	76	1
8	B.09 - Mining support service activities	772	469	277	6
9	C - Manufacturing	63,617	1,330	15,452	1,961
10	C.10 - Manufacture of food products	6,739	-	1,471	141
11	C.11 - Manufacture of beverages	1,107	-	158	20
12	C.12 - Manufacture of tobacco products	147	-	2	0
13	C.13 - Manufacture of textiles	1,045	-	207	33
14	C.14 - Manufacture of wearing apparel	1,001	-	257	50
15	C.15 - Manufacture of leather and related products	823	-	162	30
16	C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1,143	-	275	34
17	C.17 - Manufacture of paper and paper product	2,193	-	828	65
18	C.18 - Printing and reproduction of recorded media	652	-	181	26
19	C.19 - Manufacture of coke and refined petroleum products	1,696	1,330	394	1
20	C.20 - Manufacture of chemicals and chemical products	4,666	-	1,361	317
21	C.21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	1,636	-	421	4
22	C.22 - Manufacture of rubber products	3,536	-	741	55
23	C.23 - Manufacture of other non-metallic mineral products	2,845	-	503	60
24	C.24 - Manufacture of basic metals	4,345	-	1,685	65
25	C.25 - Manufacture of fabricated metal products, except machinery and equipment	6,437	-	1,463	203
26	C.26 - Manufacture of computer, electronic and optical products	3,057	-	730	38
27	C.27 - Manufacture of electrical equipment	2,686	-	469	126
28	C.28 - Manufacture of machinery and equipment n.e.c.	6,396	-	1,517	185
29	C.29 - Manufacture of motor vehicles, trailers and semi-trailers	4,802	-	1,032	348
30	C.30 - Manufacture of other transport equipment	2,840	-	360	48
31	C.31 - Manufacture of furniture	861	-	196	69
32	C.32 - Other manufacturing	1,329	-	241	14
33	C.33 - Repair and installation of machinery and equipment	1,635	-	798	28
34	D - Electricity, gas, steam and air conditioning supply	13,282	3,168	3,765	235
35	D35.1 - Electric power generation, transmission and distribution	11,158	1,516	3,465	119
36	D35.11 - Production of electricity	8,332	1,516	3,088	86
37	D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	1,917	1,651	258	112
38	D35.3 - Steam and air conditioning supply	207	-	41	4
39	E - Water supply; sewerage, waste management and remediation activities	2,528	-	528	51
40	F - Construction	14,320	-	3,289	910
41	F.41 - Construction of buildings	9,339	-	2,056	601
42	F.42 - Civil engineering	2,243	-	551	81
43	F.43 - Specialised construction activities	2,739	-	682	228
44	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	38,513	1,882	7,242	1,197
45	H - Transportation and storage	10,866	124	2,057	323
46	H.49 - Land transport and transport via pipelines	3,686	124	997	85
47	H.50 - Water transport	1,864	-	230	102
48	H.51 - Air transport	205	-	52	39
49	H.52 - Warehousing and support activities for transportation	3,355	-	756	96
50	H.53 - Postal and courier activities	1,755	-	23	1
51	I - Accommodation and food service activities	4,632	-	1,968	387
52	L - Real estate activities	43,500	-	6,112	1,399
53	Exposures towards sectors other than those that highly contribute to climate change (*)	43,406	-	6,957	1,579
54	K - Financial and insurance activities	2,785	-	256	135
55	Exposures to other sectors (NACE codes J, M - U)	40,622	-	6,701	1,444
56	Total as at 31.12.2022	241,187	8,195	50,169	8,215

Environmental, Social and Governance risks (ESG)

continued: Template 1 - Banking book - Indicators of potential climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity

(€ million)				
SECTOR/SUBSECTOR		f	g	h
		ACCUMULATED IMPAIRMENT, ACCUMULATED NEGATIVE CHANGES IN FAIR VALUE DUE TO CREDIT RISK AND PROVISIONS	OF WHICH NON-PERFORMING EXPOSURES	
			OF WHICH STAGE 2 EXPOSURES	<= 5 YEARS
1	Exposures towards sectors that highly contribute to climate change (*)	(6,996)	(2,484)	(3,680)
2	A - Agriculture, forestry and fishing	(155)	(40)	(92)
3	B - Mining and quarrying	(550)	(530)	(16)
4	B.05 - Mining of coal and lignite	(1)	(1)	-
5	B.06 - Extraction of crude petroleum and natural gas	(455)	(455)	-
6	B.07 - Mining of metal ores	(65)	(55)	(10)
7	B.08 - Other mining and quarrying	(7)	(3)	(1)
8	B.09 - Mining support service activities	(22)	(16)	(5)
9	C - Manufacturing	(2,236)	(674)	(1,056)
10	C.10 - Manufacture of food products	(259)	(79)	(97)
11	C.11 - Manufacture of beverages	(46)	(10)	(16)
12	C.12 - Manufacture of tobacco products	(1)	(0)	(0)
13	C.13 - Manufacture of textiles	(33)	(10)	(19)
14	C.14 - Manufacture of wearing apparel	(43)	(9)	(30)
15	C.15 - Manufacture of leather and related products	(27)	(6)	(16)
16	C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	(42)	(13)	(20)
17	C.17 - Manufacture of paper and paper product	(103)	(74)	(13)
18	C.18 - Printing and reproduction of recorded media	(25)	(7)	(17)
19	C.19 - Manufacture of coke and refined petroleum products	(31)	(2)	(0)
20	C.20 - Manufacture of chemicals and chemical products	(202)	(56)	(107)
21	C.21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	(37)	(21)	(3)
22	C.22 - Manufacture of rubber products	(103)	(36)	(27)
23	C.23 - Manufacture of other non-metallic mineral products	(89)	(24)	(26)
24	C.24 - Manufacture of basic metals	(172)	(88)	(49)
25	C.25 - Manufacture of fabricated metal products, except machinery and equipment	(255)	(72)	(112)
26	C.26 - Manufacture of computer, electronic and optical products	(53)	(23)	(22)
27	C.27 - Manufacture of electrical equipment	(117)	(22)	(80)
28	C.28 - Manufacture of machinery and equipment n.e.c.	(190)	(50)	(120)
29	C.29 - Manufacture of motor vehicles, trailers and semi-trailers	(240)	(34)	(193)
30	C.30 - Manufacture of other transport equipment	(33)	(7)	(18)
31	C.31 - Manufacture of furniture	(75)	(13)	(50)
32	C.32 - Other manufacturing	(34)	(11)	(7)
33	C.33 - Repair and installation of machinery and equipment	(27)	(8)	(13)
34	D - Electricity, gas, steam and air conditioning supply	(275)	(141)	(88)
35	D35.1 - Electric power generation, transmission and distribution	(240)	(128)	(73)
36	D35.11 - Production of electricity	(181)	(104)	(49)
37	D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	(29)	(12)	(12)
38	D35.3 - Steam and air conditioning supply	(5)	(2)	(3)
39	E - Water supply; sewerage, waste management and remediation activities	(86)	(46)	(28)
40	F - Construction	(735)	(167)	(500)
41	F.41 - Construction of buildings	(429)	(117)	(281)
42	F.42 - Civil engineering	(88)	(16)	(65)
43	F.43 - Specialised construction activities	(218)	(35)	(154)
44	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	(1,042)	(222)	(743)
45	H - Transportation and storage	(378)	(139)	(201)
46	H.49 - Land transport and transport via pipelines	(131)	(63)	(54)
47	H.50 - Water transport	(110)	(25)	(74)
48	H.51 - Air transport	(20)	(4)	(14)
49	H.52 - Warehousing and support activities for transportation	(112)	(41)	(58)
50	H.53 - Postal and courier activities	(6)	(6)	(0)
51	I - Accommodation and food service activities	(296)	(112)	(178)
52	L - Real estate activities	(1,245)	(412)	(779)
53	Exposures towards sectors other than those that highly contribute to climate change (*)	(988)	(203)	(707)
54	K - Financial and insurance activities	(102)	(14)	(77)
55	Exposures to other sectors (NACE codes J, M - U)	(886)	(188)	(630)
56	Total as at 31.12.2022	(7,984)	(2,686)	(4,386)

Environmental, Social and Governance risks (ESG)

continued: Template 1 - Banking book - Indicators of potential climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity

(€ million)				
SECTOR/SUBSECTOR				AVERAGE WEIGHTED MATURITY
	m	n	o	
	> 5 YEAR <= 10 YEARS	> 10 YEAR <= 20 YEARS	> 20 YEARS	
1 Exposures towards sectors that highly contribute to climate change (*)	34,227	17,633	12,964	4.74
2 A - Agriculture, forestry and fishing	758	313	167	4.93
3 B - Mining and quarrying	918	188	227	3.82
4 B.05 - Mining of coal and lignite	3	0	-	3.44
5 B.06 - Extraction of crude petroleum and natural gas	794	115	-	4.51
6 B.07 - Mining of metal ores	-	11	-	2.68
7 B.08 - Other mining and quarrying	52	28	2	3.25
8 B.09 - Mining support service activities	70	34	225	1.94
9 C - Manufacturing	8,112	1,808	1,809	2.59
10 C.10 - Manufacture of food products	976	164	186	2.60
11 C.11 - Manufacture of beverages	243	25	34	3.04
12 C.12 - Manufacture of tobacco products	0	0	-	1.47
13 C.13 - Manufacture of textiles	135	19	7	2.43
14 C.14 - Manufacture of wearing apparel	131	9	2	2.71
15 C.15 - Manufacture of leather and related products	68	21	11	2.65
16 C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	295	26	24	3.57
17 C.17 - Manufacture of paper and paper product	462	22	21	3.00
18 C.18 - Printing and reproduction of recorded media	139	21	6	3.10
19 C.19 - Manufacture of coke and refined petroleum products	458	5	7	2.52
20 C.20 - Manufacture of chemicals and chemical products	572	189	117	2.54
21 C.21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations	124	21	166	2.67
22 C.22 - Manufacture of rubber products	556	73	89	3.01
23 C.23 - Manufacture of other non-metallic mineral products	399	42	49	2.74
24 C.24 - Manufacture of basic metals	350	15	183	1.78
25 C.25 - Manufacture of fabricated metal products, except machinery and equipment	846	170	119	2.76
26 C.26 - Manufacture of computer, electronic and optical products	219	112	167	2.22
27 C.27 - Manufacture of electrical equipment	285	53	145	2.38
28 C.28 - Manufacture of machinery and equipment n.e.c.	717	130	101	2.57
29 C.29 - Manufacture of motor vehicles, trailers and semi-trailers	317	33	117	1.70
30 C.30 - Manufacture of other transport equipment	91	297	173	2.31
31 C.31 - Manufacture of furniture	110	23	3	2.88
32 C.32 - Other manufacturing	151	33	12	2.76
33 C.33 - Repair and installation of machinery and equipment	466	305	70	5.05
34 D - Electricity, gas, steam and air conditioning supply	3,735	1,923	233	5.13
35 D35.1 - Electric power generation, transmission and distribution	3,470	1,475	232	5.24
36 D35.11 - Production of electricity	3,040	1,303	125	6.02
37 D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	165	415	1	4.37
38 D35.3 - Steam and air conditioning supply	101	34	-	5.52
39 E - Water supply; sewerage, waste management and remediation activities	507	432	93	5.71
40 F - Construction	1,955	1,660	1,201	5.90
41 F.41 - Construction of buildings	1,105	1,320	1,026	6.84
42 F.42 - Civil engineering	486	196	63	4.43
43 F.43 - Specialised construction activities	364	143	113	3.81
44 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	3,730	878	571	2.32
45 H - Transportation and storage	1,845	1,026	1,910	3.63
46 H.49 - Land transport and transport via pipelines	683	146	109	3.38
47 H.50 - Water transport	631	250	25	5.31
48 H.51 - Air transport	24	1	15	2.18
49 H.52 - Warehousing and support activities for transportation	472	628	110	4.88
50 H.53 - Postal and courier activities	35	0	1,652	0.22
51 I - Accommodation and food service activities	1,235	717	73	5.91
52 L - Real estate activities	11,434	8,688	6,679	9.69
53 Exposures towards sectors other than those that highly contribute to climate change (*)	6,382	2,530	2,748	4.01
54 K - Financial and insurance activities	357	408	166	4.38
55 Exposures to other sectors (NACE codes J, M - U)	6,025	2,122	2,582	3.98
56 Total as at 31.12.2022	40,609	20,163	15,712	4.61

Environmental, Social and Governance risks (ESG)

Notes:

- (*) In accordance with the Commission Delegated Regulation (EU) 2020/1818 supplementing Regulation (EU) 2016/1011 as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks - Climate Benchmark Standards Regulation - Recital 6: Sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) 1893/2006.
- (**) Article 12(1) points (d) to (g) and article 12(2) of Regulation (EU) 2020/1818.
- Average weighted maturity is in years (column p).
- The Template 1 above does not show the following columns:
 - column c ("of which environmentally sustainable (CCM)") required:
 - with first reference date as at 31 December 2023, for exposures included in the numerator of the Green Asset Ratio ("GAR");
 - with first reference date as at 31 December 2024, for those exposures included in the numerator of the Banking book Taxonomy Alignment Ratio ("BTAR") but not in the numerator of the GAR;
 - column i ("GHG financed emissions (scope 1, 2 and 3 emissions of the counterparty) (in tons of CO2 equivalent)");
 - column j ("of which scope 3 financed emissions");
 - column k ("GHG emissions (column (i): gross carrying amount percentage of the portfolio derived from company-specific reporting") required with first reference date as at 30 June 2024.

Template 2 - Banking book - Indicators of potential climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral

Description

Template 2 represents energy efficiency information on loans collateralized by immovable property.

Prudential information on climate change transition risk related to loans collateralised by commercial and residential real estate properties, and on collateral repossessed, are based on the energy efficiency of the collateral, including information on the distribution of real estate loans and advances and on repossessed collateral, by energy consumption and by EPC (Energy Performance Certificates, hereinafter "EPC") label of the collateral. The exposures are splitted according to the geographical area of residence of the counterparty (EU area and outside EU).

ESG metrics

The prudential information on environmental, social and governance (ESG) risks to disclose in template 2 are related to:

- GCA of loans collateralised by immovable property and of repossessed real estate collateral with a breakdown by punctual EPC label of the collateral (columns H, I, J, K, L, M, N);
- GCA of loans collateralised by immovable property and of repossessed real estate collateral with a breakdown by Level of energy efficiency (EP (Energy Performance, hereinafter "EP") score in kWh/m² of collateral) (columns B, C, D, E, F, G) both punctual and estimated.

UniCredit approach developed to address the regulatory requirements

UniCredit included in template 2 information on loans secured by commercial and residential real estate, and on repossessed collateral, based on energy consumption and collateral EPC.

During the collection of EPC/EP values needed to estimate the GCA of loans collateralised by immovable property and of repossessed real estate collateral with a breakdown by EPC label of the collateral and by level of energy efficiency (EP score in kWh/m² of collateral), two cases occur:

- punctual EPC/EP is available in internal bank databases;
- punctual EPC/EP is not available, in this case, UniCredit engaged an external provider to setup an approach for the collection of EPC/EP information.

The process of EPC estimated data has involved the following steps:

- the bank has defined the unrated collateral portfolio, related to eligible perimeter and verified if that EPC/EP punctual data was not available;
- a data remediation process has been implemented for the recovery/estimation of EPC data (also leveraging on external specialized partners) and following two options:
 - Option A: Recovery of punctual real EPC/EP data where possible
 - Option B: estimation by an algorithm of EPC/EP data for the unrated collateral leveraging on the mandatory input variables, provided by the bank (e.g., type of asset, address, city, etc.).

Possibility to retrieve punctual data is differentiated by country, depending also from availability of public sources. Considering geographical footprint of UniCredit, this retrieval of information for the stock has been possible mainly in Italy. This geographical concentration has an impact on the distribution of EPC for the existing stock, considering that in the Template 2 only punctual EPC should be disclosed (while in the same template both punctual and estimated EP scores should be disclosed).

An EPC data coverage of more than 90% considering both reported and estimated data has been achieved (the residual part includes also not eligible assets, for which the legislation in force does not provide for EPC certification) on the stock, allowing the bank to have a comprehensive picture of the portfolio.

In view of the relevance of this information for transition risk mapping, the Bank has already started the collection of the EPC and PED (Primary Energy Demand, hereinafter "PED") indicators on the new origination, through direct request to the customers.

Environmental, Social and Governance risks (ESG)

Template 2 - Banking book - Indicators of potential climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral

									(€ million)
		a	b	c	d	e	f	g	
		TOTAL GROSS CARRYING AMOUNT							
		LEVEL OF ENERGY EFFICIENCY (EP SCORE IN KWH/M² OF COLLATERAL)							
COUNTERPARTY SECTOR		0; <= 100	> 100; <= 200	> 200; <= 300	> 300; <= 400	> 400; <= 500	> 500		
1	Total EU area	144,804	30,354	48,663	24,616	5,027	2,336	3,441	
2	of which Loans collateralised by commercial immovable property	52,638	6,008	11,206	6,260	2,440	1,017	1,787	
3	of which Loans collateralised by residential immovable property	91,669	24,247	37,358	18,270	2,516	1,302	1,637	
4	of which Collateral obtained by taking possession: residential and commercial immovable properties	497	99	99	86	72	17	18	
5	of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	93,908	24,392	40,563	21,027	3,201	1,732	2,994	
6	Total non-EU area	3,834	1,000	493	153	15	4	2	
7	of which Loans collateralised by commercial immovable property	2,166	669	141	17	0	0	-	
8	of which Loans collateralised by residential immovable property	1,664	330	352	135	15	4	2	
9	of which Collateral obtained by taking possession: residential and commercial immovable properties	4	-	0	-	-	-	-	
10	of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	1,547	978	406	147	12	3	1	

continued: Template 2 - Banking book - Indicators of potential climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral

(€ million)										
		h	i	j	k	l	m	n	o	p
		TOTAL GROSS CARRYING AMOUNT								
		LEVEL OF ENERGY EFFICIENCY (EPC LABEL OF COLLATERAL)							WITHOUT EPC LABEL OF COLLATERAL	
									OF WHICH LEVEL OF ENERGY EFFICIENCY (EP SCORE IN KWH/M² OF COLLATERAL) ESTIMATED	
COUNTERPARTY SECTOR		A	B	C	D	E	F	G		
1	Total EU area	3,473	2,207	2,339	2,477	2,836	3,361	4,587	123,523	76%
2	of which Loans collateralised by commercial immovable property	1,104	980	945	574	345	394	493	47,802	50%
3	of which Loans collateralised by residential immovable property	2,365	1,209	1,296	1,852	2,428	2,911	4,010	75,597	92%
4	of which Collateral obtained by taking possession: residential and commercial immovable properties	3	18	98	51	63	55	84	124	14%
5	of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated								91,604	100%
6	Total non-EU area	8	3	11	16	14	8	12	3,761	41%
7	of which Loans collateralised by commercial immovable property	-	-	5	11	4	1	-	2,145	35%
8	of which Loans collateralised by residential immovable property	8	3	6	5	10	7	12	1,612	49%
9	of which Collateral obtained by taking possession: residential and commercial immovable properties	-	-	-	-	-	-	-	4	2%
10	of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated								1,538	100%

Environmental, Social and Governance risks (ESG)

Template 4 - Banking book - Indicators of potential climate change transition risk: Exposures to top 20 carbon-intensive firms

Description

Template 4 shows institutions exposures towards the top 20 carbon-intensive companies in the world. It includes information on the average maturity of the exposures, providing insights on how these exposures may be impacted by longer-term climate change transition risks.

ESG metrics

The prudential information on environmental, social and governance (ESG) risks that must be disclosed in Template 4 are related to:

- GCA towards counterparties among the top 20 carbon emitting companies in the world compared to total gross carrying amount (column B);
- GCA of which environmentally sustainable (CCM), required starting from December 2023 (column C);
- Number of top 20 polluting firms included (column E).

UniCredit approach developed to address the regulatory requirements

UniCredit has identified in its portfolio the presence of companies ranked among the top polluters. The definition of “top polluter” includes companies with the highest level of emissions, defined as the total tons CO₂/year emitted.

UniCredit made use an external specialized data provider to collect a list covering all different industries, based on most updated GHG emission levels (scope 1 and 2), at Group level. The emission levels used can be punctual (retrieved by public disclosures) or estimated.

The exposure of UniCredit has been assessed also through the comparison with two other public lists providing top 20 polluters: the Carbon Majors Database of the Carbon Disclosure Project (2017) and the list provided by the Climate Accountability Institute (2019). The resulting exposure of UniCredit with these two public lists (€2.3 billion of exposure in both cases) is fully aligned to the result of the assessment with the internally updated list, confirming limited exposure of the portfolio versus top 20 polluters firms.

Template 4 - Banking book - Indicators of potential climate change transition risk: Exposures to top 20 carbon-intensive firms

(€ million)

	a	b	c	d	e
	GROSS CARRYING AMOUNT (AGGREGATE)	GROSS CARRYING AMOUNT TOWARDS THE COUNTERPARTIES COMPARED TO TOTAL GROSS CARRYING AMOUNT (AGGREGATE)*	OF WHICH ENVIRONMENTALLY SUSTAINABLE (CCM)	WEIGHTED AVERAGE MATURITY	NUMBER OF TOP 20 POLLUTING FIRMS INCLUDED
1	2,287	0.95%	-	3.28	12

Note:

(*) For counterparties among the top 20 carbon emitting companies in the world.

Template 5 - Banking book - Indicators of potential climate change physical risk: Exposures subject to physical risk

Description

Template 5 provides information on exposures in the banking book (including loans and advances, debt securities and equity instruments not held for trading and not held for sale) towards non-financial corporates, on loans collateralized by immovable property and on repossessed real estate collateral that are exposed to chronic and acute climate-related hazards. The template includes information by sector of economic activity (NACE classification) and by geography, in line with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations in the supplemental guidance for institutions, for those sectors and geographical areas more exposed to climate change acute and chronic events.

ESG metrics

The prudential information on environmental, social and governance (ESG) risks to disclose in template 5 are related to:

- GCA of exposures sensitive to impact from climate change chronic physical events (column H);
- GCA of exposures sensitive to impact from climate change acute physical events (column I);
- GCA of exposures sensitive to impact from both climate change chronic and acute physical events (column J).

UniCredit approach developed to address the regulatory requirements

UniCredit included in Template 5 information on exposures in the banking book exposed to chronic and acute climate-related hazards, leveraging on following process:

1) Selection of material physical hazard events: selection of specific hazard event that could have a material relevance at corporate rather than at collateral level, on the basis of expert judgment and data available;

Environmental, Social and Governance risks (ESG)

2) Mapping of material physical hazard events related to the bank portfolio asset/collateral localization: association of the more relevant physical risks with the areas to which the bank is exposed at the counterparty/asset levels;

3) Thresholds setting for the relevant physical hazard events: definition of the thresholds considered to intercept the most material risks based on the probability of occurrence and the severity of the physical hazard event;

4) Quantification of the risk exposure at asset and counterparty level: matching of the GCA exposure at collateral and counterparty level with the physical risk identified.

Two different methodologies have been defined to assess the physical risk score depending on the disclosure level (collateral or counterparty), considering different specificities.

For this purpose, UniCredit made use of external specialized data providers.

1) Selection of material physical hazard events

Focus on counterparty level

A comprehensive assessment of the physical hazard event material relevance at counterparty level has been performed according to the sectorial dimension which allows relevant differences according to the specific hazards. Some of the physical hazard events (e.g., heat waves) can be very relevant for some productive activities (such as agriculture) and less relevant (or non-relevant at all) for other activities. Each risk has its own metric/measure, its native level of precision and data source.

Considering ESG risks, the climate change related hazards considered at counterparty level are summarized in the table 1 below:

Table 1: Material physical risk hazard events at counterparty level

Type of physical risk (Acute/Chronic)	Material physical risk hazard Event	Description of the physical risk hazard event	Metric/approach	Spatial Resolution	Source
Acute	LandSlide	Risk of landslide events, long historical data	Annual probability of event with high severity	grid 200 meters/census cell	Third parts Data & Bundesanstalt für Geowissenschaften und Rohstoffe & Istituto di Ricerca per la Protezione Idrogeologica
Acute	Flood	Risk of flood events, related to waterways and heavy rain events, predictive model	Annual probability of event with high severity, return period 50y	grid 100 mt/census cell	Third parts Data & ISPRA (Italy)
Acute	Wind (Extreme wind-related events)	Probability of extreme wind events based on storm footprint, measured on Bedford scale, return period 50y	Annual probability of extreme events (11-12 Bedford scale)	grid H3	Third parts Data
Acute	WildFire	Risk classes depending on days with high fire risk subject to the type environmental where the company is located, RCP 4.5 scenario	Average days/year with high fire risk, subject to type of environmental	grid 4 kilometers	Third parts Data & ESA Data & Copernicus Data
Acute	Extreme waves (Extreme waves, storm surges)	Probability of having storm surges and high energy waves	Wave height in RCP 8.5 with a return period of 50y	grid 25 kilometers	Third parts Data
Acute	Frost occurrences	Probability of cold events (frost, even of short duration), predictive model	Average number of events by years	grid 10 kilometers	Third parts Data
Acute	Heat occurrence	Probability of hot events (even of short duration), predictive model	Average number of events by years	grid 10 kilometers	Third parts Data
Acute	Heat waves	Probability of Heat Waves (extreme hot event > 3 days), historical data	Number of events (> 3 days) observed in a 60y period	grid 10 kilometers	Third parts Data
Acute	Aridity	Probability of aridity phenomena (ratio precipitation/evaporation), predictive model	Mean annual precipitation (P)/mean annual evapotranspiration (ETP)	grid 500 meters	Third parts Data
Chronic	Rainfall soil erosion	Severity of soil erosion due Rainfall, scenario RCP 4.5	R factor: Mj mm/ha h yr	grid H3	Third parts Data
Chronic	Shoreline erosion	Score representing the erosion with respect to the present, RCP 4.5	Meter of erosion, scenario RCP4.5 a y2050	grid 200 meters	Third parts Data
Chronic	Sea level rise	Estimates the sea level with various meteorological models	Max wave height at 2050, return period in 50y	grid 25 kilometers	Third parts Data

Environmental, Social and Governance risks (ESG)

Focus on collateral level

The assessment of physical risk for real estate collateral portfolio has been based on a methodology which covers a comprehensive set of climate hazards that includes chronic hazard events (sea level rise) and acute hazard events (flood, storm, wildfire). Identification of the events has been performed considering possible material damage to the collateral that could be directly generated. Indeed, the potential damage to the buildings allows relevant differences according to the specific hazards: some of the physical risk hazard events (e.g., precipitation, heat stress) are less relevant for potential damages on assets, and therefore are not included in the methodology.

Considering ESG risks, the climate change related hazards were considered at collateral level are summarized in the table 2 below:

Table 2: Material physical risk hazard events at collateral level

Type of physical risk (Acute/Chronic)	Material physical risk hazard Event	Description of the physical risk hazard event	Metric/approach	Spatial Resolution	Source
Chronic	Sea level rise	Estimates the sea level with various meteorological models	Sea-Level Rise Hazard Zones defined on Elevation Index (driven by Coastal Topography) and Sea-Level Rise Index (driven by Sea-Level Rise). The sea-level rise hazard information is available for different scenarios	30 meters resolution for flooding hazard by sea-level rise globally	Third party data: Sea-level rise zones were modelled based on high-resolution elevation data from elevation model and sea-level rise projections from climate models
Acute	Flood: - River Flood - Flash Flood	- River Flood: Risk of river flood events, related to waterways and heavy rain events, predictive model - Flash floods are short-term events which can be produced by multiple thunderstorms with heavy rain over one area	- River Flood: global climate model and global land surface models estimate changes in peak water runoff at hydrological basin resolution. These changes in peak runoff are then used to scale current River Flood maps. The projections are available in different scenarios - Flash Flood: The flash flood map is based on meteorological data, as well as soil, terrain and hydrographic data (slope and flow accumulation). The meteorological data includes the amount, variability, and extreme behavior of rainfall	- River Flood: 30 meters - Flash Flood: approximately 250 meters	Third party data: - River Flood: Geoweb natural hazard maps - Flash flood: soil-sealing maps (detected by looking at impervious surfaces), curvature (from global multi-resolution terrain elevation data), slope and flow accumulation (from conditioned terrain data) as modifiers to generate the final flash flood map
Acute	Storm	Storm (including blizzards, dust and sandstorms); extratropical storms and storm surge	- Extratropical storm: The main variables of the exposure analysis are forward wind, maximum wind speed, minimum central pressure, radius of maximum wind speeds, track of the center ("eye") in 3- to 6-hourly intervals - Storm surge: multiple wave heights are simulated for each coast and calculated the maximum expansion. Wind speeds and bathymetry data were also taken into account	- Extratropical storm: approximately 5 kilometers - Storm surge: approximately 30 meters	Third part data
Acute	WildFire	Risk classes depending on days with high fire risk subject to the type environmental where the company is located, RCP 4.5 scenario	Fire Weather Index (FWI) combining the probability of ignition, the speed and likelihood of fire spread and the availability of fuel.	Approximately 1 kilometer	Third party data: modelled based on daily information about temperature, precipitation, humidity and wind

Focus on counterparty level

Focus on collateral level

3) Thresholds setting for the most relevant physical hazard events

Focus on counterparty level

At counterparty level, physical scoring system has been designed to generate scores based on the thresholds defined according to materiality (frequency and severity) of different hazard events.

The materiality of the different risks was also assessed according to the driver of the sector; for specific sectors, such as agriculture, which is more impacted by certain physical risks, a more conservative approach was adopted.

Focus on collateral level

At collateral level, physical scoring system is designed to generate scores based on the thresholds defined to filter the relevant exposure to specific hazards considering the severity and the frequency of the climate hazard event. Collateral exposed at least to one material hazard event has been considered.

4) Quantification of the risk exposure at counterparty and collateral level

The final step is to quantify the exposure of the bank's portfolio based on the risks selected as impactful according to the methodology above for counterparties and portfolio assets.

(€ million)

(€ million)								
a	b	c	d	e	f	g	h	
TOTAL GEOGRAPHICAL AREA SUBJECT TO CLIMATE CHANGE PHYSICAL RISK - ACUTE AND CHRONIC EVENTS		GROSS CARRYING AMOUNT						OF WHICH EXPOSURES SENSITIVE TO IMPACT FROM CHRONIC CLIMATE CHANGE EVENTS
		OF WHICH EXPOSURES SENSITIVE TO IMPACT FROM CLIMATE CHANGE PHYSICAL EVENTS						
		BREAKDOWN BY MATURITY BUCKET						
		<= 5 YEARS	> 5 YEAR <= 10 YEARS	> 10 YEAR <= 20 YEARS	> 20 YEARS	AVERAGE WEIGHTED MATURITY		
1	A - Agriculture, forestry and fishing	3,606	915	237	55	18	3.28	-
2	B - Mining and quarrying	2,915	25	3	-	0	1.99	-
3	C - Manufacturing	63,617	4,478	656	61	185	2.15	-
4	D - Electricity, gas, steam and air conditioning supply	13,282	205	222	232	1	8.46	-
5	E - Water supply; sewerage, waste management and remediation activities	2,528	89	56	50	25	8.58	-
6	F - Construction	14,320	1,284	239	145	131	5.05	-
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	38,513	1,819	262	45	42	2.60	-
8	H - Transportation and storage	10,866	329	377	21	2	4.62	-
9	L - Real estate activities	43,500	816	725	571	170	8.29	-
10	Loans collateralised by residential immovable property	93,333	448	1,376	4,470	4,892	18.74	153
11	Loans collateralised by commercial immovable property	54,803	2,233	1,238	486	70	5.67	32
12	Reposessed collaterals	502	-	-	-	-	0.00	0
13	Other relevant sectors	48,038	2,062	637	379	401	4.22	-

Environmental, Social and Governance risks (ESG)

continued: Template 5 - Banking book - Indicators of potential climate change physical risk: Exposures subject to physical risk

								(€ million)
	a	i	j	k	l	m	n	o
GROSS CARRYING AMOUNT								
OF WHICH EXPOSURES SENSITIVE TO IMPACT FROM CLIMATE CHANGE PHYSICAL EVENTS								
TOTAL GEOGRAPHICAL AREA SUBJECT TO CLIMATE CHANGE PHYSICAL RISK - ACUTE AND CHRONIC 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		
1	A - Agriculture, forestry and fishing	1,181	45	376	74	(74)	(17)	(48)
2	B - Mining and quarrying	16	12	3	10	(10)	(0)	(10)
3	C - Manufacturing	4,306	1,075	1,200	96	(146)	(43)	(54)
4	D - Electricity, gas, steam and air conditioning supply	510	151	200	16	(21)	(6)	(12)
5	E - Water supply; sewerage, waste management and remediation activities	158	61	59	4	(4)	(1)	(3)
6	F - Construction	1,550	249	434	137	(107)	(29)	(69)
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	1,680	488	398	71	(64)	(13)	(48)
8	H - Transportation and storage	617	112	212	8	(22)	(12)	(5)
9	L - Real estate activities	1,986	295	402	91	(55)	(19)	(33)
10	Loans collateralised by residential immovable property	9,529	1,504	2,024	116	(127)	(85)	(22)
11	Loans collateralised by commercial immovable property	3,328	667	916	226	(123)	(41)	(72)
12	Reposessed collaterals	52	12	-	-	-	-	-
13	Other relevant sectors	2,884	596	1,108	205	(156)	(55)	(94)

Note:

Average weighted maturity is in years.

The templates below (from 5.1 to 5.4) show the outcome of the GCA quantification with the breakdown by granular economic sectors and by loans collateralised by immovable property, aggregated by group (template 5.1) or by specific geographic countries exposed to the the physical risk hazard events (Italy - template 5.2, Germany - template 5.3 and the other countries of the Group - template 5.4):

Template 5.1 - Gross carrying amount breakdown subject by physical risk: Group

(€ million)

DESCRIPTION	GROUP		
	GROSS CARRYING AMOUNT	OF WHICH: PHYSICAL RISK	PHYSICAL RISK/GROSS CARRYING AMOUNT (%)
1 A - Agriculture, forestry and fishing	3,606	1,225	34%
2 B - Mining and quarrying	2,915	28	1%
3 C - Manufacturing	63,617	5,380	8%
4 D - Electricity, gas, steam and air conditioning supply	13,282	661	5%
5 E - Water supply; sewerage, waste management and remediation activities	2,528	219	9%
6 F - Construction	14,320	1,799	13%
7 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	38,513	2,168	6%
8 H - Transportation and storage	10,866	729	7%
9 L - Real estate activities	43,500	2,281	5%
10 Loans collateralised by residential immovable property	93,333	11,186	12%
11 Loans collateralised by commercial immovable property	54,803	4,028	7%
12 Repossessed collaterals	502	64	13%
13 Other relevant sectors (breakdown below where relevant)	48,038	3,479	7%

Environmental, Social and Governance risks (ESG)

Template 5.2 - Gross carrying amount breakdown subject by physical risk: Italy

(€ million)

ITALY			
DESCRIPTION	GROSS CARRYING AMOUNT	OF WHICH: PHYSICAL RISK	PHYSICAL RISK/GROSS CARRYING AMOUNT (%)
1 A - Agriculture, forestry and fishing	1,452	353	24%
2 B - Mining and quarrying	117	10	9%
3 C - Manufacturing	29,108	2,978	10%
4 D - Electricity, gas, steam and air conditioning supply	3,844	228	6%
5 E - Water supply; sewerage, waste management and remediation activities	1,309	101	8%
6 F - Construction	5,817	1,158	20%
7 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	16,400	1,257	8%
8 H - Transportation and storage	4,922	232	5%
9 L - Real estate activities	7,122	656	9%
10 Loans collateralised by residential immovable property	44,365	7,480	17%
11 Loans collateralised by commercial immovable property	14,120	1,870	13%
12 Repossessed collaterals	457	64	14%
13 Other relevant sectors (breakdown below where relevant)	16,526	1,328	8%

Template 5.3 - Gross carrying amount breakdown subject by physical risk: Germany

(€ million)

GERMANY			
DESCRIPTION	GROSS CARRYING AMOUNT	OF WHICH: PHYSICAL RISK	PHYSICAL RISK/GROSS CARRYING AMOUNT (%)
1 A - Agriculture, forestry and fishing	460	60	13%
2 B - Mining and quarrying	105	3	2%
3 C - Manufacturing	10,632	818	8%
4 D - Electricity, gas, steam and air conditioning supply	1,867	240	13%
5 E - Water supply; sewerage, waste management and remediation activities	315	50	16%
6 F - Construction	2,806	81	3%
7 G - Wholesale and retail trade; repair of motor vehicles and motorcycles	7,718	240	3%
8 H - Transportation and storage	1,480	45	3%
9 L - Real estate activities	21,971	848	4%
10 Loans collateralised by residential immovable property	18,508	963	5%
11 Loans collateralised by commercial immovable property	16,236	588	4%
12 Repossessed collaterals	-	-	0%
13 Other relevant sectors (breakdown below where relevant)	11,130	850	8%

Environmental, Social and Governance risks (ESG)

Template 5.4 - Gross carrying amount breakdown subject by physical risk: Other countries

(€ million)

DESCRIPTION		OTHER COUNTRIES		PHYSICAL RISK/GROSS CARRYING AMOUNT (%)
		GROSS CARRYING AMOUNT	OF WHICH: PHYSICAL RISK	
1	A - Agriculture, forestry and fishing	1,694	813	48%
2	B - Mining and quarrying	2,693	16	1%
3	C - Manufacturing	23,878	1,584	7%
4	D - Electricity, gas, steam and air conditioning supply	7,571	193	3%
5	E - Water supply; sewerage, waste management and remediation activities	903	69	8%
6	F - Construction	5,697	560	10%
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	14,395	671	5%
8	H - Transportation and storage	4,464	452	10%
9	L - Real estate activities	14,408	777	5%
10	Loans collateralised by residential immovable property	30,460	2,742	9%
11	Loans collateralised by commercial immovable property	24,448	1,570	6%
12	Reposessed collaterals	45	0	0%
13	Other relevant sectors (breakdown below where relevant)	20,382	1,300	6%

The templates 5.5 and 5.6 below represent synoptic templates of country distribution of physical risk in terms of GCA in detail; template 5.5 is related to the perimeter of companies and template 5.6 to that one of collateral.

Template 5.5 - Gross carrying amount exposures towards Non-financial corporations subject to physical risk (at counterparty level - breakdown by country)

(€ million)

DESCRIPTION	GROSS CARRYING AMOUNT		PHYSICAL RISK/GROSS CARRYING AMOUNT (%)
		OF WHICH: PHYSICAL RISK	
Group	241,187	17,971	7%
Italy	86,617	8,301	10%
Germany	58,485	3,234	6%
Other	96,084	6,436	7%

Template 5.6 - Gross carrying amount of loans collateralised by immovable property and reposessed collaterals subject subject to physical risk (at collateral level - breakdown by country)

(€ million)

DESCRIPTION	GROSS CARRYING AMOUNT		PHYSICAL RISK/GROSS CARRYING AMOUNT (%)
		OF WHICH: PHYSICAL RISK	
Group	148,638	15,278	10%
Italy	58,942	9,414	16%
Germany	34,744	1,551	4%
Other	54,953	4,312	8%

Environmental, Social and Governance risks (ESG)

Template 10 - Other climate change mitigating actions that are not covered in Regulation (EU) 2020/852

UniCredit strongly believes in the effectiveness of the sustainable finance market and its ability to channel investments into projects and activities with environmental and social benefits. Therefore, the Group has developed a Sustainability Bond Framework for the issuance of green, social or sustainability bonds. It aims to support UniCredit ambition to align its business strategy with the needs of individuals and the goals of society as expressed in the United Nations sustainable development goals and the Paris Climate Agreement. More information, including dedicated allocation and impact reports, are available on UniCredit website at the following link: <https://www.unicreditgroup.eu/en/investors/esg-investors/sustainability-bonds.html>.

Useful information on the integration of climate-related risks, both transition and physical, in our risk management framework are available in the following documents:

- “Qualitative information on environmental risk” section of the present chapter;
- Integrated Report 2022, in particular “Risk Management” chapter, available in the ESG and Sustainability section of the UniCredit website (<http://www.unicreditgroup.eu>);
- TCFD (Task force on Climate-related Financial Disclosures) Report 2021 available in the Investors section of the UniCredit website (<http://www.unicreditgroup.eu>).

Template 10 - Other climate change mitigating actions that are not covered in Regulation (EU) 2020/852

						(€ million)
a	b	c	d	e	f	
TYPE OF FINANCIAL INSTRUMENT	TYPE OF COUNTERPARTY	GROSS CARRYING AMOUNT	TYPE OF RISK MITIGATED (CLIMATE CHANGE TRANSITION RISK)	TYPE OF RISK MITIGATED (CLIMATE CHANGE PHYSICAL RISK)	QUALITATIVE INFORMATION ON THE NATURE OF THE MITIGATING ACTIONS	
1	Financial corporations	123	Climate change transition risk	-	(*)	
2	Bonds (e.g. green, sustainable, sustainability-linked under standards other than the EU standards) (*)	-	Climate change transition risk	-		
3	of which Loans collateralised by commercial immovable property	-	-	-		
4	Other counterparties	-	Climate change transition risk	-		
5	Financial corporations	-	Climate change transition risk	-		
6	Non-financial corporations	6,567	Climate change transition risk	-	(**)	
7	of which Loans collateralised by commercial immovable property	4,388	Climate change transition risk	-	(**)	
8	Loans (e.g. green, sustainable, sustainability-linked under standards other than the EU standards) (**)	9,026	Climate change transition risk	-	(**)	
9	Households	8,791	Climate change transition risk	-	(**)	
10	of which Loans collateralised by residential immovable property	-	-	-		
11	of which building renovation loans	-	-	-		
	Other counterparties	800	Climate change transition risk	-	(**)	

Notes:

(*) Regarding bonds, the figures refer to those flagged as “green” among the eligible bonds relevant for Market risk purposes for the bank’s trading book. The “green” flag was assigned according to ICMA and CBI principles.

(**) Regarding loans, in line with UniCredit Sustainability Bond Framework, the following ICMA Eligible Green Categories have been considered: Renewable Energy (only for UniCredit S.p.A.) and Green Buildings (for UniCredit S.p.A., UniCredit Bank AG, UniCredit Bank Austria). Green Building perimeter has been defined following below approach:

- UniCredit S.p.A.: loans where all assets collateralized are green according to top 15% analysis of real estate portfolio;
- UniCredit Bank AG: loans with one green asset collateralized according to top 15% analysis of real estate portfolio;
- UniCredit Bank Austria: loans where at least one asset collateralized is green according to top 15% analysis of real estate portfolio.

Declaration by the Manager charged with preparing the financial reports

The undersigned Stefano Porro, in his capacity as the Manager charged with preparing UniCredit S.p.A.'s financial reports

DECLARES

that, pursuant to article 154-bis, paragraph 2, of the "Consolidated Law on Finance", the information disclosed in this document corresponds to the accounting documents, books and records.

Milan, 24 February 2023

Stefano Porro



Annex 1 - Template EU CCA - Main features of regulatory Own Funds instruments and eligible liabilities instruments

The Annex 1 - Template EU CCA is published in the editable format (excel) on the UniCredit website to the link <https://www.unicreditgroup.eu/en/investors/financial-reporting/pillar-3-disclosures.html>.

Annex 2 - List of templates Regulation (EU) 637/2021

The following templates of UniCredit Group Disclosure Pillar III as at 31 December 2022, required by Regulation (EU) 637/2021, as subsequently amended, are published in the editable format (excel) on the Group website (<https://www.unicreditgroup.eu/en/investors/financial-reporting/pillar-3-disclosures.html>).

Moreover, in order to facilitate the understanding of the consistency of the quantitative data between the templates of the present Disclosure, the Annex 2, published in excel format, reports the reconciliation of the regulatory figures represented in the various templates (where applicable).

Template	Reconciled
1 Template EU CC1 - Composition of regulatory Own Funds	x
2 Template EU CC2 - Reconciliation of regulatory Own Funds to balance sheet in the audited financial statements	x
3 Template EU CCR1 - Analysis of CCR exposure by approach	x
4 Template EU CCR2 - Transactions subject to own funds requirements for CVA risk	x
5 Template EU CCR3 - Standardised approach – CCR exposures by regulatory exposure class and risk weights	
6 Template EU CCR4 - IRB approach - CCR exposures by exposure class and PD scale	
7 Template EU CCR5 - Composition of collateral for CCR exposures	
8 Template EU CCR6 - Credit derivatives exposures	
9 Template EU CCR7 - RWEA flow statements of CCR exposures under the IMM	x
10 Template EU CCR8 - Exposures to CCPs	x
11 Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer	
12 Template EU CCyB2 - Amount of institution-specific countercyclical capital buffer	x
13 Template EU CR10 - Specialised lending and equity exposures under the simple risk weighted approach (CR10.1)	x
14 Template EU CR10 - Specialised lending and equity exposures under the simple risk weighted approach (CR10.2)	x
15 Template EU CR10 - Specialised lending and equity exposures under the simple risk weighted approach (CR10.5)	x
16 Template EU CR4 - Standardised approach - Credit risk exposure and CRM effects	x
17 Template EU CR5 - Standardised approach - Credit risk exposures by regulatory exposure class and risk weights	x
18 Template EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range	
19 Template EU CR6-A – Scope of the use of IRB and SA approaches	
20 Template EU CR7 - IRB approach - Effect on the RWEAs of credit derivatives used as CRM techniques	x
21 Template EU CR7-A - IRB approach - Disclosure of the extent of the use of CRM techniques	x
22 Template EU CR8 - RWEA flow statements of credit risk exposures under the IRB approach	x
23 Template EU CR9 - IRB approach – Back-testing of PD per exposure class (fixed PD scale)	
24 Template EU KM1 - Key metrics	x
25 Template EU LIQ1 - Quantitative information of LCR	x
26 Template EU LIQ2 - Net Stable Funding Ratio	x
27 Template EU MR1 - Market risk under the standardised approach	x
28 Template EU MR2-A - Market risk under the Internal Model Approach (IMA)	x
29 Template EU MR2-B - RWEA flow statements of market risk exposures under the IMA	x
30 Template EU MR3 - IMA values for trading portfolios	
31 Template EU OR1 - Operational risk, Own Funds requirements and risk-weighted exposure amount	x
32 Template EU OV1 - Overview of risk weighted exposure amounts	x
33 Template EU AE1 - Encumbered and unencumbered assets	
34 Template EU AE2 - Collateral received and own debt securities issued	
35 Template EU AE3 - Sources of encumbrance	
36 Template EU CQ1 - Credit quality of forbore exposures	
37 Template EU CQ2 - Quality of forbearance	
38 Template EU CQ3 - Credit quality of performing and non-performing exposures by past due days	x
39 Template EU CQ4 - Quality of non-performing exposures by geography	x
40 Template EU CQ5 - Credit quality of loans and advances by industry	x
41 Template EU CQ6 - Collateral valuation - loans and advances	x
42 Template EU CQ7 - Collateral obtained by taking possession and execution processes	
43 Template EU CQ8 - Collateral obtained by taking possession and execution processes - vintage breakdown	

Annex 2 - List of templates Regulation (EU) 637/2021

Template	Reconciled
44 Template EU CR1 - Performing and non-performing exposures and related provisions	x
45 Template EU CR2a - Changes in the stock of non-performing loans and advances and related net accumulated recoveries	x
46 Template EU CR1-A - Maturity of exposures	
47 Template EU CR3 - CRM techniques Overview: Disclosure of the use of credit risk mitigation techniques	
48 Template EU LR1 - LRSum: Summary reconciliation of accounting assets and leverage ratio exposures	x
49 Template EU LR2 - LRCom: Leverage ratio common disclosure	x
50 Template EU LR3 - LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	
51 Template EU LI1 - Differences between the accounting and prudential scope of consolidation and mapping of financial statements categories with regulatory risk categories	
52 Template EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements	
53 Template EU PV1 - Prudent valuation adjustments (PVA)	
54 Template EU SEC1 - Securitisation exposures in the non-trading book	
55 Template EU SEC2 - Securitisation exposures in the trading book	
56 Template EU SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor	x
57 Template EU SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor	x
58 Template EU SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments	
59 Template EU IRRBB1 - Interest rate risks on positions not held in the trading book	
60 Template 1 - Banking book - Indicators of potential climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity	
61 Template 2 - Banking book - Indicators of potential climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral	
62 Template 4 - Banking book - Indicators of potential climate change transition risk: Exposures to top 20 carbon-intensive firms	
63 Template 5 - Banking book - Indicators of potential climate change physical risk: Exposures subject to physical risk	
64 Template 10 - Other climate change mitigating actions that are not covered in Regulation (EU) 2020/852	

Note:

The following templates are not published as not applicable for the Group as at 31 December 2022: EU CR10.3, EU CR10.4, EU INS1, EU INS2 e EU CR9.1.

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

Basis of consolidation for accounting and prudential purposes - Consolidated entities as at 31 December 2022

NAME OF THE ENTITY	METHOD OF REGULATORY CONSOLIDATION				ENTITY CATEGORY
	METHOD OF ACCOUNTING CONSOLIDATION	FULL CONSOLIDATION	PROPORTIONAL CONSOLIDATION	NEITHER CONSOLIDATED NOR DEDUCTED DEDUCTED(1)	
UNICREDIT SPA	Full consolidation	X			BANKS
UNICREDIT BULBANK AD	Full consolidation	X			BANKS
ZAGREBACKA BANKA D.D.	Full consolidation	X			BANKS
UNICREDIT BANK D.D.	Full consolidation	X			BANKS
UNICREDIT INTERNATIONAL BANK (LUXEMBOURG) SA	Full consolidation	X			BANKS
UNICREDIT BANK CZECH REPUBLIC AND SLOVAKIA, A.S.	Full consolidation	X			BANKS
UNICREDIT BANK HUNGARY ZRT.	Full consolidation	X			BANKS
UNICREDIT BANK SERBIA JSC	Full consolidation	X			BANKS
UNICREDIT JELZALOGBANK ZRT.	Full consolidation	X			BANKS
UNICREDIT BANK AUSTRIA AG	Full consolidation	X			BANKS
LEASFINANZ BANK GMBH	Full consolidation	X			BANKS
UNICREDIT BANK A.D. BANJA LUKA	Full consolidation	X			BANKS
SCHOELLERBANK AKTIENGESellschaft	Full consolidation	X			BANKS
UNICREDIT BANKA SLOVENIJA D.D.	Full consolidation	X			BANKS
UNICREDIT BANK AG	Full consolidation	X			BANKS
UNICREDIT BANK S.A.	Full consolidation	X			BANKS
AO UNICREDIT BANK	Full consolidation	X			BANKS
CORDUSIO SOCIETA' FIDUCIARIA PER AZIONI	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING SPA	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT FACTORING SPA	Full consolidation	X			FINANCIAL COMPANIES
PAI MANAGEMENT LTD	Full consolidation	X			FINANCIAL COMPANIES
PAI (BERMUDA) LIMITED	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT CAPITAL MARKETS LLC	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP PEJA MANAGEMENT GMBH*	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING EAD	Full consolidation	X			FINANCIAL COMPANIES
HVB IMMOBILIEN AG	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING FINANCE GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING CROATIA D.O.O. ZA LEASING	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING SRBIJA D.O.O. BEOGRAD	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING HUNGARY ZRT	Full consolidation	X			FINANCIAL COMPANIES
HVB PROJEKT GMBH	Full consolidation	X			FINANCIAL COMPANIES
STRUCTURED INVEST SOCIETE ANONYME	Full consolidation	X			FINANCIAL COMPANIES
HVB TECTA GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT U.S. FINANCE LLC	Full consolidation	X			FINANCIAL COMPANIES
HVB VERWA 4 GMBH	Full consolidation	X			FINANCIAL COMPANIES
HVB VERWA 4.4 GMBH	Full consolidation	X			FINANCIAL COMPANIES
WEALTH MANAGEMENT CAPITAL HOLDING GMBH*	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING CORPORATION IFN S.A.	Full consolidation	X			FINANCIAL COMPANIES
INTRO LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
JAUSERN-LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT CONSUMER FINANCING EAD	Full consolidation	X			FINANCIAL COMPANIES
KUTRA GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
LAGEV IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
LARGO LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
LEASFINANZ GMBH	Full consolidation	X			FINANCIAL COMPANIES
LEGATO LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
LELEV IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING AVIATION GMBH	Full consolidation	X			FINANCIAL COMPANIES
LIPARK LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
LIVA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
M. A. V. 7., BANK AUSTRIA LEASING BAUTRAEGER GMBH & CO. OG.	Full consolidation	X			FINANCIAL COMPANIES
MBC IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
MENUETT GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT GARAGEN ERRICHTUNG UND VERWERTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
BA-CA MARKETS & INVESTMENT BETEILIGUNG GES.M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
NAGE LOKALVERMIETUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
OCT Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
OLG HANDELS- UND BETEILIGUNGSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
OOO UNICREDIT LEASING	Full consolidation	X			FINANCIAL COMPANIES
ORESTOS IMMOBILIEN-VERWALTUNGS GMBH	Full consolidation	X			FINANCIAL COMPANIES
FINN ARSENAL LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
PAYTRIA UNTERNEHMENS BETEILIGUNGEN GMBH	Full consolidation	X			FINANCIAL COMPANIES
PELOPS LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
PIANA LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP MANAGEMENT SERVICES GMBH*	Full consolidation	X			FINANCIAL COMPANIES
POSATO LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
PRELUDE GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H. IN LIQU.	Full consolidation	X			FINANCIAL COMPANIES
PROJEKT-LEASE GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
QUADEC Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
QUART Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

NAME OF THE ENTITY	METHOD OF REGULATORY CONSOLIDATION				ENTITY CATEGORY
	METHOD OF ACCOUNTING CONSOLIDATION	FULL CONSOLIDATION	PROPORTIONAL CONSOLIDATION	NEITHER CONSOLIDATED NOR DEDUCTED	
QUINT Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
REAL-LEASE GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
REAL-RENT LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
REGEV REALITAETENVERWERTUNGSGESELLSCHAFT M.B.H. IN LIQU.	Full consolidation	X			FINANCIAL COMPANIES
SCHOELLERBANK INVEST AG	Full consolidation	X			FINANCIAL COMPANIES
SECA-LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
SEDEC Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
SEXT Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT MOBILIEN UND KFZ LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
SIGMA LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
SPECTRUM GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
STEWIE GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
ALLEGRO LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
TERZ Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT AURORA LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
TREDEC Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H. IN LIQU.	Full consolidation	X			FINANCIAL COMPANIES
ALLIB LEASING S.R.O.	Full consolidation	X			FINANCIAL COMPANIES
OFFICIUM IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICOM IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
VAPE COMMUNA LEASINGGESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
ALMS LEASING GMBH.	Full consolidation	X			FINANCIAL COMPANIES
CARD COMPLETE SERVICE BANK AG	Full consolidation	X			FINANCIAL COMPANIES
WOEM GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING ALFA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING ARKTUR IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING AURIGA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING CORVUS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING DORADO IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING DRACO IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING GAMA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING GEMINI IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING HEBE IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING HERCULES IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
BACA HYDRA LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING IPSILON IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING ITA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING JANUS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING KALLISTO IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING KAPA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING LYRA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING NEREIDE IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING OMEGA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING PERSEUS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
Z LEASING VENUS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
ANTARES IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
BAH-OMEGA ZRT.'V.A.'	Full consolidation	X			FINANCIAL COMPANIES
ARNO GRUNDSTUECKSVERWALTUNGS GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
AUSTRIA LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
IDEA FIMIT SGR FONDO SIGMA IMMOBILIARE	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP INVESTORENBETREUUNG GMBH*	Full consolidation	X			FINANCIAL COMPANIES
BA-CA SECUND LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BA EUROLEASE BETEILIGUNGSGESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
BA-CA ANDANTE LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT BPC MORTGAGE S.R.L.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT CONSUMER FINANCING IFN S.A.	Full consolidation	X			FINANCIAL COMPANIES
BA-CA LEASING DREI GARAGEN GMBH	Full consolidation	X			FINANCIAL COMPANIES
BA-CA LEASING MAR IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT TECHRENT LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LUNA LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT POLARIS LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BA-CA PRESTO LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT ZEGA LEASING-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING TECHNIKUM GMBH	Full consolidation	X			FINANCIAL COMPANIES
BA/CA-LEASING BETEILIGUNGEN GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT OBG S.R.L.	Full consolidation	X			FINANCIAL COMPANIES
BACA KOMMUNALLEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BACA LEASING UND BETEILIGUNGSMANAGEMENT GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT PEGASUS LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP KAPITALVERWALTUNGSGESELLSCHAFT MBH*	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT FACTORING CZECH REPUBLIC AND SLOVAKIA, A.S.	Full consolidation	X			FINANCIAL COMPANIES
BAL HESTIA IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UCLA IMMO-BETEILIGUNGSHOLDUNG GMBH & CO KG	Full consolidation	X			FINANCIAL COMPANIES
BAL HORUS IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BAL HYPNOS IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

NAME OF THE ENTITY	METHOD OF REGULATORY CONSOLIDATION				ENTITY CATEGORY
	METHOD OF ACCOUNTING CONSOLIDATION	FULL CONSOLIDATION	PROPORTIONAL CONSOLIDATION	NEITHER CONSOLIDATED NOR DEDUCTED DEDUCTED(1)	
BAL LETO IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BAL OSIRIS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
CASTELLANI LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BAL SOBEK IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA FINANZSERVICE GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT HAMRED LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT KFZ LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT GUSTRA LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING (AUSTRIA) GMBH	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA CREDITANSTALT LEASING IMMOBILIENANLAGEN GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT STERNECK LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT OK1 LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA REAL INVEST IMMOBILIEN-MANAGEMENT GMBH	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA REAL INVEST IMMOBILIEN-KAPITALANLAGE GMBH	Full consolidation	X			FINANCIAL COMPANIES
UCLA AM WINTERHAFFEN 11 IMMOBILIENLEASING GMBH & CO OG	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP IMMOBILIEN DEUTSCHLAND 46 GMBH & CO. KG*	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT ACHTERHAUS LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
EBS FINANCE S.R.L.	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA WOHNBAUBANK AG	Full consolidation	X			FINANCIAL COMPANIES
BAHBETA INGATLANHASZNOSITO KFT.	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA LEASING ARGO IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA LEASING IKARUS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
BANK AUSTRIA LEASING MEDEA IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
BAULANDENTWICKLUNG GDST 1682/8 GMBH & CO OG	Full consolidation	X			FINANCIAL COMPANIES
BETEILIGUNGSVERWALTUNGSGESELLSCHAFT DER BANK AUSTRIA CREDITANSTALT LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP LEASING GMBH*	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP EQUITY GMBH*	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP FONDS GMBH*	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP INITIATOREN GMBH*	Full consolidation	X			FINANCIAL COMPANIES
BREWO GRUNDSTUECKSVERWALTUNGS-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
CA-LEASING OVUS S.R.O.	Full consolidation	X			FINANCIAL COMPANIES
CA-LEASING SENIOREN PARK GMBH	Full consolidation	X			FINANCIAL COMPANIES
CABET-HOLDING GMBH	Full consolidation	X			FINANCIAL COMPANIES
CABO BETEILIGUNGSGESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING SLOVAKIA A.S.	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT LEASING CZ, A.S.	Full consolidation	X			FINANCIAL COMPANIES
CALG 307 MOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG 443 GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG 445 GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG ALPHA GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG ANLAGEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG ANLAGEN LEASING GMBH, WIEN & CO. GRUNDSTUECKSVERMIETUNG UND - VERWALTUNG KG	Full consolidation	X			FINANCIAL COMPANIES
CALG DELTA GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG GAMMA GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG IMMOBILIEN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
CALG MINAL GRUNDSTUECKVERWALTUNG GMBH	Full consolidation	X			FINANCIAL COMPANIES
CHARADE LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
CHEFREN LEASING GMBH	Full consolidation	X			FINANCIAL COMPANIES
CIVITAS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
COMMUNA - LEASING GRUNDSTUECKSVERWALTUNGSGESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
CONTRA LEASING-GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
DLV IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
DUODEC Z IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
EUROLEASE ANUBIS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
EUROLEASE ISIS IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
EUROLEASE MARDUK IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
EUROLEASE RA IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
EUROLEASE RAMSES IMMOBILIEN LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
EUROPA BEFEKTEZESI ALAPKEZELO ZRT (EUROPA INVESTMENT FUND MANAGEMENT LTD.)	Full consolidation	X			FINANCIAL COMPANIES
FACTORBANK AKTIENGESELLSCHAFT	Full consolidation	X			FINANCIAL COMPANIES
FMZ SAVARIA SZOLGALTATO KORLATOLT FELELOSSEGG TARSASAG	Full consolidation	X			FINANCIAL COMPANIES
FOLIA LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP REAL ESTATE MANAGEMENT GMBH*	Full consolidation	X			FINANCIAL COMPANIES
GALA GRUNDSTUECKVERWALTUNG GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
GEBAEULEASING GRUNDSTUECKSVERWALTUNGSGESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
GEMEINDELEASING GRUNDSTUECKVERWALTUNG GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
GEMMA VERWALTUNGSGESELLSCHAFT MBH & CO. VERMIETUNGS KG	Full consolidation	X			FINANCIAL COMPANIES
GRUNDSTUECKSVERWALTUNG LINZ-MITTE GMBH	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP INVESTMENT SERVICES GMBH*	Full consolidation	X			FINANCIAL COMPANIES
H.F.S. LEASINGFONDS DEUTSCHLAND 7 GMBH & CO. KG	Full consolidation	X			FINANCIAL COMPANIES
HERKU LEASING GESELLSCHAFT M.B.H.	Full consolidation	X			FINANCIAL COMPANIES
SUCCESS 2015 B.V.	Full consolidation	X			FINANCIAL COMPANIES

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

NAME OF THE ENTITY	METHOD OF REGULATORY CONSOLIDATION				ENTITY CATEGORY
	METHOD OF ACCOUNTING CONSOLIDATION	FULL CONSOLIDATION	PROPORTIONAL CONSOLIDATION	NEITHER CONSOLIDATED NOR DEDUCTED	
CONSUMER THREE SRL (CARTOLARIZZAZIONE: CONSUMER THREE)	Full consolidation	X			FINANCIAL COMPANIES
MOMENTUM ALL-WEATHER STRATEGIES - LONG TERM STRATEG	Full consolidation	X			FINANCIAL COMPANIES
ORBIT PERFORMANCE STRATEGIES - ORBIT US CLASSE I U	Full consolidation	X			FINANCIAL COMPANIES
MOMENTUM LONG TERM VALUE FUND	Full consolidation	X			FINANCIAL COMPANIES
IMPRESA TWO SRL (CARTOLARIZZAZIONE: IMPRESA TWO)	Full consolidation	X			FINANCIAL COMPANIES
WEALTHCAP SPEZIAL - AIF-SV BUERO 8*	Full consolidation	X			FINANCIAL COMPANIES
EBS FINANCE S.R.L. (PATR.SEPARATO)	Full consolidation	X			FINANCIAL COMPANIES
ALTUS ALPHA PLC	Full consolidation	X			FINANCIAL COMPANIES
EUROPA INGATLANBEFEKTETESI ALAP (EUROPE REAL-ESTATE INVESTMENT FUND)	Full consolidation	X			FINANCIAL COMPANIES
REAL INVEST EUROPE DER BANK AUSTRIA REAL INVEST IMMOBILIEN- KAPI	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT BPC MORTGAGE SRL (COVERED BONDS)	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT OBG SRL (COVERED BONDS)	Full consolidation	X			FINANCIAL COMPANIES
CAPITAL MORTGAGE SRL (CARTOLARIZZAZIONE: CAPITAL MORTGAGE 2007 - 1)	Full consolidation	X			FINANCIAL COMPANIES
F-E MORTGAGES SRL (CARTOLARIZZAZIONE: F-E MORTGAGES 2005)	Full consolidation	X			FINANCIAL COMPANIES
CORDUSIO RMBS SECURITISATION SRL (CARTOLARIZZAZIONE: CORDUSIO RMBS SECURITISATION - SERIE 2007)	Full consolidation	X			FINANCIAL COMPANIES
ARENA NPL ONE S.R.L. (CARTOLARIZZAZIONE 2014)	Full consolidation	X			FINANCIAL COMPANIES
OOO UNICREDIT GARANT	Full consolidation	X			INSTRUMENTAL COMPANIES
UNICREDIT DIRECT SERVICES GMBH	Full consolidation	X			INSTRUMENTAL COMPANIES
HVB GESELLSCHAFT FÜR GEBÄUDE MBH & CO KG	Full consolidation	X			INSTRUMENTAL COMPANIES
TRICASA GRUNDBESITZ GESELLSCHAFT MBH & CO. 1. VERMIETUNGS KG	Full consolidation	X			INSTRUMENTAL COMPANIES
TRICASA GRUNDBESITZGESELLSCHAFT DES BÜRGERLICHEN RECHTS NR. 1	Full consolidation	X			INSTRUMENTAL COMPANIES
UNICREDIT FLEET MANAGEMENT EOOD	Full consolidation	X			INSTRUMENTAL COMPANIES
UNICREDIT SERVICES GMBH	Full consolidation	X			INSTRUMENTAL COMPANIES
MERKURHOF GRUNDSTÜCKSGESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG	Full consolidation	X			INSTRUMENTAL COMPANIES
PALAIS RÖTHSCHILD VERMIETUNGS GMBH & CO OG	Full consolidation	X			INSTRUMENTAL COMPANIES
ACIS IMMOBILIEN- UND PROJEKTENTWICKLUNGS GMBH & CO. STUTTGART KRONPRINZSTRASSE KG	Full consolidation	X			INSTRUMENTAL COMPANIES
PORTIA GRUNDSTÜCKS-VERWALTUNGSGESELLSCHAFT MBH & CO. OBJEKT KG	Full consolidation	X			INSTRUMENTAL COMPANIES
SALVATORPLATZ-GRUNDSTÜCKSGESELLSCHAFT MBH & CO. OHG VERWALTUNGSZENTRUM	Full consolidation	X			INSTRUMENTAL COMPANIES
SALVATORPLATZ-GRUNDSTÜCKSGESELLSCHAFT MBH & CO. OHG SAARLAND	Full consolidation	X			INSTRUMENTAL COMPANIES
POLLUX IMMOBILIEN GMBH	Full consolidation	X			INSTRUMENTAL COMPANIES
SOFIGERE SOCIETE PAR ACTIONS SIMPLIFIEE (IN LIQUIDAZIONE)	Full consolidation	X			INSTRUMENTAL COMPANIES
BA GEBÄUDEVERMIETUNGSGMBH	Full consolidation	X			INSTRUMENTAL COMPANIES
BA GVG-HOLDING GMBH	Full consolidation	X			INSTRUMENTAL COMPANIES
UNICREDIT LEASED ASSET MANAGEMENT SPA	Full consolidation	X			INSTRUMENTAL COMPANIES
BAYERISCHE WOHNUNGSGESELLSCHAFT FÜR HANDEL UND INDUSTRIE, GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG	Full consolidation	X			INSTRUMENTAL COMPANIES
OMNIA GRUNDSTÜCKS-GMBH & CO. OBJEKT PERLACH KG	Full consolidation	X			INSTRUMENTAL COMPANIES
GRUNDSTÜCKSGESELLSCHAFT SIMON BESCHRÄNKTE HAFTENDE KOMMANDITGESELLSCHAFT	Full consolidation	X			INSTRUMENTAL COMPANIES
HAWA GRUNDSTÜCKS GMBH & CO OHG IMMOBILIENVERWALTUNG	Full consolidation	X			INSTRUMENTAL COMPANIES
UNIVERSALE INTERNATIONAL REALTÄTEN GMBH	Full consolidation	X			OTHER COMPANIES
UCTAM BALTICS SIA	Full consolidation	X			OTHER COMPANIES
UCTAM RU LIMITED LIABILITY COMPANY	Full consolidation	X			OTHER COMPANIES
UCTAM D.O.O. BEOGRAD	Full consolidation	X			OTHER COMPANIES
UCTAM BULGARIA EOOD	Full consolidation	X			OTHER COMPANIES
UCTAM CZECH REPUBLIC SRO	Full consolidation	X			OTHER COMPANIES
WEALTHCAP ENTITY SERVICE GMBH*	Full consolidation	X			OTHER COMPANIES
WEALTHCAP IMMOBILIEN 2 GMBH & CO. KG*	Full consolidation	X			OTHER COMPANIES
WEALTHCAP IMMOBILIEN 1 GMBH & CO. KG*	Full consolidation	X			OTHER COMPANIES
UCTAM BH D.O.O.	Full consolidation	X			OTHER COMPANIES
WEALTHCAP OBJEKT DRESDEN GMBH & CO. KG*	Full consolidation	X			OTHER COMPANIES
WEALTHCAP OBJEKT-VORRAT 35 GMBH & CO. KG*	Full consolidation	X			OTHER COMPANIES
WEALTHCAP OBJEKT-VORRAT 37 GMBH & CO. KG*	Full consolidation	X			OTHER COMPANIES
WEALTHCAP OBJEKT-VORRAT 39 GMBH & CO. KG*	Full consolidation	X			OTHER COMPANIES
UNICREDIT TURN-AROUND MANAGEMENT CEE GMBH	Full consolidation	X			OTHER COMPANIES
WEALTHCAP VORRAT-2 GMBH*	Full consolidation	X			OTHER COMPANIES
H.F.S. LEASINGFONDS GMBH & CO. DEUTSCHLAND 8 KG*	Full consolidation	X			OTHER COMPANIES
H.F.S. LEASINGFONDS GMBH & CO. DEUTSCHLAND 9 KG*	Full consolidation	X			OTHER COMPANIES
H.F.S. LEASINGFONDS GMBH & CO. DEUTSCHLAND 10 KG*	Full consolidation	X			OTHER COMPANIES
H.F.S. LEASINGFONDS GMBH & CO. DEUTSCHLAND 11 KG*	Full consolidation	X			OTHER COMPANIES
H.F.S. LEASINGFONDS GMBH & CO. DEUTSCHLAND 12 KG*	Full consolidation	X			OTHER COMPANIES
OBERBANK AG	Equity method			X	BANKS
OÖSTERREICHISCHE KONTROLLBANK AKTIENGESELLSCHAFT	Equity method			X	BANKS
BANK FÜR TIROL UND VORARLBERG AKTIENGESELLSCHAFT	Equity method			X	BANKS
BKS BANK AG	Equity method			X	BANKS
ALLIANZ ZB D.O.O. DRUŠTVO ZA UPRAVLJANJE OBVEZNIM I DOBROVOLJNIM MIROVINSKIM FONDovima	Equity method			X	FINANCIAL COMPANIES
UNICREDIT INSURANCE BROKER EOOD	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT INSURANCE BROKER SRL	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT BETEILIGUNGS GMBH	Full consolidation			X	FINANCIAL COMPANIES
HETA BA LEASING SÜED GMBH	Equity method			X	FINANCIAL COMPANIES
WKBG WIENER KREDITBÜRGERSCHAFTS- UND BETEILIGUNGSBANK AG	Equity method			X	FINANCIAL COMPANIES
NOTARTREUHANDBANK AG	Equity method			X	FINANCIAL COMPANIES
OÖSTERREICHISCHE WERTPAPIERDATEN SERVICE GMBH	Equity method			X	FINANCIAL COMPANIES
PALATIN GRUNDSTÜCKVERWALTUNGS GESELLSCHAFT M.B.H.	Equity method			X	FINANCIAL COMPANIES

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

NAME OF THE ENTITY	METHOD OF REGULATORY CONSOLIDATION				ENTITY CATEGORY
	METHOD OF ACCOUNTING CONSOLIDATION	FULL CONSOLIDATION	PROPORTIONAL CONSOLIDATION	NEITHER CONSOLIDATED NOR DEDUCTED DEDUCTED(*)	
RCI FINANCIAL SERVICES S.R.O.	Equity method			X	FINANCIAL COMPANIES
UNI GEBAEUEMANAGEMENT GMBH	Equity method			X	FINANCIAL COMPANIES
CASH SERVICE COMPANY AD	Equity method			X	FINANCIAL COMPANIES
MULTIPLUS CARD D.O.O. ZA PROMIDZBU I USLUGE	Equity method			X	FINANCIAL COMPANIES
PSA PAYMENT SERVICES AUSTRIA GMBH	Equity method			X	FINANCIAL COMPANIES
BARN BV	Equity method			X	FINANCIAL COMPANIES
ASSET BANCARI II	Equity method			X	FINANCIAL COMPANIES
COMPAGNIA AEREA ITALIANA S.P.A.	Equity method			X	FINANCIAL COMPANIES
UNICREDIT INSURANCE MANAGEMENT CEE GMBH	Full consolidation			X	FINANCIAL COMPANIES
ANTHEMIS EVO LLP	Full consolidation			X	FINANCIAL COMPANIES
LEASFINANZ ALPHA ASSETVERMIETUNG GMBH	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT LEASING ALPHA ASSETVERMIETUNG GMBH	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT CENTER AM KAISERWASSER GMBH	Full consolidation			X	FINANCIAL COMPANIES
BIL LEASING-FONDS VERWALTUNGS-GMBH*	Full consolidation			X	FINANCIAL COMPANIES
WEALTHCAP EQUITY MANAGEMENT GMBH*	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT FLEET MANAGEMENT S.R.O.	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT FLEET MANAGEMENT S.R.O.	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT POJISTOVACI MAKLERSKA SPOL.S R.O.	Full consolidation			X	FINANCIAL COMPANIES
UNICREDIT BROKER S.R.O.	Full consolidation			X	FINANCIAL COMPANIES
CBD INTERNATIONAL SP ZO.O.	Equity method			X	FINANCIAL COMPANIES
FIDES LEASING GMBH	Equity method			X	FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 37 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 38 DAC	Full consolidation	X			FINANCIAL COMPANIES
ROSENKAVALIER 2015 UG	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 43 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 46 DAC	Full consolidation	X			FINANCIAL COMPANIES
ICE CREEK POOL NO. 5 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 54 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 57 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 56 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 64 DAC	Full consolidation	X			FINANCIAL COMPANIES
ICE CREEK POOL NO.1 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 71 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 69 DAC	Full consolidation	X			FINANCIAL COMPANIES
ROSENKAVALIER 2020 UG	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 74 DAC	Full consolidation	X			FINANCIAL COMPANIES
ICE CREEK POOL NO.3 DAC	Full consolidation	X			FINANCIAL COMPANIES
ROSENKAVALIER 2022 UG	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 350 DAC	Full consolidation	X			FINANCIAL COMPANIES
PADEL FINANCE 01 DAC	Full consolidation	X			FINANCIAL COMPANIES
ARABELLA FINANCE DAC	Full consolidation	X			FINANCIAL COMPANIES
ROSENKAVALIER 2008 GMBH	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 28 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 911 LTD	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 31 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 32 S.A. - COMPARTMENT 1	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 36 DAC	Full consolidation	X			FINANCIAL COMPANIES
ELEKTRA PURCHASE NO. 33 DAC	Full consolidation	X			FINANCIAL COMPANIES
UNICREDIT ALLIANZ ASSICURAZIONI S.P.A.	Equity method			X	INSURANCE COMPANIES
UNICREDIT ALLIANZ VITA S.P.A.	Equity method			X	INSURANCE COMPANIES
INCONTRA ASSICURAZIONI S.P.A.	Equity method			X	INSURANCE COMPANIES
CNP UNICREDIT VITA S.P.A.	Equity method			X	INSURANCE COMPANIES
LOCAT CROATIA DOO	Full consolidation			X	OTHER COMPANIES
ALPHA RENT DOO BEOGRAD	Full consolidation			X	OTHER COMPANIES
UNICREDIT LEASING FLEET MANAGEMENT S.R.L.	Full consolidation			X	OTHER COMPANIES
WEALTHCAP PEIA KOMPLEMENTAR GMBH*	Full consolidation			X	OTHER COMPANIES
ISB UNIVERSALE BAU GMBH	Full consolidation			X	OTHER COMPANIES
OMNIA GRUNDSTUCKS-GMBH & CO. OBJEKT HAIDENAUPLATZ KG	Full consolidation			X	OTHER COMPANIES
OTHMARSCHEN PARK HAMBURG GMBH & CO. GEWERBEPARK KG	Full consolidation			X	OTHER COMPANIES
RANA-LIEGENSCHAFTSVERWERTUNG GMBH	Full consolidation			X	OTHER COMPANIES
ROLIN GRUNDSTUCKSPLANUNGS- UND -VERWALTUNGSGESELLSCHAFT MBH*	Full consolidation			X	OTHER COMPANIES
T & P FRANKFURT DEVELOPMENT B.V.	Full consolidation			X	OTHER COMPANIES
T & P VASTGOED STUTTGART B.V.	Full consolidation			X	OTHER COMPANIES
TERRENO GRUNDSTUCKSVERWALTUNG GMBH & CO. ENTWICKLUNGS- UND FINANZIERUNGSVERMITTLUNGS-KG	Full consolidation			X	OTHER COMPANIES
TIVOLI GRUNDSTUCKS-AKTIEGESELLSCHAFT	Full consolidation			X	OTHER COMPANIES
V.M.G. VERMIETUNGSGESELLSCHAFT MBH*	Full consolidation			X	OTHER COMPANIES
ZAPADNI TRGOVACKI CENTAR D.O.O.	Full consolidation			X	OTHER COMPANIES
ARGENTAURUS IMMOBILIEN-VERMIETUNGS- UND VERWALTUNGS GMBH	Full consolidation			X	OTHER COMPANIES
CAMFIN S.P.A.	Equity method			X	OTHER COMPANIES
NUOVA COMPAGNIA DI PARTECIPAZIONI SPA	Full consolidation			X	OTHER COMPANIES
DA VINCI S.R.L.	Equity method			X	OTHER COMPANIES
COMTRADE GROUP B.V.	Equity method			X	OTHER COMPANIES
RISANAMENTO SPA*	Equity method			X	OTHER COMPANIES
NF OBJEKT FFM GMBH	Full consolidation			X	OTHER COMPANIES

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

NAME OF THE ENTITY	METHOD OF REGULATORY CONSOLIDATION				ENTITY CATEGORY
	METHOD OF ACCOUNTING CONSOLIDATION	FULL CONSOLIDATION	PROPORTIONAL CONSOLIDATION	NEITHER CONSOLIDATED NOR DEDUCTED DEDUCTED(**)	
COMPAGNIA FONDARIA ROMANA - SOCIETA' A RESPONSABILITA' LIMITATA	Full consolidation			X	OTHER COMPANIES
KAISERWASSER BAU- UND ERRICHTUNGS GMBH UND CO OG	Full consolidation			X	OTHER COMPANIES
PIRTA VERWALTUNGS GMBH	Full consolidation			X	OTHER COMPANIES
VISCONTI SRL	Full consolidation			X	OTHER COMPANIES
WEALTHCAP IMMOBILIENFONDS DEUTSCHLAND 38 KOMPLEMENTAR GMBH*	Full consolidation			X	OTHER COMPANIES
VERMIETUNGSGESELLSCHAFT MBH & CO OBJEKT MOC KG	Full consolidation			X	OTHER COMPANIES
BF NINE HOLDING GMBH	Full consolidation			X	OTHER COMPANIES
UNICREDIT SUBITO CASA SPA	Full consolidation			X	OTHER COMPANIES
UNICREDIT LEASING INSURANCE SERVICES S.R.O.	Full consolidation			X	OTHER COMPANIES
WEICKER S. A R.L.	Full consolidation			X	OTHER COMPANIES
WEALTHCAP IMMOBILIENANKAUF KOMPLEMENTAER GMBH*	Full consolidation			X	OTHER COMPANIES
WEALTHCAP OBJEKT STUTTGART III GMBH & CO. KG*	Full consolidation			X	OTHER COMPANIES
WEALTHCAP IMMOBILIEN 43 KOMPLEMENTAER GMBH*	Full consolidation			X	OTHER COMPANIES
WEALTHCAP INVESTMENTS INC.*	Full consolidation			X	OTHER COMPANIES
CA-ZETA REAL ESTATE DEVELOPMENT LIMITED LIABILITY COMPANY	Full consolidation			X	OTHER COMPANIES
DIRANA LIEGENSCHAFTSVERWERTUNGSGESELLSCHAFT M.B.H.	Full consolidation			X	OTHER COMPANIES
H.F.S. IMMOBILIENFONDS GMBH*	Full consolidation			X	OTHER COMPANIES
H.F.S. LEASINGFONDS GMBH*	Full consolidation			X	OTHER COMPANIES
WEALTHCAP IMMOBILIENFONDS DEUTSCHLAND 36 KOMPLEMENTAR GMBH*	Full consolidation			X	OTHER COMPANIES
PENSIONSKASSE DER HYPO VEREINSBANK VWAG	Full consolidation	X			OTHER COMPANIES
BARD HOLDING GMBH	Full consolidation			X	OTHER COMPANIES
BARD ENGINEERING GMBH	Full consolidation			X	OTHER COMPANIES

Notes:

(*) Company classified in the Financial Statements as "non-current assets and disposal groups classified as held for sale" according to IFRS5 and therefore valued at minor between fair value net of cost to sell and booking value. The latter is determined by interrupting the valuation at Equity starting from the date of IFRS5 classification.

(**) With reference to 31 December 2022, UniCredit does not exceeds the thresholds related to significant investments in CET1 instruments issued by financial sector entities and deferred tax assets that rely on future profitability and arise from temporary differences, generating a capital deduction from Common Equity Tier 1 Capital. In particular, the deferred tax assets that rely on future profitability and arise from temporary differences summed up to the direct, indirect and synthetic holdings detained by UniCredit in financial sector entities in which UniCredit has a significant investment does not exceed the threshold of 17.65% of the residual amount of Common Equity Tier 1 items after applying the adjustments and deductions in CRR Articles 32 to 36 in full.

Annex 3 - Template EU LI3 - Outline of the differences in the scopes of consolidation

Names of all subsidiaries not included in the basis of consolidation and aggregate amount of their capital deficiencies with respect to any mandatory capital requirements.

Here follows a list of the banking, financial and instrumental companies directly or indirectly controlled by UniCredit S.p.A. registered in the Banking Group that are held at cost due to immateriality.

As at 31 December 2022, for these companies no capital deficiencies with respect to the any mandatory capital requirements were disclosed.

COMPANY NAME	TYPE	HEADQUARTER	
		TOWN	COUNTRY
AI BETEILIGUNGS GMBH**	FINANCIAL COMPANIES	VIENNA	AUSTRIA
ALPINE CAYMAN ISLANDS LTD.**	FINANCIAL COMPANIES	GEORGE TOWN	CAYMAN ISLANDS
B.I. INTERNATIONAL LIMITED*	FINANCIAL COMPANIES	GEORGE TOWN	CAYMAN ISLANDS
BA ALPINE HOLDINGS, INC.**	FINANCIAL COMPANIES	WILMINGTON	U.S.A.
BA CA LEASING (DEUTSCHLAND) GMBH*	FINANCIAL COMPANIES	HAMURG	GERMANY
BIL LEASING-FONDS GMBH & CO VELUM KG*	FINANCIAL COMPANIES	GRUENWALD	GERMANY
DINERS CLUB CS, S.R.O.*	FINANCIAL COMPANIES	BRATISLAVA	SLOVAKIA
DINERS CLUB POLSKA SP.Z.O.O.*	FINANCIAL COMPANIES	WARSAW	POLAND
FOOD & MORE GMBH**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	MUNICH	GERMANY
HUMAN RESOURCES SERVICE AND DEVELOPMENT GMBH*	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	VIENNA	AUSTRIA
HVB EXPORT LEASING GMBH**	FINANCIAL COMPANIES	MUNICH	GERMANY
HVB HONG KONG LIMITED**	FINANCIAL COMPANIES	HONG KONG	CHINA
HVB LONDON INVESTMENTS (AVON) LIMITED**	FINANCIAL COMPANIES	LONDON	UNITED KINGDOM
HVB SECUR GMBH**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	MUNICH	GERMANY
HVBFF INTERNATIONALE LEASING GMBH***	FINANCIAL COMPANIES	MUNICH	GERMANY
HVBFF OBJEKT BETEILIGUNGS GMBH**	FINANCIAL COMPANIES	MUNICH	GERMANY
HYPO-BANK VERWALTUNGSZENTRUM GMBH**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	MUNICH	GERMANY
PALAIS ROTHSCHILD VERMIETUNGS GMBH**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	VIENNA	AUSTRIA
REDSTONE MORTGAGES LIMITED*	FINANCIAL COMPANIES	LONDON	UNITED KINGDOM
UNICREDIT GLOBAL LEASING EXPORT GMBH*	FINANCIAL COMPANIES	VIENNA	AUSTRIA
UNICREDIT MYAGENTS SRL**	FINANCIAL COMPANIES	BOLOGNA	ITALY
VERWALTUNGSGESELLSCHAFT KATHARINENHOF MBH**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	MUNICH	GERMANY
WEALTHCAP STIFTUNGSTREUHAND GMBH**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	MUNICH	GERMANY
ZAGREB NEKRETNINE D.O.O. ZA POSLOVANJE NEKRETNINAMA**	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	ZAGREB	CROATIA
ZANE BH DOO*	OTHER COMPANIES/ INSTRUMENTAL COMPANIES	SARAJEVO	BOSNIA AND HERZEGOVINA
ZB INVEST D.O.O. ZA UPRAVLJANJE INVESTICIJSKIM FONDOVIMA**	FINANCIAL COMPANIES	ZAGREB	CROATIA

Note:

(*) Company belonging to the Banking Group that individually hold a total balance sheet value lower than €1,000.

(**) Company belonging to the Banking Group listed within Equity investments item in Regulatory Balance sheet.

(***) Company belonging to the Banking Group not listed within Equity investments item in Regulatory Balance sheet.

Glossary

ITEM	DESCRIPTION
ABCP Conduits - Asset Backed Commercial Paper Conduits	<p>Asset Backed Commercial Paper Conduits are a type of "SPV - Special Purpose Vehicle" (see item) set up to securitise various types of assets and financed by Commercial Paper.</p> <p>Commercial Paper generally matures in 270 days, with payment of principal and interest depending on the cash flow generated by the underlying assets.</p> <p>ABCP Conduits may be single-sellers or multi-sellers according to the number of issues they make. Conduits generally require several SPVs. The first-level vehicles issue the Commercial Paper and finance one or more second-level vehicles or Purchase Companies (see item) which purchase the assets to be securitised.</p> <p>An ABCP Conduit will have the following:</p> <ul style="list-style-type: none"> • issues of short-term paper creating a maturity mismatch between the assets held and the paper issued; • liquidity lines covering the maturity mismatch; and • security covering default risk in respect of both specific assets and the entire programme.
ABS - Asset Backed Securities	<p>Debt securities, generally issued by an "SPV - Special Purpose Vehicle" (see item) guaranteed by assets of various types such as mortgage loans, consumer credits, credit card receivables, etc. Principal and interest payments are subject to the performance of the securitised assets and the existence of any further security guaranteeing the bond. ABSs are divided into tranches (senior, mezzanine and junior) according to the priority with which principal and interest will be paid.</p>
Allocated capital	<p>It represents the amount of capital absorbed by the Group and the Divisions to perform their business activities and to cover all the types of related risks. It is measured by Regulatory Capital obtained by multiplying risk-weighted assets by target Common Equity tier 1 ratio, plus certain regulatory deductions (e.g. shortfall, securitisations, equity exposures).</p>
ALM - Asset & Liability Management	<p>Integrated management of assets and liabilities, designed to allocate resources in such a manner as to optimise the risk/return ratio.</p>
AMA - Advanced Measurement Approach	<p>Applying this methodology the operational risk requirement is obtained with calculation models based on operational loss data and other evaluation elements collected and processed by the bank. Admittance threshold and specific suitability requirements have been provided for the use of the standardised and advanced approaches. For the AMA approach the requirements concern, beside the management system, also the measurement system.</p>
AVA - Additional value adjustments	<p>Deduction from Common Equity Tier 1 capital, in accordance to article 34 of the Regulation (EU) 575/2013 (CRR) setting that "Institutions shall apply the requirements of article 105 to all their assets measured at fair value when calculating the amount of their own funds and shall deduct from Common Equity Tier 1 capital the amount of any additional value adjustments necessary".</p>
Back-testing	<p>Statistical technique which entails the comparison of model estimates of risk parameters with the ex-post empirical evidences.</p>
Bad Loans	<p>Exposures to borrowers in a state of insolvency (even when not recognised in a court of law) or in an essentially similar situation, regardless of any loss forecasts made by the bank (i.e. irrespective of the presence of any protection covering the exposures).</p>
Banking Book	<p>Portfolio that identifies the technical forms of lending and funding typical of the core business of the bank, including consumer and residential loans, investments in securities, deposits, etc.</p>
Basel 2	<p>New international capital agreement redefining the guidelines for determining the minimum capital requirements for banks. Such prudential regulation, which came into force in Italy in 2008, is based on three pillars.</p> <p>Pillar 1</p> <p>While the objective of a level of capitalization equivalent to 8% of the risk-weighted exposures remains unchanged, a new set of rules has been defined for measuring the typical risks associated with banking and financial activities (credit risk, counterparty risk, market risk and operational risk) which provides for alternative calculation methods characterised by different levels of complexity, with the ability to use internally developed models subject to prior authorization by the Regulatory Authority;</p> <p>Pillar 2</p> <p>This requires the banks to have processes and tools for determining the adequate level of total internal capital (Internal Capital Adequacy Assessment Process - ICAAP) for covering all types of risk, including risks other than those covered by the overall capital requirement (Pillar 1), within the framework of an evaluation of current and future exposure that takes account of strategies and of changes in the reference context. It is the Regulatory Authority's task to examine the ICAAP process, formulate an overall judgment and, where necessary, apply the appropriate corrective measures;</p> <p>Pillar 3</p> <p>It refers to the obligations to publish information concerning capital adequacy, exposure to risks, and the general characteristics of the systems used for identifying, measuring and managing those risks.</p>

Glossary

ITEM	DESCRIPTION
Basel 3	As a consequence of the crisis that, since 2008 has hit the financial markets, the Basel Committee on Banking Supervision has approved the substantial enhancement of the minimum capital requirements and the changes to the rules on the liquidity of banks (Basel 3) by providing for the gradual introduction of the new prudential requirements as at 1 January 2014. These rules have been implemented at the European level through the CRD IV "Package".
Best practice	Behaviour commensurated with the most significant experience and/or the best level of knowledge achieved in relation to a given technical or professional field.
BRRD -Bank Recovery and Resolution Directive	European Directive that introduced harmonised routes on the recovery and resolution of credit institutions and investment firms.
CCF - Credit Conversion Factor	The ratio of the currently undrawn amount of a commitment that could be drawn and that would therefore be outstanding at default to the currently undrawn amount of the commitment.
CDO - Collateralised Debt Obligations	<p>Bonds issued by a SPV (see item) with loans, bonds, ABS - Asset Backed Securities (see item) or other CDOs as underlyings. CDOs make it possible to derecognise assets in the bank's balance sheet and also to arbitrage the differences in yield between the securitised assets and the bonds issued by the vehicle.</p> <p>CDOs may be funded if the vehicle legally acquires title to the assets or unfunded if the vehicle acquires the underlying risk by means of a CDS - Credit Default Swap (see item) or similar security.</p> <p>These bonds may be further subdivided as follows:</p> <ul style="list-style-type: none"> • CDOs of ABSs, which have tranches of ABSs as underlyings; • Commercial Real Estate CDOs (CRE CDOs), with commercial property loans as underlyings; • Balance sheet CDOs which enable the Originator (see item), usually a bank, to transfer its credit risk to third investors, and, where possible under local law and supervisory regulations, to derecognise the assets from its balance sheet; • Market Value CDOs whereby payments of interest and principal are made not only out of cash flow from the underlying assets, but also by trading the instruments. The performance of the notes issued by the vehicle thus depends not only on the credit risk, but also on the market value of the underlyings; • Preferred Stock CDOs with hybrid debt/equity instruments or Preference shares (see item) issued by financial institutions; • Synthetic Arbitrage CDOs which arbitrage the differences in yield between the securitised assets acquired synthetically by means of derivatives and the bonds issued by the vehicle.
CDS - Credit Default Swap	A derivative in which a seller of protection engages, for a fee, to pay the buyer of protection a fixed amount should a certain event indicating a deterioration of the creditworthiness of a reference entity occur.
CIU - Collective Investment Undertakings	Collective Investment Undertaking means an "UCITS - Undertakings for Collective Investment in Transferable Securities" (see item) that may be constituted in accordance with contract law (as common funds managed by management companies), trust law (as unit trusts), or statute (as investment companies), an AIF (Alternative Investments Fund) or a non-EU AIF.
Collateral held	Impact of collateral on the netted current exposure of derivatives and SFTs transactions, including the volatility adjustments as defined in the application of Part Two, Title III, Chapter 4 and Chapter 6 of the CRR. This include the impact of any collateral that would be eligible for CRM or that would have an impact on the netted current credit exposure.
Collateral Posted	It represents the amount of collateral that the Bank has to pay to the Counterparty to mitigate the exposure of the Counterparty toward the Bank against possible changes in the value of derivative and SFT transactions.
Commodity risk	The risk that the value of the instrument decreases due to commodity prices (e.g. gold, crude oil) changes.
COREP - Common Reporting	There are the prudential regulatory requirements schemes introduced by EBA by Implementing Technical Standards - ITS, containing Pillar I in term of credit, counterparty, market risk, operational risk, own funds and capital adequacy indexes, structured in a standard template.
Corporate	Customer segment consisting of medium to large businesses.
Cost of risk	The annualised ratio between loan loss provisions and average net volumes of loans and receivables with customers. It is one of the indicators of the bank assets' level of risk: the lower the ratio, the less risky the bank assets.
Counterparty Credit Risk	The risk that the counterparty to a transaction involving financial instruments might default prior to completing all agreed cash-flows exchanges.
Covered bond	A bond which, as well as being guaranteed by the issuing bank, is also covered by a portfolio of mortgages or other high-quality loans transferred, to this end, to a suitable SPV (see item).

Glossary

ITEM	DESCRIPTION
CRD - Capital Requirement Directive	Directives (EU) 2006/48 and 2006/49, incorporated into Banca d'Italia Circular No.263/2006 of 27 December 2006 as amended. The CRD IV "Package" has replaced the two aforementioned Directives and consists of the Directive (EU) 2013/36 on the taking up of the business of credit institutions and prudential supervision and the Regulation (EU) 575/2013 on prudential requirements, incorporated into Banca d'Italia Circular No.285 of 17 December 2013 as amended.
CRD V	Directive (EU) 2019/878 of 20 May 2019 amending Directive 2013/36/EU (CRD IV).
Credit Quality Step (or creditworthiness)	Classification of counterparties used to assign risk weights under external rating based approaches for credit risk.
Credit risk	The risk that an unexpected change in the creditworthiness of a counterparty, the value of the guarantees provided by it or the margins used by it in the event of insolvency might produce an unexpected change in the value of the bank's credit position.
Creditworthiness (or Credit quality step)	See item "Credit quality step".
CRM	Credit Risk Mitigation is a set of techniques, contracts accessories to the loan or other instruments (e.g. securities, guarantees), which allows a reduction of the credit risk capital requirements.
Cross-product netting	Means the inclusion of transactions of different product categories within the same netting set pursuant to the cross-product netting rules.
CRR - Capital Requirements Regulation	Regulation (EU) 575/2013 of the European Parliament and of the Council of 26 June 2013, and subsequently amendment in Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 ("CRR2"), on prudential requirements for credit institutions and investment firms and that amending Regulation (EU) 648/2012.
CRR2	Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 ("CRR2") amending Regulation (EU) 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) 648/2012 (see also "CRR" definition).
Currency risk	The risk that the value of the instrument decreases due to foreign exchange rates changes.
CVA - Credit Valuation Adjustment	Adjustment to the valuation of a portfolio of transactions reflecting the market value of the counterparties' credit risk.
Cyber security risk	Cyber security risk is the probability of exposure or loss resulting from a cyber-attack or data breach on the organization.
Daily VaR	It reflects the Value at Risk risk measures calibrated to a 1-day holding period to compare with the 99% confidence level with its trading outcomes.
Default	A party's declared inability to honor its debts and/or the payment of the associated interest.
Duration	This is generally calculated as the weighted average of the maturities for payment of the interest and capital associated with a bond, and represents an indicator of the interest rate risk to which a security or a bond portfolio is subject.
EAD - Exposure At Default	With reference to the on-balance and off-balance sheet positions, EAD is defined as the estimation of the future value of an exposure at the time of the debtor's default. Only banks that meet the requirements for adopting the IRB - Internal Rating Based (see item) advanced approach are allowed to estimate EAD (see item). Other banks are required to refer to regulatory estimations.
Earnings at risk	The change in interest rates affects earnings by changing the net interest income and, depending on the accounting treatment of the individual balance sheet items, it can be reflected directly in equity, following the change in their market value.
EBA - European Banking Authority	The European Banking Authority is an independent EU Authority which works to ensure effective and consistent prudential regulation and supervision across the European banking sector. Its overall objectives are to maintain financial stability in the EU and to safeguard the integrity, efficiency and orderly functioning of the banking sector.
ECB - European Central Bank	Central bank for Europe's single currency, the euro. The ECB's main task is to preserve the purchasing power of the single currency thus ensuring the maintenance of price stability in the Euro area.
Economic capital	Level of capital required to a bank to cover losses in excess of those expected that could occur with a one-year horizon and a certain probability or confidence level.

Glossary

ITEM	DESCRIPTION
Economic value	The change in interest rates impacts the theoretical economic value of assets, liabilities and off-balance sheet instruments, following the change in their current value.
EL - Expected Losses	Amount of credit risk exposures expected to be lost for a default event of the obligor in a time horizon of one year.
Eligible Collateral	Refers to collateral which allows a reduction of the credit risk capital requirements.
ELOR - Expected Losses on Revenues	ELOR is a ratio estimated, for the Group and for the main legal entities, with a statistical model, based on the historical losses time series, forward looking factors and the budget revenues.
Equity risk	The risk that the value of the instrument decreases due to stock or index prices changes.
ESG - Environmental, Social and Governance	Refers to criteria used to measure the environmental, social and governance impact of the company and highlight the sustainability of its initiatives.
ESMA - European Securities and Markets Authority	Authority that works in the field of securities legislation and regulation to improve the functioning of financial markets in Europe.
EU Paris-aligned Benchmarks (PAB)	Paris-aligned benchmarks are indices whose constituent companies are aligned with the Paris Agreement, which seeks to limit the rise in global temperatures to well below 2°C above pre-industrial levels, and to pursue efforts to keep the rise to 1.5°C. An EU Paris-aligned benchmark is made of underlying assets that are selected in such a manner that the resulting benchmark portfolio's greenhouse gases emissions are aligned with the long-term global warming target of the Paris Climate Agreement and is also constructed in accordance with the minimum standards laid down in the delegated acts.
EU Taxonomy	The EU Taxonomy is a classification system, establishing a list of environmentally sustainable economic activities. The Taxonomy Regulation was published in the Official Journal of the European Union on 22 June 2020 and entered into force on 12 July 2020.
EVA - Economic Value Added	EVA indicates the value created by a company. It expresses the ability to create value in monetary terms and it is equal to the difference between the Net Profit (as defined below) and the cost of the Allocated Capital. A corrective factor is applied to divisional Net Profit where capitalisation is higher than Group's target.
Expected Shortfall	Risk measure representing the expected loss of a portfolio or a counterparty calculated in the scenarios of loss exceeding the VaR.
Fair value	The sum for which, in a freely competitive market, an item can be exchanged or a liability extinguished between aware and independent parties.
FINREP	Reporting framework with statistical and financial data defined from the European Banking Authority, an independent EU Authority which works to ensure a consistent level of prudential regulation and supervision across the European banking sector. The aim of FINREP is to gather data used from Supervisory Authorities and the European Central Banks for their supervisory activities.
FL - Forward looking	IFRS9 adjustment that allows to reflect in the credit parameters the expectations about the future evolution of the economic cycle.
Forbearance/Forborne exposures	According to EBA Implementing Technical Standards, forbearance exposures consist of exposures to which forbearance measures have been extended, i.e. concessions towards a debtor who is facing or about to face difficulties in meeting its financial commitments ("financial difficulties").
Foreign exchange movements	Changes arising from foreign currency exchange rate volatility.
Forwards	Forward contracts on interest rates, exchange rates or share indices, generally traded on "OTC - Over-the-Counter" (see item) markets, in which the conditions are fixed when the contract is agreed but execution will take place at a predetermined future date, by means of the collection or payment of differentials calculated with reference to various parameters according to the subject of the contract.
FRTB - Fundamental Review of Trading Book	Fundamental Review of Trading Book consists in a set of proposals by the Basel Committee on Banking Supervision for a new market risk-related capital requirement for banks. This reform is often named as "Basel IV".
Full Revaluation Approach	A methodology behind the historical simulation approach for VaR calculation, when the value of a portfolio is estimated by the complete revaluation of its value according to the simulation results.
Funding	Provision, in various forms, of the funds necessary to finance business activities or particular financial transactions.
Futures	Standardised contracts whereby the parties undertake to exchange money, transferable securities or goods at a present price at a future date. These contracts are traded on regulated markets, where their execution is guaranteed.
FVtOCI	Financial asset at Fair Value through Other Comprehensive Income.
FVtPL	Financial Assets at Fair Value through Profit and Loss.

Glossary

ITEM	DESCRIPTION
GAR - Green Asset Ratio	is the share of green exposures, qualified as environmentally sustainable that contribute or enable the environmental objectives as reported in the EU taxonomy Regulation 2020/852.
G-SIIs Institutions	Institutions classified as "Global Systemically Important Institutions", in accordance with the article 131 of Directive 2013/36/EU. These institutions represent a higher risk for the financial system and their failure may have potential impact on the taxpayers.
GW BANKS	IRB calculation model - Group Wide model Financial Institution & Banks.
GW MNC	IRB calculation model - Group Wide Multinational Corporate.
Hedge Fund	Speculative mutual investment fund adopting hedging techniques which generally are not used by ordinary mutual funds, in order to deliver a constant performance, which is only hardly linked to reference markets. Hedge Funds are distinguished by a limited number of partners and require a high minimum level of investment.
IAS/IFRS	International accounting standards issued by the International Accounting Standard Board (IASB), a private international body established in April 2001, involving representatives of the accounting professions of the principal countries and, as observers, the European Union, IOSCO (International Organisation of Securities Commissions) and the Basel Committee. This body is the successor of the International Accounting Standards Committee (IASC), set up in 1973 to promote harmonisation of the rules for the preparation of company accounts. When the IASC became the IASB, it was decided, among other things, to name the new accounting principles "International Financial Reporting Standards" (IFRS). At international level, work is currently underway to harmonise the IAS/IFRS with the US GAAP - United States Generally Accepted Accounting Principles (Accounting principles issued by the Financial Accounting Statement Board-"FASB", generally accepted in the USA).
ICAAP - Internal Capital Adequacy Assessment Process	The discipline of the so called "Pillar 2" requires banks to implement processes and systems to determine the level of internal capital adequate to face any type of risk, also different from those provided by the capital requirements (Pillar 1) rules; in the scope of an assessment of the exposure, actual and future, that has to consider also the strategies and the evolution of the reference environment.
ILC - Italian Large Corporate	IRB calculation model - Italian Large Corporate.
IMA - Internal Model Approach	Internal Models Approach is an approach to calculate market risk capital requirement using internal models.
Impairment	Within the framework of the IAS/IFRS (see item), this refers to the loss of value of a balance sheet asset, recorded when the book value is greater than the recoverable value, i.e. the sum that can be obtained by selling or using the asset.
Initial margin	Margin posted to the CCP to cover risk arising from potential future exposure stemming from trading activity with clearing members and, where relevant, interoperable CCPs in the interval between the last margin collection and the liquidation of positions following a default of a clearing member or of an interoperable CCP default. Initial Margin can also be exchanged between third parties in case both of them are subject to Regulation (EU) 2251/2016 (New Margin Requirements).
Interest rate risk - (IRR)	Interest rate risk expresses the exposure to unfavorable changes in interest rates on the economic value of the equity and on the net interest income.
Investor	Any entity other than the Sponsor (see item) or Originator (see item) with exposure to a securitisation.
IRB - Internal Rating Based	Method for determining the capital needed to cover credit risk within the framework of Pillar 1 of "Basel 2" (see item). The rules are applied to the exposures of the banking portfolio. Furthermore, in the IRB methods the risk weightings of the assets are determined on the basis of the bank's own internal evaluations of the debtors (or, in some cases, of the transactions). Using systems based on internal ratings, the banks determine the weighted risk exposure. The IRB methods consist of a basic method and an advanced method, which differ in terms of the risk parameters that the bank must estimate: in the basic method, the banks use their own estimates for "PD - Probability of Default" and the regulatory values for the other risk parameters; in the advanced method, the banks use their own estimates for "PD - Probability of Default", "LGD - Loss Given Default", "CCF - Credit Conversion Factor" and, where provided for, "M - Maturity" (see item). The use of IRB methods for the calculation of capital requirements is subject to authorisation from Banca d'Italia.
IRC - Incremental Risk Charge	Incremental Risk Charge is a measure of potential losses arising from default and migration risks of unsecuritised credit products over a 1-year capital horizon at a 99.9% confidence level, taking into account the liquidity horizons of individual positions.
Junior, Mezzanine and Senior exposures	In a securitisation transaction, the exposures may be classified as follows: <ul style="list-style-type: none"> • junior exposures are the last to be repaid, and consequently absorb the first loss produced by the securitisation transaction; • mezzanine exposures are those with medium repayment priority, between senior and junior; • senior exposures are the first to be repaid.

Glossary


ITEM	DESCRIPTION
KPI - Key Performance Indicators	Set of indicators used to evaluate the performance of a business activity or process.
LCR - Liquidity Coverage Ratio	Ratio of a credit institution's liquidity buffer to its net liquidity outflows over a 30 calendar day stress period.
Leverage ratio	Is a measure which allows for the assessment of institutions' exposure to the risk of excessive leverage.
LGD - Loss Given Default	Expected value (which may be conditional upon adverse scenarios) of the ratio, expressed as a percentage, between the loss giving rise to the default and the amount of exposure at the time of the default ("EAD - Exposure At Default", see item).
Liquidity risk	The risk of the company being unable to meet its payment commitments due to the inability to mobilise assets or obtain adequate funding from the market (funding liquidity risk) or due to the difficulty/impossibility of easily liquidating positions in financial assets without significantly and unfavourably affecting the price because of insufficient depth or temporary malfunction of the financial market (market liquidity risk).
M - Maturity	The average, for a given exposure, of the residual contractual maturities, each weighted for the relevant amount.
Market risk	The effect that changes in market variables might have on the economic value of the Group's portfolio, where this includes both the assets held in the Trading Book and those entered in the Banking Book, or the operations connected with the characteristic management of the commercial bank and its strategic investment choices.
MREL - Minimum requirement for eligible liabilities	Minimum requirements for own funds and eligible liabilities, is designed to ensure that there are sufficient resources to write down or convert into equity if a bank or other financial institution is in crisis. This allows the central government to intervene quickly in order to maintain the critical operations of that institution, without using tax money.
Notch	Level, referred to a scale.
NPE - Non-performing exposures	According to EBA Implementing Technical Standards, non-performing exposures are debt instruments and off-balance sheet exposures which satisfy either or both of the following criteria: (i) material exposures which are more than 90 days past-due; (ii) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or of the number of days past due.
Operational risk	The risk of losses due to errors, infringements, interruptions, damages caused by internal processes or personnel, systems, or caused by external events. This definition includes legal and compliance risks but excludes strategic and reputational risk. For example, losses arising from the following can be defined as operational: internal or external fraud, employment practices and workplace safety, client claims, products distribution, fines and penalties due to regulation breaches, damages to the company's physical assets, business disruption and system failures, process management.
Originator	The entity that originated or acquired from third parties the assets to be securitised.
OTC - Over The Counter	Over the counter (OTC) trading consists of the exchange of financial instruments such as shares, bonds, derivatives or goods directly between two counterparties. The OTC markets do not have standardised contracts or buying/selling procedures and are not associated with a set of rules (admissions, controls, obligations of information, etc.) like those that govern the official markets.
Past Due	Problematic exposures that, at the reporting date, are more than 90 days past due on any material obligation, as required by the relevant prudential regulation. Past due can be determined either at individual debtor or at single transaction level according to the relevant local prudential regulation.
Payout ratio	It indicates the percentage of net income distributed or to be distributed to shareholders. The percentage distributed is determined mainly on the basis of the company's self-financing needs and the return expected by shareholders. Based on the strategy for remunerating shareholders underlying UniCredit Unlocked strategic plan, it refers to "Net Profit" when it involves cash dividends or it refers to Organic Capital Generation (i.e. stated net profit plus capital equivalent of RWEA changes in the period) when it involves all the remunerations to shareholders such as buyback of own shares (so called Shares Buy-back)
PD - Probability of Default	Probability of a counterparty entering into a situation of "default" (see item) within a time horizon of one year.
PEPP - Pandemic Emergency Purchase Programme	Massive new stimulus package from the ECB to support the eurozone economy as a response to the Covid-19 (coronavirus) crisis.
Preference shares	Capital instruments that associate forms of remuneration tied to market rates with particularly pronounced subordination conditions, such as non-recovery in subsequent years of the interest not paid by the bank and bearing a share of its losses in the event that these produce a significant reduction in the capital requirements. The regulatory authorities set the conditions under which preference shares may be counted among the core capital of banks and banking groups.

Glossary

ITEM	DESCRIPTION
Prefunded default fund contributions	Pre-funded contribution to the default fund of a CCP means a contribution to the default fund of a CCP that is paid in by an institutions. Default Fund means a fund established by a CCP in accordance with article 42 of Regulation (EU) 648/2012 and used in accordance with article 45 of that Regulation.
Private equity	Investments in the risk capital of companies, generally unlisted but with high growth potential and the ability to generate constant cash flows. Investments in private equity include a wide range of operations that vary according to both the development phase of the company concerned and the investment techniques used. These techniques include closed-end private equity funds.
Purchase companies	SPV (see item) used by "ABCP Conduits - Asset Backed Commercial Paper Conduits" (see item) to purchase the assets to be securitised and which are in turn financed by the Conduit vehicle issuing the commercial papers.
PVA (Prudent Valuation)	Standards for valuation of the all trading book positions and non-trading book positions measured at fair value, specified in the article 105 of the Regulation (EU) 575/2013 (CRR) as amended by Regulation (EU) 2019/876 ("CRR2").
RACE	Indicator of Risk Adjusted Credit Efficiency.
Rating	Evaluation of the quality of a company or its issues of debt securities on the basis of the company's financial soundness and prospects. This evaluation is made either by specialist agencies or by the bank on the basis of internal models.
Replacement cost	In general, replacement cost represents the actual or hypothetical cost which the non-defaulting counterparty would incur in order to replace the terminated contract, after taking into account any collateral posted or received.
Reputational risk	Reputational risk is defined as the current or prospective risk to earnings and capital arising from the adverse perception of the image of the financial institution on the part of customers, counterparties (including also debt-holders, market analysts, other relevant parties), shareholders/investors, regulators or employees (stakeholders). Reputational risk is a secondary risk generated as a "knock-on effect" from risk categories, such as credit, market, operational and liquidity risks and all others risks types (e.g., business risk, strategy risk, ESG risk which considers the environmental, social and governance aspects of responsible investments). Reputational risk could also be generated from material events.
Retail	Customer segment consisting principally of private individuals, self-employed professionals, traders and artisans.
RIC	IRB calculation model - Integrated Corporate Rating.
RIP	IRB calculation model - Integrated Private Rating.
RISB	IRB calculation model - Rating Integrated Small Business (Small Business Integrate Rating).
RNIME - Risk Not in the Model Engines	Framework that provides an estimate on the completeness of the risk factors included in VaR, SVaR and IRC.
RTS	Regulatory Technical Standards supplementing Regulation (EU) 575/2013 (CRR) and Directive 2013/36/EU (CRD).
RWEA - Risk Weighted Exposure Amount	Risk Weighted Exposure Amount of on-balance sheet assets and off-balance sheet items (credit derivatives and guarantees) is calculated applying to all exposures, unless deducted from own funds, the risk weights in accordance with the CRR and based on the exposure class to which the exposure is assigned and its credit quality in order to define the capital requirements.
Scope 1 - Greenhouse Gases (GHG) emissions	Emissions are direct emissions from owned or controlled sources.
Scope 2 - Greenhouse Gases (GHG) emissions	Emissions are indirect emissions from the generation of purchased energy.
Scope 3 - Greenhouse Gases (GHG) emissions	Emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company.
Securitisation	Transfer of a portfolio of assets to an "SPV - Special Purpose Vehicle" (see item) and the issue of securities with various levels of seniority to meet any default by the underlying assets. Securitisations can be: • traditional: method of securitisation whereby transfer of the assets is by means of sale of the portfolio to the "SPV - Special Purpose Vehicle" (see item); • synthetic: method of securitisation whereby the transfer of assets is by means of credit derivatives or similar security enabling the risk of the portfolio to be transferred.
Segregated Collateral	Refers to collateral that is held in a bankruptcy-remote manner in the meaning of article 300 in the CRR.

Glossary

ITEM	DESCRIPTION
Sensitivity	The greater or lesser degree of sensitivity with which certain assets or liabilities react to changes in rates or other reference parameters.
SFTs	Any repurchase transactions, securities or commodities lending or borrowing transactions in accordance with the applicable accounting framework that has its exposure value calculated in accordance with Part Three, Title II, Chapter 6 of the CRR.
Sponsor	An entity other than the "Originator" (see item) and the "Investor" (see item) which sets up and manages an ABCP programme (see item) or other securitisation scheme where assets to be securitized are acquired from third parties.
SPV - Special Purpose Vehicle	An entity, partnership, limited company or trust, set up to carry out a set object, such as isolating financial risk or obtaining special regulatory or tax treatment for specific portfolios of financial assets. SPV's operations are accordingly limited by a set of rules designed for this purpose. In general SPVs' sponsors do not hold equity in them. The equity is held by other entities in order to ensure that there is no shareholder relationship with the "Sponsor" (see item). SPVs are usually bankruptcy-remote, in that their assets cannot be claimed by the creditors of the sponsor, even if the latter becomes insolvent.
Stress Test	Assessment of bank' vulnerabilities either in terms of capital or liquidity position in case of possible adverse events, both of an idiosyncratic nature and related to macroeconomic scenarios.
Subprime (Residential Mortgages)	Although Subprime has no univocal definition, this category includes mortgages granted to borrowers who have had repayment difficulties in the past, e.g. delayed installments, insolvency or bankruptcy, or who are more likely to default than the average due to high loan-to-value and installment-to-income ratios.
SVaR - Stressed VaR	Stressed VaR is a quantification of exposures to particular extreme losses that can be inflicted to a Bank during market tensions, by modeling the portfolio response conditional on historical data from a (continuous 12-month) period of significant financial stress.
Swap	A transaction that generally consists of the exchange of financial streams between operators according to different contractual arrangements. In the case of an interest rate swap (IRS), the counterparties exchange payment streams that may or may not be linked to interest rates, calculated on a notional principal amount (for example, one counterparty pays a stream on the basis of a fixed rate, while the other does so on the basis of a variable rate). In the case of a currency swap, the counterparties exchange specific amounts in two different currencies, with these amounts being exchanged back in due course according to predefined arrangements that may concern both the capital (notional) and the streams of interest payments.
TLAC - Total Loss Absorbing Capacity	TLAC represents the indicator of the Total Loss Absorbing Capacity, a new Pillar I requirement established by the Regulation (EU) 2019/876 (CRR2), entered into force on 27 June 2019, for Global Systemically Important Banks (G-SIBs). The TLAC standard requires G-SIBs, to hold a sufficient amount of highly loss absorbing liabilities.
TLTRO - Target Long Term Refinancing operations	Target Long Term Refinancing operations. Non-regular open market operations conducted by the ECB. Operations that provide financing to credit institutions for periods of up to four years. They offer long-term funding at attractive conditions to credit institutions in order to further ease private sector credit conditions and stimulate bank lending to the real economy.
TTC - Through the cycle	Calibration type of the credit parameters on a horizon that considers the entire economic cycle.
UCITS - Undertakings for Collective Investment in Transferable Securities	This term covers open-end real estate investment funds, both Italian and foreign, and investment companies with variable capital. The latter are joint stock companies that have the sole purpose of collective investment of the assets gathered through a public offer of their own shares.
UGRM - UniCredit global Risk Monitor	The pool of software applications, IT structure and database used by the Group for the financial risk analysis.
UL - Unexpected Losses	Unexpected Losses are the losses exceeding the expected losses.
Unfunded default fund contributions	Contributions that an institution acting as a clearing member has contractually committed to provide to a CCP after the CCP has depleted its default fund to cover the losses it incurred following the default of one or more of its clearing members.
Unlikely to Pay	The classification in this category is the result of the judgment of the bank about the unlikelihood, without recourse to actions such as realising collaterals, that the obligor will pay in full (principal and/or interest) its credit obligations. This assessment should be carried out independently of the presence of any amount (or rate) past due and unpaid.
Unrated Exposure	Exposures for which a credit assessment by a nominated ECAI is not available.
Unsegregated Collateral	Refers to collateral that is not held in a bankruptcy-remote manner.
VaR - Value at Risk	A measure of the risk of potential loss, under a given level of confidence and time horizon, which could occur on a position or a portfolio.

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