

# BofA Securities Europe SA

## Pillar 3 Disclosure

As at 31 December 2022

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**Glossary**

ABS	Asset-Backed Security
ACPR	Autorité de Contrôle Prudentiel et de Résolution
A-IRB	Advanced IRB
ALM	Asset and Liability Management
AMA	Advanced Measurement Approach
AMF	Autorité des Marchés Financiers
ASA	Alternative Standardised Approach
ASF	Available Stable Funding
AT1	Additional Tier 1
BAC / BAC Group	Bank of America Corporation
BAC ERC	BAC Enterprise Risk Committee
BACANA	Bank of America California, National Association
BANA	Bank of America, National Association
BIA	Basic Indicator Approach
BofA Europe	Bank of America Europe Designated Activity Company
BofASE	BofA Securities Europe SA
BofASE Board	BofASE Board of Directors
BofASE BRC	BofASE Board Risk Committee
BofASE MRC	BofASE Management Risk Committee
BofASE NOMCO	BofASE Nominations Committee
BofASE REMCO	BofASE Remuneration Committee
Capital Resources	BofASE's Capital Resources
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CCyB	Countercyclical Capital Buffer
CDO	Collateralised Debt Obligation
CDS	Credit Default Swap
CEEMEA	Central and Eastern Europe, Middle East, and Africa
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CFO	Chief Financial Officer
CLO	Collateralised Loan Obligation
CMBS	Commercial Mortgage-Backed Securities
CMR	Contingent Market Risk
COVID-19	2019 coronavirus
CQS	Credit Quality Step
CRD	Capital Requirements Directive
CRD IV	Capital Requirements Directive IV
CRD V	Capital Requirements Directive V
CRM	Comprehensive Risk Measure
CRO	Chief Risk Officer
CRR	Capital Requirements Regulations
CRR 2	Capital Requirements Regulations 2
CRR 'quick fix'	Regulation (EU) 2020/873
CSA	Credit Support Annexes
CVA	Credit Valuation Adjustment
DFC	Default Fund Contributions

EaR	Earnings at Risk
EBA	European Banking Authority
ECA	Export Credit Agency
ECAI	External Credit Assessment Institution
ECB	European Central Bank
EEA	European Economic Area
EEPE	Effective Expected Positive Exposure
EMEA	Europe, Middle East, and Africa
EMT	Executive Management Team
ESG	Environmental, Social, and Governance
EVE	Economic Value of Equity
FICC	Fixed-Income Currencies and Commodities
F-IRB	Foundation IRB
Fitch	Fitch Ratings, Inc
FLU	Front Line Unit
FTP	Funds Transfer Pricing
FX	Foreign Exchange
GCOR	Global Compliance and Operational Risk
G-SII	Global Systemically Important Institution
GDP	Gross Domestic Product
GMFR	Global Markets and Financial Risk
GMRA	Global Master Repurchase Agreement
GRM	Global Risk Management
HQLA	High-Quality Liquid Assets
IAA	Internal Assessment Approach
IBOR	Interbank Offer Rate
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
ILST	Internal Liquidity Stress Test
IM	Initial Margin
IMA	Internal Model Approach
IMM	Internal Model Method
IMMC	Identify, Measure, Monitor, and Control
INED	BofASE Independent Non-Executive Director
IRB	Internal Ratings Based
IRC	Incremental Risk Charge
IRRBB	Interest Rate Risk in the Banking Book
ISDA	International Swap Dealers Association Master Agreement
IT	Information Technology
ITS	Implementing Technical Standards
LAS	Liquidity Adequacy Statement
LCR	Liquidity Coverage Ratio
LCR Delegated Act	Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions
LEI	Legal Entity Identifier
LOB	Line of Business
LRP	Liquidity Risk Policy
Minimum Capital Requirement	Pillar 1 Capital Requirement

MLI	Merrill Lynch International
Moody's	Moody's Investors Service, Inc.
MRM	Model Risk Management
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NII	Net Interest Income
NSFR	Net Stable Funding Ratio
OTC	Over-the-Counter
P&L	Profit and Loss
PFE	Potential Future Credit Exposure
QCCP	Qualifying Central Counterparty
RAS	Risk Appetite Statement
RC	Replacement Cost
Regulatory VaR	VaR for regulatory capital calculations
Reputational Risk Committee	EMEA Reputational Risk Committee
Risk Framework	BAC's Risk Governance Framework
RMBS	Residential Mortgage-Backed Securities
RNiV	Risks Not in VaR
RSF	Required Stable Funding
RTO	Return-to-Office
RWA	Risk-Weighted Assets
RWEA	Risk Weighted Exposure Amount
S&P	S&P Global Ratings
SA-CCR	Standardised Approach for Counterparty Credit Risk
SFT	Securities Financing Transaction
SREP	Supervisory Review and Evaluation Process
SSPE	Securitisation Special Purpose Entity
Steering Group	EMEA ESG Risk and Regulatory Steering Group
SVaR	Stressed Value at Risk
Trading VaR	Value at Risk used for management reporting purposes
TREA	Total Risk Exposure Amount
TRIM	Targeted Review of Internal Models
TSA	Standardised Approach
TSCR	Total SREP Capital Requirement
UMR	Uncleared Margin Rules
VaR	Value at Risk
VM	Variation Margin

# BofA Securities Europe SA

## Pillar 3 Disclosure

1. Introduction  
As at 31 December 2022

### 1.1. Overview and Purpose of Document

This document contains the Pillar 3 disclosures as at 31 December 2022 in respect to the capital adequacy and risk management framework of BofA Securities Europe SA ("BofASE").

This document provides details on BofASE's capital resources ("Capital Resources"), regulatory defined Pillar 1 Capital Requirement ("Minimum Capital Requirement") and Total SREP Capital Requirement ("TSCR"). The Pillar 3 disclosures demonstrate that BofASE has Capital Resources in excess of this requirement and maintains robust risk management and controls.

To further increase transparency, this document also includes information on BofASE's liquidity position and information on the capital requirements in respect of the Countercyclical Capital Buffer ("CCyB"). BofASE has not omitted any information on the basis that it is proprietary or confidential, and where information is omitted on the basis that it is not regarded as material, this is noted within this document.

#### 1.1.1. BofASE

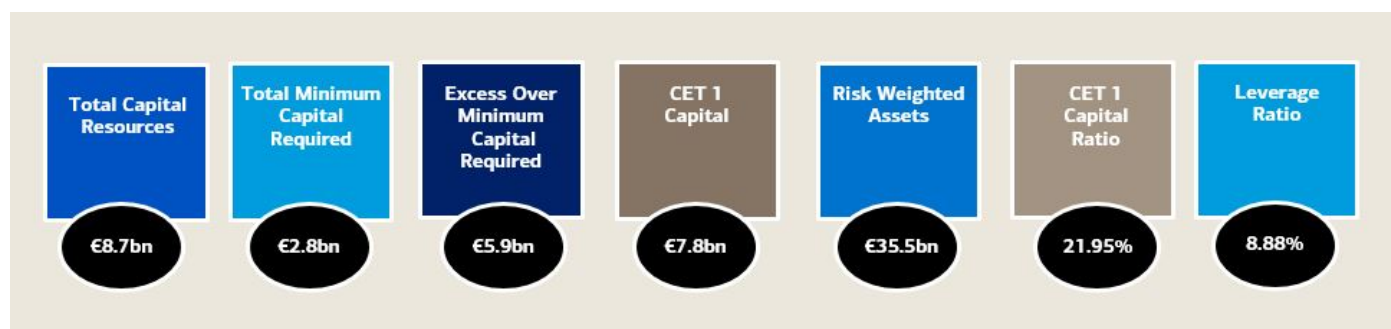
BofASE is owned by NB Holdings Corporation (which holds 99.9% of BofASE) and Merrill Lynch Group Holdings I, L.L.C. (which holds 0.1% of BofASE), and its ultimate parent is Bank of America Corporation ("BAC" or "BAC Group"). BofASE's activities form part of BAC's Global Banking and Markets operations in Europe, Middle East, and Africa ("EMEA"), and serves as Bank of America's primary broker-dealer for clients in the European Economic Area ("EEA").

BofASE is a credit and investment institution domiciled in France and headquartered in Paris. The Investment Firm Regulation ("IFR") and Investment Firm Directive ("IFD") required investment firms exceeding a threshold of €30 billion consolidated assets to be re-authorized as credit institutions. In November 2022, the European Central Bank ("ECB") approved re-authorization of BofASE as a significant credit and investment institution effective 8th December 2022. BofASE is authorised and supervised by the ECB and the Autorité de Contrôle Prudentiel et de Résolution ("ACPR") and is regulated by the ACPR and the Autorité des Marchés Financiers ("AMF"). BofASE has the ability to trade throughout the EEA. BofASE's Legal Entity Identifier ("LEI") is 549300FH0WJJAPEHTIQ77. As at 31 December 2022, BofASE was rated by Fitch Ratings, Inc ("Fitch") (AA / F1+) and S&P Global Ratings ("S&P") (A+ / A-1).

#### 1.1.2. BofASE's Capital Position at 31 December 2022

BofASE's Capital Resources consist of €7.80bn Common Equity Tier 1 ("CET1") and €0.92bn of Tier 2 capital. As at 31 December 2022, BofASE's CET1 ratio was 21.95% which significantly exceeds the Pillar 1 CET1 requirement of 4.5%, and the reported Leverage ratio of 8.88% is in excess of the 3.00% regulatory requirement.

**Figure 1.1.2.F1. – Summary of BofASE's Key Metrics as at 31 December 2022**





## 1.2. Basis of Preparation

The Basel Capital Accords provide a series of international standards for bank regulation commonly known as Basel I, Basel II, and, most recently, Basel III. Basel III was implemented in the EU through the Capital Requirements Directive (“CRD”) and the Capital Requirements Regulation (“CRR”), as amended by the Capital Requirements Regulation 2 (“CRR 2”), (collectively known as the Capital Requirements Directive IV (“CRD IV”) as amended by Capital Requirements Directive V (“CRD V”)). The CRD IV requirements took effect from 1 January 2014. The CRR 2 entered into force in June 2019 (with most provisions effective from 28 June 2021), while CRD V was transposed into French law in line with the EU transposition deadline of 29 December 2020. As an amending regulation, the existing provisions of CRR apply unless they are amended by CRR 2.

This legislation consists of three pillars. Pillar 1 is defined as “Minimum Capital Requirement,” Pillar 2 “Supervisory Review Process,” and Pillar 3 “Market Discipline.” The aim of Pillar 3 is to encourage market discipline by allowing market participants to access key pieces of information regarding the capital adequacy of institutions through a prescribed set of disclosure requirements.

The information contained in this Pillar 3 disclosure has been prepared in accordance with Part Eight of the CRR, as amended by CRR 2, and with additional guidance provided by the ACPR notice “Modalités de calcul et de publication des ratios prudentiels dans le cadre de la CRDIV et exigence de MREL,” on an individual basis. These disclosures are updated annually in line with the accounting year end as at 31 December 2022, unless otherwise stated. All tables are as at 31 December 2022, with prior year comparatives as at 31 December 2021. In accordance with Article 433 of the amended CRR, BofASE also produces semi-annual disclosures updated on half-yearly basis, with prior period comparatives. All disclosures are made in EUR, unless otherwise stated.

BofASE statutory accounts are prepared in accordance with French Companies Law and Generally Accepted Accounting Principles, with prudential reporting prepared under International Financial Reporting Standards (“IFRS”).

Therefore, the information contained in these Pillar 3 disclosures may not be directly comparable with the BofASE Annual Report and BofASE Financial Statements, and the disclosures are not required to be audited by external auditors. In addition, certain components of the disclosure contain forward looking assumptions. Forward-looking assumptions represent beliefs and expectations regarding future events and are not guarantees of future results, and involve certain known and unknown risks and uncertainties that are difficult to predict and are often beyond BofASE’s control. Actual outcomes and results may differ materially from those expressed in, or implied by, any forward-looking assumptions. Undue reliance should not be placed on any forward-looking assumptions and consideration should be given to the uncertainties and risks discussed in other publicly available disclosures of BAC.

Although the Pillar 3 disclosure is intended to provide transparent information on a common basis, the information contained in this document may not be directly comparable with the information provided by other banks.

These Pillar 3 disclosures are published on the Investor Relations section of BAC’s corporate website: <http://investor.bankofamerica.com>.

### CRR ‘Quick Fix’

On 26 June 2020, Regulation (EU) 2020/873 (“CRR quick fix”) was published in the Official Journal of the EU, amending Regulations (EU) No 575/2013 and (EU) 2019/876 as regards certain adjustments in response to the 2019 coronavirus (“COVID-19”) pandemic. The CRR ‘quick fix’ is part of a series of measures taken by European institutions to mitigate the impact of the COVID-19 pandemic on institutions across EU Member States. In addition to the flexibility already provided in the existing rules, the CRR ‘quick fix’ introduces certain adjustments to the CRR, including temporary measures, intended, inter alia, to enhance credit flows to companies and households, thereby supporting the EU’s economy.

Article 468 of CRR ‘quick fix’ relates to the temporary treatment of unrealised gains and losses measured at fair value through other comprehensive income in view of the COVID-19 pandemic.

This article introduces a temporary treatment that allows institutions to remove from the calculation of their CET1 items, unrealised gains and losses measured at fair value through other comprehensive income, corresponding to exposures to central governments, to regional governments, or to local authorities referred to in Article 115(2) CRR and to public sector entities referred to in Article 116(4) CRR, excluding those financial assets that are credit-impaired, during the period from 1 January 2020 to 31 December 2022. This article replaces the previous article that was applicable until 31 December 2017.

BofASE has chosen not to apply this temporary treatment of Article 468 of CRR ‘quick fix.’

### Environmental, Social and Governance

BofASE is not required to make disclosure of Environmental, Social and Governance (“ESG”) risks as laid down in CRR Article 449a as it does not meet the criteria of “large institutions which have issued securities that are admitted to trading on a regulated market of any Member State”.

Please refer to 4.4.5. Climate Change for details on BofASE’s approach to climate risk

#### 1.2.1. Mapping of Financial Statement Categories with Regulatory Risk Categories

Table 1.2.1..T1. shows BofASE’s accounting balance sheet and breaks down the carrying values of each line item between the relevant regulatory risk framework(s) to which they are allocated. BofASE is subject to the requirements of Part Eight of the CRR, as amended by CRR2, on an individual basis, and given that the scope of accounting consolidation and the scope of prudential consolidation are exactly the same, columns (a) and (b) of this template have been merged.

**Table 1.2.1.T1. – EU LI1 Differences between Accounting and Regulatory Scopes of Consolidation and the Mapping of Financial Statement Categories with Regulatory Risk Categories**

		b	c	d	e	f	g
		Carrying values under scope of prudential consolidation	Carrying values of items				
			Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to own funds requirements or subject to deduction from own funds
(€ in Millions)							
Breakdown by asset classes according to the balance sheet in the published financial statements							
1	Cash at bank and in hand	5,581	5,581	—	—	—	—
	Financial assets at fair value through profit or loss	—	—	—	—	—	—
2	Securities	12,738	227	—	—	12,511	—
3	Loans and repurchase agreements	16,574	19	16,555	—	16,555	—
4	Derivative financial instruments	56,364	—	56,364	—	56,364	—
	Financial assets at fair value through OCI	—	—	—	—	—	—
5	Debt securities	99	99	—	—	—	—
	Financial assets at amortised cost	—	—	—	—	—	—
6	Loans and repurchase agreements	7,147	13	7,133	—	7,133	1
7	Current and deferred tax assets	38	38	—	—	—	—
8	Other assets	18,163	131	15,324	—	—	2,708
9	Tangible and intangible assets	—	—	—	—	—	—
10	Total assets	116,705	6,108	95,376	—	92,563	2,709

		b	c	d	e	f	g
		Carrying values under scope of prudential consolidation	Carrying values of items				
			Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to own funds requirements or subject to deduction from own funds
(€ in Millions)							
	Breakdown by liability classes according to the balance sheet in the published financial statements						
1	Deposits from central banks	—	—	—	—	—	—
	Financial liabilities at fair value through profit or loss	—	—	—	—	—	—
2	Securities	10,029	—	—	—	10,029	—
3	Deposits and repurchase agreements	13,573	—	13,372	—	13,573	—
4	Derivative financial instruments	57,883	—	57,883	—	57,883	—
5	Derivatives used for hedging purposes	—	—	—	—	—	—
	Financial liabilities at amortised cost	—	—	—	—	—	—
6	Deposits and repurchase agreements	9,784	—	4,527	—	4,527	5,257
7	Subordinated debt	924	—	—	—	—	924
8	Other financial liabilities	342	—	30	—	—	312
9	Current and deferred tax liabilities	25	—	—	—	—	25
10	Other liabilities	16,120	—	11,129	—	—	4,991
11	Provisions for contingencies and charges	16	—	—	—	—	16
12	TOTAL LIABILITIES	108,696	—	86,941	—	86,012	11,524

The sum of amounts disclosed in columns (c) to (g) may not equal the amounts disclosed in column (b), as some items are subject to capital requirements for more than one risk framework listed in Part Three of CRR.

#### 1.2.2. Differences between the Financial Statements' Carrying Value Amounts and the Exposure Amounts used for Regulatory Purposes (EU LIA)

EU LI2 discloses differences between the financial statements' carrying value amounts and the exposure amounts used for regulatory purposes. The purpose of the following table is to provide information on the main sources of difference between the financial statements' carrying value amounts and the exposure amounts used for regulatory purposes.

**Table 1.2.2.T1. – EU LI2 Main Sources of Differences between Regulatory Exposure Amounts and Carrying Values in Financial Statements**

		a	b	c	d	e
		Total	Items subject to			
			Credit risk framework	Securitisation framework	CCR framework	Market risk framework
(€ in Millions)						
1	Assets carrying value amount under the scope of prudential consolidation (as per template LI1)	113,995	6,108	—	95,376	92,563
2	Liabilities carrying value amount under the scope of prudential consolidation (as per template LI1)	97,171	—	—	86,941	86,102

		a	b	c	d	e
		Total	Items subject to			
			Credit risk framework	Securitisation framework	CCR framework	Market risk framework
(€ in Millions)						
3	Total net amount under the scope of prudential consolidation	16,824	6,108	—	8,435	6,551
4	Off-balance-sheet amounts	116,133	569	—	115,564	
5	Differences in valuations	(165)	—	—	(165)	
6	Differences due to different netting rules, other than those already included in row 2	128,563	(471)	—	129,034	
7	Differences due to consideration of provisions	—	—	—	—	
8	Differences due to the use of credit risk mitigation techniques	(242,486)	(468)	—	(242,018)	
9	Differences due to credit conversion factors	(76)	(76)	—	—	
10	Differences due to Securitisation with risk transfer	—	—	—	—	
11	Other differences	27,213	156	—	27,057	
12	Exposure amounts considered for regulatory purposes	46,007	5,819	—	37,907	6,551

### Explanations of Differences between Accounting and Regulatory Exposure Amounts

Included below is a summary of the key types of difference between the accounting and regulatory exposure amounts as shown in the reconciliation above.

#### Off-Balance Sheet Amounts

- Instruments not on the balance sheet, such as guarantees and commitments, are considered as exposures for the calculation of regulatory capital requirements
- Collateral provided in the form of securities (debt and equity instruments) are not shown on the balance sheet, but are used in the calculation of regulatory exposure amounts

#### Differences Due to Netting Rules

- Under the accounting framework, financial assets and liabilities are offset, and the net amount is reported on the balance sheet where BofASE currently has a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously
- Under the regulatory framework, netting is applied for the calculation of exposures where it is legally effective and enforceable. This typically means that more netting is recognised under the regulatory framework than under the accounting framework

#### Differences Due to the Use of Credit Risk Mitigation Techniques

- In counterparty credit risk ("CCR"), differences arise between accounting carrying values and regulatory exposure as a result of the application of credit risk mitigation, relating to financial collateral received in derivative and securities financing transactions ("SFTs")

#### Differences Due to Credit Conversion Factors

- Off-balance sheet exposures are multiplied by a credit conversion factor as defined in the CRR, as amended by CRR 2, in order to determine the regulatory exposure value

Other Differences

- Under the standardised approach for counterparty credit risk an add-on for potential future credit exposure (“PFE”) is applied for derivative exposures, and an additional alpha factor of 1.4 is applied in determining the regulatory exposure value

**1.2.2.1. Prudential Valuation Adjustment**

Prudential valuation adjustment is deducted from BofASE’s Tier 1 Capital Resources. There is an established valuation control policy and prudent valuation guidelines which set out the policies and procedures for the determination of price verification and prudent valuation in accordance with the requirements of the CRR and related interpretive guidance.

The following table shows a breakdown of the amounts of the constituent elements of the prudent valuation adjustment as at 31 December 2022 for BofASE.

**Table 1.2.2.1.T1. – EU PV1 Prudent Valuation Adjustments (PVA)**

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	Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
(€ in Millions)		Equity	Interest Rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA			
1	Market price uncertainty	71	54	4	9		11	13	81	69	11
2	Not applicable										
3	Close-out cost	28	39	1	9		—	—	39	39	—
4	Concentrated positions	8	5	—	1				15	15	—
5	Early termination										
6	Model risk	3	5	—			27		18	4	14
7	Operational risk	5	5	—	2				12	11	1
8	Not applicable										
9	Not applicable										
10	Future administrative costs										
11	Not applicable										
12	<b>Total Additional Valuation Adjustments (AVAs)</b>								<b>165</b>	<b>138</b>	<b>27</b>

**1.3. Disclosure Policy**

In accordance with Article 431(3) of the CRR, as amended by CRR 2, BofASE has adopted a formal policy to comply with the disclosure requirements included in Part Eight of the CRR. The BofA Securities Europe SA Pillar 3 Disclosure Policy sets out the internal processes, systems, and controls used to verify that the disclosures are appropriate and in compliance with regulatory requirements, and that the disclosures convey BofASE’s risk profile comprehensively to market participants.

Article 431(3) also requires that at least one member of the management body or senior management shall attest in writing that the disclosures required under Part Eight have been made in accordance with the policy and associated internal processes, systems, and controls. The written attestation is included below:

#### Senior Management Attestation

*"I attest that the disclosures provided in the BofASE 2022 year-end Pillar 3 disclosure have been prepared in accordance with the internal processes, systems and controls detailed in the BofASE Pillar 3 Disclosure Policy, which has been approved by the BofASE Board."*

The BofASE Pillar 3 Disclosures have been attested by:

#### **BofASE Deputy Chief Executive Officer and Executive Director**

George Carp

#### **BofASE Chief Risk Officer**

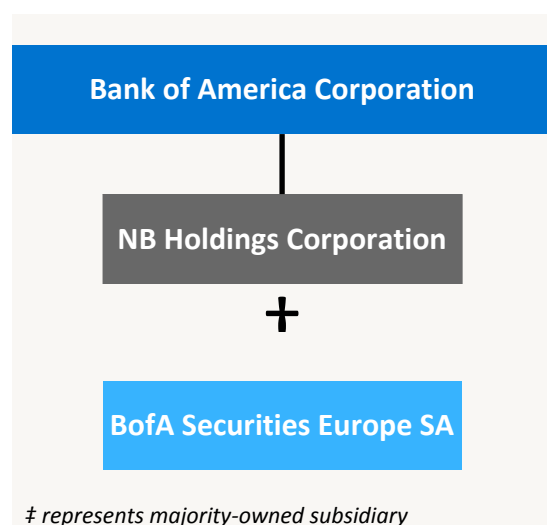
Hubert Dhers

### **1.4. Operation, Structure, and Organisation**

BofASE is BAC's primary broker-dealer for clients in the EEA. BofASE is headquartered in Paris, France and has the ability to trade throughout Europe and conduct business with international clients.

The principal activities of BofASE are to provide a wide range of financial services for business originated in EEA, to act as a broker and dealer in financial instruments and to provide corporate finance advisory services. BofASE also provides a number of post trade related services including settlement and clearing services to third-party clients.

**Figure 1.4.F1. – High-Level Ownership Chart**



# BofA Securities Europe SA

## Pillar 3 Disclosure

2. Capital Resources and Minimum Capital Requirement  
As at 31 December 2022

## 2.1. Capital Resources

### 2.1.1. Summary of 2022 Capital Resources

Capital Resources represent the amount of regulatory capital available to an entity in order to cover all risks. Defined under CRR, Capital Resources are designated into two tiers, Tier 1, and Tier 2. Tier 1 capital consists of CET1 and Additional Tier 1 ("AT1"). CET1 is the highest quality of capital and typically represents equity and audited reserves; AT1 usually represents contingent convertible bonds, and Tier 2 capital typically consists of subordinated debt and hybrid debt capital instruments.

On 12 May 2022, BofASE received a €900M CET1 capital injection from an affiliate, NB Holdings Corporation. On 18 November 2022, a further €700M CET1 capital injection was made into BofASE from the same source.

The capital resources of BofASE are set out in Table 2.1.2.T1.

BofASE's Capital Resources of €8.72B (2021: €6.93B) consist of €7.80B Tier 1 and €0.92B Tier 2 capital. All of BofASE's Tier 1 capital is made up of CET1.

### 2.1.2. Key Movements in 2022

The following table shows a summary of BofASE's key capital, leverage and liquidity metrics as at 31 December 2022.

**Table 2.1.2.T1. – EU KM1 Key Metrics Template**

		a	c	e
(€ in Millions)		Q4 2022	Q2 2022	Q4 2021
	<b>Available own funds (amounts)</b>			
1	Common Equity Tier 1 (CET1) capital	7,803	6,808	6,008
2	Tier 1 capital	7,803	6,808	6,008
3	Total capital	8,723	7,728	6,928
	<b>Risk-weighted exposure amounts</b>			
4	Total risk exposure amount ("TREA")	35,549	38,682	30,434
	<b>Capital ratios (as a percentage of risk-weighted exposure amount)</b>			
5	Common Equity Tier 1 ratio (%)	21.95 %	17.60 %	19.74 %
6	Tier 1 ratio (%)	21.95 %	17.60 %	19.74 %
7	Total capital ratio (%)	24.54 %	19.98 %	22.76 %
	<b>Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)</b>			
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	3.69 %	3.69 %	3.69 %
EU 7b	of which: to be made up of CET1 capital (percentage points)	2.08 %	2.08 %	2.08 %
EU 7c	of which: to be made up of Tier 1 capital (percentage points)	2.77 %	2.77 %	2.77 %
EU 7d	Total SREP own funds requirements (%)	11.69 %	11.69 %	11.69 %
	<b>Combined buffer and overall capital requirement (as a percentage of risk-weighted exposure amount)</b>			
8	Capital conservation buffer (%)	2.50 %	2.50 %	2.50 %
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	— %	— %	— %
9	Institution specific countercyclical capital buffer (%)	0.22 %	0.08 %	0.10 %
EU 9a	Systemic risk buffer (%)	— %	— %	— %
10	Global Systemically Important Institution ("G-SII") buffer (%)	— %	— %	— %
EU 10a	Other Systemically Important Institution buffer (%)	— %	— %	— %
11	Combined buffer requirement (%)	2.72 %	2.58 %	2.60 %



		a	c	e
(€ in Millions)		Q4 2022	Q2 2022	Q4 2021
EU 11a	Overall capital requirements (%)	14.41 %	14.27 %	14.29 %
12	CET1 available after meeting the total SREP own funds requirements (%)	12.85 %	8.29 %	11.07 %
<b>Leverage ratio</b>				
13	Total exposure measure	87,836	113,096	70,770
14	Leverage ratio (%)	8.88 %	6.02 %	8.49 %
<b>Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)</b>				
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 %
<b>Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)</b>				
EU 14d	Leverage ratio buffer requirement (%)	— %	— %	— %
EU 14e	Overall leverage ratio requirement (%)	3.00 %	3.00 %	3.00 %
<b>Liquidity Coverage Ratio</b>				
15	Total high-quality liquid assets ("HQLA") (Weighted value -average)	7,165	6,314	5,345
EU 16a	Cash outflows - Total weighted value	7,591	6,476	4,912
EU 16b	Cash inflows - Total weighted value	4,023	3,022	2,111
16	Total net cash outflows (adjusted value)	3,568	3,454	2,802
17	Liquidity coverage ratio (%)	208.05 %	187.81 %	193.07 %
<b>Net Stable Funding Ratio</b>				
18	Total available stable funding	15,086	15,171	12,788
19	Total required stable funding	11,375	10,892	10,261
20	NSFR ratio (%)	132.63 %	139.28 %	124.63 %

### 2.1.3. Transferability of Capital within the BAC Group (EU LIB)

Capital Resources are satisfied by sourcing capital either directly from BAC or from other affiliates. There are no material, current, or foreseen, practical, or legal impediments to the prompt transfer of capital resources or repayment of liabilities, subject to applicable regulatory requirements.

## 2.2. Capital Requirements and RWAs

### 2.2.1. Summary of 2022 Capital Requirement

Risk-weighted assets ("RWAs") reflect both on- and off-balance sheet risk, as well as capital charges attributable to the risk of loss arising from the following.

*Credit and counterparty credit risk* refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations. Credit and Counterparty Credit capital requirements are derived from RWAs, determined using the Standardised Approach for exposures.

*Credit Valuation Adjustment ("CVA")* is the capital requirement that covers the risk of mark-to-market losses on the counterparty risk of over-the-counter ("OTC") derivatives. CVA is calculated using standardised approaches.

*Settlement risk* refers to the capital requirement that covers the risk due to the possibility that a counterparty will fail to deliver on the terms of a contract at the agreed-upon time.

*Securitisations exposures* are a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranching. Payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures, and the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.

*Market risk* refers to the risk that a change in the level of one or more market prices, rates, indices, implied volatilities (the price volatility of the underlying instrument imputed from option prices), correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio. The market risk capital requirements are comprised of capital associated with the Internal Modelling Approaches ("IMA") approved by the ACPR and those associated with the Standardised Approach.

*Operational risk* refers to the risk of loss, or of damage to reputation, resulting from inadequate or failed internal processes or systems, people or external events. Capital requirements for operational risk are calculated under the Standardised Approach.

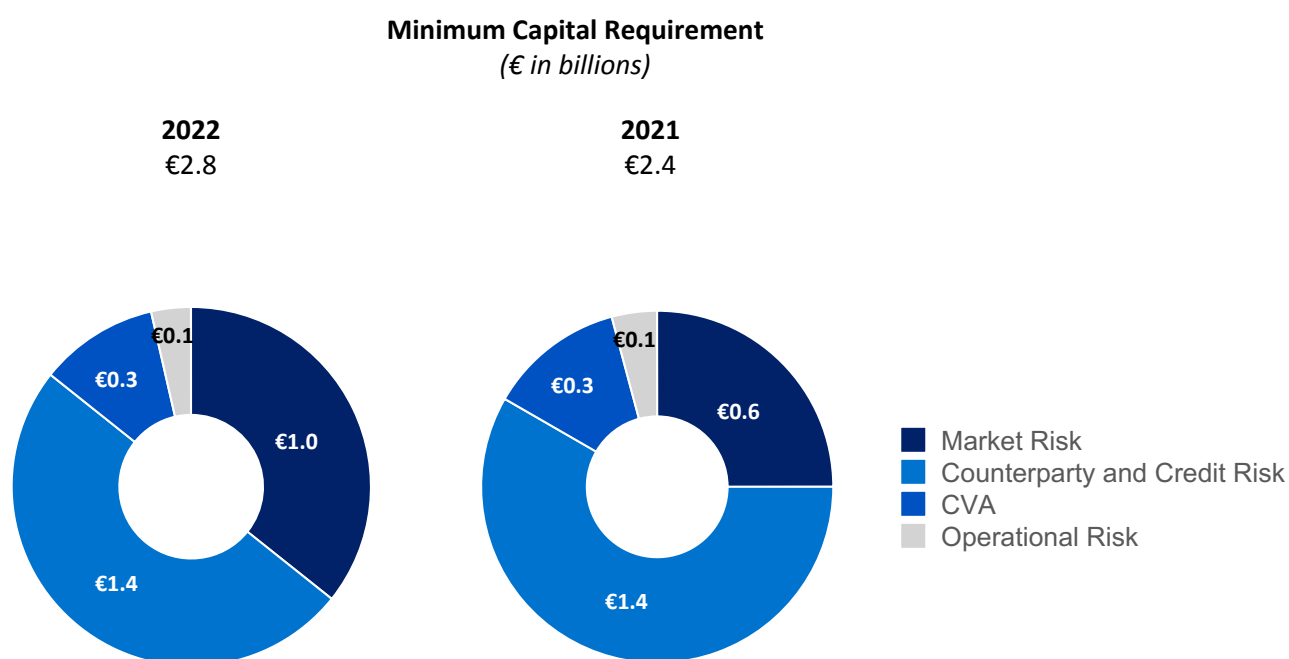
Amounts below the thresholds for deduction correspond to items not deducted from Own Funds, as they are below the applicable thresholds for deduction, in accordance with the CRR.

Figure 2.2.1.F1. summarises RWAs and Minimum Capital Requirements for BofASE by risk type. BofASE calculates Minimum Capital Requirements as 8% of RWAs in accordance with CRR.

BofASE is subject to a Minimum Capital Requirement as set out in CRR. BofASE is also required to hold capital in addition to the Minimum Capital Requirements to meet ACPR obligations and CRD buffers.

The Minimum Capital Requirements principally comprises of credit risk, market Risk, and operational Risk requirements. At 31 December 2022, BofASE had a Minimum Capital Requirement of €2.8B (2021: €2.4B) comprising of the risk requirements outlined in Figure 2.2.1.F1.

**Figure 2.2.1.F1. – Summary of BofASE's Minimum Capital Requirement**



**2.2.1.1. Use of the Standardised Approach (EU CRD)**

BofASE has adopted the standardised approach for calculating counterparty credit risk, credit risk, and operational risk capital requirements. BofASE's approach for market risk is a combination of models approved by the ACPR, including Value at Risk ("VaR"), and the Standardised Approach. In order to adhere to the standardised rules set out in the CRR, BofASE uses ratings from External Credit Assessment Institutions ("ECAIs") such as Moody's Investors Service, Inc. ("Moody's"), S&P, and Fitch. BofASE complies with the standard association for mapping of external ratings of each nominated ECAI with the credit quality steps ("CQSs"), which is published by the European Banking Authority ("EBA").

ECAI ratings are used for all relevant exposure classes. BofASE does not use Export Credit Agencies ("ECAs"). There have been no changes relating to the use of ECAIs or ECAs during the reporting period. BofASE does not transfer issuer and issue credit assessments onto items not included in the trading book.

**2.2.2. Key Movements in 2022**

BofASE's Minimum Capital Requirement increased to €2.8B in 2022 from €2.4B in 2021. This was mainly driven by an increase in capital requirements for market risk in the year.

Table 2.2.2.T1. discloses a breakdown of the RWAs and Minimum Capital Requirement of BofASE, broken down by risk types and calculation approaches.

**Table 2.2.2.T1. – EU OV1 Overview of Total Risk Exposure Amounts**

(€ in Millions)		Total risk exposure amounts		Total own funds requirements
		a	b	c
		Q4 2022	Q4 2021	Q4 2022
1	Credit risk (excluding CCR)	632	727	51
2	Of which the standardised approach	632	727	51
3	Of which the Foundation IRB ("F-IRB") approach	—	—	—
4	Of which slotting approach	—	—	—
EU 4a	Of which equities under the simple risk-weighted approach	—	—	—
5	Of which the Advanced IRB ("A-IRB") approach	—	—	—
6	Counterparty credit risk - CCR	21,381	20,311	1,710
7	Of which the standardised approach	12,692	12,728	1,015
8	Of which internal model method ("IMM")	—	—	—
EU 8a	Of which exposures to a CCP	177	199	14
EU 8b	Of which credit valuation adjustment - CVA	4,202	4,166	336
9	Of which other CCR	4,311	3,218	345
10	Not applicable			
11	Not applicable			
12	Not applicable			
13	Not applicable			
14	Not applicable			
15	Settlement risk	188	95	15
16	Securitisation exposures in the non-trading book (after the cap)	—	—	—
17	Of which SEC-IRBA approach	—	—	—
18	Of which SEC-ERBA (including Internal Assessment Approach ("IAA"))	—	—	—
19	Of which SEC-SA approach	—	—	—

		Total risk exposure amounts		Total own funds requirements
		a	b	c
		Q4 2022	Q4 2021	Q4 2022
(€ in Millions)				
EU 19a	Of which 1250% / deduction	—	—	—
20	Position, foreign exchange and commodities risks (Market risk)	12,071	8,025	966
21	Of which the standardised approach	2,336	1,769	187
22	Of which IMA	9,735	6,256	779
EU 22a	Large exposures	—	—	—
23	Operational risk	1,277	1,277	102
EU 23a	Of which basic indicator approach ("BIA")	—	—	—
EU 23b	Of which standardised approach	1,277	1,277	102
EU 23c	Of which advanced measurement approach ("AMA")	—	—	—
24	Amounts below the thresholds for deduction (subject to 250% risk weight)	95	—	8
25	Not applicable			
26	Not applicable			
27	Not applicable			
28	Not applicable			
29	<b>Total</b>	<b>35,549</b>	<b>30,434</b>	<b>2,844</b>

## 2.3. Capital Summary

### 2.3.1. Capital Position and Capital Ratio

BofASE's Capital Resources in excess of its Minimum Capital Requirements at 31 December 2022 was €5.9B (2021: €4.5B).

Table 2.3.1.T1. shows a summary of BofASE Capital position, BofASE is adequately capitalised with capital resources significantly in excess of the Minimum Capital Requirement.

BofASE capital position is monitored and analysed on a daily basis. BofASE maintained capital surplus over its Minimum Capital Requirement throughout the period.

An entity's Tier 1 ratio is the ratio of the Tier 1 Capital to RWAs. BofASE's RWAs increased in 2022, while Tier 1 resources increased during the year as a result of capital injections as described in Section 2.1.2. Key Movements in 2022. BofASE's Tier 1 ratio at 31 December 2022 was 21.95% (2021:19.74%).

**Table 2.3.1.T1. – Capital Surplus over Minimum Capital Requirement and Tier 1 Ratio**

(€ in Millions)	BofASE	
	2022	2021
Total Capital Resources	8,723	6,928
Total Pillar 1 Minimum Capital Requirement	2,844	2,435
<b>Surplus over Requirement</b>	<b>5,879</b>	<b>4,493</b>
Tier 1 Capital Resources	7,803	6,008
Risk-Weighted Assets	35,549	30,434
<b>Tier 1 Capital Ratio</b>	<b>21.95 %</b>	<b>19.74 %</b>

## 2.4. Capital Management (EU OVC)

BofASE views capital as an important source of financial strength, and is committed to managing its capital in a manner consistent with applicable laws, rules and regulations. BofASE manages and monitors capital in line with established policies and procedures and in compliance with local regulatory requirements and considers the changing needs of its businesses. The appropriate level and quality of capital is set so that BofASE meets all regulatory capital requirements, and so that BofASE's ability to continue as a going concern is safeguarded. Key components of the capital management framework include:

- A strategic capital planning process aligned to risk appetite
- A robust capital stress testing framework
- Regular monitoring against capital and leverage risk appetite limits
- Regular leverage and capital reporting to management

BofASE also conducts an Internal Capital Adequacy Assessment Process ("ICAAP") at least annually. The ICAAP is a key tool used to inform the BofASE Board of Directors ("BofASE Board") and the executive management on BofASE's risk profile and capital adequacy. The BofASE ICAAP:

- Is designed to ensure the risks to which BofASE is exposed are appropriately capitalised and risk managed
- Uses stress testing to ensure capital levels are adequate to withstand the impact of a suitably severe stress
- Assesses capital adequacy under normal and stressed operating environments over the capital planning horizon to ensure BofASE maintains a capital position in line with pre-stress and post-stress goals

The ICAAP is also aligned to the Recovery Plan that prepares BofASE to restore its financial strength and viability during an extreme stress situation, laying out a set of defined actions aimed at protecting the entity, its customers, the market, and prevent a potential resolution event. The Recovery Plan includes a wide range of counter measures that are designed to mitigate different types of stress scenarios that could threaten BofASE's capital position. In addition, the recovery plan outlines clear pre-defined governance and processes set up to support timely, efficient, and effective monitoring, escalation, decision making, and implementation of recovery options if a crisis event were to occur.

BofASE ICAAP also assesses Pillar 2R at least annually. Pillar 2R is an additional amount of capital that BofASE is required to hold in order to cover risks that are not covered (or not entirely covered) by the Minimum Capital Requirement. The ACPR reviews the ICAAP as part of the Supervisory Review and Evaluation Process ("SREP") and sets a TSCR. The TSCR is the sum of the Minimum Capital Requirement (8% of RWAs) and the Pillar 2R capital requirement (3.69% of RWAs). Following the reauthorisation of BofASE as a credit institution in December 2022, review of the ICAAP and setting of the TSCR will be done by the Joint Supervisory Team ("JST"), which will be comprised of the ACPR and ECB.

As at 31 December 2022, BofASE's TSCR was set at 11.69% of RWAs.

## 2.5. Leverage Ratio

### 2.5.1. Summary

The Basel III framework introduced a simple, transparent, non-risk based leverage ratio to act as a supplementary measure to the risk-based capital requirements. The Basel Committee is of the view that a simple leverage ratio framework is critical and complementary to the risk-based capital framework and that a credible leverage ratio ensures broad and adequate capture of both the on and off-balance sheet sources of banks' leverage.

The leverage ratio is a measure of Tier 1 capital as a percentage of exposure as defined under CRR rules. The requirement for the calculation and reporting of leverage ratios was introduced as part of CRD IV in 2014 and amended by the European Commission Delegated Act (EU) 2015/62 in 2015.

In June 2019, amendments to the CRR were published in the Official Journal of the EU as Regulation (EU) 2019/876. These amendments, which became effective as of 28 June 2021, included a binding minimum leverage ratio requirement of 3.00%, as well as a number of changes to the calculation of the exposure measure. BofASE's leverage ratio at 31 December 2022 was in excess of the minimum requirement at 8.88%.

BofASE manages its risk of excessive leverage through leverage ratio early warning trigger levels. Limits are calibrated in line with legal entity capacity and ensure that leverage exposure remains within BofASE's risk appetite.

**Table 2.5.1.T1. – Leverage Ratio**

	BofASE	
	2022	2021
Leverage Ratio	8.88 %	8.49 %

### 2.5.2. Key Movements in 2022 (EU LRA)

BofASE's leverage ratio increased from 8.49% at the end of 2021 to 8.88% at the end of 2022.

# BofA Securities Europe SA

## Pillar 3 Disclosure

3. Liquidity Position and Encumbered and Unencumbered Assets  
As at 31 December 2022

**3.1. Liquidity Position****3.1.1. Regulatory Requirement**

BofASE is subject to CRD, CRR, and ACPR liquidity requirements through which it must demonstrate self-sufficiency for liquidity purposes.

BofASE is subject to the liquidity coverage ratio ("LCR"), which requires BofASE to hold a sufficient buffer of eligible high-quality liquid assets ("HQLA") to cover potential cash outflows during the first 30 days of a liquidity stress event.

BofASE is also subject to the Net Stable Funding Ratio ("NSFR") which requires BofASE to hold stable sources of funding to support its activities.

**3.1.2. Liquidity Position**

As at 31 December 2022, BofASE was in compliance with its regulatory and internal liquidity requirements.

**3.1.3. Funding Profile**

BofASE primarily funds its balance sheet through wholesale secured funding, equity, subordinated debt and intercompany unsecured debt.

These funding sources are used to support BofASE's trading and capital market activities and maintain sufficient excess liquidity.

**3.2. Encumbered and Unencumbered Assets (EU AE4)**

Asset encumbrance occurs when an asset is pledged as collateral or used to secure a transaction from which it cannot be freely withdrawn.

Encumbered on-balance sheet assets in BofASE consist of debt trading securities which are delivered as collateral into secured funding transactions such as repurchase agreements, stock lending and collateral swaps, or as margin under derivatives agreements. BofASE also holds encumbered cash, reported within "Other Assets", which is pledged as margin under derivatives agreements.

The majority of BofASE's assets in this disclosure relate to derivatives and reverse repo transactions, shown as "Other Assets", which are reported as cash and are therefore not subject to encumbrance. In most instances, the firm has rehypothecation rights over the securities received in these transactions and therefore this collateral is generally onwards encumbered in secured funding transactions or pledged as margin under derivatives agreements. These securities form the majority of "Collateral received by the reporting institution" within Table 3.2.T2. "EU AE2 Collateral Received and Own Debt Securities Issued" and are shown as encumbered, demonstrating that asset encumbrance is an integral part of BofASE's business model. As a result there are robust collateral management strategies and systems in place to manage asset encumbrance on a business as usual and stress basis and the profile is controlled through its risk limits and metrics framework.

The values contained within this disclosure represent the median of BofASE's quarterly regulatory Asset Encumbrance submissions over 2022. The disclosure is prepared in accordance with the requirements of Article 443 of CRR and is based on accounting information produced in line with applicable accounting standards.



Table 3.2.T1. outlines the carrying amount and fair value of certain assets of BofASE split between those encumbered and unencumbered.

**Table 3.2.T1. – EU AE1 Encumbered and Unencumbered Assets**

		2022							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA <sup>(3)</sup>		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
(€ in Millions)		010	030	040	050	060	080	090	100
010	Assets of the reporting institution <sup>(1)</sup>	21,616	7,655			98,231	3,889		
030	Equity instruments	2,108	987	2,108	987	1,972	44	1,972	44
040	Debt securities	7,394	6,660	7,394	6,660	537	393	537	393
050	of which: covered bonds	—	—	—	—	—	—	—	—
060	of which: securitisations	—	—	—	—	—	—	—	—
070	of which: issued by general governments	6,500	6,474	6,500	6,474	472	387	472	387
080	of which: issued by financial corporations	667	93	667	93	43	—	43	—
090	of which: issued by non-financial corporations	147	91	147	91	22	4	22	4
120	Other assets <sup>(2)</sup>	12,634	—			96,649	3,468		

		2021							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA <sup>(3)</sup>		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
(€ in Millions)		010	030	040	050	060	080	090	100
010	Assets of the reporting institution <sup>(1)</sup>	16,859				57,077			
030	Equity instruments	2,987		2,987		2,388		2,388	
040	Debt securities	6,353		6,353		503		503	
050	of which: covered bonds	—		—		—		—	
060	of which: securitisations	—		—		—		—	
070	of which: issued by general governments	5,976		5,976		473		473	
080	of which: issued by financial corporations	464		464		33		33	
090	of which: issued by non-financial corporations	27		27		4		4	
120	Other assets <sup>(2)</sup>	7,358				54,186			

<sup>(1)</sup> Figures represent median values calculated as the median of the end-of-period values for each of the four quarters in the year. Totals in the tables are calculated as the median of the sums for each quarter-end and as such will not be equal to the sum of the individual line items in each table.

<sup>(2)</sup> The majority of unencumbered Other Assets relate to derivative assets not available for encumbrance.

<sup>(3)</sup> HQLA = High-Quality Liquid Assets; EHQLA = Extremely High-Quality Liquid Assets

Table 3.2.T2. provides details on both the fair value of encumbered collateral received and collateral received that is available for encumbrance.

**Table 3.2.T2. – EU AE2 Collateral Received and Own Debt Securities Issued**

		2022				2021			
		Fair value of encumbered collateral received or own debt securities issued		Unencumbered		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				Fair value of collateral received or own debt securities issued available for encumbrance	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
(€ in Millions)		010	030	040	060	010	030	040	060
130	Collateral received by the disclosing institution <sup>(1)</sup>	113,443	107,565	13,427	4,481	36,353		9,646	
140	Loans on demand	—	—	—	—	—		—	
150	Equity Instruments	4,895	1,774	619	201	3,937		718	
160	Debt Securities	108,676	105,690	4,497	4,320	32,610		3,661	
170	of which: Covered Bonds	191	—	—	—	2		—	
180	of which: Securitisations	71	—	1,843	1,843	300		1,517	
190	of which: Issued by General Governments	105,656	105,072	3,212	3,181	29,978		1,611	
200	of which: Issued by Financial Corporations	2,427	566	52	12	1,581		8	
210	of which: Issued by Non-Financial Corporations	895	212	75	20	731		5	
220	Loans and Advances Other Than Loans on Demand	—	—	9,390	—	—		5,138	
230	Other Collateral received	—	—	—	—	—		—	
240	Own Debt Securities Issued Other than Own Covered Bonds or Securitisations	—	—	—	—	—		—	
241	Own Covered Bonds and Asset-Backed Securities Issued and Not Yet Pledged			—	—			—	
250	TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	135,059	114,997			53,800			

<sup>(1)</sup> Figures represent median values calculated as the median of the end-of-period values for each of the four quarters in the year. Totals in the tables are calculated as the median of the sums for each quarter end and as such will not be equal to the sum of the individual line items.

Table 3.2.T3. outlines the value of liabilities against which assets have been encumbered and the respective asset values.

**Table 3.2.T3. – EU AE3 Sources of Encumbrance**

(€ in Millions)		2022		2021	
		Matching Liabilities, Contingent Liabilities or Securities Lent	Assets, Collateral Received and Own Debt Securities Issued other than Covered Bonds and ABSs Encumbered	Matching Liabilities, Contingent Liabilities or Securities Lent	Assets, Collateral Received and Own Debt Securities Issued other than Covered Bonds and ABSs Encumbered
		010	030	010	030
010	Carrying Amount of Selected Financial Liabilities	102,819	103,604	33,012	35,170

### **3.3. LCR Disclosures (EU LIQB)**

#### **3.3.1. LCR Disclosure Requirements**

This LCR disclosure, as at 31 December 2022, is prepared in accordance with the requirements of Article 451a of CRR. The objective of the LCR disclosure requirements is to provide market participants with information to assess in scope EU firm's liquidity positions and risk management.

**3.3.2. LCR Disclosure Template**

Table 3.3.2.T1. below discloses average weighted and unweighted values of the liquidity buffer, total net cash outflows, the LCR ratio, and provides details of cash outflows and cash inflows of BofASE.

**Table 3.3.2.T1. - EU LIQ1 Quantitative information of LCR<sup>(1)</sup>**

		a	b	c	d	e	f	g	h
(€ in Millions)		Total unweighted value (average)				Total weighted value (average)			
EU 1a	Quarter ending on	31 Mar 22	30 Jun 22	30 Sep 22	31 Dec 22	31 Mar 22	30 Jun 22	30 Sep 22	31 Dec 22
EU 1b	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
<b>HIGH-QUALITY LIQUID ASSETS</b>									
1	Total high-quality liquid assets ("HQLA")					5,797	6,314	6,972	7,165
<b>CASH - OUTFLOWS</b>									
2	Retail deposits and deposits from small business customers, of which:	—	—	—	—	—	—	—	—
3	Stable deposits	—	—	—	—	—	—	—	—
4	Less stable deposits	—	—	—	—	—	—	—	—
5	Unsecured wholesale funding	119	137	141	137	119	137	141	137
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	—	—	—	—	—	—	—	—
7	Non-operational deposits (all counterparties)	119	137	141	137	119	137	141	137
8	Unsecured debt	—	—	—	—	—	—	—	—
9	Secured wholesale funding					2,010	2,360	2,786	3,011
10	Additional requirements	2,886	3,005	3,244	3,158	2,621	2,740	2,975	2,966
11	Outflows related to derivative exposures and other collateral requirements	2,703	2,822	3,061	3,067	2,603	2,722	2,956	2,957
12	Outflows related to loss of funding on debt products	—	—	—	—	—	—	—	—
13	Credit and liquidity facilities	183	183	183	91	18	18	18	9
14	Other contractual funding obligations	11,371	10,736	10,828	10,782	993	1,157	1,339	1,344
15	Other contingent funding obligations	127	181	233	232	30	82	133	133
16	<b>TOTAL CASH OUTFLOWS</b>					<b>5,775</b>	<b>6,476</b>	<b>7,373</b>	<b>7,591</b>
<b>CASH - INFLOWS</b>									
17	Secured lending (e.g. reverse repos)	42,168	57,406	74,222	85,019	1,126	1,350	1,638	1,909
18	Inflows from fully performing exposures	267	295	366	380	160	183	281	321
19	Other cash inflows	1,217	1,489	1,702	1,792	1,217	1,489	1,702	1,792
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	<b>TOTAL CASH INFLOWS</b>	<b>43,652</b>	<b>59,191</b>	<b>76,290</b>	<b>87,192</b>	<b>2,502</b>	<b>3,022</b>	<b>3,620</b>	<b>4,023</b>
EU-20a	Fully exempt inflows	—	—	—	—	—	—	—	—
EU-20b	Inflows subject to 90% cap	—	—	—	—	—	—	—	—
EU-20c	Inflows subject to 75% cap	40,749	53,456	67,870	76,632	2,502	3,022	3,620	4,023
<b>TOTAL ADJUSTED VALUE</b>									
EU-21	<b>LIQUIDITY BUFFER</b>					<b>5,797</b>	<b>6,314</b>	<b>6,972</b>	<b>7,165</b>
22	<b>TOTAL NET CASH OUTFLOWS</b>					<b>3,273</b>	<b>3,454</b>	<b>3,753</b>	<b>3,568</b>
23	<b>LIQUIDITY COVERAGE RATIO</b>					<b>181.26 %</b>	<b>187.81 %</b>	<b>188.57 %</b>	<b>208.05 %</b>

<sup>(1)</sup> The disclosed values and figures are simple averages of the preceding 12 LCR monthly reporting observations for each quarter.

**3.3.3. Main Drivers of the LCR**

The LCR aims to ensure that sufficient High Quality Liquid Assets ("HQLA") is held to cover a projected 30-calendar day stress period. BofASE calculates the LCR pursuant to the Commission Delegated Regulation (EU) 2015/61 with regard to liquidity coverage requirement for Credit Institutions ("LCR Delegated Act").

BofASE largely holds HQLA in the form of both Level 1 qualifying securities (predominantly government bonds) and withdrawable cash held at the ECB.

BofASE's cash flows are modelled in accordance with the LCR Delegated Act. Cash outflows include, but are not limited to, secured wholesale funding activity, derivative exposures and other derivatives related collateral requirements.

Cash inflows include, but are not limited to, secured wholesale funding activity, derivatives exposures and unsecured lending to affiliates.

For the year ending 31 December 2022 the 12-month average LCR was 208.05%.

**3.3.4. Concentration of Funding and Liquidity Sources**

BofASE aims to achieve sufficient diversification of funding sources and actively monitors the tenor of liabilities to ensure long term assets are adequately funded. BofASE's primary sources of funding are equity, unsecured debt from affiliates and secured wholesale funding. Both liquidity and funding concentration risk is managed according to internal policies.

**3.3.5. Derivative Exposures and Potential Collateral Calls**

Derivative exposures give rise to inherent uncertainty and liquidity risk from contractual and behavioural implications of a combined stress environment. Both are modelled as part of the LCR, including impact of credit rating agency downgrades, monitoring historical changes in variation margin and expected counterparty behaviour and collateral flows.

BofASE undertakes derivative exposures both with clients or to hedge client activity. Risks in relation to this are monitored and measured through internal and regulatory liquidity stress testing and metrics.

**3.3.6. Currency Mismatch in the LCR**

BofASE's business activity is conducted in USD as well as other currencies, predominantly EUR and GBP. To mitigate the potential exposures that can result from fluctuations in currencies, BofASE monitors and aims to ensure sufficient liquidity resources are available to mitigate currency mismatches. BofASE's separately reportable currency exposures in line with CRR are EUR and USD.

**3.3.7. Other Items in the LCR**

There are no other items in the LCR calculation, that are not captured in this disclosure, considered relevant for the liquidity profile of BofASE.

### **3.4. NSFR Disclosures**

#### **3.4.1. NSFR Disclosure Requirements**

The Net Stable Funding Ratio (“NSFR”) disclosure is prepared in accordance with the requirements of Article 451a of CRR. The NSFR aims to ensure that firms maintain a stable funding structure over a long term horizon, complementing the shorter term LCR.

BofASE aims to achieve sufficient diversification of funding sources and actively monitors the tenor of liabilities to ensure long term assets are adequately funded.

#### **3.4.2. NSFR Disclosure Templates**

Table 3.4.2.T1 below discloses quarter-end weighted and unweighted values of assets, liabilities and off balance sheet items that make up the NSFR of BofASE.

Table 3.4.2.T1. – EU LIQ2 Net Stable Funding Ratio

(€ in Millions)		Quarter Ended 31 December 2022				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
Available Stable Funding ("ASF") Items						
1	Capital items and instruments	7,711	—	—	920	8,631
2	Own funds	7,711	—	—	920	8,631
3	Other capital instruments		—	—	—	—
4	Retail deposits		—	—	—	—
5	Stable deposits		—	—	—	—
6	Less stable deposits		—	—	—	—
7	Wholesale funding:		20,244	329	6,114	6,456
8	Operational deposits		349	—	—	175
9	Other wholesale funding		19,895	329	6,114	6,281
10	Interdependent liabilities		6,169	—	—	—
11	Other liabilities:	466	16,424	—	—	—
12	NSFR derivative liabilities	466				
13	All other liabilities and capital instruments not included in the above categories		16,424	—	—	—
14	Total available stable funding ("ASF")					15,086
Required stable funding ("RSF") items						
15	Total high-quality liquid assets ("HQLA")					770
EU-15a	Assets encumbered for more than 12m in cover pool		—	—	—	—
16	Deposits held at other financial institutions for operational purposes		562	—	—	281
17	Performing loans and securities:		21,443	306	5,520	6,099
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		13,708	206	—	609
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		7,571	—	1,123	1,607
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		1	—	—	—
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
22	Performing residential mortgages, of which:		—	—	—	—
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
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		163	100	4,397	3,883
25	Interdependent assets		6,169	—	—	—
26	Other assets:		20,255	—	3,163	4,220
27	Physical traded commodities				—	—
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		841	—	2,715	3,023
29	NSFR derivative assets		—			—
30	NSFR derivative liabilities before deduction of variation margin posted		14,945			747
31	All other assets not included in the above categories		4,469	—	448	450
32	Off-balance sheet items		75	—	—	4
33	Total RSF					11,375
34	Net Stable Funding Ratio (%)					132.63 %

(€ in Millions)		Quarter Ended 30 September 2022				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
Available stable funding ("ASF") items						
1	Capital items and instruments	7,011	—	—	920	7,931
2	Own funds	7,011	—	—	920	7,931
3	Other capital instruments		—	—	—	—
4	Retail deposits		—	—	—	—
5	Stable deposits		—	—	—	—
6	Less stable deposits		—	—	—	—
7	Wholesale funding:		38,707	502	7,144	8,118
8	Operational deposits		347	—	—	173
9	Other wholesale funding		38,360	502	7,144	7,945
10	Interdependent liabilities		6,456	—	—	—
11	Other liabilities:	—	24,952	—	—	—
12	NSFR derivative liabilities	—				
13	All other liabilities and capital instruments not included in the above categories		24,952	—	—	—
14	Total available stable funding ("ASF")					16,049
Required stable funding ("RSF") items						
15	Total high-quality liquid assets ("HQLA")					636
EU-15a	Assets encumbered for more than 12m in cover pool		—	—	—	—
16	Deposits held at other financial institutions for operational purposes		—	—	—	—
17	Performing loans and securities:		42,651	787	5,065	6,332
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		29,141	455	1	466
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		13,155	279	631	1,893
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		266	—	—	133
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
22	Performing residential mortgages, of which:		—	—	—	—
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
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		88	52	4,433	3,841
25	Interdependent assets		6,456	—	—	—
26	Other assets:		30,685	—	2,395	4,991
27	Physical traded commodities				—	—
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		794	—	2,059	2,426
29	NSFR derivative assets		1,305			1,305
30	NSFR derivative liabilities before deduction of variation margin posted		18,473			924
31	All other assets not included in the above categories		10,113	—	335	337
32	Off-balance sheet items		280	—	—	14
33	Total RSF					11,973
34	Net Stable Funding Ratio (%)					134.05 %



(€ in Millions)		Quarter Ended 30 June 2022				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
Available stable funding ("ASF") items						
1	Capital items and instruments	7,011	—	—	920	7,931
2	Own funds	7,011	—	—	920	7,931
3	Other capital instruments		—	—	—	—
4	Retail deposits		—	—	—	—
5	Stable deposits		—	—	—	—
6	Less stable deposits		—	—	—	—
7	Wholesale funding:		35,640	581	6,146	7,240
8	Operational deposits		320	—	—	160
9	Other wholesale funding		35,319	581	6,146	7,080
10	Interdependent liabilities		7,381	—	—	—
11	Other liabilities:		23,637	—	—	—
12	NSFR derivative liabilities					
13	All other liabilities and capital instruments not included in the above categories		23,637	—	—	—
14	Total available stable funding ("ASF")					15,171
Required stable funding ("RSF") items						
15	Total high-quality liquid assets ("HQLA")					530
EU-15a	Assets encumbered for more than 12m in cover pool		—	—	—	—
16	Deposits held at other financial institutions for operational purposes		—	—	—	—
17	Performing loans and securities:		39,827	753	3,960	5,217
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		26,304	447	1	269
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		12,542	278	—	1,076
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		964	—	—	482
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
22	Performing residential mortgages, of which:		—	—	—	—
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
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		18	27	3,959	3,391
25	Interdependent assets		7,381	—	—	—
26	Other assets:		23,300	—	3,131	5,119
27	Physical traded commodities				—	—
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		759	—	2,521	2,789
29	NSFR derivative assets		1,004			1,004
30	NSFR derivative liabilities before deduction of variation margin posted		14,166			708
31	All other assets not included in the above categories		7,370	—	610	619
32	Off-balance sheet items		502	—	—	25
33	Total RSF					10,892
34	Net Stable Funding Ratio (%)					139.28 %

(€ in Millions)		Quarter Ended 31 March 2022				
		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
Available stable funding ("ASF") items						
1	Capital items and instruments	6,111	—	—	920	7,031
2	Own funds	6,111	—	—	920	7,031
3	Other capital instruments		—	—	—	—
4	Retail deposits		—	—	—	—
5	Stable deposits		—	—	—	—
6	Less stable deposits		—	—	—	—
7	Wholesale funding:		35,606	114	7,778	8,563
8	Operational deposits		—	—	—	—
9	Other wholesale funding		35,606	114	7,778	8,563
10	Interdependent liabilities		7,242	—	—	—
11	Other liabilities:	—	26,163	—	—	—
12	NSFR derivative liabilities	—				
13	All other liabilities and capital instruments not included in the above categories		26,163	—	—	—
14	Total available stable funding ("ASF")					15,593
Required stable funding ("RSF") items						
15	Total high-quality liquid assets ("HQLA")					488
EU-15a	Assets encumbered for more than 12m in cover pool		—	—	—	—
16	Deposits held at other financial institutions for operational purposes		186	—	—	93
17	Performing loans and securities:		43,190	670	4,572	5,827
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		28,448	24	226	357
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		13,899	586	200	1,494
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		644	—	—	322
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
22	Performing residential mortgages, of which:		—	—	—	—
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		—	—	—	—
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		199	60	4,146	3,654
25	Interdependent assets		7,242	—	—	—
26	Other assets:		21,212	—	2,877	4,120
27	Physical traded commodities				—	—
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		797	—	2,633	2,916
29	NSFR derivative assets		428			428
30	NSFR derivative liabilities before deduction of variation margin posted		10,634			532
31	All other assets not included in the above categories		9,352	—	244	244
32	Off-balance sheet items		72	—	—	4
33	Total RSF					10,531
34	Net Stable Funding Ratio (%)					148.07 %

**3.4.3. Drivers and Composition of the NSFR**

BofASE's NSFR required stable funding is primarily driven by securities, secured funding and derivatives activity. Available stable funding consists primarily of equity and unsecured affiliate debt.

# BofA Securities Europe SA

## Pillar 3 Disclosure

4. Risk Management, Objectives, and Policy  
As at 31 December 2022

#### 4.1. BAC Risk Framework

BAC has established a risk governance framework (the “Risk Framework”) which serves as the foundation for consistent and effective management of risks facing BAC and its subsidiaries (including BofASE). BAC adopted the 2023 Risk Framework in December 2022. The key enhancements from the 2022 Risk Framework include the addition of an overview of capital limits and capital planning as well as enhanced detail on how BAC manages technology risk, information security risk, and data risk.

BofASE is integrated into and adheres to the global management structure including risk management and oversight, as adapted to reflect local business, legal, and regulatory requirements. The BofASE Board adopted the BAC 2023 Risk Framework in March 2023.

The following section lays out the risk management approach and key risk types for BofASE.

#### 4.2. Risk Management Approach

Risk is inherent in all business activities. Managing risk well is the responsibility of every employee. Sound risk management enables BofASE to serve the customers and deliver for the shareholders. If not managed well, risks can result in financial loss, regulatory sanctions and penalties, and damage to BofASE's reputation, each of which may adversely impact BofASE and its ability to execute its business strategy. Managing risk well is fundamental to delivering on BAC's responsible growth approach to business.

The Risk Framework applies to all employees and explains BofASE's approach to risk management and each employee's responsibilities for managing risk. All employees must take ownership for managing risk well and are accountable for identifying, escalating, and debating risks facing BofASE. The Risk Framework sets forth roles and responsibilities for the management of risk by front line units (“FLUs”), Global Risk Management (“GRM”), other control functions (“CFs”), and Corporate Audit.

The following are the five components of BofASE's risk management approach:

- Culture of managing risk well
- Risk appetite
- Risk management processes
- Risk data management, aggregation, and reporting
- Risk governance

Focusing on these five components allows effective management of risks across the seven key risk types faced by BofASE's businesses, namely: strategic, credit, market, liquidity, operational, compliance, and reputational risks.

##### 4.2.1. Culture of Managing Risk Well (EU OVA)

A culture of managing risk well is fundamental to BofASE's core values and its purpose, and how it drives responsible growth. A culture of managing risk well requires a focus on risk in all activities and encourages the necessary mind-set and behaviour to enable effective risk management and promote sound risk-taking within BofASE's risk appetite. Sustaining a culture of managing risk well throughout the organisation is critical to the success of BofASE and is a clear expectation of BofASE's Executive Management Team and BofASE Board.

The following principles form the foundation of BofASE's culture of managing risk well:

1. Managing risk well protects BofASE and its reputation and enables BofASE to deliver on its purpose and strategy

2. BofASE treats customers fairly and acts with integrity to support the long-term interests of its employees and customers. BofASE understands that improper conduct, behaviour, or practices by BofASE, its employees, or representatives could harm BofASE, the customers, or damage the integrity of the financial markets
3. As BofASE helps its customers improve their financial lives, it must always conduct itself with honesty, integrity, and fairness
4. All employees are responsible for proactively managing risk as part of their day-to-day activities through prompt identification, escalation, and debate of risks
5. While BofASE employs models and methods to assess risk and better inform BofASE's decisions, proactive debate and a thorough challenge process lead to the best outcomes
6. Lines of business ("LOBs") and other FLUs are first and foremost responsible for managing all aspects of their businesses, including all types of risk
7. GRM provides independent oversight and effective challenge, while Corporate Audit provides independent assessment and validation
8. BofASE strives to be best-in-class by continually working to improve risk management practices and capabilities

#### **4.2.2. Risk Statement and Risk Appetite (EU OVA)**

##### **Risk Statement**

Below is the concise risk statement, approved by the BofASE Board, which succinctly describes BofASE's overall risk profile associated with the business strategy.

BofASE's primary business lines include Equity Sales and Trading, Fixed-Income, Currencies and Commodities ("FICC") Sales and Trading, and Capital Markets.

As at 31 December 2022, BofASE had regulatory Capital Resources of €8.72B, consisting of CET1 capital of €7.80B and an additional €0.92B of Tier 2 Capital. BofASE had a Tier 1 capital ratio of 21.95%. As at 31 December 2022, BofASE's leverage ratio was 8.88%.

BofASE's largest credit risk exposures based on regulatory credit risk exposure classes are Institutions, Corporates and Central Governments or Central Banks representing 81% of the total exposure. The majority of BofASE's exposure sits within the EMEA region. The majority of the residual maturity based on credit risk exposures value is below one year. 38% of credit risk exposures in BofASE were rated by ECAs. Credit risk is assessed as outlined in Section 4.3. Key Risk Types.

BofASE enters into transactions with affiliated companies within BAC, primarily as a result of its own risk management purposes and receives intercompany loans for general liquidity management purposes. At 31 December 2022, BofASE had 25% of balances with affiliated companies (10% with MLI, 9% with BofA Europe).

BofASE's market risk capital requirement is principally driven by BofASE's internal model based capital requirement and a standard rules charge on traded debt instruments. BofASE's capital requirements for market risk under standard approach is driven by interest rate risk, equity, collective investment undertakings, and foreign exchange ("FX"). VaR is a common statistic used to measure market risk as it allows the aggregation of market risk factors, including the effects of portfolio diversification. Average VaR for BofASE during 2022 was €33M.

BofASE maintains excess liquidity in order to meet day-to-day funding requirements, withstand a range of liquidity shocks, safeguard against potential stress events, and meet internal and regulatory requirements.

The BofASE Risk Appetite Statement (“RAS”) indicates the amount of capital, earnings, or liquidity BofASE is willing to put at risk to achieve its strategic objectives and business plans, consistent with applicable regulatory requirements. Further detail on this is provided in below section.

### Risk Appetite

The BofASE RAS ensures that BofASE maintains an acceptable risk profile that is in alignment with its strategic and capital plans. The BofASE RAS is designed with the objective of ensuring that it is comprehensive for all key risks, relevant to the BofASE business and aligned with the risk management practices of BAC. The BofASE RAS is reviewed and approved by the BofASE Board at least annually.

BofASE’s risk appetite is designed to be consistent with the aggregate risk appetite at the BAC level and is based on several principles:

- **Overall risk capacity:** BofASE’s overall capacity to take risk is limited; therefore, BofASE prioritises the risks it takes. Risk capacity informs risk appetite, which is the level and types of risk BofASE is willing to take to achieve its business objectives
- **Financial strength to absorb adverse outcomes:** BofASE must maintain a strong and flexible financial position so it can weather challenging economic times and take advantage of organic growth opportunities. Therefore, objectives and targets are set for capital and liquidity that permit BofASE to continue to operate in a safe and sound manner at all times, including during periods of stress
- **Risk-reward evaluation:** Risks taken must fit BofASE’s risk appetite and offer acceptable risk-adjusted returns for shareholders
- **Acceptable risks:** BofASE considers all types of risk including those that are difficult to quantify. Qualitative guidance within the BofASE RAS describes the approach to managing such risks throughout BofASE in a manner consistent with its culture. For example, actions considered in a line of business that may unduly threaten BofASE’s reputation should be escalated and restricted appropriately
- **Skills and capabilities:** BofASE seeks to assume only those risks it has the skills and capabilities to Identify, Measure, Monitor, and Control (“IMMC”)

Risk appetite is aligned with BofASE’s strategic, capital, and financial operating plans to ensure consistency with its strategy and financial resources. Line of business strategies and risk appetite are also aligned. Ongoing reporting shows performance against the Strategic Plan, as well as risk appetite breaches for each of the lines of business, as appropriate. Risk appetite is also considered within the Recovery Plan, Product Risk Management - Enterprise Policy and processes, and within decisions around the business model and strategic plan. Managing risk well and embracing the Risk Framework are considered as part of compensation and performance management decisions.

The quantitative and qualitative elements of BofASE’s RAS provide clear, actionable information for taking and managing risk. Training and communication reinforce the importance of aligning risk-taking decisions to applicable aspects of the RAS.

### Risk Appetite Metrics

BofASE’s RAS quantitative framework consists of BofASE Board and BofASE Management Risk Committee (“BofASE MRC”) approved metrics which are designed to manage the amount of risk BofASE is willing to take to meet its strategic objectives. The calibration of the metrics reflect the level of BofASE’s financial resources and risk profile.

Risk appetite metrics are expressed on an in-year and forward-looking basis, as appropriate, under expected and stressed macroeconomic conditions. In addition, risk appetite metrics and limits related to material concentrations are maintained to ensure appropriate visibility into risks that may manifest themselves across lines of business or

risk types as part of ongoing efforts to ensure concentrations are effectively identified, measured, monitored, and controlled.

The BofASE RAS provides qualitative statements for all seven risk types defined in the Risk Framework. In addition, there is a suite of quantitative metrics for the following risk types:

- **Strategic Risk:** Metrics relating to capital and leverage and are provided in addition to stress loss limits
- **Credit Risk:** Forward-looking baseline metrics, in addition to concentration limits aligned to credit quality using internal risk rating, geography, and industry
- **Market Risk:** Metrics relating to trading VaR, stress loss, and Interest Rate Risk in the Banking Book ("IRRBB") from an economic value and earnings approach
- **Liquidity Risk:** Metrics relating to key liquidity coverage ratios
- **Compliance and Operational Risk:** Metrics for Non-Legal Operational Losses, Residual Risk Level and Direction, Past Due Issues, Performance of Outsourced Services, Information Security Incidents with Significant Impact, Business & Technical Tests Successful, Technology Performance, High Residual Risk Model Use Breaches and Financial Crimes

#### Risk Appetite Monitoring, Reporting, and Escalation

Robust monitoring and reporting processes for BofASE Board-owned and BofASE MRC-owned limits are in place, with breaches resulting in appropriate notification and escalation based on the severity of the breach. Breach resolution plans include a written description of the root causes and how a breach will be resolved, as appropriate.

The performance against the BofASE risk appetite is reviewed on a regular basis by the BofASE MRC and on a quarterly basis by the BofASE Board Risk Committee ("BofASE BRC"). Limits and tripwires are monitored by FLUs and risk management on a more frequent basis. BofASE Management, BofASE MRC, BofASE BRC, and the BofASE Board take action as necessary to proactively and effectively manage risk.

The BofASE Chief Risk Officer ("CRO") is the executive sponsor of the BofASE RAS and oversees the risk appetite exception management process in order to ensure that excesses are properly escalated, effectively managed, and that any required remediation actions are governed and implemented appropriately. This process outlines the escalation and management of exposures that are in excess of the tripwire or limit levels. When exposures breach tripwire and limit levels, they are escalated as appropriate to management bodies including BofASE MRC, BofASE BRC, and the BofASE Board.

BofASE is committed to communicating a clear, consistent position on risk taking to internal and external stakeholders, as appropriate.

#### **4.2.3. Risk Management Processes (EU OVA)**

The Risk Framework requires that strong risk management practices are integrated in key strategic, capital, and financial planning processes, and day-to-day business processes across BofASE, thereby ensuring risks are appropriately considered, evaluated, and responded to in a timely manner.

BofASE's approach to risk management processes:

- All employees are responsible for proactively managing risk
- Risk considerations are part of all daily activities and decision making
- BofASE encourages a thorough challenge process and maintains processes to identify, escalate, and debate risks



- BofASE utilises timely and effective escalation mechanisms for risk limit breaches

The FLUs have primary responsibility for managing risks inherent in their businesses. BofASE employs an effective risk management process, referred to as IMMC as part of its daily activities.

#### 4.2.4. Risk Data Management, Aggregation, and Reporting (EU OVA)

Effective risk data management, aggregation, and reporting is critical to provide a clear understanding of current and emerging risks and enables BofASE to proactively and effectively manage risk.

Risk Data Management, Aggregation, and Reporting Principles:

- Complete, accurate, reliable, and timely data
- Clear and uniform language to articulate risks consistently across BofASE
- Robust risk quantification methods and clear approaches to aggregate exposures for risk measures
- Timely, accurate, and comprehensive view of all material risks, including appropriate levels of granularity

Functional risk managers arrange risk reporting to address the requirements of BofASE management bodies as appropriate.

#### 4.2.5. Risk Governance (EU OVA, EU OVB)

BAC's risk governance principles serve as the cornerstone of the risk governance framework. The Code of Conduct, Risk Framework, BofASE RAS, and strategic plans are overarching documents that firmly embed BofASE's culture of managing risk well in everything it does. The Code of Conduct provides basic guidelines for business practices and professional and personal conduct that all employees are expected to follow. The Risk Framework articulates how BofASE defines and manages risk. The BofASE RAS clearly indicates the risks BofASE is willing to accept. The strategic plans, for both BAC and BofASE, document strategies for the next three-year period.

### Three Lines of Defence

BofASE has clear ownership and accountability for managing risk across three lines of defence: FLUs, Global Risk Management, and Corporate Audit. BofASE also has CF outside of FLUs and Global Risk Management (e.g., Legal and Global Human Resources), that provide guidance and subject matter expertise in support of managing risks facing BofASE.

<b>FLUs</b>	Own and proactively manage all risks in business activities
<b>Global Risk Management</b>	Oversee risk-taking activities within the FLUs and across the BAC Group, and provide independent assessment of effective challenge of risks
<b>Corporate Audit</b>	Provide independent validation through testing of key processes and controls

### Corporate Audit

Corporate Audit supports BofASE's risk governance framework by assessing whether controlling processes and controls over strategic, credit, market, liquidity, operational, compliance, and reputational risks are adequately designed and functioning effectively. This is carried out by conducting independent assessments and validation through testing of key processes and controls.

Corporate Audit resources are used to execute work across all EMEA locations. Team deployments are assessed based on the scale, complexity, and nature of the business and CFs in each location. Corporate Audit prepares an annual audit plan with consideration to external and internal risk factors, risk assessment of a business, and

legislative and regulatory requirements. The annual planning process directs timely and flexible testing of BofASE's key risks and risk management processes (inclusive of risk appetite).

Corporate Audit is not responsible for setting or approving limits for risks which BofASE is exposed to. However, Corporate Audit conducts reviews, as appropriate, of the controls and monitoring of such limits.

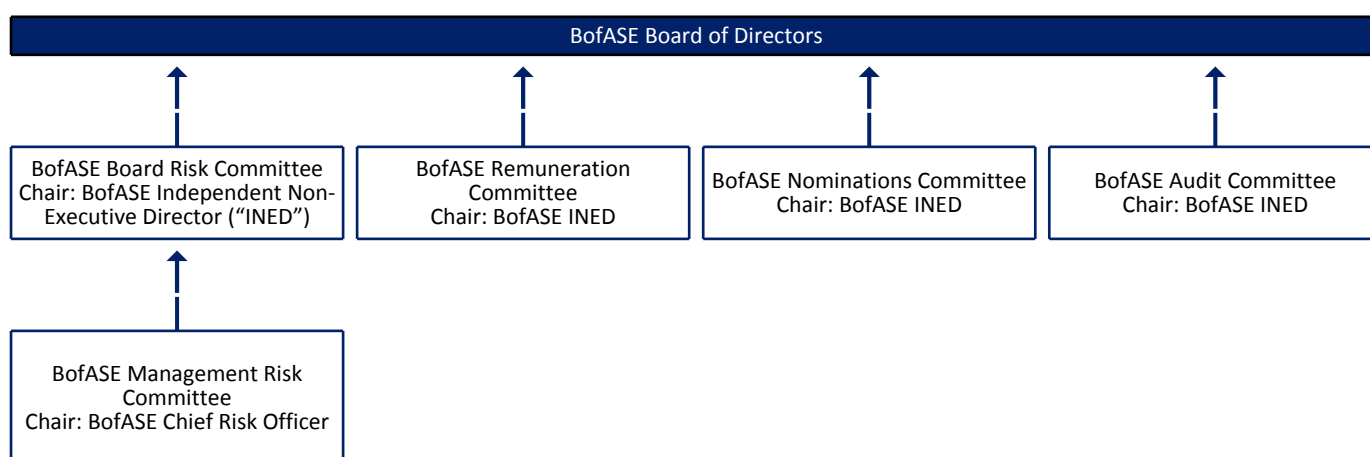
Corporate Audit maintains independence from the BofASE's lines of business and governance and CFs by reporting directly to the BofASE Audit Committee of the BofASE Board.

### Risk Governance Structure

The BofASE Board ensures suitable risk management and controls through the BofASE BRC, BofASE Audit Committee, BofASE Remuneration Committee ("BofASE REMCO"), BofASE Nominations Committee ("BofASE NOMCO"), and the BofASE MRC. The BofASE MRC conducts periodic reviews of risk reporting and remediation plans; escalates reporting to the BofASE BRC, the BofASE Board, or other committees, as appropriate; and reviews risk management strategies to assess their continuing effectiveness.

The BofASE Board fulfils its oversight responsibilities relating to BofASE's internal financial controls, prepares the annual report and financial statements, and maintains relationship with its external auditor. The BofASE Board met eight times during 2022.

**Figure 4.2.5.F1. – BofASE Risk Governance Structure**



The BofASE BRC assists the BofASE Board in fulfilling its oversight responsibility relating to senior management's responsibilities regarding the identification of, management of, and planning for, the following key risks of BofASE: strategic risk, market risk, credit risk, liquidity risk, operational risk, compliance risk, and reputational risk. The BofASE BRC met six times during 2022.

The BofASE MRC reports to the BofASE BRC and is responsible for providing management oversight and approval of (or reviewing and recommending to the BofASE BRC) strategic risk, market risk, credit risk, liquidity risk, operational risk (including Legal and Information Technology ("IT") risks), compliance risk, reputational risk, balance sheet, capital, liquidity management and stress testing activities. In particular, the BofASE MRC reviews and recommends BofASE's Risk Appetite Statement and Risk Governance Framework to the BofASE BRC prior to their presentation to the BofASE Board for approval. The BofASE MRC met 13 times during 2022.

The BofASE Audit Committee assists the BofASE Board in fulfilling its oversight responsibility relating to (i) the preparation and integrity of BofASE's Financial Statements, the Directors' Compliance Statement and oversight of related disclosure matters; (ii) qualifications, independence and performance of, and BofASE's relationship with, the external auditors and reviewing the scope and engagement terms of the external auditors; and (iii) the performance BofASE's Corporate Audit function. The Audit Committee met five times during 2022.

The BofASE REMCO and the BofASE NOMCO of the BofASE Board assist the BofASE Board in fulfilling its oversight of the development of, and implementation of BofASE's remuneration policies and practices and nominates for the BofASE Board's approval, candidates to fill BofASE Board vacancies. The BofASE REMCO met six times during 2022 and the BofASE NOMCO met four times during 2022.

#### **BofASE Director Selection and Diversity Policy**

The BofASE NOMCO assists the BofASE Board in fulfilling its oversight relating to the governance of the BofASE Board of Directors relating to nominations to the BofASE Board, reviewing and reporting to the BofASE Board on matters of corporate governance principles applicable to BofASE, reviewing and reporting to the BofASE Board on senior management talent planning and succession, and leading the BofASE Board and its committees in their assessments of their performance.

Before any appointment is made by the BofASE Board, the BofASE NOMCO is responsible for evaluating the balance of skills, knowledge, experience, and diversity on the BofASE Board, and, in light of this evaluation, preparing a description of the role and capabilities required for a particular appointment. Pursuant to the terms of the charter, the BofASE NOMCO shall consider the overall knowledge, skills, experience, and expertise represented on the BofASE Board, as well as the qualifications and suitability of each candidate, taking care that appointees have sufficient time available to devote to the position. Furthermore, the BofASE NOMCO shall consider candidates from a wide range of backgrounds and consider candidates on merit and against objective criteria and with due regard for the benefits of diversity on the BofASE Board, including, but not limited to gender.

In addition, pursuant to the terms of its charter, the BofASE NOMCO is responsible for deciding on a target for the representation of the underrepresented gender on the BofASE Board and how to meet it (as required).

#### **General**

All appointments to the BofASE Board are made in compliance with BAC's Global Background Check - Enterprise Policy and are subject to successful completion of the following background checks: identification, credit, criminal, global sanctions, media, directorship, employment, and education checks, as required. In addition, directors and board and committee chairs appointed to the BofASE Board require regulatory approval in line with ACPR's requirements under the Appointment of Members of a Supervisory Body Regime.

BofASE Board member experience is detailed within individual director biographies in Appendix 1 - Directors Board Membership and Experience (EU OVB).

The independent risk management functions led by the BofASE CRO have operational responsibility for risk management of BofASE and ensuring appropriate reporting and escalation to the BofASE Board.

#### **4.2.6. Risk Declaration (EU OVA)**

The BofASE Board, supported by the BofASE BRC, confirms that the risk management arrangements outlined are adequate to facilitate the management of risk in the context of BofASE's profile and strategy.

#### **4.3. Key Risk Types**

The Risk Management processes outlined above allow BofASE to manage risks across the seven key risk types; strategic, credit, market, liquidity, operational, compliance, and reputational. Further details on how risk is managed within BofASE are given below.

#### **4.3.1. Strategic Risk**

##### **Definition**

Strategic risk is the risk to current or projected financial condition arising from incorrect assumptions about external or internal factors, inappropriate business plans (e.g. too aggressive, wrong focus, ambiguous), ineffective business strategy execution, or failure to respond in a timely manner to changes in the regulatory, macroeconomic, or competitive environments, in the geographic locations in which BofASE operates (e.g. competitor actions, changing customer preferences, product obsolescence, and technology developments).

##### **Strategic Risk Management**

BofASE proactively considers strategic risk in the strategic planning process which feeds into the capital, liquidity and financial planning processes throughout the year. BofASE continuously evaluates the internal and external environment, including the perspective of external experts, and its strengths, weaknesses, opportunities and threats. During the strategic and capital planning processes, the BofASE Board provides credible challenge to senior management's assumptions and recommendations and approves the strategic and capital plans after a comprehensive assessment of the risks.

BofASE sets strategies within the context of overall risk appetite. BofASE strategic plans are consistent with risk appetite, the capital plan and liquidity requirements and specifically address strategic risks.

BofASE tracks performance to the strategic plan and analyses progress throughout the year. Senior management continuously monitors business performance throughout the year with several existing processes ranging from the monitoring of financial and operating performance, to the management of the BofASE Recovery Plan and the regular assessment of earnings and risk profile. Senior management provides the BofASE Board with reports on progress in meeting the Strategic Plan, as well as whether timelines and objectives are being met and if additional or alternative actions need to be implemented.

BofASE sets capital limits in the capital planning process. As part of the capital planning process, BofASE establishes capital management triggers to help ensure it maintains adequate capital, including during periods of stress. BofASE manages its capital position in line with its Capital Plan and its Capital Management Policy, and tracks performance with capital adequacy assessments throughout the year.

##### **Strategic Risk Governance**

The BofASE Board is responsible for overseeing the strategic planning process and senior management's execution of the resulting strategic plan. The strategic plan is reviewed and approved annually by the BofASE Board in line with the capital plan, financial operating plan, liquidity requirements and risk appetite. Significant strategic actions, such as capital actions, material acquisitions or divestitures and recovery and resolution plans are reviewed and approved by the BofASE Board as required.

Processes exist to discuss the strategic risk implications of new, expanded or modified businesses, products or services and other strategic initiatives, and to provide formal review and approval where required.

The BofASE Board is also responsible for overseeing the capital planning process. Capital plans are reviewed and approved annually by the BofASE Board in consideration of the entity's overall strategic plans, financial operating plans and risk appetite.

Global Risk Management, Corporate Audit and other CFs provide input, challenge and oversight to front line unit strategic plans, initiatives and capital plans relating to BofASE.

## Strategic Risk Reporting

Transparency around meeting the objectives of the BofASE strategic and capital plans by providing visibility to the strategic risks is critical to effective risk management. Front line units and control functions present updates to senior management and the BofASE Board on their business performance and management of strategic risk. Updates take into account analyses of performance relative to the strategic plan, capital adequacy assessments, capital management triggers, risk appetite and performance relative to peers. Topical presentations are also made to address any developments or additional considerations as they relate to strategic or capital planning, or the strategic plan itself. The BofASE Board use these updates and presentations to ensure that management actions and decisions remain consistent with strategic plans, capital plans and risk appetite.

### 4.3.2. Credit Risk (EU CCRA, EU CRA, EU CRC)

#### Definition

Credit risk is the risk of loss arising from the inability or failure of a borrower or counterparty to meet its obligations.

Credit risk is created when BofASE commits to, or enters, an agreement with a borrower or counterparty.

BofASE defines credit exposure to a borrower or counterparty as the loss potential arising from loans, leases, derivatives, and other extensions of credit.

#### Credit Risk Management Process

BofASE manages credit risk to a borrower or counterparty based on their risk profile, which includes assessing repayment sources, underlying collateral (if any), and the expected effects of the current and forward-looking economic environment on the borrowers or counterparties. Underwriting, credit management, and credit risk limits are proactively reassessed as a borrower's or counterparty's risk profile changes.

BofASE uses a number of actions to mitigate losses, including increased frequency and intensity of portfolio monitoring for moderate to weak risk profiles, hedging, and transferring management of deteriorated commercial exposures to special assets officers.

Credit risk management includes the following processes:

- Credit origination
- Portfolio management
- Loss mitigation activities

These processes create a comprehensive and consolidated view of the BofASE's credit risks, thus providing senior management with the information required to guide or redirect front line units and certain legal entity strategic plans, if necessary.

BofASE recognises that credit risk management relies heavily upon forward-looking estimates (some required by regulatory capital rules), including, but not limited to, probabilities of default, exposures at default, loss severity and collateral valuations. This makes it particularly susceptible to model risk.

#### Credit Origination

BofASE's credit strategy and origination is focused on its trading, securities, and derivatives activities which account for the majority of its credit exposure. BofASE's credit processes align with BAC's credit policies and credit risk appetite across front line units and are compliant with applicable laws, rules, and regulations. Credit risk management oversees decisions about the amount of credit to extend to borrowers consistent with BofASE's credit risk appetite.

Counterparties' credit risk profiles are assessed through risk modelling, underwriting, and asset analysis, while considering current and forward-looking views on economic, industry, and counterparty outlooks to help ensure portfolio asset quality within front line units remains within approved credit risk limits. New products and credit terms and conditions are also differentiated based on risk.

Counterparty credit risk is a type of credit risk that arises from trading activities. BofASE manages counterparty credit risk with specific policies, limits and controls. Based on counterparty creditworthiness, limits on exposures and tenors are set for individual counterparties. Current exposure and potential exposure are measured and applicable collateral is monitored. BofASE limits transactions requiring non-standard risk calculations and monitors differences between market values calculated by front office models and values calculated by the counterparty credit risk system.

Counterparty risk exposures are considered within the context of the broader credit risk portfolio across front line units and legal entities. Trading exposures with counterparties are accounted for in the assessment of portfolio concentrations so credit decisions reflect complete, accurate, and timely information.

### **Portfolio Management**

Once a credit limit has been extended, processes are in place to monitor BofASE credit risk exposure at both the individual borrower and portfolio levels. Key credit risk exposures are assessed under both normal and stress scenarios and credit risk is managed primarily through establishing limits and monitoring usage. BofASE credit risk may be hedged to mitigate exposure and remain within BofASE credit risk appetite.

Regular portfolio monitoring and reporting and business-specific governance routines, including periodic testing and examinations by Credit Review, which is part of Corporate Audit, enable detection of deteriorating credit trends, development of mitigation strategies, and measurement of the effectiveness of actions taken. At the counterparty level, the risks inherent in ongoing financial performance are reviewed. At the portfolio level, the credit performance of key concentrations under actual conditions, as well as under baseline and potential stress scenarios are assessed.

As part of the portfolio management process, loss experience is evaluated compared to expected losses against established credit risk metrics for the entire credit portfolio, including obligor and facility rating distributions for the portfolio. In addition, targeted and portfolio stress testing and scenario analysis are performed and reviewed.

Counterparty Stress Testing is an important element of counterparty exposure monitoring carried out by Enterprise Credit ("EC") and Enterprise Credit Risk ("ECR").

Stress Testing gives transparency into the types and magnitudes of CCR the firm undertakes and provides conservative but plausible views on CCR stressed market conditions.

With increasing collateral coverage under Uncleared Margin Rules ("UMR"), Current Exposure ("CE") and Potential Exposure ("PE") will not be sufficient to monitor the level of CCR, therefore a BAU stress framework is required for daily prudent risk management.

Scope of stress testing portfolio includes Bilateral OTC Derivatives, Listed Futures & Options, Cleared OTC Derivatives (House and Client), Repo Style Transactions, Fixed Income Forwards and CSA Collateral.

### **Loss and Credit Risk Mitigation Activities**

At times, counterparties do not fulfil their obligations and steps are taken to mitigate and manage losses. Dedicated teams and stringent processes are in place to appropriately handle non-performing assets.

During a credit cycle, BofASE may experience a concentration of losses and in response would intensify efforts to mitigate losses, balancing responsibilities to protect asset values with BofASE's principles to serve its customers.



BofASE employs a range of techniques to actively mitigate counterparty credit risks. As a broker-dealer, BofASE's main technique is accepting collateral that is permitted by documentation such as a CSA to an International Swaps and Derivatives Association ("ISDA") Master Agreement. For derivatives, required collateral levels may vary depending on the credit quality of the party posting collateral. The Global Banking and Global Markets Legal Department provides written legal advice regarding the enforceability of netting agreements for certain traded products agreements. The Global Banking and Global Markets Legal Department also performs a periodic legal review of such written legal advice, no less frequently than annually.

Generally, collateral is accepted in the form of cash and high grade government securities.

BofASE credit risk exposure is net of collateral where legally enforceable netting and collateral agreements are recognised. In order to benefit from close-out netting / enforceability of collateral, written legal opinions are required to confirm:

- Where (i) the enforceability of close-out netting under a Master Agreement; and (ii) enforceability of credit support agreements (if applicable) in the jurisdiction of incorporation of the counterparty in each case for the relevant type of counterparty
- Where applicable for UMR purposes or otherwise; (i) the enforceability of collateral arrangements in respect of BofASE, the counterparty and the custodian including in the event of bankruptcy, insolvency or other similar proceeding; and (ii) the ability of the collateral provider and collateral taker to recover collateral held by the custodian. Where necessary, Credit Risk management consults with the Legal department so that any necessary capacity and authority matters, country and enforceability issues are addressed

The collateral eligible for exchange is subject to BAC's collateral policies and relevant regulatory requirements. Policies are in place to value and manage collateral according to its type and risk characteristics.

The Marketable Securities and Other Liquid Collateral Policy establishes criteria for the types of marketable securities and other liquid assets that are acceptable as collateral when there is a reliance on such collateral as the primary or secondary source of repayment. The Marketable Securities and Other Liquid Collateral Policy defines parameters for maintaining collateral values and also addresses risk mitigation, documentation, monitoring, control, and compliance with legal and regulatory requirements. Business units have documented processes to comply with this policy and, where monitored less than daily, reduced advance rates may be applied to account for the increased market risk. When FLU Credit and ECR are negotiating CSAs with counterparties, the list of eligible collateral is defined based on the counterparty's credit profile. At any point in time, FLU Credit and ECR can request updating the collateral list should the counterparty's credit profile change.

Generally, daily valuations are carried out on market trading activities such as collateralised OTC derivatives in support of margining requirements. All requests for non-standard collateral are approved through the Non-Standard Collateral Review Process. Collateral Management reports and escalates collateral disputes and fails through established routines.

Derivative exposures are increasingly routed through Central Counterparties in response to regulation changes.

The standard type of collateral that BofASE accepts for its Global Markets business consists of EUR and USD Cash and Government bonds from G7 countries. Non-cash collateral taken in respect of trading exposures will be subject to a "haircut," which is negotiated at the time of signing the collateral agreement. A haircut is the valuation percentage applicable to each type of collateral and will be largely based on liquidity and price volatility of the underlying security. Where applicable, regulations in certain jurisdictions may specify minimum haircuts on eligible collateral. In the situation where an ISDA / CSA is subject to UMRs of multiple regulatory regimes, the accepted haircuts are floored by the most conservative of the regulatory minimums, while more conservative haircuts may be negotiated. Where haircuts are not required by regulations, haircuts associated with acceptable forms of collateral are standard haircuts recommended by Counterparty Credit Risk Portfolio Management. Any deviation from these

standard haircut recommendations is subject to approval following the “Agreements and Documentation Escalation Grid guidelines.”

A range of instruments including guarantees, credit insurance, credit derivatives, and securitisation can be used to transfer credit risk from one counterparty to another. Third party guarantees are reviewed by the legal department and must conform to certain standards in order to be recognised as mitigation for credit risk management purposes. The main types of providers of guarantees are banks, other financial institutions, and corporates; the latter typically in support of subsidiaries of their company group. Where credit risk mitigation is deemed to transfer credit risk, the risk is transferred to a counterparty with higher credit quality than the transferor and typically with investment grade ratings, this exposure is appropriately recorded against the credit risk mitigation provider.

Credit risk mitigation taken by BofASE to reduce credit risk may result in credit or market risk concentrations. Guarantees that are treated as eligible credit risk mitigation are marked as an exposure against the guarantor and aggregated with other credit exposure to the guarantor. Limit monitoring at the counterparty level is then used for monitoring of concentrations in line with Enterprise policy.

### **Credit Risk Governance**

BofASE Credit Risk is integrated into the BAC's and BofASE's governance structure. BofASE has established a robust credit risk governance structure that provides an escalation path for the three lines of defence, with oversight from the BofASE Board and its committees.

Core credit policies are supplemented, as needed, by individual business unit or legal entity policies which contain additional requirements specific to individual business unit / legal entity needs.

Global Risk Management oversees the front line unit's credit risk management processes in accordance with BofASE's requirements and authority levels. Credit risk teams oversee credit risk management processes in accordance with BAC's subsidiary governance requirements. This includes reporting to various risk governance committees, senior management, and boards of directors.

### **Credit Risk Reporting**

Comprehensive, timely and actionable credit risk reporting is produced to provide appropriate transparency into credit risk exposures across BAC and certain legal entities. For example, BofASE produces regular exposure trend reports for senior management and board committees that include outstanding industry and geographic concentrations, counterparty ratings, stress testing results and scenario analysis output.

Transparency is critical to effective risk management. To ensure appropriate transparency and escalation across front line units, BAC and BofASE Boards and executive management, comprehensive and actionable credit risk reporting containing the required granularity of content for each level of seniority is produced.

Exposure under BofASE's RAS credit risk limits is reported on an ongoing basis and monitored by ECR. BofASE MRC receives a monthly risk appetite limits monitoring report and the BofASE Board receives quarterly reporting.

BofASE's Weekly Risk Update is shared with BofASE's France Country Executive.

Additionally, BofASE's credit risk governance framework and reporting enable appropriate risk escalation for key items, including policy violations, limit breaches, exceptions, emerging risks and issues.

### **4.3.3. Market Risk (EU MRA, EU MRB)**

#### **Definition**

Market risk is the risk that changes in market conditions may adversely impact the value of assets or liabilities or otherwise negatively impact earnings.



Market risk is composed of price risk and interest rate risk.

- Price risk is the risk to current or projected financial condition arising from changes in the value of trading portfolios, investment securities, or Treasury-related funding activities. These portfolios typically are subject to daily price movements and are accounted for primarily on a Mark-to-Market (“MTM”) basis. This risk occurs most significantly from market-making, dealing, and capital markets activity in interest rate, FX, equity, commodities, and credit markets
- Interest rate risk is the risk to current or projected financial condition arising from movements in interest rates. Interest rate risk results from differences between the timing of rate changes and the timing of cash flows (repricing risk), from changing rate relationships among different yield curves affecting bank activities (basis risk), from changing rate relationships across the spectrum of maturities (yield curve risk), and from interest-related options embedded in bank products or investment securities (options risk)

### **Market Risk Measurement and Management**

BofASE adheres to the Global Markets Market Risk Policy and the Market Risk Limits Policy. In addition, the BofASE Market Risk Policy specifies additional corporate governance and regulatory requirements beyond those stated in the global policies and is approved by the BofASE MRC. The Firm’s approach to managing market risk involves

- Monitoring compliance with established market risk limits and reporting our exposures
- Diversifying exposures
- Controlling position sizes
- Evaluating mitigants, such as economic hedges in related securities or derivatives

Global Markets and Financial Risk (“GMFR”) produces risk measures and monitors them against established market risk limits. These measures reflect an extensive range of scenarios, and the results are aggregated at product, business and firm-wide levels. Metrics including VaR, risk factor sensitivities and stress scenario impacts are reported to market risk managers and relevant stakeholders in GMFR and Front-Line Units. The metrics are available on the applications housed in the “Market Risk Suite”, which can be accessed for further analyses. GMFR also provides risk measures and analyses to various oversight and governance routines in the Firm.

### **Stress Testing**

Stress testing and scenario analysis are performed to capture the potential risk that may arise in severe but plausible events. These stress tests may be hypothetical or historical, and applied to individual instruments or the aggregate BofASE portfolio. Ad-hoc scenarios are implemented in response or anticipation of material geopolitical / macroeconomic / market events, and analysis of stress impacts from these scenarios are provided by GMFR to facilitate the Market Risk management efforts in the entity and across the Firm.

### **Market Risk-Weighted Assets**

BofASE has been granted permission by the ACPR to use an IMA for calculating regulatory capital for market risk using the following models: VaR, Stressed VaR (“SVaR”), Incremental Risk Charge (“IRC”), and Comprehensive Risk Measure (“CRM”) . The capital requirement for trading book positions that do not meet the conditions for inclusion within the approved IMA is calculated using standardised rules in accordance with Title IV of Part Three of CRR. RWA for market risk are the sum of each of these measures multiplied by 12.5.

### Value at Risk and Stressed Value at Risk

VaR is a statistical measure of potential portfolio market value loss resulting from changes in market variables, during a given holding period, measured at a specified confidence level. A single model is used consistently across the trading portfolios.

VaR for regulatory capital calculations ("Regulatory VaR") is equivalent to a 99% confidence level, has a ten-day time horizon (1 day scaled up by square root of 10), and uses three years of historic data. Using a ten-day scaled approach instead of actual ten-day time horizon avoids the issue of using overlapping time series shocks. This change was implemented in 2022.

Stressed VaR for regulatory capital calculations is equivalent to a 99% confidence interval, has a scaled ten-day time horizon and uses a historical window that is calibrated to a continuous 12-month period that maximises the resulting VaR calculation for BofASE. The window used to calculate Regulatory SVaR is reviewed at least quarterly using various performance indicators. Performance indicators based on historic data, recent trading activity and changes in portfolio composition are considered as inputs for forecasting the window for a given current quarter.

The permission provided by the ACPR allows the entity to calculate model based capital requirement for "General Risk" across Categories 1-4 products.

BofASE uses a historical simulation approach to calculate VaR and SVaR. A hypothetical profit & loss ("P&L") distribution is generated for the current portfolio using time series of historical risk factor changes via Risk Grids / Scenarios. For the VaR model to reflect current market conditions, the historical data is updated on a weekly basis, or more frequently during periods of market stress. Depending on the risk factor, the historical scenarios can represent either absolute or relative shocks, or a mixture of both as deemed most appropriate. The Market Data Team is responsible for ensuring accuracy of the data used. This is performed through data quality tests including checks to detect stale, missing or spiky data.

For both risk management purposes and regulatory capital calculations, the firm uses a single VaR model which captures risks, including those related to interest rates, equity prices, foreign exchange rates, and commodity prices. As such, VaR facilitates comparison across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the entity level.

Key differences between the model parameters used for regulatory capital and for internal management purposes are listed in the table below.

**Table 4.3.3.T1. – Differences between the VaR for Regulatory and Management Reporting Purposes**

Parameter	BofASE Regulatory VaR	BofASE Stressed VaR	BofASE Management VaR
Scope	Covered positions as defined by ACPR approval	Covered positions as defined by ACPR approval	Covered and non-covered positions
Liquidity horizon (holding period)	10 days (scaled)	10 days (scaled)	1 day
Historical Window	3 years	Worst 1 year back to 15/01/2007 excluding the window used for the BofASE Regulatory VaR calculation	3 years

BofASE identifies and assesses any material price risks that are not adequately captured by its models, as required per CRR Article 367 1a, on at least a quarterly basis and holds additional own funds against those risks. Risks Not in VaR ("RNiV") are identified and assessed for capital purposes at least quarterly, with the majority of RNiVs being calculated on a monthly basis. These risks are capitalised through its RNiV Framework.

**Incremental Risk Charge**

IRC estimates the potential losses, at a 99.9% confidence level, that non-securitised credit products in the trading portfolio might experience over a one-year period of financial stress from defaults, ratings migration and significant basis risk factors. The permission provided by ACPR allows the entity to calculate IRC for positions in specific products listed in Table 3 in the permission letter.

The IRC model utilises a Monte-Carlo framework to simulate transitions and defaults. Additional risk factors include recovery rates, bond-credit default swap ("CDS") basis, index-single name basis, index option volatility, and FX. The model assumes a constant position, so the liquidity horizon is the same as the capital horizon of one year. The transition matrix is sourced from published rating agency data.

The IRC model captures issuer and market concentrations through the multi-factor framework of the model and the fact that the market data is evolved for all issuers. The asset correlation for each pair of issuers is defined at the sector / region level. The model also captures the negative correlation between default rate and recovery.

**Comprehensive Risk Measure**

CRM estimates the potential losses, at a 99.9% confidence level, that the correlation trading portfolio (primarily tranches on credit index, with their corresponding hedges) might experience over a one-year period of financial stress.

CRM is comprised of a modelled component and a surcharge for the eligible positions in the correlation trading portfolio. The modelled component of CRM utilises the same Monte Carlo simulation framework as the IRC model, with the inclusion of additional risk factors that materially impact the value of the positions within the correlation trading portfolio. The model captures the complexity of these positions, including the non-linear nature of the trade valuations, particularly during periods of market stress, as well as the impact of the joint evolution of the risk factors. Like IRC, the CRM calculation uses a full-revaluation approach. The permission provided by ACPR allows the entity to calculate CRM for positions in specific products listed in Table 3 in the permission letter.

The CRM and IRC models share the usage of the rating migration / default risk factor, with CRM employing an additional risk factor for credit spread diffusion. Here the combined migration / default and credit spread risk factors act as a jump-diffusion process. In this model, credits are organised into sectors and regions to take into account the correlated moves across industries or markets. To capture the correlation between names and the economy, the model uses an economy-wide factor that drives the evolution of all names and has factors specific to each sector and region. The jump component is also correlated to the diffusion component through these factors. This allows for the simulation of widening credit environments, while also capturing the increase in default rates that would be observed in these scenarios.

The base correlation data used in CRM is sourced from front office data, which uses a stochastic recovery Collateralised Debt Obligation ("CDO") model. The CRM model applies an instantaneous shock to the portfolio as of the calculation date. The modelled component of the CRM, like the IRC model, assumes a constant position and a liquidity horizon of one year. Stress scenario tests are run weekly on the correlation trading portfolio, which capture changes in default rates, recovery rates, and credit spreads; correlations of underlying exposures; and correlations of a correlation trading position and its hedge.

**Market Risk Governance**

GMFR, which is independent of the revenue-producing units and reports to the Firm's Chief Risk Officer, has primary responsibility for assessing, monitoring and managing market risk through firm-wide oversight across global businesses. Managers in revenue-producing units and GMFR discuss market information, positions and estimated loss scenarios on an ongoing basis. Managers in revenue-producing units are accountable for managing risk within prescribed limits. These managers have in-depth knowledge of their positions, markets, and the instruments available to hedge their exposures.

Models used in calculation of measures used for day-to-day Market Risk management and for calculation of capital requirement per IMA are developed by the Global Markets Risk Analytics (“GMRA”) team and validated by the Model Risk Management (“MRM”) team. These teams are part of the GRM division. GMFR engages with these teams as part of governance bodies overseeing model performance, model change assessments, review of measures produced by these models and their uses including in regulatory capital requirements.

GMFR engages with senior management in the entity, relevant lines of business and at the firm-wide level through multiple committees such as the BofASE MRC, BofASE BRC, and Global Markets Risk Committee. Additionally, working groups and steering councils are established to provide oversight on specific initiatives or aspects of market risk management in the entity. The details of these are elucidated in the BofASE Market Risk Policy.

### **Regulatory VaR Backtesting**

The effectiveness of the VaR methodology is evaluated and monitored through back-testing, which compares the daily VaR results, utilising a one-day holding period, against actual and hypothetical changes in portfolio value as defined in CRR Article 366. A back-testing overshoot occurs when a trading loss exceeds the VaR for the corresponding day. These overshoots are evaluated to understand the positions and market moves that produced the trading loss in order to ensure the VaR methodology accurately represents those losses. Exceptions are documented and reported to the ACPR, as appropriate, as part of regulatory reporting processes. Additionally, Specific Risk Portfolio Backtesting is performed to assess capture of specific risk. Credit specific risk is primarily driven by single-name credit spread exposures and equity specific risk is primarily driven by Equity Price and Volatility risk of individual securities.

### **Model Review and Validation**

The models discussed above, which are used to determine Regulatory VaR, SVaR, Incremental Risk Charge and Comprehensive Risk Measure, are independently reviewed, validated and approved by MRM.

These models are regularly reviewed and enhanced in order to better reflect the market risk exposure from changes in the composition of positions included in market risk measures, as well as variations in market conditions. Prior to implementing significant changes to models, MRM performs model validations.

*Note: For additional information regarding market risk management, stress testing, backtesting, timeseries and proxy data usage see “Market Risk Management -Trading Risk Management” in “Part II – Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations” in BAC's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission, and which can be found at <https://investor.bankofamerica.com/>.*

#### **4.3.3.1. Exposures to Interest Rate Risk on positions not held in the trading book (EU IRRBBA)**

BofASE defines Interest Rate Risk in the Banking Book (“IRRBB”) as the risk to its current or anticipated earnings or capital arising from movements in interest rates in the Banking Book. Interest rate risk represents the most significant market risk exposure to BofASE's Banking Book balance sheet. Interest rate sensitivity on BofASE's Banking Book balance sheet is driven by funding business activity, namely repo, reverse repo, stock loans / borrow and margin loans, in addition to the Treasury position including the HQLA portfolio.

BofASE's overall IRRBB management and mitigation strategies are performed through regular risk measurements using Economic Value of Equity (“EVE”) and Earnings at Risk (“EaR”) scenario based risk measurements which are monitored against established limit, and hedging actions are taken as necessary. The BofASE MRC approves the risk measurement methodology, limits, and hedging strategy.

Forward-looking forecasts of EaR are prepared. The baseline forecast takes into consideration expected future business growth, Asset and Liability Management (“ALM”) positioning, and the direction of interest rate movements as implied by the market-based forward rate paths. BofASE then measures and evaluates the impact that alternative interest rate scenarios have on the baseline forecast in order to assess interest rate sensitivity under varied conditions. The EaR forecast is frequently updated for changing assumptions and differing outlooks based on

economic trends, market conditions, and business strategies. Thus, BofASE's Balance Sheet position is continually monitored in order to maintain an acceptable level of exposure to interest rate changes.

EVE is calculated measuring the changes in present value of interest rate-sensitive instruments currently on the BofASE's Banking Book over their remaining life using a baseline and shocked forward interest rate paths with the difference between the two representing EVE risk.

For EVE methodology, measurements include commercial margins in cash flows and use risk free discount rates.

Risk measurement for each material currency is aggregated by direct summation - with a 50% positive currency adjustment for EVE Supervisory Outlier Test in line with EBA guidelines on the management of interest rate risk arising from non-trading book activities (EBA/GL/2018/02).

To estimate changes in economic value and in earnings driven by interest rate movements, BofASE leverages a range of internal and regulatory mandated parallel and non-parallel shock scenarios and stress scenarios consistent with EBA/GL/2018/02.

The results of all IRRBB metrics are generated using a model that is reviewed and validated by Model Risk management routinely. The BofASE MRC consistently receive updates on IRRBB metrics, trends, and details on various topics impacting IRRBB, facilitating timely decision making in response to any factor impacting BofASE's interest rate risk exposure.

BofASE's overall goal is to manage interest rate risk so that movements in interest rates do not significantly adversely affect earnings or capital. If deemed necessary, BofASE will hedge its IRRBB by changing the maturity and / or interest rate repricing profile of banking book assets and liabilities.

The key difference between the information in the table below and internal measurement approaches is that the measurement of internal EaR uses a forecasted / dynamic balance sheet for EaR measurement as opposed to the static balance sheet used for the measurement of Net Interest Income ("NII") populated in Table 4.3.3.1.T1.

IRRBB metrics contained in Table 4.3.3.1.T1 signify that BofASE manages exposures within its risk appetite. Variances in EVE results period on period are driven by a combination of Balance Sheet composition changes and changes in forward rate path expectations.

**Table 4.3.3.1.T1. – EU IRRBB1 - Interest Rate Risks of Non-trading Book Activities**

Supervisory shock scenarios (€ in Millions)		a	b	c	d
		Changes of the economic value of equity		Changes of the net interest income	
		Q4 2022	Q4 2021	Q4 2022	Q4 2021
1	Parallel up	1	6	126	142
2	Parallel down	(2)	(3)	(130)	(27)
3	Steepener	—	(5)		
4	Flattener	—	5		
5	Short rates up	—	7		
6	Short rates down	—	(6)		

**4.3.4. Liquidity Risk (EU LIQA)****Definition**

Liquidity risk is the inability to meet expected or unexpected cash flow and collateral needs while continuing to support the businesses and customers, under a range of economic conditions.

**Liquidity Risk Management**

The BofASE Liquidity Risk Policy (“LRP”) defines the approach to managing and mitigating BofASE’s liquidity risk, aligned to BAC processes and tailored to meet BofASE’s business mix, strategy, activity profile, risk appetite, and regulatory requirements and is approved by the BofASE Board. The BofASE MRC reviews and recommends risk appetite limits to the BofASE BRC, which in turn reviews and recommends to the BofASE Board for approval.

Each of the FLUs are accountable for managing liquidity risk within the BofASE liquidity risk appetite by establishing appropriate processes to identify, measure, monitor, and control the risks associated with their activities. GRM provides independent oversight and supervision of FLU activities, an independent view of the liquidity risk of FLU activities, and assesses the effectiveness of BofASE’s liquidity risk management processes.

The BofASE Liquidity risk appetite is defined by the following:

- Internal Liquidity Stress Test (“ILST”) - 30 day = Pre-positioned liquidity sources divided by the net peak outflows over a 30-day combined stress period
- ILST - 90 day = Available liquidity sources (including committed line with NB Holdings Corporation) divided by the net peak outflows over a 90-day combined stress period
- Liquidity Coverage Ratio = High-quality liquid assets divided by 30-day net stress outflows
- Net Stable Funding Ratio = Available Stable Funding divided by Required Stable Funding

The primary objective of liquidity risk management is to ensure that BofASE can meet expected or unexpected cash flow and collateral needs while continuing to support its businesses and customers under a range of economic conditions. Consistent with the Risk Framework, the main components to achieve BofASE’s liquidity risk management objectives include:

1. Clear accountability residing with FLUs for the liquidity risk inherent in their activities
2. Management of BofASE’s liquidity and funding activities by Treasury
3. Independent oversight of front line unit activities by Global Risk Management
4. Maintaining sufficient liquidity buffers which are readily convertible to cash for use by BofASE if necessary during periods of significant liquidity stress
5. Ensuring appropriate diversification of funding tenors and sources considering BofASE’s asset profile and legal entity structure
6. Transferring the economic costs and benefits of liquidity risk to the appropriate lines of business through the Funds Transfer Pricing (“FTP”) process
7. Maintaining a contingent funding plan that allows BofASE to react across all market and economic conditions

GRM works with Treasury and the businesses to monitor actual and forecast liquidity and funding requirements with a focus on limit utilisation and trends, and any change in business / market behaviour may require a change in



liquidity risk management. The BofASE LRP further describes the liquidity risk roles and responsibilities including requirements for liquidity risk limits, stress testing, analytics and reporting, and recovery and resolution planning.

The BofASE Liquidity Adequacy Statement (“LAS”) has been documented as a statement of the BofASE Board’s consideration of the Internal Liquidity Adequacy Assessment Process (“ILAAP”) and prepared with reference to relevant ECB guidance. The ILAAP demonstrates BofASE has an appropriate framework to manage its liquidity and funding risk and adequate liquidity buffers and stable funding to deliver on its business strategy while continuing to operate within the BofASE Board risk appetite.

### **Liquidity Risk Governance**

The BofASE Board sets the liquidity risk appetite that is the minimum amount of liquidity that must be held to meet net modelled outflows under an internally developed combined stress scenario and to comply with regulatory requirements and appropriate funding metrics. GRM is responsible for maintaining a liquidity risk limits framework to ensure that the entity is managed within its liquidity risk appetite. In line with the BAC Risk Framework, liquidity risk limits are classified as:

- BofASE Board-owned risk appetite
- BofASE MRC-owned management level appetite limits
- Non-risk appetite limits

Limits are monitored and reported daily, and a clear escalation path to senior management, the BofASE MRC, the BofASE BRC, and the BofASE Board by limit category and breach type exists.

### **Liquidity Risk Reporting**

Daily liquidity reporting helps enable liquidity risk monitoring and appropriate risk escalation, which includes defined protocols for limit breaches and emerging risks and issues. Regular liquidity risk reports are sent to the BofASE MRC, the BofASE BRC, BofASE Board, and BofASE senior management.

#### **4.3.5. Operational Risk and Compliance Risk (EU ORA)**

##### **Definition**

BofASE is subject to numerous laws, rules, and regulations that define the regulatory requirements it must satisfy across the jurisdictions in which it operates. Changes to existing products and services, new product innovations in delivery of services, expanding markets, and changes to the technology infrastructure create changes to BofASE’s operational risk profile that must be anticipated and managed to mitigate adverse impacts to BofASE.

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, people, or from external events. BofASE have designed an operational risk management programme that seeks to anticipate and assess operational risks and respond to these risks effectively should they materialise. Operational risk includes legal risk, which is the risk of loss (including litigation costs, settlements, and regulatory fines) resulting from the failure of BofASE to comply with laws and regulations, in any aspect of the BofASE’s business, or to adequately anticipate and protect against legal claims against BofASE. Although operational risk excludes strategic and reputational risks, operational risk may impact or be impacted by these risks.

While operational risk exposure exists in business activities that may be outsourced to third parties, ownership of the risks related to outsourced functions remains within the Company.

Compliance risk is the risk of legal or regulatory sanctions, material financial loss or damage to the reputation of the BofASE arising from the failure of BofASE to comply with the requirements of applicable laws, rules, and regulations or internal policies and procedures (collectively, applicable laws, rules, and regulations).

BofASE adopts the Standardised Approach for calculating Minimum Capital Requirements for operational risk. As part of the annual ICAAP, the adequacy of Minimum Capital Requirements is assessed through scenario analysis and stress testing that considers the material compliance and operational risks documented within the BofASE Risk Self-Assessment.

### **Operational Risk and Compliance Risk Management**

BofASE is committed to maintaining strong operational risk and compliance management practices across all FLUs and CFs. BofASE manages operational risk and compliance risk in an ever changing and complex regulatory environment, and with the evolving products, services and strategies offered by BofASE's FLUs. BofASE has an integrated set of processes and controls to manage external and internal risks, including metrics and extensive monitoring, testing, and risk assessment processes.

FLUs and CFs are first and foremost responsible for managing all aspects of their businesses, including their operational risk and compliance risks. FLUs and CFs are required to understand their business processes and related risks and controls, including third-party dependencies, the related regulatory requirements, and monitor and report on the effectiveness of the control environment. In order to actively monitor and assess the performance of their processes and controls, they must conduct comprehensive quality assurance activities and identify issues and risks to remediate control gaps and weaknesses. FLUs and CFs must also adhere to compliance and operational risk appetite limits to meet strategic, capital, and financial planning objectives. Finally, FLUs and CFs are responsible for the proactive identification, management, and escalation of operational risks and compliance risks across BofASE. When third-party capabilities are required to support processes, products, and services, BofASE manages third-party risk with a similar level of accountability as if managed internally.

BofASE has combined the operational risk and compliance risk management CFs into a single, integrated function, Global Compliance and Operational Risk ("GCOR"), under the leadership of the BofASE Chief Compliance and Operational Risk Officer. This combination allows the BofASE to bring professionals with complementary subject matter expertise together to assess business processes. It also gives a broader view of the key operational risks and compliance risks facing the businesses and CFs, with the ability to develop wide-ranging coverage plans to address risk more holistically, aggregate quantitative and qualitative data across the two disciplines, and provide greater visibility into systemic issues in business activities so that critical risks are understood and adequately controlled.

GCOR sets enterprise-wide policies and standards and provides independent challenge and oversight to the FLUs and CFs. GCOR comprises of subject matter experts who understand the front-to-back processes and controls by which BofASE delivers products and services, understand applicable laws, rules, regulations, and conduct risk-based oversight activities to assess the effectiveness of processes and controls. GCOR teams independently assess compliance and operational risk, monitor business activities and processes, determine and develop tests to be conducted by the Enterprise Independent Testing unit, and report on the state of the control environment. GCOR also collaborates with other CFs to provide additional support for certain issue remediation efforts and shares responsibility with the FLUs, other organisations within Global Risk Management and other CFs for mitigating certain risks, such as reputational risks and risks associated with improper conduct.

BofASE's approach to managing conduct risk is documented in the Conduct Risk Management Programme, which is organised around a framework of five distinct segments that work together to (1) reinforce Bank of America's expectations for employee conduct as outlined in the Code of Conduct, (2) describe the infrastructure, programme and practices used to prevent employee misconduct, (3) define the systems and controls designed to detect employee misconduct, (4) outline a consistent approach for evaluating and disciplining employees when misconduct occurs, and (5) address the governance process for escalating conduct-related matters to senior management and the boards of directors.

In addition, teams in GCOR cover areas such as financial crimes, privacy, climate risk, and information security / cybersecurity, that affect multiple FLUs or CFs. These horizontal teams are responsible for, among other things, reviewing the front line units and control functions' risk management practices related to these specific areas to



gauge the effectiveness and consistency of the controls across business units, monitoring losses and reporting and overseeing processes for accuracy and adherence to the BofASE Operational Risk and Compliance Risk standards.

### **Operational Risk and Compliance Risk Governance**

GCOR employs a governance structure to escalate material risks and issues, as well as the changes to BofASE's compliance and operational risk policies and procedures. Compliance and Operational Risk reports to the BofASE MRC, where compliance and operational risk issues are reviewed, and to the BofASE Audit Committee, BofASE BRC, and BofASE Board as appropriate. The goal of having this governance structure is to drive accountability for risk management, including decision-making, oversight, and escalation, at all levels throughout BofASE.

### **Operational Risk and Compliance Risk Identification and Reporting**

Operational risks and Compliance risks which require heightened transparency and escalation to management and / or BofASE governance committees are referred to as identified risks. Identified risks which meet or exceed minimum materiality thresholds in the Risk Identification process will be designated material risks. All identified risks are documented in the BofASE Risk Identification Inventory ("Risk ID") and all material operational risks and compliance risks are further documented in the BofASE Risk Self-Assessment process.

Operational Risk and Compliance Risk reporting and escalation to senior management and the BofASE Board is critical to ensuring a clear understanding of current and emerging risks across BofASE, as well as whether BofASE is operating within its Operational Risk Appetite and Compliance Risk Appetite limits, so BofASE can promptly take action to address out of tolerance risks.

Reporting includes results of operational risk and compliance risk assessments, monitoring and testing results, notable issues, and other operational and compliance metrics. To support decision making within management routines and governance committees, significant operational risks and compliance risks and issues are escalated to management-level committees, board-level committees, and the BofASE Board, as applicable.

BofASE establishes and monitors operational risk appetite metrics for Non-Legal Operational Losses, Residual Risk Level & Direction, Past Due Issues, Performance of Outsourced Services, Information Security Incidents with significant impact (to BofASE), Business & Technical Tests Successful-Top Tier(%), Technology Performance Banking / Finance Platforms, Technology Performance- Markets / Risk Platforms, Non-Legal Operational Losses (Electronic Trading Related), Non-Legal Operational Losses (Physical Climate Related), High Residual Risk Model Use Breaches, Financial Crimes Portfolio-Level Concentration Risk and Financial Crimes Client Level Risk Events.

BofASE is committed to the highest level of compliance and has no appetite for violations of legislative or regulatory requirements. No separate compliance risk appetite metrics have been set, with compliance risk being managed by establishing risk management processes to reduce BofASE exposure to financial loss, reputational harm, or regulatory sanctions.

### **4.3.6. Reputational Risk**

#### **Definition**

Reputational risk is the risk that negative perception of BofASE may adversely impact profitability or operations.

Reputational risk can stem from many of BofASE's activities, including those related to the management of the strategic, operational, compliance, and other risks, as well as the overall financial position. As a result, BAC evaluates the potential impact to its reputation within all of the risk categories and throughout the risk management process.

#### **Reputational Risk Management**

BAC and its subsidiaries manage reputational risk through established policies and controls in the business and risk management processes to mitigate reputational risks in a timely manner and through proactive monitoring and

identification of potential reputational risk events. In addition, reputational risk is also reflected as one of the considerations in the assessment of operational risk scenarios.

At the Enterprise level, reputational risk is reviewed by the BAC Enterprise Risk Committee ("BAC ERC") and the BAC Management Risk Committee, which provide primary oversight of reputational risk. Additionally, top reputational risks are reviewed by the Global Risk Management leadership team and the BAC Board.

Reputational risk items relating to BofASE are considered as part of the EMEA Reputational Risk Committee (the "Reputational Risk Committee"), whose mandate includes consideration of reputational risk issues (including matters related to ESG factors) and to provide guidance and approvals for activities that represent specific reputational risks which have been referred for discussion by other current control frameworks or lines of business.

Activities will be escalated to the Reputational Risk Committee for review and approval where elevated levels of risk are present. Examples of such activities include:

- Business activities that present significant legal, regulatory, or headline risk
- Violations of, or deviations from, established policies
- Concerns about customer / client identity or integrity, money laundering, potential criminal activity, or potential violations of economic sanctions requirements, such as direct or indirect terrorist financing or operation of an account for or on behalf of a sanctioned country, company, or person
- Business activities that have a particular accounting, finance, or tax treatment as a material objective
- Business activities that raise the possibility that BofASE might have an undisclosed or significant conflict of interest
- Business activities from which BofASE expects to receive disproportionate compensation compared with the services provided, investments made, and / or risks assumed
- Business activities which due to their nature or due to the current or historic reputation of any of the parties involved, might reflect adversely on BofASE reputation or suggest the need for close scrutiny
- Business activities that present the risk of creating information or security breaches or consumer privacy issues
- Business activities that may present environmental or social risks due to actions by BofASE or any of the parties involved
- Business activities or practices that may follow long-standing industry practice where there is the potential for a shift in public sentiment such that the business activity or practice might now or in the future be perceived as unfair, improper, or unethical
- Business activities that are similar to other activities in BofASE or another firm that have caused reputational harm
- Any potential reputational risk associated with the introduction, modification, or discontinuation of products, services, lines of business, or delivery channels
- Any reputational risk concerns that are specific to the business, region, or the markets in which the business operates

Ultimately, to help ensure that reputational risk is mitigated through regular business activity, monitoring and oversight of the risk is integrated into the overall governance process, as well as incorporated into the roles and responsibilities for employees.

Given the nature of reputational risk, BofASE, aligned with BAC, does not set quantitative limits to define its associated risk appetite. Through proactive risk management, BofASE seeks to minimise both the frequency and impact of reputational risk events.

### **Reputational Risk Governance**

BAC, including its subsidiaries, have well established organisational and governance structure in place to ensure strong oversight at both the BAC Group and business levels.

The Reputational Risk Committee membership consists of executive representation from Global Markets, Global Corporate and Investment Banking, and CFs (i.e. Legal, GRM including Risk, Compliance and Climate Risk and Environment and Social Governance). This includes senior representatives from BofASE. The committee is co-chaired by the President - International, the BofASE Chief Executive Officer ("BofASE CEO") and the BofASE CRO. The Reputational Risk Committee charter requires that a majority of members must be present, including a co-chair and all control functions, in order for meetings to proceed.

The Reputational Risk Committee is a sub-committee of the Global Reputational Risk Committee. Items requiring increased attention may be escalated from the Reputational Risk Committee to the Global Reputational Risk Committee, as appropriate. The BofASE MRC and the BofASE BRC is informed of such matters through a BofASE-specific report.

### **Reputational Risk Reporting**

The reporting of BofASE reputational risk issues is captured as part of management routines for the Reputational Risk Committee. Tracking of items presented to this committee is maintained through a reporting protocol, which provides detail such as the description of the reputational risk issue, the geographical jurisdiction, the reason for escalation, and the decision reached by the Reputational Risk Committee. In addition, the Reputational Risk Committee provides updates to the BofASE BRC on a quarterly basis through a standing agenda item.

## **4.4. Other Risk Considerations**

The risk management approach outlined in Section 4.2. Risk Management Approach also allows BofASE to manage the other risk considerations set out below.

### **4.4.1. Wrong-Way Risk (EU CCRA)**

Wrong-way risk exists when there is adverse correlation between the counterparty's probability of default and the market value of the underlying transaction and / or the collateral. Examples of wrong-way risk include, but are not limited to, situations that involve a counterparty that is a resident and / or incorporated in an emerging market entering into a transaction to sell non-domestic currency in exchange for its local currency; a trade involving the purchase of an equity put option from a counterparty whose shares are the subject of the option; or the purchase of credit protection from a counterparty who is closely associated with the credit default swap reference entity.

BofASE uses a range of policies and reporting to identify and monitor wrong-way risk across the portfolio. The Correlation and Concentration Risk policy describes the governance, limit frameworks, approval requirements, and roles and responsibilities for the management of wrong-way risk exposures. Forums have been established to review potential situations of wrong-way risk, and depending on the nature of the wrong way risk, Risk Management may require pre-trade approval or apply various portfolio limits. In keeping with the Risk Management Framework, several processes exist to control and monitor wrong-way risk, including reviews at the BAC Global Markets Risk Committee, the BAC Credit Risk Committee and BofASE MRC.

### **4.4.2. Contingent Market Risk**

Contingent Market Risk ("CMR") arises from concentrated positions with a single counterparty. Traditional exposure metrics, like potential exposure and CVA, trend towards zero with the rise of over-collateralisation and central

clearing, while tail risk remains. This risk is captured by measuring concentrated positions using sensitivities and stress testing.

BofASE is subject to various BAC enterprise-level CMR limits and monitoring metrics, based on appropriate measures and levels, taking into account market liquidity, risk appetite stress scenarios, and business rationale. Limits and monitoring metrics are reviewed and monitored by the GMFR team. Permanent limits and monitoring metrics are approved at the BAC Global Markets Risk Committee, or by delegated authority from that committee.

#### **4.4.3. Pegged Currency Risk**

A pegged exchange rate is a type of exchange rate regime where a currency's value is managed against either the value of another single currency, to a basket of other currencies, or to another measure of value. Pegged Currency Risk arises when the peg "breaks," such as that which occurred in January 2015 when the Swiss National Bank announced it would no longer be pegging its currency, the Swiss Franc, to the Euro.

BofASE is subject to various BAC pegged currency monitoring metrics for each pegged currency, across different ratings buckets and at the single name and portfolio level. The monitoring metrics are reviewed and monitored by GMFR. The permanent monitoring metric changes are approved by the BAC Market Risk Executive.

#### **4.4.4. Equities Exposures in the Non-Trading Book**

No detailed disclosures are made in respect of equity exposures in the non-trading book as the information provided by such disclosures is not regarded as material.

#### **4.4.5. Climate Change**

Climate risk is the risk that climate change or actions taken to mitigate climate change expose the Company to adverse impacts on its reputation, profitability or operations. Climate-related risks are divided into two major categories:

- **Physical Risks:** Risks related to the physical impacts of climate change, driven by extreme weather events, such as hurricanes and floods, as well as chronic longer-term shifts, such as rising average global temperatures and sea levels
- **Transition Risks:** Risks related to the transition to a low-carbon economy, which may entail extensive policy, legal, technology, and market changes

Physical risks of climate change, such as more frequent and severe extreme weather events, can increase credit risk by diminishing borrowers' repayment capacity or collateral values, or can increase operational risk through the impact on BofASE's facilities, employees, customers, or vendors. Transition risks of climate change may amplify credit risks through the financial impacts of changes in policy, technology or the market on BofASE or its counterparties. Unanticipated market changes can lead to sudden price adjustments and give rise to heightened market risk. Reputational risk can arise if BofASE does not meet its climate-related commitments.

BAC has established an Enterprise Climate Programme. The programme brings together executives across LOBs, ESG, Public Policy, GRM, Global Sustainable Finance, and Enterprise Credit to drive climate action across its LOBs and seven risk types.

As part of the Enterprise Climate Programme, which BofASE is integrated into, BAC has established an Enterprise Climate Steering Council which is responsible for overseeing the execution of climate-related priorities.

The BofASE Board ensures suitable risk management, governance, and controls for BofASE through appropriate committees and alignment to BAC group policies where appropriate. This includes consideration of climate-related risks and opportunities. BofASE BRC assists the BofASE Board in fulfilling its oversight responsibility relating to the management of climate and environmental risk.

BofASE MRC is responsible for providing management review and assessment of exposure to climate and environmental risk and overseeing the approach implemented to manage climate and environmental risk. The BofASE MRC receives updates on climate risk. To support the BofASE Board and committees in overseeing the management of climate risk, BofASE developed and continues to enhance reporting capabilities, including regular reporting to the BofASE MRC and quarterly reporting to the BofASE BRC. This reporting includes a climate risk dashboard that consolidates information on how climate risk manifests across the key risk types.

Within the EMEA region, the EMEA ESG Risk and Regulatory Steering Group (“Steering Group”) is responsible for providing management oversight of activities related to the financial risks and opportunities from climate change and other ESG-related regulatory requirements impacting BAC’s EMEA legal entities. The Steering Group is attended by senior leaders from across the three lines of defence including the ESG team and is connected to the enterprise ESG and Climate Risk governance framework and to BofASE’s governance framework. In addition the BofASE ESG Risk and Regulatory Steering Group provides oversight, challenge, and review of BofASE’s risk activities related to the management of climate and environmental risk.

### Risk Management

As climate risk spans across multiple risk types, BofASE has developed and continues to enhance processes to embed climate risk considerations into risk management programmes established for strategic, credit, market, liquidity, compliance, operational, and reputational risks.

Effective management of climate risk requires coordinated governance, clearly defined roles and responsibilities, and well-developed processes to identify, measure, monitor and control risks.

- **Risk Identification** – A key element of how BofASE manages climate risk is the risk identification process through which climate and other risks are identified across all lines of business and CFs, prioritised in its risk inventory and evaluated to determine estimated severity and likelihood of occurrence. Once identified, climate risks are assessed for potential impacts.
- **Risk Measurement** – Measurement of climate risk is conducted using a range of methods with key examples including scenario analysis, stress testing, and industry and country level assessments. Industry and country level assessments are conducted by Credit Risk and leveraged across a broad spectrum of climate-related functions.
- **Risk Monitoring** – BofASE has developed climate-related risk metrics to enable monitoring of exposure to climate risk as part of ongoing risk management routines. These metrics are reported to the BofASE MRC and BofASE BRC on an ongoing basis
- **Risk Controls** – BofASE establishes and communicates risk limits and controls through policies, standards, procedures and processes. BofASE has incorporated climate considerations into its RAS. Qualitative statements have been supplemented by monitoring metrics and limits such as BofASE SA’s credit exposure to “High” and “Moderate” climate sensitive industries and countries , and non-legal operational losses from physical climate-related risks

BofASE SA has taken a number of key actions to assess and manage the impacts of climate-related risks

- Climate risk management is being embedded into the credit risk framework. Credit and risk officers are being trained on climate change and its impact on credit risk. High, moderate, or low climate risk designations have been assigned to industry segments and countries in BAC’s coverage universe. Climate risk supplements have been developed for high and moderate risk industries and incorporated into Enterprise Industry Risk Guidance documents. These provide credit underwriters and risk officers with guidance for clients in the relevant industries and countries. The climate risk designations are supplemented by borrower level assessment of climate and environmental risk (Climate & Environmental Risk Assessment (“CERA”) process) since two companies in the same sector / country may be impacted differently by climate change based on their unique business model, management awareness, strategy, and preparedness to deal with the risks

- Market risk has expanded the existing risk management framework to incorporate consideration of climate risks. BofASE has created daily risk reporting and monthly dashboards that track climate Key Risk Indicators and climate stress scenario(s) to analyse the impact of “sudden transition” risks on trading portfolios with a particular focus on identifying concentrations of risk within the portfolio
- Liquidity Risk has performed climate risk assessments of the key drivers of liquidity risk for BofASE. Reporting has been enhanced to include monitoring metrics that track concentrations in funding sources and uses by climate sensitive industries / sectors
- Climate risk considerations are being integrated into key elements of the Compliance and Operational Risk programme, including conducting risk assessments; assessing monitoring and testing opportunities; conducting issues management routines; managing regulatory change; and developing metrics and reporting. In addition, through the operational risk Scenario Analysis programme, risk management and front line unit and control function teams consider a number of climate related scenarios to further understand the impact of transition risk, in addition to acute and chronic climate-related physical risk, on BofASE’s operations
- The EMEA Reputational Risk Committee is responsible for reviewing all business activities which may impact reputational risk in the region including those related to climate risk

BofASE continues to build out and enhance its climate and environmental risk management capabilities in line with the expectations set out in the ECB Guide on climate-related and environmental risks in a way that is proportionate to the nature, scale, complexity, and risk profile of the BofASE.

#### **4.4.6. Impact of a Credit Rating Downgrade on OTC Collateral (EU CCRA)**

The full impact of a credit rating downgrade on BofASE depends on numerous factors, including: (1) the type and severity of any downgrade; and (2) the reaction of counterparties, customers, and investors who face BofASE.

Based on the terms of various over-the-counter derivatives contracts and other trading agreements, a credit rating downgrade may result in BofASE posting additional collateral to counterparties or counterparties choosing to unwind or terminate specific transactions. In either case, BofASE could experience liquidity outflows or the loss of funding sources. The materiality of such events will depend on whether the downgrade affects long-term or short-term credit ratings, as well as whether credit ratings drop by one or more levels.

The potential impact of a credit rating downgrade on collateral is monitored continuously and factored into BofASE’s internal liquidity stress testing and regulatory liquidity requirements. As at 31 December 2022, BofASE was in excess of both internal and regulatory liquidity requirements, with a one-notch and two-notch downgrade scenario resulting in nil and €18M of incremental additional outflows, respectively in line with contractual obligations in OTC derivative contracts.

#### **4.4.7. Securitisation Risk Governance and Reporting (EU SECA)**

Securitised products, in the form of Collateralised Loan Obligations (“CLOs”), Residential Mortgage-Backed Securities (“RMBS”), Commercial Mortgage-Backed Securities (“CMBS”) and Asset-Backed Securities (“ABS”), are approved products for BofASE. The entity engaged in the trading of these products on an intermediation-only basis during 2022, to facilitate market making activity with European clients. VaR-based limits / modelling and stress testing procedures are in place to capture any end-of-day exposure to securitised products in BofASE.



**4.4.8. Product Initiatives**

BofASE is committed to offering products and services that are appropriate, are aligned with BofASE's strategic plans and risk appetite, and comply with applicable laws and regulations in the jurisdiction(s) in which they are offered.

BofASE complies with the Product Risk Management - Enterprise Policy, which establishes requirements designed to consistently identify and mitigate risks associated with New Modified, Expanded, Stop-sell and Exit Products (collectively referred to as "Product Initiatives"). This Policy requires that Product Initiatives be assessed across applicable key risk types, including consistency with Enterprise risk appetite, prior to product implementation.

Under this Policy, businesses are required to develop and maintain process and procedures related to the governance of Product Initiatives throughout the Product Lifecycle. The Product Lifecycle includes New Product Development, Launch, Ongoing Product Management, Modify / Expand, and Stop-Sell / Exit, each with a set of key requirements. Key requirements include (but are not limited to) initial Product Risk Classification and Product Risk Assessment, relevant Committee Approval, inclusion in the Product Inventory, Post-Implementation Review in addition to required reporting and documentation

**4.4.9. Geopolitical and Macroeconomic Factors**

Market conditions in 2022 have seen markedly higher volatility amidst growing concern over geopolitics, record inflation, and rising rates. In EMEA, Italy held a snap general election as a result of a parliamentary impasse. The UK has had three Prime Ministers including the shortest tenure in history (44 days) after a mini-budget which caused significant market volatility and required emergency intervention from the Bank of England to restore functioning markets in long-dated government bonds.

Geopolitical risks saw an increase in 2022, driven by Russia's invasion of Ukraine, tensions between China and Hong Kong/Taiwan, as well as between the United States of America and China. Following its invasion of Ukraine, Russia responded to Western/Global sanctions by restricting oil flows to Europe. This, coupled with oil supply cuts by organisation of petroleum exporting countries, is increasingly threatening Europe's energy supply with many European governments and firms planning for the possibility of gas shortages in the winter period. Meanwhile, consumer prices have continued to accelerate driven by elevated food and energy prices, with the UK Consumer Price Index at a 40 year high and Euro Area inflation hitting a double-digit record. The majority of central banks have responded by tightening monetary conditions, hiking rates to fight inflation and increasing the cost of borrowing which is further elevated due to wider credit spreads.

Activity in primary markets is down across the board. Following a record 2021 for the BAC Group, EMEA Equity Capital Markets volumes are down 69%, Mergers & Acquisitions activity is down 36%, EMEA Debt Capital Markets activity has also slowed, with investment grade issuance down 12% year on year and leveraged finance activity down 45% year on year. Looking ahead, economists are forecasting slower economic growth beyond 2022, with the possibility of recession.

**Russia/Ukraine Conflict**

Due to the Russia/Ukraine conflict, there has been significant volatility in financial and commodities markets, and multiple jurisdictions have implemented various economic sanctions.

BofASE's direct exposure to Russia remains immaterial.

## BofA Securities Europe SA Pillar 3 Disclosure

5. Further Detail on Capital Requirement, Capital Resources, Leverage,  
Securitisation, and Capital Buffers  
As at 31 December 2022



## 5.1. Minimum Capital Requirement Summary

BofASE's Minimum Capital Requirement is principally comprised of credit risk, counterparty credit risk, and market risk requirements.

The majority of BofASE's counterparty and credit risk exposure is as a result of derivative exposures determined using the Standardised Approach for Counterparty Credit Risk ("SA-CCR"), and securities financing exposures determined using the financial collateral comprehensive method. Further details can be found in Section 5.3. Counterparty and Credit Risk.

BofASE's market risk Capital Requirement is principally driven by BofASE's internal model based capital requirement and a standard rules charge on traded debt instruments. Further detail on market risk can be found in Section 5.2. Market Risk.

## 5.2. Market Risk

### Summary

Market risk is the potential change in an instrument's value caused by fluctuations in interest and currency exchange rates, equity and commodity prices, credit spreads, or other risks. BofASE has established trading book guidelines which set out the policies and procedures for the overall management of the trading book in accordance with the requirements of CRR.

Table 5.2.T1. presents a breakdown of BofASE's market risk under the Standardised Approach, and Table 5.2.T2. presents a breakdown of BofASE's market risk under the IMA.

**Table 5.2.T1. – EU MR1 Market Risk under the Standardised Approach**

	2022
	RWEAs
(€ in Millions)	
<b>Outright products</b>	
Interest rate risk (general and specific)	1,601
Equity and Collective Investment Undertakings risk (general and specific)	329
Foreign exchange risk	283
Commodity risk	123
<b>Options</b>	
Simplified approach	-
Delta-plus method	-
Scenario approach	-
Securitisation (specific risk)	-
<b>Total</b>	<b>2,336</b>

**Table 5.2.T2. – EU MR2-A Market Risk under the IMA**

(€ in Millions)	2022	
	RWEAs	Own Funds Requirements
<b>VaR</b>	<b>1,736</b>	<b>139</b>
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		33
Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		139
<b>SVaR</b>	<b>2,393</b>	<b>191</b>
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		55
Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		191
<b>IRC</b>	<b>1,758</b>	<b>141</b>
Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		141
Average of the IRC number over the preceding 12 weeks		109
<b>Comprehensive risk measure</b>	<b>847</b>	<b>68</b>
Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)		68
Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		34
8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio (Article 338(4) of the CRR)		27
<b>Other</b>	<b>3,001</b>	<b>240</b>
<b>Total</b>	<b>9,735</b>	<b>779</b>

**Table 5.2.T3. – EU MR 2-B RWA Flow Statement of Market Risk Exposures under the IMA**

(€ in Millions)	VaR	SVaR	IRC	CRM	Other	Total RWEAs	Total own funds requirements
RWEAs at previous quarter end	936	1,934	1,300	204	1,883	6,256	500
Regulatory adjustment <sup>(1)</sup>	(738)	(1,511)	(145)	—	—	(2,394)	(192)
RWEAs at the previous quarter-end (end of the day)	198	423	1,155	204	1,883	3,861	309
Movement in the risk levels	213	264	603	643	1,118	2,842	227
RWEAs at the end of the reporting period (end of the day)	411	686	1,758	847	3,001	6,703	536
Regulatory adjustment	1,325	1,707	—	—	—	3,032	243
<b>RWEAs at the end of the reporting period</b>	<b>1,736</b>	<b>2,393</b>	<b>1,758</b>	<b>847</b>	<b>3,001</b>	<b>9,735</b>	<b>779</b>

<sup>(1)</sup> Regulatory adjustment accounts for the difference between the RWA calculated based on the end-of-day position, compared with the RWA calculated based on the 60-day average in the case of VaR / SVaR, and 12-week average measure or the floor measure in the case of IRC and CRM. The regulatory adjustments also account for the multiplication factors mc and ms, per Article 366 of the CRR, for the VaR, SVaR, and Other respectively.

Market risk capital requirements under the IMA increased during the year, driven by an increase in VaR, Stressed VaR, IRC, CRM, and RNIV add-ons due to an increase in risk levels.

### 5.2.1. Internal Model Based Capital Requirement (EU MRB)

The model based regulatory capital requirement in BofASE is calculated based on the internal model (VaR) approved by the ACPR. BofASE has established trading book guidelines which set out the policies and procedures for the overall management of the trading book in accordance with the requirements of CRR. The trading book policy defines the requirements and provides criteria for the FLUs to identify and classify transactions as either trading book or non-trading book under CRR and for risk management purposes. FLUs are required to identify all on- and off-balance positions to determine if they meet the criteria for trading book or non-trading book designation under the CRR. FLUs and appropriate control functions must meet the assessment, monitoring, and reporting requirements for trading book and non-trading book positions as outlined in this policy. FLUs and appropriate control functions are required to review all trading assets and trading liabilities to determine if the FLU's and appropriate control functions' positions meet the criteria for designation as a trading book position under CRR rules. Furthermore, valuation control processes are in place to help ensure that the valuation estimates are prudent and reliable, including completeness reconciliations, commentary, review, and presentation of valuation control metrics to front office, market risk, Model Risk Management, and Finance management.

#### VaR

VaR is a common statistic used to measure market risk as it allows the aggregation of market risk factors, including the effects of portfolio diversification. The primary VaR statistic is equivalent to a 99% confidence level. This means that for a VaR with a one-day holding period, there should not be losses in excess of VaR, on average, 99 out of 100 trading days.

For further details on VaR and how BofASE uses VaR as a risk management tool, please refer to the market risk key risk type in Section 4.3. Key Risk Types.

#### Regulatory VaR

Regulatory VaR is a variation of VaR in which a ten-day holding period is used with rolling actual ten-day returns generated from three years of historical market data.

#### Back-testing

The VaR methodology is evaluated through a daily back-testing process, which compares the daily VaR results, utilizing a one-day holding period, against a comparable subset of trading P&L.

As required by the CRR, back-testing uses the 'Hypothetical' and 'Actual' definitions of the P&L. Hypothetical P&L is the P&L from the move in the value of the portfolio on the current day assuming unchanged positions from the end of the previous day. Actual P&L and Hypothetical P&L exclude fees, commissions, and net interest income.

A back-testing overshooting occurs when a trading loss on day N exceeds the VaR value of the portfolio on day N-1. These overshoots are evaluated to understand the positions and market moves that produced the trading loss and to ensure that the VaR methodology accurately represents those losses.

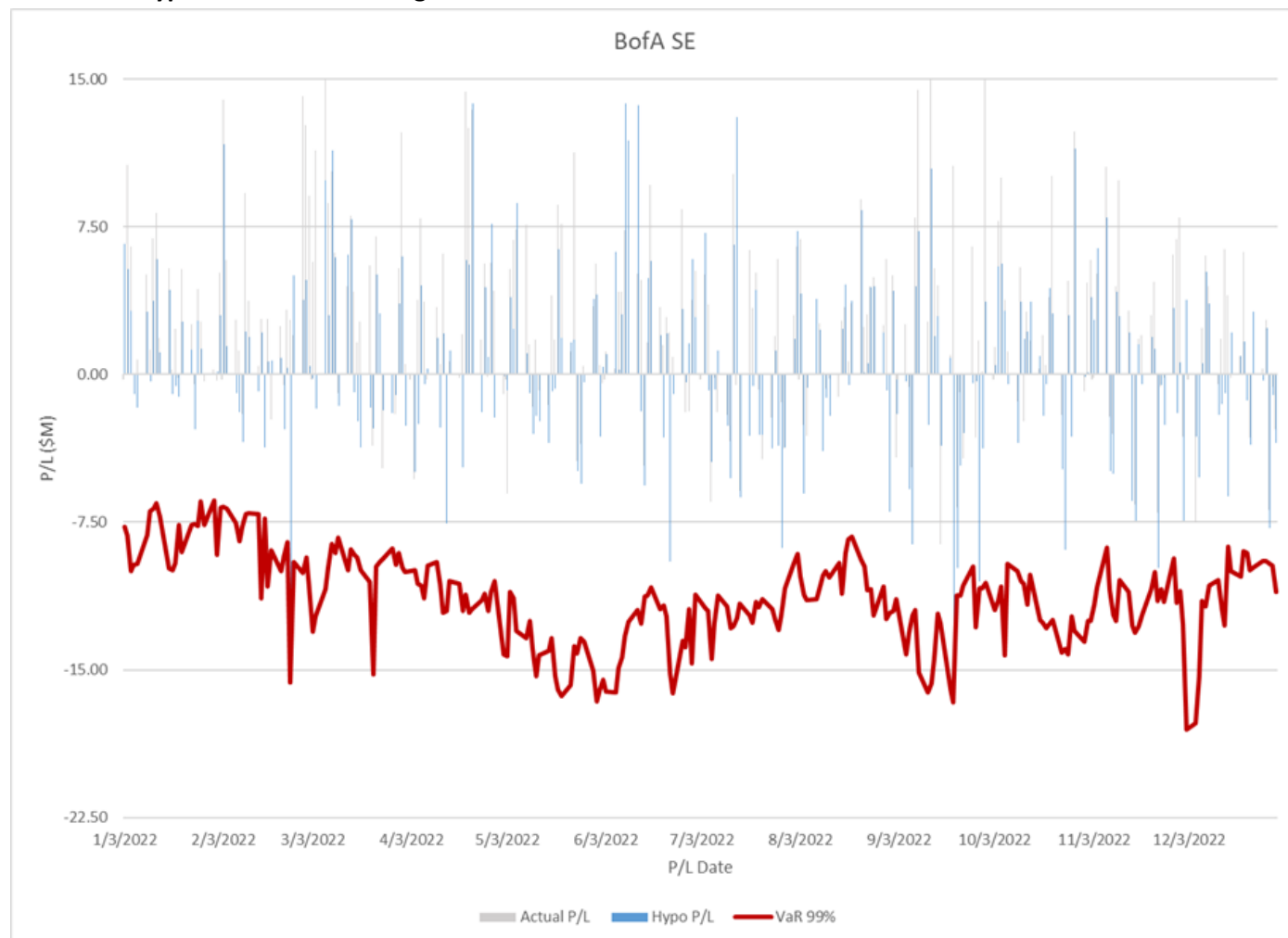
The number of back-testing overshootings observed can differ from the statistically expected number of overshootings for a number of reasons. When this occurs, analysis is done to assess the model's performance.

In the twelve months ending 31 December 2022, BofASE trading losses as measured by Hypothetical P&L and Actual P&L did not exceed the prior day's VaR. The capital multiplier as at 31 December 2022 was 3.8 (including an ad-hoc multiplier from the ACPR), consistent with guidance provided by the Supervisory College of the ACPR, in application of the provisions of Article 500c of CRR.

The results are illustrated in the figure below.

**Figure 5.2.1.F1. – EU MR4 Comparison of VaR Estimates with Gains / Losses**

**Actual and Hypothetical Back-testing Results**



The actual and hypothetical P&L shown in the above figure is only for positions covered by the VaR model and not for the entirety of BofASE. The VaR measure shown is for regulatory VaR using a three-year look-back period and one-day holding period.

**Trading Portfolio Stress Testing**

Given the very nature of a VaR model, results can exceed the model's estimates and are dependent on a limited historical window. As such, BofASE's portfolio is also stress tested using scenario analysis. This analysis estimates the change in value of the trading portfolio that may result from abnormal market movements.

For further details on how BofASE's performs stress testing to the trading portfolio, please refer to Section 4.3.3. Market Risk (EU MRA, EU MRB).

**Stressed VaR**

Stressed VaR is a variation of VaR in which the historical window is not the previous three years but is calibrated to a continuous 12-month window that reflects a period of significant stress appropriate to BofASE. Stressed VaR is calculated based on 99% confidence level, a 10-day holding period, and the same population of exposures as the regulatory VaR.

**RNIV Framework**

The RNIV framework aims to capture and capitalise material market risks that are not adequately covered in the VaR model.

**IRC**

The IRC model is one component of the regulatory capital calculation for market risk. The model is intended to capture the potential losses that non-securitised credit products in the trading portfolio might experience over a one-year period of financial stress from defaults, ratings migration, and significant basis risk factors. To calculate potential losses at the required 99.9% confidence level, BofASE utilises a Monte Carlo simulation calibrated using relevant, available historical data for each risk factor in order to sample potential market scenarios.

The model reflects the impact of concentrated risks, including issuer, sector, region, and product basis risks, and assigns a higher potential loss to a concentrated portfolio than a more diversified portfolio with a similar credit profile. The model framework also captures the broad relationships between the different risk factors and is flexible enough to allow additional dependencies or risk factors to be incorporated in the future. The IRC model assumes a constant position and a liquidity horizon of one year.

**Comprehensive Risk Measure**

BofASE's CRM is the modelled component of the All Price Risks regulatory capital requirement for market risk for positions which are eligible to be included in the correlation trading portfolio, primarily tranches on indices and bespoke portfolios and their corresponding hedges. The CRM takes into account all of the risk factors that materially impact the value of the positions within the correlation trading portfolio.

The model captures the complexity of these positions including the non-linear nature of the trade valuations, particularly during periods of market stress, and the impact of the joint evolution of the risk factors. The CRM utilises the same Monte Carlo simulation framework as the IRC model with the additional risk factors required for the correlation products in order to calculate the potential losses at the required 99.9% confidence level. The modelled component of the CRM, like the IRC model, assumes a constant position and a liquidity horizon of one year.

For the All Price Risk regulatory capital requirement purposes, the point in time modelled CRM value is compared to its 12-week average and to the correlation trading portfolio floor calculated under the Standardised Approach for market risk per the CRR. The highest of these three numbers will be the All Price Risk regulatory capital requirement used for the correlation trading portfolio.

Table 5.2.1.T1 shows BofASE's maximum, minimum, average, and period-end values for regulatory VaR and Stressed VaR, and risk numbers for the IRC and CRM models for the 12 months to 31 December 2022. Both VaR and Stressed VaR include a price volatility cross risk add-on.

**Table 5.2.1.T1. – EU MR3 IMA Values for Trading Portfolios**

(€ in Millions)	2022
<b>VaR (10 day 99%)</b>	
Maximum value	56
Average value	33
Minimum value	13
Period end	33
<b>SVaR (10 day 99%)</b>	
Maximum value	144
Average value	69
Minimum value	25
Period end	55
<b>IRC (99.9%)</b>	
Maximum value	147
Average value	79
Minimum value	29
Period end	141
<b>Comprehensive risk capital charge (99.9%)</b>	
Maximum value	68
Average value	28
Minimum value	18
Period end	68

### 5.2.2. Capital Requirement under Standardised Approaches

In BofASE, regulatory capital required is calculated on traded debt instruments that are not part of the scope of the internal models permission granted by the ACPR. The requirement is split into two components: General market risk and specific risk.

- General market risk is based on a currency portfolio basis. Positions are grouped into maturity bands ranging from less than one month to more than 20 years with a different weighting applied to each maturity band
- Specific risk looks at each security in terms of type of issuer (e.g., corporate / government), credit quality, and maturity

#### Equity Market Risk

Equity market risk is the regulatory capital requirement calculated on equity positions that are out of scope of the internal models permission granted by the ACPR to BofASE.

#### Commodity Market Risk

Commodity market risk is the regulatory capital requirement calculated on the global commodities investor product business in BofASE. The positions are grouped by maturity with a different weighting applied to each maturity band.

#### FX Market Risk

FX market risk requirement is the regulatory capital requirement calculated on the open net foreign currency position for exposures that are out of scope of the internal models permission granted by the ACPR to BofASE.

**Option Market Risk Requirement**

Option market risk requirement is the regulatory capital requirement calculated on options which are not in scope of the internal models permission granted by the ACPR. Option market risk requirement attracts a delta equivalent treatment, with additional regulatory capital requirement calculated for convexity risk (gamma risk) and volatility risk (vega risk).

**5.3. Counterparty and Credit Risk**

Counterparty and credit risk is the risk of loss arising from a borrower or counterparty failing to meet its financial obligations. Counterparty and credit risk capital requirements are derived from risk-weighted exposures, determined using the Standardised Approach. BofASE has counterparty and credit risk exposure as a result of derivative trades, securities financing transactions, and other trading and non-trading book exposures.

The following section provides detailed information on BofASE's regulatory credit risk and counterparty credit risk exposures.

**5.3.1. Credit Risk by Type**

Table 5.3.1.T1. sets out BofASE's credit risk exposures to non-financial corporations by industry distribution.

**Table 5.3.1.T1. – EU CQ5: Credit Quality of Loans and Advances to Non-financial Corporations by Industry**

(€ in Millions)		a	b	c	d	e	f
		Gross carrying amount			Of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non performing exposures
			Of which non performing	Of which defaulted			
10	Agriculture, forestry and fishing	—	—	—	—	—	—
20	Mining and quarrying	—	—	—	—	—	—
30	Manufacturing	—	—	—	—	—	—
40	Electricity, gas, steam and air conditioning supply	—	—	—	—	—	—
50	Water supply	—	—	—	—	—	—
60	Construction	—	—	—	—	—	—
70	Wholesale and retail trade	—	—	—	—	—	—
80	Transport and storage	—	—	—	—	—	—
90	Accommodation and food service activities	—	—	—	—	—	—
100	Information and communication	—	—	—	—	—	—
110	Financial and insurance activities	—	—	—	—	—	—
120	Real estate activities	—	—	—	—	—	—
130	Professional, scientific and technical activities	—	—	—	—	—	—
140	Administrative and support service activities	—	—	—	—	—	—
150	Public administration and defence, compulsory social security	—	—	—	—	—	—
160	Education	—	—	—	—	—	—
170	Human health services and social work activities	—	—	—	—	—	—
180	Arts, entertainment and recreation	—	—	—	—	—	—
190	Other services	—	—	—	—	—	—
200	<b>Total</b>	—	—	—	—	—	—

**5.3.2. Credit Risk Exposure Geographic Distribution and Maturity Profile Detail**

Table 5.3.2.T1. shows further analysis of the geographical distribution of BofASE's credit risk exposure values.

The geographical distribution is reported by analysing where the counterparty is based. The majority of BofASE's exposure sits within the EMEA region.



Table 5.3.2.T1. – EU CQ4: Quality of Non-performing Exposures by Geography

		a	b	c	d	e	f	g
		Gross carrying / nominal amount				Accumulated impairment	Provisions on off balance sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non performing exposures
				Of which defaulted				
(€ in Millions)								
10	On-balance-sheet exposures	7,405			7,245			
20	AUSTRALIA	—			—			
	DENMARK	53			53			
	FINLAND	22			22			
	FRANCE	2,924			2,924			
	GERMANY	205			205			
	HONG KONG	—			—			
	INDIA	160						
	ITALY	23			23			
	LUXEMBOUR G	584			584			
	NIGERIA	—			—			
	NORWAY	33			33			
	SINGAPORE	—			—			
	SPAIN	21			21			
	SWEDEN	43			43			
	UNITED KINGDOM	91			91			
	UNITED STATES	3,247			3,247			
80	Off-balance-sheet exposures	34,744						
90	BAHAMAS	20						
	CAYMAN ISLANDS	2,319						
	DENMARK	469						
	FRANCE	20,680						
	GUERNSEY	—						
	ITALY	5						
	LUXEMBOUR G	1						
	POLAND	77						
	UNITED KINGDOM	11,161						
	UNITED STATES	13						
150	Total	42,149			7,245			

Table 5.3.2.T2 splits BofASE's Credit Risk exposure values at the end of the year by residual maturity.

**Table 5.3.2.T2. – EU CR1-A: Maturity of Exposures**

		a	b	c	d	e	f
		Net exposure value					
(€ in Millions)		On demand	< 1 year	> 1 year < 5 years	> 5 years	No stated maturity	Total
1	Loans and advances		3,307	3,839			7,146
2	Debt securities		99	160			259
3	<b>Total</b>		<b>3,406</b>	<b>3,999</b>			<b>7,405</b>

### 5.3.3. Counterparty Credit Risk Exposure

BofASE has exposure to counterparty credit risk arising from exposures to counterparties in derivative and securities financing transactions. BofASE calculates counterparty credit risk of derivative exposures using SA-CCR. For securities financing transactions, BofASE used the financial collateral comprehensive method.

Table 5.3.3.T1. shows a breakdown of BofASE's CCR exposures by approach.

**Table 5.3.3.T1. – EU CCR1 – Analysis of CCR Exposure by Approach**

		a	b	c	d	e	f	g	h
		Replacement Cost ("RC")	Potential Future Exposure	Effective Expected Positive Exposure ("EEPE")	Alpha used for computing regulatory exposure value	Exposure value pre CRM	Exposure value post CRM	Exposure value	RWEA
(€ in Millions)									
EU-1	EU - Original Exposure Method (for derivatives)				1.4				
EU-2	EU - Simplified SA-CCR (for derivatives)				1.4				
1	SA-CCR (for derivatives)	4,317	10,562		1.4	66,899	20,831	20,831	12,692
2	IMM (for derivatives and SFTs)								
2a	<i>Of which securities financing transactions netting sets</i>								
2b	<i>Of which derivatives and long settlement transactions netting sets</i>								
2c	<i>Of which from contractual cross-product netting sets</i>								
3	Financial collateral simple method (for SFTs)								
4	Financial collateral comprehensive method (for SFTs)					166,553	11,710	11,710	4,311
5	VaR for SFTs								
6	<b>Total</b>					<b>233,452</b>	<b>32,541</b>	<b>32,541</b>	<b>17,003</b>

**5.3.4. Credit Quality of Assets (EU CRB)**

A financial asset is past due if there is a legal obligation to make a payment and the payment is compulsory and not paid. A financial asset is “credit-impaired” when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following observable data:

- Significant financial difficulty of the borrower or issuer
- A breach of contract such as a default or past due event
- The re-structuring of a loan or advance by BofASE on terms that BofASE would not consider otherwise
- It is becoming probable that the borrower will enter bankruptcy or other financial re-organisation
- The disappearance of an active market for a security because of financial difficulties

A loan or advance that has been re-negotiated due to a deterioration in the borrower’s condition is usually considered to be credit-impaired unless there is evidence that the risk of not receiving contractual cash flows has reduced significantly and there are no other indicators of impairment.

For regulatory purposes, a default shall be considered to have occurred with regard to a particular the borrower when:

- Material exposures are more than 90 days past-due
- The borrower 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

As at 31 December 2022, BofASE did not recognise any specific or general credit risk adjustments.

**5.4. Securitisation**

As at 31 December 2022, BofASE had an immaterial amount of exposure as investor in securitisations. BofASE has not acted as an originator or sponsor to any securitisations.

Based on materiality no further disclosures for exposure to securitisation positions are made in this document.

## 5.5. Capital Buffer Requirements

The CCyB was introduced through CRD IV, as amended by CRD V, and is defined as the amount of CET1 capital that BofASE must calculate in accordance with the CRD as implemented by the ACPR. The CCyB is equal to BofASE's total risk exposure amount multiplied by the weighted average of the CCyB rates that apply to exposures in the jurisdictions where BofASE's relevant credit exposures are located.

The aim of the CCyB is to achieve the broader macro-prudential goal of protecting the banking sector from periods of excess aggregate credit growth that have often been associated with the build-up of system-wide risk. The CCyB requirements may also help to limit the build-up of credit in jurisdictions in the first place, by raising the cost of credit and dampening its demand. Thus jurisdictions will be required to monitor credit growth in relation to measures such as Gross Domestic Product ("GDP") and assess whether growth is excessive and leading to the build-up of system-wide risk. Based on this assessment a countercyclical buffer requirement, ranging from 0.0% to 2.5% of RWAs, may be put in place for specified jurisdictions.

BofASE should face the same CCyB rates as domestic institutions on its cross-border exposures under the international reciprocation process. The French CCyB rate was 0% effective as at 31 December 2022.

Jurisdictions with a non-zero CCyB rate as at the end of 2022 were Hong Kong (1%), Norway (2%), Czech Republic (1.5%), Slovakia (1%), Luxembourg (0.5%), Bulgaria (1%), Sweden (1%), Iceland (2%), Denmark (2%), Estonia (1%), and Romania (0.5%).

Table 5.5.T1. outlines the components of relevant credit exposures used in the calculation of CCyB by country.

**Table 5.5.T1. – EU CCyB1 - Geographical Distribution of Credit Exposures Relevant for the Calculation of the Countercyclical Buffer**

		General credit exposures		Relevant credit exposures market risk		Securitisation exposures Exposure value for non trading book	Total exposure value	Own fund requirements				Risk weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
		Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures 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			
(€ in Millions)														
010	Breakdown by country:													
	AUSTRALIA	6	—	2	3	—	12	—	4	—	4	55	0.2 %	— %
	AUSTRIA	53	—	—	1	—	55	4	2	—	6	81	0.4 %	— %
	BAHAMAS	3	—	—	—	—	3	—	—	—	—	3	— %	— %
	BAHRAIN	—	—	—	—	—	—	—	—	—	—	—	— %	— %

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		General credit exposures		Relevant credit exposures market risk		Securitisation exposures Exposure value for non trading book	Total exposure value	Own fund requirements				Risk weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
		Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures 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			
(€ in Millions)	Breakdown by country:													
	BELGIUM	115	—	1	160	—	275	6	88	—	95	1,181	5.2 %	— %
	BERMUDA	13	—	—	—	—	13	1	—	—	1	13	0.1 %	— %
	BRAZIL	—	—	—	4	—	4	—	129	—	129	1,618	7.2 %	— %
	CANADA	34	—	18	3	—	55	3	3	—	5	68	0.3 %	— %
	CAYMAN ISLANDS	1,390	—	—	—	—	1,390	111	—	—	111	1,390	6.2 %	— %
	CHINA	19	—	—	—	—	19	1	—	—	1	16	0.1 %	— %
	CZECH REPUBLIC	—	—	—	—	—	—	—	—	—	—	1	— %	1.5 %
	DENMARK	354	—	—	—	—	354	25	—	—	25	315	1.4 %	2.0 %
	FINLAND	159	—	—	37	—	196	13	22	—	34	428	1.9 %	— %
	FRANCE	1,792	—	28	312	—	2,132	118	62	—	179	2,244	9.9 %	— %
	GEORGIA	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	GERMANY	1,493	—	27	155	—	1,675	104	61	—	165	2,061	9.1 %	— %
	GREECE	3	—	—	5	—	8	—	16	—	16	199	0.9 %	— %
	GUERNSEY	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	HONG KONG	3	—	—	—	—	3	—	—	—	—	3	— %	1.0 %
	INDIA	559	—	—	—	—	559	45	—	—	45	559	2.5 %	— %
	IRAN, ISLAMIC REPUBLIC OF	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	IRELAND	121	—	—	12	—	133	10	8	—	17	218	1.0 %	— %
	ITALY	226	—	—	158	—	384	18	50	—	68	850	3.8 %	— %
	JAPAN	674	—	—	11	—	684	53	6	—	59	741	3.3 %	— %
	JERSEY	—	—	—	—	—	—	—	—	—	—	—	— %	— %

# BofA Securities Europe SA

## Pillar 3 Disclosure for the Year Ended 31 December 2022

		General credit exposures		Relevant credit exposures market risk		Securitisation exposures Exposure value for non trading book	Total exposure value	Own fund requirements				Risk weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)
		Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures 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			
(€ in Millions)	Breakdown by country:													
	KENYA	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	KOREA, REPUBLIC OF	10	—	—	—	—	10	1	—	—	1	10	— %	— %
	LUXEMBOURG	2,838	—	—	15	—	2,854	184	7	—	191	2,387	10.6 %	0.5 %
	MALAYSIA	12	—	—	—	—	12	1	—	—	1	12	0.1 %	— %
	MEXICO	—	—	—	9	—	9	—	4	—	4	48	0.2 %	— %
	MONACO	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	NETHERLANDS	1,501	—	4	79	—	1,585	100	38	—	138	1,720	7.6 %	— %
	NEW ZEALAND	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	NIGERIA	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	NORWAY	22	—	—	29	—	51	2	19	—	21	259	1.2 %	2.0 %
	Other Countries	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	POLAND	74	—	—	—	—	74	6	—	—	6	74	0.3 %	— %
	PORTUGAL	86	—	—	22	—	109	7	11	—	18	222	1.0 %	— %
	RUSSIAN FEDERATION	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	SINGAPORE	24	—	—	6	—	30	2	6	—	8	98	0.4 %	— %
	SPAIN	603	—	8	8	—	619	48	25	—	74	920	4.1 %	— %
	SUDAN	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	SWEDEN	278	—	—	43	—	321	22	6	—	28	344	1.5 %	1.0 %
	SWITZERLAND	48	—	—	63	—	111	4	7	—	11	139	0.6 %	— %
	TAIWAN, PROVINCE OF CHINA	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	TUNISIA	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	UNITED ARAB EMIRATES	—	—	—	—	—	—	—	—	—	—	—	— %	— %
	UNITED KINGDOM	4,030	—	10	33	—	4,073	164	25	—	189	2,365	10.5 %	1.0 %
	UNITED STATES	503	—	115	194	—	813	40	112	—	152	1,898	8.4 %	— %
	URUGUAY	1	—	—	—	—	1	—	—	—	—	1	— %	— %
	VIRGIN ISLANDS, BRITISH	8	—	—	—	—	8	1	—	—	1	8	— %	— %
020	Total	17,065	—	215	1,364	—	18,644	1,094	711	—	1,805	22,561	100.0 %	

**Table 5.5.T2. – EU CCyB2 Amount of Institution Specific Countercyclical Capital Buffer**

(€ in Millions)	2022
Total risk exposure amount	35,549
Institution specific countercyclical capital buffer rate	0.22 %
Institution specific countercyclical capital buffer requirement	80

The increase in institution-specific CCyB requirement from €31M in 4th Quarter 2021 to €80M in 4th Quarter 2022 is driven by an increase in the CCyB rate of UK from 0% to 1% in 2022.

## 5.6. Capital Resources

Table 5.6.T1. shows the accounting balance sheet, with references in column C to the balance sheet items included within the elements of BofASE's own funds as reported in template EU CC1. Further details on the composition of BofASE's capital resources are shown in Tables 5.6.1.T1 and 5.6.2.T1. There are no restrictions applied to the calculation of own funds in accordance with CRR regulations.

**Table 5.6.T1. – EU CC2 - Reconciliation of Regulatory Own Funds to Balance Sheet in the Audited Financial Statements**

		a	c
		Balance sheet as in published financial statements	Reference in Table 5.6.2.T1 EU CC1 Composition of Regulatory Own Funds
(€ in Millions)		As at period end	
Assets - Breakdown by asset classes according to the balance sheet in the published financial statements			
1	Cash at bank and in hand	5,581	
	<b>Financial assets at fair value through profit or loss</b>		
2	Securities	12,738	
3	Loans and repurchase agreements	16,574	
4	Derivative financial instruments	56,364	
	<b>Financial assets at fair value through OCI</b>		
5	Debt securities	99	
	<b>Financial assets at amortised cost</b>		
6	Loans and repurchase agreements	7,147	
7	Current and deferred tax assets	38	
8	Other assets	18,163	
9	Tangible and intangible assets	—	
10	<b>Total assets</b>	<b>116,705</b>	
Liabilities - Breakdown by liability classes according to the balance sheet in the published financial statements			
1	Deposits from central banks	—	
	<b>Financial liabilities at fair value through profit or loss</b>		
2	Securities	10,029	
3	Deposits and repurchase agreements	13,573	
4	Derivative financial instruments	57,883	
	<i>Of Which:</i>		
4a	<i>Fair value gains and losses arising from the institution's own credit risk re-lated to derivative liabilities</i>	(41)	27a
5	Derivatives used for hedging purposes	—	
	<b>Financial liabilities at amortised cost</b>		
6	Deposits and repurchase agreements	9,784	
7	Subordinated debt	924	
	<i>Of Which:</i>		
7a	<i>Subordinated debt</i>	920	46
7b	<i>Accrued interest</i>	4	
8	Other financial liabilities	342	
9	Current and deferred tax liabilities	25	
10	Other liabilities	16,120	
11	Provisions for contingencies and charges	16	
12	<b>Total liabilities</b>	<b>108,696</b>	
Shareholders' Equity			
1	Capital	7,976	1



		a	c
		Balance sheet as in published financial statements	Reference in Table 5.6.2.T1 EU CC1 Composition of Regulatory Own Funds
(€ in Millions)		As at period end	
2	Retained earnings	(189)	2
3	Net income	222	EU-5a
4	<b>Total equity</b>	<b>8,009</b>	

**5.6.1. Capital Resources (Landscape)****Table 5.6.1.T1. – EU CCA: Main Features of Regulatory Own Funds Instruments and Eligible Liabilities Instruments**

Capital Instruments Main Features		BofASE		
		CET1	AT1	T2
1	Issuer	BofA Securities Europe SA	N/A	BofA Securities Europe SA
2	Unique identifier (e.g., CUSIP, ISIN or Bloomberg identifier for private placement)	N/A	N/A	N/A
2a	Public or Private Placement	Private Placement	N/A	Private Placement
3	Governing law(s) of the instrument	French	N/A	French
3a	Contractual recognition of write down and conversion powers of resolution authorities	N/A	N/A	Yes
<b>Regulatory Treatment</b>				
4	Current treatment taking into account, where applicable, transitional CRR rules	CET1	N/A	T2
5	Post-transitional CRR rules	CET1	N/A	T2
6	Eligible at solo / (sub-)consolidated / solo and (sub-)consolidated	Solo	N/A	Solo
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares with full voting rights	N/A	Subordinated Loan T2
8	Amount recognised in regulatory capital or eligible liabilities (Currency in million, as of most recent reporting date)	EUR 7,976M	N/A	EUR 920M
9	Nominal amount of instrument	EUR 10.00	N/A	EUR 920M
EU-9a	Issue price	EUR 10.00	N/A	EUR 920M
EU-9b	Redemption price	N/A	N/A	EUR 920M
10	Accounting classification	Shareholders equity	N/A	Liability - amortised cost
11	Original date of issuance	EUR 0.05M 25 September 2018 EUR 540M 19 November 2018 EUR 2,086M 14 January 2019 EUR 2,650M 19 July 2019 EUR 1,100M 21 June 2021 EUR 900M 12 May 2022 EUR 700M 18 November 2022	N/A	15 October 2021
12	Perpetual or dated	Perpetual	N/A	Dated
13	Original maturity date	No maturity	N/A	31 March 2032

Capital Instruments Main Features		BofASE		
		CET1	AT1	T2
14	Issuer call subject to prior supervisory approval	No	N/A	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	No issuer call date. However, may repay in whole but not in part at par on any date if a Regulatory Event or Tax Event occurs, subject to prior supervisory approval.
16	Subsequent call dates, if applicable	N/A	N/A	N/A
<b>Coupons / Dividends</b>				
17	Fixed or floating dividend / coupon	N/A	N/A	Floating
18	Coupon rate and any related index	N/A	N/A	€STR + 102bps
19	Existence of a dividend stopper	No	N/A	No
EU-20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	N/A	Mandatory
EU-20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	N/A	Mandatory
21	Existence of step up or other incentive to redeem	No	N/A	No
22	Non-cumulative or cumulative	Non-cumulative	N/A	Cumulative
23	Convertible or non-convertible	Non-convertible	N/A	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A
30	Write-down features	No	N/A	No
31	If write-down, write-down trigger(s)	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A
34a	Type of subordination (only for eligible liabilities)	N/A	N/A	N/A
EU-34b	Ranking of the instrument in normal insolvency proceedings	1 - Equity	N/A	2 - Statutory Subordinated Claim
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Subordinated liabilities	N/A	Senior Liabilities

Capital Instruments Main Features		BofASE		
		CET1	AT1	T2
36	Non-compliant transitioned features	No	N/A	No
37	If yes, specify non-compliant features	N/a	N/A	N/A
37a	Link to full terms and conditions of the instrument (signposting)	<a href="http://investor.bankofamerica.com">http://investor.bankofamerica.com</a>	N/A	<a href="http://investor.bankofamerica.com">http://investor.bankofamerica.com</a>
<sup>(1)</sup> Insert 'N/A' if the question is not applicable				

## 5.6.2. Capital Resources (continued)

Table 5.6.2.T1. – EU CC1 - Composition of Regulatory Own Funds

		(a)	(b)
		Amounts	Source based on reference numbers / letters of the balance sheet under the regulatory scope of consolidation
(€ in Millions)			
<b>Common Equity Tier 1 capital: instruments and reserve</b>			
1	Capital instruments and the related share premium accounts	7,976	Shareholders' Equity - 1
	of which: Ordinary shares with full voting rights	7,976	
2	Retained earnings	(189)	Shareholders' Equity - 2
3	Accumulated other comprehensive income (and other reserves)	—	
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)		
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	222	Shareholders' Equity - 3
6	<b>Common Equity Tier 1 capital before regulatory adjustments</b>	8,009	
<b>Common Equity Tier 1 capital: regulatory adjustments</b>			
7	Additional value adjustments (negative amount)	(165)	
8	Intangible assets (net of related tax liability) (negative amount)		
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)		
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value		
12	Negative amounts resulting from the calculation of expected loss amounts		
13	Any increase in equity that results from securitised assets (negative amount)		
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing		
15	Defined-benefit pension fund assets (negative amount)		
16	Direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount)		
17	Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)		
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)		
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)		
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		
EU-20b	of which: qualifying holdings outside the financial sector (negative amount)		
EU-20c	of which: securitisation positions (negative amount)		

		(a)	(b)
		Amounts	Source based on reference numbers / letters of the balance sheet under the regulatory scope of consolidation
(€ in Millions)			
EU-20d	of which: free deliveries (negative amount)		
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)		
22	Amount exceeding the 17,65% threshold (negative amount)		
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities		
24	Not applicable		
25	of which: deferred tax assets arising from temporary differences		
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	(41)	Liabilities - 4a
28	<b>Total regulatory adjustments to Common Equity Tier 1</b>	(206)	
29	<b>Common Equity Tier 1 capital</b>	7,803	
<b>Additional Tier 1 capital: instruments</b>			
30	Capital instruments and the related share premium accounts	—	
31	of which: classified as equity under applicable accounting standards	—	
32	of which: classified as liabilities under applicable accounting standards	—	
33	Amount of qualifying items referred to in Article 484 (4) CRR and the related share premium accounts subject to phase out from AT1	—	
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	—	
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	—	
35	of which: instruments issued by subsidiaries subject to phase out	—	
36	<b>Additional Tier 1 capital before regulatory adjustments</b>	—	
<b>Additional Tier 1 capital: regulatory adjustments</b>			
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	—	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	—	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	—	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	—	

		(a)	(b)
		Amounts	Source based on reference numbers / letters of the balance sheet under the regulatory scope of consolidation
(€ in Millions)			
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	<b>Total regulatory adjustments to Additional Tier 1 capital</b>	—	
44	<b>Additional Tier 1 capital</b>	—	
45	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	7,803	
<b>Tier 2 (T2) capital: instruments</b>			
46	Capital instruments and the related share premium accounts	920	Liabilities - 7a
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	—	
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	—	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	—	
49	of which: instruments issued by subsidiaries subject to phase out	—	
50	Credit risk adjustments	—	
51	<b>Tier 2 (T2) capital before regulatory adjustments</b>	920	
<b>Tier 2 (T2) capital: regulatory adjustments</b>			
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	—	
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)	—	
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	—	
57	<b>Total regulatory adjustments to Tier 2 (T2) capital</b>	—	
58	<b>Tier 2 (T2) capital</b>	920	
59	<b>Total capital (TC = T1 + T2)</b>	8,723	
60	<b>Total Risk exposure amount</b>	35,549	
<b>Capital ratios and requirements including buffers</b>			
61	Common Equity Tier 1 capital	21.95 %	
62	Tier 1 capital	21.95 %	

		(a)	(b)
		Amounts	Source based on reference numbers / letters of the balance sheet under the regulatory scope of consolidation
(€ in Millions)			
63	Total capital	24.54 %	
64	Institution CET1 overall capital requirements	9.30 %	
65	of which: capital conservation buffer requirement	2.50 %	
66	of which: countercyclical capital buffer requirement	0.22 %	
67	of which: systemic risk buffer requirement	— %	
EU-67a	of which: Global Systemically Important Institution or Other Systemically Important Institution ("O-SII") buffer requirement	— %	
EU-67b	of which: additional own funds requirements to address the risks other than the risk of excessive leverage	2.08 %	
68	<b>Common Equity Tier 1 capital (as a percentage of risk exposure amount) available after meeting the minimum capital requirements</b>	12.85 %	
<b>National minima (if different from Basel III)</b>			
69	Not applicable		
70	Not applicable		
71	Not applicable		
<b>Amounts below the thresholds for deduction (before risk weighting)</b>			
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)	411	
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)	—	
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)	38	
<b>Applicable caps on the inclusion of provisions in Tier 2</b>			
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	222	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based ("IRB") approach (prior to the application of the cap)	—	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	—	
<b>Capital instruments subject to phase-out arrangements (only applicable between 1 January 2014 and 1 January 2022)</b>			
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)	—	



**5.7. Leverage****5.7.1. Leverage Approach**

The leverage ratio is a measure of Tier 1 capital as a percentage of exposure as defined under the CRR rules.

The leverage ratio is monitored in line with regulatory requirements. Exposure is typically managed through a combination of mechanisms including risk appetite limits, collateralisation, and netting arrangements.

The following tables disclose a breakdown of the total leverage ratio exposure measure, as well as a reconciliation of total exposure measure with the relevant information disclosed in published financial statements.

**5.7.2. Additional Detail on Leverage Ratio****Table 5.7.2.T1. – EU LR1 - LRSum: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures**

(€ in Millions)		a Applicable amount
1	Total assets as per published financial statements	116,705
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	—
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	—
4	(Adjustment for temporary exemption of exposures to central banks (if applicable))	—
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) CRR)	—
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	—
7	Adjustment for eligible cash pooling transactions	—
8	Adjustment for derivative financial instruments	(18,078)
9	Adjustment for securities financing transactions	2,817
10	Adjustment for off-balance sheet items (i.e., conversion to credit equivalent amounts of off-balance sheet exposures)	267
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	(13,874)
13	<b>Total exposure measure</b>	<b>87,836</b>

**Table 5.7.2.T2. – EU LR2 - LRCom: Leverage Ratio Common Disclosure**

(€ in Millions)		CRR leverage ratio exposures	
		a	b
		2022	2021
<b>On-balance sheet exposures (excluding derivatives and SFTs)</b>			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	34,871	25,554
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)	(12,049)	(6,086)
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	—	—

(€ in Millions)		CRR leverage ratio exposures	
		a	b
		2022	2021
5	(General credit risk adjustments to on-balance sheet items)	—	—
6	(Asset amounts deducted in determining Tier 1 capital)	(177)	(76)
7	Total on-balance sheet exposures (excluding derivatives and SFTs)	22,645	19,391
<b>Derivative exposures</b>			
8	Replacement cost associated with SA-CCR derivatives transactions (i.e., net of eligible cash variation margin)	12,586	6,791
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	—	—
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	17,341	16,776
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	—	—
EU-9b	Exposure determined under Original Exposure Method	—	—
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(2,096)	(1,637)
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	68,616	49,807
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(58,139)	(39,742)
13	<b>Total derivatives exposures</b>	<b>38,307</b>	<b>31,994</b>
<b>Securities financing transaction exposures</b>			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	102,428	60,455
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(78,627)	(42,691)
16	Counterparty credit risk exposure for SFT assets	2,817	1,306
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	<b>Total securities financing transaction exposures</b>	<b>26,617</b>	<b>19,070</b>
<b>Other off-balance sheet exposures</b>			
19	Off-balance sheet exposures at gross notional amount	500	1,260
20	(Adjustments for conversion to credit equivalent amounts)	(233)	(945)
21	(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	—	—
22	<b>Off-balance sheet exposures</b>	<b>267</b>	<b>315</b>
<b>Excluded exposures</b>			
EU-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	—	—
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a(1) CRR (on and off balance sheet))	—	—
EU-22c	(Excluded exposures of public development banks (or units) - Public sector investments)	—	—
EU-22d	(Excluded exposures of public development banks (or units) - Promotional loans)	—	—
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))	—	—
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	—	—
EU-22g	(Excluded excess collateral deposited at triparty agents)	—	—
EU-22h	(Excluded CSD related services of CSD / institutions in accordance with point (o) of Article 429a(1) CRR)	—	—
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	—	—

		CRR leverage ratio exposures	
		a	b
(€ in Millions)		2022	2021
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	—	—
EU-22k	(Total exempted exposures)	—	—
<b>Capital and total exposure measure</b>			
23	<b>Tier 1 capital</b>	<b>7,803</b>	<b>6,008</b>
24	<b>Total exposure measure</b>	<b>87,836</b>	<b>70,770</b>
<b>Leverage ratio</b>			
25	Leverage ratio (%)	8.88 %	8.49 %
EU-25	Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	8.88 %	8.49 %
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) (%)	8.88 %	8.49 %
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	— %	— %
27	Leverage ratio buffer requirement (%)	— %	— %
EU-27a	Overall leverage ratio requirement (%)	3.00 %	3.00 %
<b>Choice on transitional arrangements and relevant exposures</b>			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	Fully Phased In	Fully Phased In
<b>Disclosure of mean values</b>			
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	44,415	29,519
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	23,801	17,765
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)	108,451	82,525
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)	108,451	82,525
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)	7.20 %	7.28 %
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)	7.20 %	7.28 %

**Table 5.7.2.T3. – EU LR3 - LRSpl: Split-Up of On Balance Sheet Exposures (Excluding Derivatives, SFTs and Exempted Exposures)**

(€ in Millions)		a CRR leverage ratio exposures
EU-1	<b>Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:</b>	<b>22,822</b>
EU-2	Trading book exposures	14,279
EU-3	Banking book exposures, of which:	8,543
EU-4	Covered bonds	—
EU-5	Exposures treated as sovereigns	4,998
EU-6	Exposures to regional governments, MDB, international organisations and PSE, not treated as sovereigns	3
EU-7	Institutions	1,893
EU-8	Secured by mortgages of immovable properties	—
EU-9	Retail exposures	—
EU-10	Corporates	1,127
EU-11	Exposures in default	—
EU-12	Other exposures (e.g., equity, securitisations, and other non-credit obligation assets)	522

**5.7.3. Management of Risk of Excessive Leverage (EU LRA)**

The risk of excessive leverage is the risk resulting from an institution's vulnerability due to leverage or contingent leverage that may require the addition of unintended corrective measures to its business plan, including distressed selling of assets which might result in losses or in valuation adjustments to its remaining assets. BofASE sets a leverage ratio risk appetite limit at an appropriate level to manage this risk. Leverage ratio metrics are monitored and reviewed for consistency with the Strategic Plan and BofASE Risk Appetite Statement, as well as being reviewed quarterly by the BofASE BRC. This will include the actual reported leverage ratio, compared against the BofASE Board's risk appetite limit, which is set in excess of the minimum leverage requirement of 3%. The leverage ratio requirements reinforce risk-based requirements and limit the build up of excessive leverage.

Comprehensive risk management of excessive leverage is achieved through the risk appetite framework and quarterly BofASE Board oversight. A breach of a limit will trigger defined operational protocols as set out in the BofASE Capital Management Policy, where specific governance, escalation, and management actions are set out at various trigger levels that align to the BofASE Board risk appetite and recovery plan indicators. BofASE does not currently assess that there is a risk of excessive leverage for the entity.

**5.8. Operational Risk**

The following table shows a breakdown of the calculation of own funds requirements for operational risk as at 31 December 2022 for BofASE. Own funds requirements for operational risk are calculated under the Standardised Approach.

**Table 5.8.T1. – EU OR1 Operational Risk Own Funds Requirements and Risk-Weighted Exposure Amounts**

Banking activities (€ in Millions)		a	b	c	d	e
		Relevant indicator			Own funds requirements	Risk exposure amount
		Year 3	Year 2	Last year		
1	Banking activities subject to Basic Indicator Approach	—	—	—	—	—
2	Banking activities subject to standardised (“TSA”) / alternative standardised (“ASA”) approaches	276	562	864	102	1,277
3	<u>Subject to TSA:</u>	276	562	864		
4	<u>Subject to ASA:</u>					
5	Banking activities subject to advanced measurement approaches	—	—	—	—	—

# BofA Securities Europe SA

## Pillar 3 Disclosure

6. Additional Information on Remuneration Disclosure  
As at 31 December 2022

#### **6.1. Remuneration Disclosure**

The BofASE remuneration disclosure providing qualitative information on relevant remuneration policies and practices, in addition to quantitative remuneration information on Material Risk Takers, made in accordance with Article 450 of the Capital Requirements Regulation (EU) No. 575/2013, as amended by Regulation (EU) 2019/876, and related EBA guidance, is separately published on BAC's corporate website (<http://investor.bankofamerica.com>) and should be deemed part of the Pillar 3 Disclosure for BofASE.

# BofA Securities Europe SA Pillar 3 Disclosure

7. Appendices  
As at 31 December 2022



## Appendix 1 - Directors Board Membership and Experience (EU OVB)

Table A1.T1. – Directors Board Membership and Experience

		No. Of Directorships	
		Total	Excluding non commercial and counting group appointments as one
<b>Anne Finucane</b>	Ms. Finucane, who recently retired as Vice Chairman of Bank of America Corporation ("BAC"), served as a senior leader of BAC for more than 26 years and was a member of the executive management team. Prior to her appointment as Vice Chairman she held the position of Global Chief Strategy and Marketing officer. Ms. Finucane was as global leader for BAC on capital deployment, climate finance, public policy, and environmental, social and governance. She joined Bank of America's Global Advisory Council in 2021. Ms. Finucane was the Chair of BofA Europe, and served on the Board Risk Committee, Nominations Committee and Remuneration Committee. She was also a Group Non-Executive Director of BofA Securities Europe S.A ("BofASE"). Ms. Finucane resigned from the Boards BofA Europe and BofASE effective from 31 December 2022. She resigned as a Group Non-Executive Director of Bank of America Charitable Foundation, Inc. on 31 December 2021. She was a Non-Executive Director of Carnegie Hall Society, Inc. and the National September 11 Memorial & Museum at the World Trade Centre Foundation, Inc. Ms. Finucane is currently a Non-Executive Director of Mass General Brigham, and Special Olympics, Inc., the Carnegie Endowment for International Peace, and The Ireland Funds. Ms. Finucane is a member of the Council on Foreign Relations, and has served on the U.S. State Department's Foreign Affairs Policy board and the World Bank Group's Women Entrepreneurs Finance Initiative (We-Fi). Ms. Finucane is an Independent Non-Executive Director of CVS Health Corp and was appointed in 2021 as a Non-Executive Director of William-Sonoma, Inc.	9	3
<b>Director</b>			
<b>Jérôme Morisseau</b>	Jérôme started his career at Morgan Stanley in London in 1994, before moving to Paris where he was promoted Managing Director in 2006. He joined Citi as Managing Director in Paris in 2006 until 2015 and then joined Bank of America in 2015. Jérôme was promoted to Co-Head of Investment Banking France in 2020. In addition, he became Director of BofASE in 2021.	1	1
<b>Director</b>			
<b>Bernard Mensah</b>	President of International for Bank of America and a member of BAC's Executive Management Team. Chief Executive Officer of Merrill Lynch International, Bank of America's largest subsidiary, a director of BofA Securities Europe SA and of Bank of America Europe Designated Activity Company, and BANA London Branch Head. Joined BAC in 2010 from Goldman Sachs in London, where he was a Partner and global head of Bank Loan and Distressed Trading, and prior to that ran the Asia Credit and Convertibles business, based in Hong Kong and Tokyo.	8	1
<b>Director</b>			
<b>Vanessa Holtz</b>	Vanessa Holtz is Chief Executive Officer of Bank of America's principal EU broker-dealer, BofASE, and country executive for France. She is responsible for the implementation of BofASE's strategy. Vanessa is also a member of Bank of America's EMEA executive committee. Vanessa has been based in Paris since 2019 and was formerly head of EU FICC Trading. In this role she was instrumental in Bank of America's pre-Brexit preparations and played a critical role in growing Bank of America's European presence. As CEO of BofASE and country executive France, her strategic focus is to drive sustainable growth across the business and the European region while continuing to expand and deepen Bank of America's relationships with clients. Prior to joining Bank of America, Vanessa held several key positions leading and managing foreign exchange trading desks including ABN AMRO, Barclays Capital and JP Morgan.	3	1
<b>Director and CEO</b>			
<b>Pierre de Weck</b>	Independent director of Bank of America Corporation; Bank of America California, National Association; Bank of America, National Association; and Chair of the Board of directors of Merrill Lynch International and BofA Securities Europe SA. Mr. de Weck served as the Chair and Global Head of Private Wealth Management and as a member of the Group Executive Committee of Deutsche Bank AG from 2002 to May 2012. Prior to joining Deutsche Bank, Mr. de Weck served on the Management Board of UBS AG from 1994 to 2001, as Head of Institutional Banking from 1994 to 1997, as Chief Credit Officer and Head of Private Equity from 1998 to 1999, and as Head of Private Equity from 2000 to 2001. Previously held various senior management positions at Union Bank of Switzerland, a predecessor firm of UBS, from 1985 to 1994.	13	4
<b>Director (outside) and Chairman</b>			
<b>Pierre Fleuriot</b>	Appointed in August 2019 as a non-executive director of the BofASE Board. He also serves on the Board of Directors of Renault S.A., the Casablanca Stock Exchange and is the Chair of the Board of the Cercle de l'Orchestre de Paris. Previously served as the CEO of Credit Suisse for France, Belgium and Luxembourg from 2009 to 2016 and prior to that he held roles as the CEO for France and Belgium for Royal Bank of Scotland from 2008 to 2009, the CEO for ABM-AMRO France from 2000 to 2008, and as the CEO of the Commissions des Operations de Bourse from 1991 to 1997.	7	4
<b>Director (outside)</b>			
<b>Marie Hélène Sartorius</b>	Marie-Hélène Sartorius was appointed in October 2020 as a non-executive director of the BofASE Board. She also serves on the Board of Directors of Milleis Banque (formerly Barclays France SA), Orano SA, BNPP Cardif SA, and Gemalto NV. Ms. Sartorius is an experienced financial services practitioner, advisor, independent, and executive board member. She has in-depth experience in investment banking, insurance, and risk. Ms. Sartorius was a senior partner at PricewaterhouseCoopers where she spent 15 years, providing consulting services across banking, capital markets, insurance, asset management and private banking industries. Prior to that she held different roles at BNP Paribas (formerly Banque Paribas) from 1982 to 2001 in Global Markets and Corporate Finance.	5	4
<b>Director (outside)</b>			

		No. Of Directorships	
		Total	Excluding non commercial and counting group appointments as one
<b>Catherine Bessant</b>	<p>Cathy Bessant serves as vice chair, Global Strategy at BAC, and is a member of BAC's executive management team. In this role, Cathy is responsible for working with European boards, focused on the integration of our global strategy. She is based in Paris and provides leadership within and beyond our European presence.</p> <p>Bessant most recently served as chief operations and technology officer from 2010 - 2021, responsible for delivering end-to-end technology and operating services across the company through a team of 95,000 people in over 35 countries, with oversight of the company's global information security efforts.</p> <p>Since joining BAC in 1982, Bessant has held a number of senior leadership roles. She was president, Global Corporate Banking; president, Global Product Solutions and Global Treasury Services; chief marketing officer; president, Consumer Real Estate and Community Development Banking; national Small Business Segment executive; and president of the Florida market.</p> <p>Cathy Bessant serves on the board of directors of Zurich Insurance Group, serves as chair of the USA Field Hockey board of directors, and is on the advisory board for the Ross School of Business at the University of Michigan</p>	4	2
<b>Director</b>			
<b>George Carp</b>	<p>George Carp is the Deputy CEO and has served as CFO for BofASE with overall responsibility for key financial processes and controls as well as providing strategic analysis and performance insight to BofASE senior leaders.</p> <p>George joined BAC in 1994 in Finance supporting capital markets activities including debt origination, real estate, structured finance, and institutional sales and trading. George has held several senior leadership positions at BAC based in their Charlotte headquarters. In 2007, George became the finance executive for the Global Markets Group for Bank of America prior to the merger with Merrill Lynch, and later served on the transition team for the Merrill Lynch merger.</p> <p>In 2018, George became the Chief Financial Officer for BofA Europe in Dublin, Ireland with overall responsibility for key financial processes and controls as well as providing strategic analysis and performance insight to BofA Europe senior leaders.</p> <p>Prior to joining BAC, George spent 13 years with Ernst &amp; Young in the Financial Services Industries Group. George specialised in the audit of broker-dealers and large multi-national banking organisations.</p>	2	1
<b>Director and Deputy CEO</b>			

Note: The table outlines the directors that served at 31 December 2022. Anne Finucane resigned from the BofASE Board on 1 January 2023.

## Appendix 2 – Supplementary Disclosure Templates

The following table shows the total amount of performing and non-performing exposures and related provisions as at 31 December 2022 for BofASE.

Table A2.T1. – EU CR1 Performing and Non-performing Exposures and Related Provisions

(€ in Millions)		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount / nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write off	Collateral and financial guarantees received	
		Performing exposures			Non performing exposures			Performing exposures accumulated impairment and provisions		Non performing exposures accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						
Of which stage 1	Of which stage 2												Of which stage 2	Of which stage 3	Of which stage 1	Of which stage 2
5	Cash balances at central banks and other demand deposits	5,581	5,581	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Loans and advances	7,146	7,146	—	—	—	—	—	—	—	—	—	—	—	7,133	—
20	Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30	General governments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40	Credit institutions	3,909	3,909	—	—	—	—	—	—	—	—	—	—	—	3,909	—
50	Other financial corporations	3,237	3,237	—	—	—	—	—	—	—	—	—	—	—	3,224	—
60	Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70	Of which SMEs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80	Households	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
90	Debt securities	259	99	—	—	—	—	—	—	—	—	—	—	—	—	—
100	Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
110	General governments	259	99	—	—	—	—	—	—	—	—	—	—	—	—	—
120	Credit institutions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
130	Other financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
140	Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(€ in Millions)		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	
		Gross carrying amount / nominal amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write off	Collateral and financial guarantees received	
		Performing exposures			Non performing exposures				Performing exposures accumulated impairment and provisions		Non performing exposures accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					On performing exposures	On non performing exposures
			Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3				
150	Off-balance-sheet exposures	34,744	34,744	—	—	—	—	—	—	—	—	—	—		34,744	—	
160	Central banks	—	—	—	—	—	—	—	—	—	—	—	—		—	—	
170	General governments	—	—	—	—	—	—	—	—	—	—	—	—		—	—	
180	Credit institutions	645	645	—	—	—	—	—	—	—	—	—	—		645	—	
190	Other financial corporations	34,100	34,100	—	—	—	—	—	—	—	—	—	—		34,100	—	
200	Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—		—	—	
210	Households	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
220	Total	47,730	47,571	—	—	—	—	—	—	—	—	—	—	—	41,877	—	

The following table shows the extent of the use of CRM techniques as at 31 December 2022 for BofASE.

**Table A2.T2. – EU CR3 CRM Techniques Overview: Disclosure of the Use of Credit Risk Mitigation Techniques**

		Unsecured carrying amount	Secured carrying amount			
				Of which secured by collateral	Of which secured by financial guarantees	Of which secured by credit derivatives
(€ in Millions)		a	b	c	d	e
1	Loans and advances	5,595	7,133	7,133	—	—
2	Debt securities	259	—	—	—	—
3	<b>Total</b>	<b>5,853</b>	<b>7,133</b>	<b>7,133</b>	—	—
4	<i>Of which non-performing exposures</i>	—	—	—	—	—
EU-5	<i>Of which defaulted</i>	—	—	—	—	—

**Appendix 2 – Supplementary Disclosure Templates (Landscape)**

The following table shows the effect of all CRM techniques as at 31 December 2022 for BofASE.

**Table A2.T3. – EU CR4 Standardised Approach - Credit Risk Exposure and CRM Effects**

	Exposure classes	Exposures before CCF and before CRM		Exposures post CCF and post CRM		RWAs and RWAs density	
		On balance sheet exposures	Off balance sheet exposures	On balance sheet exposures	Off balance sheet exposures	RWAs	RWAs density (%)
	(€ in Millions)	a	b	c	d	e	f
1	Central governments or central banks	4,998	—	4,998	—	171	3.42 %
2	Regional government or local authorities	—	25	—	2	2	100.00 %
3	Public sector entities	—	—	—	—	—	— %
4	Multilateral development banks	—	—	—	—	—	— %
5	International organisations	—	—	—	—	—	— %
6	Institutions	20	—	20	—	4	20.98 %
7	Corporates	252	544	252	24	264	95.83 %
8	Retail	—	—	—	—	—	— %
9	Secured by mortgages on immovable property	—	—	—	—	—	— %
10	Exposures in default	—	—	—	—	—	— %
11	Exposures associated with particularly high risk	—	—	—	—	—	— %
12	Covered bonds	—	—	—	—	—	— %
13	Institutions and corporates with a short-term credit assessment	522	—	522	—	190	36.41 %
14	Collective investment undertakings	—	—	—	—	—	— %
15	Equity	—	—	—	—	—	— %
16	Other items	—	—	—	—	—	100.00 %
17	<b>Total</b>	5,793	569	5,793	26	632	10.85 %

The following table shows the breakdown of exposures under the standardised approach by exposure class and risk weight as at 31 December 2022 for BofASE.

**Table A2.T4. – EU CR5 Standardised Approach**

	Exposure classes	Risk weight															Total	Of which unrated
		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250 %	Other s		
	(€ in Millions)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
1	Central governments or central banks	4,802	—	—	—	—	—	160	—	—	—	—	36	—	—	—	4,998	4,703
2	Regional government or local authorities	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	—
3	Public sector entities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	International organisations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Institutions	—	—	—	—	20	—	—	—	—	—	—	—	—	—	—	20	19
7	Corporates	—	—	—	—	—	—	23	—	—	253	—	—	—	—	—	276	253
8	Retail exposures	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Exposures secured by mortgages on immovable property	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Exposures in default	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	Exposures associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Covered bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Exposures to institutions and corporates with a short-term credit assessment	—	—	—	—	241	—	279	—	—	1	—	—	—	—	—	522	—
14	Units or shares in collective investment undertakings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Equity exposures	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	Other items	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	<b>Total</b>	<b>4,802</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>262</b>	<b>—</b>	<b>462</b>	<b>—</b>	<b>—</b>	<b>256</b>	<b>—</b>	<b>36</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>5,819</b>	<b>4,976</b>

The following table shows a breakdown of performing and non-performing exposures by past due days as at 31 December 2022 for BofASE.

**Table A2.T5. – EU CQ3 Credit Quality of Performing and Non-performing Exposures by Past Due Days**

		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount / nominal amount											
		Performing exposures			Non performing exposures								
			Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
(€ in Millions)													
5	Cash balances at central banks and other demand deposits	5,581	5,581	—		—	—	—	—	—	—	—	—
10	Loans and advances	7,146	7,146	—		—	—	—	—	—	—	—	—
20	Central banks	—	—	—		—	—	—	—	—	—	—	—
30	General governments	—	—	—		—	—	—	—	—	—	—	—
40	Credit institutions	3,909	3,909	—		—	—	—	—	—	—	—	—
50	Other financial corporations	3,237	3,237	—		—	—	—	—	—	—	—	—
60	Non-financial corporations	—	—	—		—	—	—	—	—	—	—	—
70	Of which SMEs	—	—	—		—	—	—	—	—	—	—	—
80	Households	—	—	—		—	—	—	—	—	—	—	—
90	Debt securities	259	259	—		—	—	—	—	—	—	—	—
100	Central banks	—	—	—		—	—	—	—	—	—	—	—
110	General governments	259	259	—		—	—	—	—	—	—	—	—
120	Credit institutions	—	—	—		—	—	—	—	—	—	—	—
130	Other financial corporations	—	—	—		—	—	—	—	—	—	—	—
140	Non-financial corporations	—	—	—		—	—	—	—	—	—	—	—
150	Off-balance-sheet exposures	34,744											—
160	Central banks	—											—
170	General governments	—											—
180	Credit institutions	645											—
190	Other financial corporations	34,100											—
200	Non-financial corporations	—											—



		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount / nominal amount											
		Performing exposures			Non performing exposures								
			Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
(€ in Millions)													
210	Households	—											—
220	<b>Total</b>	47,730	12,986	—		—	—	—	—	—	—	—	—

The following table shows the exposure value and risk-weighted exposure amount for CVA by approach as at 31 December 2022 for BofASE.

**Table A2.T6. – EU CCR2 Transactions Subject to Own Funds Requirements for CVA Risk**

		a	b
		Exposure value	RWEA
(€ in Millions)			
1	Total transactions subject to the Advanced method	—	—
2	(i) VaR component (including the 3× multiplier)		—
3	(ii) stressed VaR component (including the 3× multiplier)		—
4	Transactions subject to the Standardised method	13,317	4,202
EU-4	Transactions subject to the Alternative approach (Based on the Original Exposure Method)	—	—
5	<b>Total transactions subject to own funds requirements for CVA risk</b>	13,317	4,202

The following table shows a breakdown of CCR exposures under the standardised approach, by exposure class and risk weight as at 31 December 2022 for BofASE.

**Table A2.T7. – CCR3 Standardised Approach – CCR Exposures by Regulatory Exposure Class and Risk Weights**

	Exposure classes (€ in Millions)	Risk weight											Total exposure value
		a 0%	b 2%	c 4%	d 10%	e 20%	f 50%	g 70%	h 75%	i 100%	j 150%	k Others	
1	Central governments or central banks	6,224	—	—	—	—	—	—	—	443	—	—	6,666
2	Regional government or local authorities	49	—	—	—	1	—	—	—	—	—	—	49
3	Public sector entities	464	—	—	—	—	—	—	—	—	—	—	464
4	Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—
5	International organisations	46	—	—	—	—	—	—	—	—	—	—	46
6	Institutions	—	4,907	—	—	2,242	1,486	—	—	43	—	—	8,679
7	Corporates	—	—	—	—	839	2,959	—	—	10,409	6	—	14,213
8	Retail	—	—	—	—	—	—	—	—	—	—	—	—
9	Institutions and corporates with a short-term credit assessment	—	—	—	—	2,416	4,322	—	—	546	46	—	7,331
10	Other items	—	—	—	—	—	—	—	—	—	—	—	—
11	<b>Total exposure value</b>	<b>6,782</b>	<b>4,907</b>	<b>—</b>	<b>—</b>	<b>5,498</b>	<b>8,768</b>	<b>—</b>	<b>—</b>	<b>11,441</b>	<b>52</b>	<b>—</b>	<b>37,448</b>

The following table shows the breakdown of all types of collateral posted or received to support or reduce CCR exposures related to derivative transactions or to SFTs as at 31 December 2022 for BofASE.

**Table A2.T8. – EU CCR5 Composition of Collateral for CCR Exposures**

		a	b	c	d	e	f	g	h
	Collateral type (€ in Millions)	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
1	Cash – domestic currency	—	11,347	—	9,092	—	93,836	—	95,766
2	Cash – other currencies	—	3,801	—	5,591	—	10,035	—	12,292
3	Domestic sovereign debt	—	1,208	426	583	—	12,182	—	13,508
4	Other sovereign debt	—	3,780	1,002	1,337	—	89,937	—	91,189
5	Government agency debt	—	—	—	—	—	1,859	—	575
6	Corporate bonds	—	98	8	47	—	1,577	—	1,980
7	Equity securities	—	—	—	6	—	4,772	—	4,859
8	Other collateral	—	—	—	—	—	—	—	—
9	<b>Total</b>	—	<b>20,234</b>	<b>1,435</b>	<b>16,657</b>	—	<b>214,200</b>	—	<b>220,168</b>

The following table shows exposures to credit derivative transactions broken down between derivatives bought or sold as at 31 December 2022 for BofASE.

**Table A2.T9. – EU CCR6 Credit Derivatives Exposures**

(€ in Millions)		a	b
		Protection bought	Protection sold
<b>Notionals</b>			
1	Single-name credit default swaps	8,459	9,734
2	Index credit default swaps	49,748	49,146
3	Total return swaps	3,710	3,000
4	Credit options	5,967	5,128
5	Other credit derivatives	2,198	1,239
6	<b>Total notionals</b>	<b>70,082</b>	<b>68,246</b>
<b>Fair values</b>			
7	Positive fair value (asset)	831	876
8	Negative fair value (liability)	(999)	(754)

The following table shows the breakdown of exposures to qualifying CCPs ("QCCPs") and non-qualifying CCPs as at 31 December 2022 for BofASE.

**Table A2.T10. – EU CCR8 Exposures to CCPs**

(€ in Millions)		a	b
		Exposure value	RWEA
1	<b>Exposures to QCCPs (total)</b>		177
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	4,868	97
3	(i) OTC derivatives	1,607	32
4	(ii) Exchange-traded derivatives	1,650	33
5	(iii) SFTs	1,610	32
6	(iv) Netting sets where cross-product netting has been approved	—	—
7	Segregated initial margin	—	
8	Non-segregated initial margin	40	1
9	Prefunded default fund contributions	459	79
10	Unfunded default fund contributions	—	—
11	<b>Exposures to non-QCCPs (total)</b>		—
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	—	—
13	(i) OTC derivatives	—	—
14	(ii) Exchange-traded derivatives	—	—
15	(iii) SFTs	—	—
16	(iv) Netting sets where cross-product netting has been approved	—	—
17	Segregated initial margin	—	
18	Non-segregated initial margin	—	—
19	Prefunded default fund contributions	—	—
20	Unfunded default fund contributions	—	—

BofASE does not follow the Internal Ratings Based (“IRB”) approach and does not have an Internal Model Method (“IMM”) approval. Therefore no IRB or IMM related templates are disclosed.

BofASE is subject to the requirements of Part Eight of CRR on an individual basis. Therefore template EU LI3 (Outline of the differences in the scopes of consolidation) is not disclosed.

The following templates have not been disclosed as BofASE has no relevant exposures to report:

- EU CR2 changes in the stock of non-performing loans and advances
- EU CQ1 credit quality of forbore exposures
- EU CQ7 collateral obtained by taking possession and execution processes

BofASE does not have any exposures classified as non-performing. Therefore in accordance with the EBA’s Implementing Technical Standards (“ITS”) on public disclosure, the following templates are not required to be disclosed:

- EU CR2a changes in the stock of non-performing loans and advances and related net accumulated recoveries
- EU CQ2 quality of forbearance
- EU CQ6 collateral valuation – loans and advances
- EU CQ8 Collateral obtained by taking possession and execution processes – vintage breakdown

BofASE does not have any exposures subject to the EBA Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis and on newly originated exposures subject to public guarantee schemes. Therefore no templates from EBA/GL/2020/07 Guidelines on reporting and disclosures of exposures subject to measures applied in response to the COVID-19 crisis have been disclosed, as BofASE has no relevant exposures to report.

## Appendix 3 – Index

Table A3.T1. – Index

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
431	Disclosure requirements and policies	431(1)	For Information	Requirement to publish Pillar 3 disclosures	1.2. Basis of Preparation	9
		431(2)		Firms with permission to use specific instruments and methodologies under Title III must disclose relevant information	Not Applicable - BofASE uses Standardised Approach for Operational Risk	n/a
		431(3)		Institutions shall adopt a formal policy to comply with the disclosure requirements in Part Eight of CRR	1.3. Disclosure Policy	13
		431(4)		All quantitative disclosures shall be accompanied by a qualitative narrative and any other supplementary information for the users to understand the quantitative disclosures, noting any significant change in any given disclosure compared to the information contained in the previous disclosures	Throughout document accompanying quantitative disclosures	N/A
		431(5)		Explanation of ratings decision upon request	Not Applicable	N/A
432	Non-material, proprietary or confidential information	432(1)		Institutions may omit information that is not material if certain conditions are respected	4.4.7. Securitisation Risk Governance and Reporting (EU SECA) 5.4. Securitisation	60, 75
		432(2)		Institutions may omit information that is proprietary or confidential if certain conditions are respected	Not Applicable - BofASE has not omitted any information which is proprietary or confidential.	N/A
		432(3)		Where 432(2) applies this must be stated in the disclosures, and more general information must be disclosed		
433	Frequency and scope of disclosures	433		Disclosures must be published in the manner and frequency set out in Articles 433a, 433b and 433c  Annual disclosures to be published on the same date as the date on which institutions publish their financial statements or as soon as possible thereafter  Semi-annual and quarterly disclosures to be published on the same date as the date on which the institutions publish their financial reports for the corresponding period where applicable or as soon as possible thereafter  Any delay between the date of publication of the disclosures and the relevant financial statements shall be reasonable	1.2. Basis of Preparation	9

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
433a	Disclosures by large institutions	433a(1)(a)-(c)	For Information	Large institutions shall disclose the information outlined on an annual, semi-annual, and quarterly basis	Not applicable - BofASE is subject to the derogation outlined in 433a(2)	N/A
		433a(2)		Large Institutions other than G-SIIs that are non-listed shall disclose all information per Part 8 annually, and key metrics per Article 447 semi-annually	1.2. Basis of Preparation	9
		433a(3)		Large institutions subject to Article 92a or 92b shall disclose the information required under Article 437a on a semi-annual basis, except for the key metrics referred to in point (h) of Article 447, which are to be disclosed on a quarterly basis	Not applicable - Art 92a and 92b not applicable to BofASE	N/A
433b	Disclosures by small and non-complex institutions	433b (1) - (2)	For Information	Small and non-complex institutions shall disclose information outlined below with the defined frequency	Not applicable - BofASE is not a small non-complex institution	N/A
433c	Disclosures by other institutions	433c (1) - (2)		Institutions that are not subject to Article 433a or 433b shall disclose the information outlined with the defined frequency	Not applicable - BofASE is subject to 433a(2)	N/A
434	Means of disclosures	434(1)		To include all disclosures in one appropriate medium, or provide clear cross-references	1.2. Basis of Preparation 1.3. Disclosure Policy The remuneration disclosure is published separately and is signposted in Section 6. Additional Information on Remuneration Disclosure of this document	9, 13, 94
		434(2)		Institutions shall make available on their website an archive of Pillar 3 disclosures which shall be kept accessible for a period of time that shall be no less than the storage period set by national law for information included in the institutions' financial reports	1.2. Basis of Preparation	9
434a	Uniform disclosure formats	434a		EBA shall develop draft implementing technical standards specifying uniform disclosure formats	Not applicable - information only, no disclosure requirement	N/A
435	Disclosure of risk management objectives and policies	435(1)(a)-(d)	EU OVA; EU OVB; EU LIQA; EU CRA; EU MRA; EU ORA	Objectives and policies for each separate category of risk	4.2. Risk Management Approach 4.3. Key Risk Types	43, 59
		435(1)(e)		Risk declaration	Section 4.2.6. Risk Declaration (EU OVA)	43
		435(1)(f)		Risk statement	Section 4.2.2. Risk Statement and Risk Appetite (EU OVA)	38
		435(2)(a)	EU OVA; EU OVB	Number of directorships held by directors	Appendix 1 - Directors Board Membership and Experience (EU OVB)	97
		435(2)(b)		Directors' knowledge, skills and experience		
		435(2)(b)-(c)		BofASE Board recruitment and diversity policy	4.2.5. Risk Governance (EU OVA, EU OVB)	41
		435(2)(d)-(e)		BofASE Risk Committees and risk information		

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
436	Disclosure of the scope of application	436(a)	N/A	Name of institution	Section 1.1. Overview and Purpose of Document	8
		436(b)	EU LI1; EU LI3; EU LIA	A reconciliation between the consolidated financial statements prepared in accordance with the applicable accounting framework and the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation; that reconciliation shall outline the differences between the accounting and regulatory scopes of consolidation and the legal entities; the outline of the legal entities included within the regulatory scope of consolidation shall describe the method of regulatory consolidation where it is different from the accounting consolidation method, whether those entities are fully or proportionally consolidated and whether the holdings in those legal entities are deducted from own funds	not applicable as requirements of part eight are applied on an individual basis and BofASE has no subs	N/A
		436(c)	EU LI1; EU LI3	Breakdown of assets and liabilities of the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation, broken down by type of risks	1.2.1. Mapping of Financial Statement Categories with Regulatory Risk Categories	10
		436(d)	EU LI2; EU LIA	Reconciliation identifying the main sources of differences between the carrying value amounts in the financial statements, and the exposure amount used for regulatory purposes; that reconciliation shall be supplemented by qualitative information on those main sources of differences	1.2.2. Differences between the Financial Statements' Carrying Value Amounts and the Exposure Amounts used for Regulatory Purposes (EU LIA)	11
		436(e)	EU PV1	A breakdown of the amounts of the constituent elements of an institution's prudent valuation adjustment, by type of risks, and the total of constituent elements separately for the trading book and non-trading book positions	1.2.2.1. Prudential Valuation Adjustment	13
		436(f)	EU LIB	Impediments to transfer of own funds between parent and subsidiaries	2.1.3. Transferability of Capital within the BAC Group (EU LIB)	17
		436(g)		Capital shortfalls in any subsidiaries outside the scope of consolidation	Not applicable as requirements of part eight are applied on an individual basis and BofASE has no subs	N/A
		436(h)		Use of articles on derogations from a) prudential requirements or b) liquidity requirements for individual subsidiaries	Not Applicable as derogations are not used	N/A
437	Disclosure of own funds	437(1)(a)	EU CC1; EU CC2	Reconciliation of regulatory capital amounts to balance sheet	5.6. Capital Resources	80
		437(1)(b)	EU CCA	Description of the main features of Capital Instruments issued		
		437(1)(c)		Full terms and conditions of Capital Instruments issued		
		437(1)(d)-(e)	EU CC1; EU CC2	Disclosure of prudential filters, deductions, and any restrictions applied to the calculation of own funds	Not Applicable - BofASE does not disclose capital ratios calculated using elements of own funds on a different basis	N/A
		437(1)(f)		Where institutions disclose capital ratios calculated using elements of own funds determined on a different basis		



Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
437a	Disclosure of own funds and eligible liabilities	437a (a)	EU TLAC1 (for resolution entities); EU ILAC (for non-resolution entities); EU CCA (both)	Institutions that are subject to Article 92a or 92b shall disclose (a) the composition of their own funds and eligible liabilities, their maturity and their main features	Arts 92a and 92b are not applicable to BofASE	N/A
		437a (b)	EU TLAC3 (for resolution entities); EU TLAC2 (for non-resolution entities)	Institutions that are subject to Article 92a or 92b shall disclose (b) the ranking of eligible liabilities in the creditor hierarchy		
		437a (c)	EU TLAC1 (for resolution entities); EU ILAC (for non-resolution entities)	Institutions that are subject to Article 92a or 92b shall disclose (c ) the total amount of each issuance of eligible liabilities instruments referred to in Article 72b and the amount of those issuances that is included in eligible liabilities items within the limits specified in Article 72b(3) and (4)		
		437a (d)	EU TLAC1 (for resolution entities); EU ILAC (for non-resolution entities)	Institutions that are subject to Article 92a or 92b shall disclose (d) the total amount of excluded liabilities referred to in Article 72a(2).		
438	Disclosure of own funds requirements and risk-weighted exposure amount	438(a)	EU OVC	Approach to assessing adequacy of capital levels	2.4. Capital Management (EU OVC)	21
		438(b)	EU OVC; EU KM1	Own funds based on supervisory review, and composition in terms of CET1, additional Tier 1 and Tier 2 instruments		
		438(c)	EU OVC	upon demand, the result of the institution's internal capital adequacy assessment process	Not applicable - No demand has been made by the competent authority for BofASE to include ICAAP results in the Pillar 3 disclosure	N/A
		438(d)	EU OV1; EU OR1	The total risk-weighted exposure amount and the corresponding total own funds requirement, to be broken down by the different risk categories and, where applicable, an explanation of the effect on the calculation of own funds and risk-weighted exposure amounts that results from applying capital floors and not deducting items from own funds	2.2.2. Key Movements in 2022	19
		438(e)	EU CR10	on- and off-balance-sheet exposures, the risk-weighted exposure amounts and associated expected losses for each category of specialised lending and equity exposures	Not Applicable - BofASE does not have exposures to specialised lending and equity exposures under the simple risk weight approach	N/A
		438(f)	EU INS1; EU INS2	Capital amounts of own funds instruments held in any insurance undertaking, reinsurance undertaking or insurance holding company	Not applicable - BofASE does not hold any instruments in insurance or reinsurance undertakings	
		438(g)		Supplementary own funds requirement and the capital adequacy ratio of the financial conglomerate	Not applicable - BofASE is not a financial conglomerate	N/A
		438(h)	EU CR8; EU CCR7; EU MR2-B	Variations in the risk-weighted exposure amounts of the current disclosure period compared to the immediately preceding disclosure period that result from the use of internal models	5.2. Market Risk	65

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
439	Disclosure of exposures to counterparty credit risk	439(a)	EU CCRA	Discussion of process to assign internal capital and credit limits to CCR exposures	Section 4.3.2. Credit Risk (EU CCRA, EU CRA, EU CRC)	45
		439(b)		Discussion of policies related to guarantees and other credit risk mitigants, such as the policies for process to secure collateral and establishing reserves		
		439(c)		Discussion of management of wrong-way exposures	Section 4.4.1. Wrong-Way Risk (EU CCRA)	59
		439(d)		Discussion of collateral to be provided in the event of a ratings downgrade	4.4.6. Impact of a Credit Rating Downgrade on OTC Collateral (EU CCRA)	62
		439(e)	EU CCR5	Amount of segregated and unsegregated collateral received and posted per type of collateral, further broken down between collateral used for derivatives and securities financing transactions	Table A2.T8. – EU CCR5 Composition of Collateral for CCR Exposures	107
		439(f)	EU CCR1	For derivative transactions, exposure values before and after the effect of the credit risk mitigation and associated risk exposure amounts broken down by applicable method	5.3.3. Counterparty Credit Risk Exposure	74
		439(g)		For securities financing transactions, exposure values before and after the effect of the credit risk mitigation and associated risk exposure amounts broken down by applicable method		
		439(h)	EU CCR2; EU CCR7	The exposure values after credit risk mitigation effects and the associated risk exposures for credit valuation adjustment	Table A2.T6. – EU CCR2 Transactions Subject to Own Funds Requirements for CVA Risk	105
		439(i)	EU CCR8	Exposure value to central counterparties and the associated risk exposures, separately for qualifying and non-qualifying central counterparties, and broken down by types of exposures	Table A2.T10. – EU CCR8 Exposures to CCPs	108
		439(j)	EU CCR6	Notional amounts and fair value of credit derivative transactions, broken down by product type; within each product type, broken down further by credit protection bought and credit protection sold	Table A2.T9. – EU CCR6 Credit Derivatives Exposures	107
		439(k)	EU CCR1	Estimate of alpha, if applicable	5.3.3. Counterparty Credit Risk Exposure	74
		439(l)	EU CCR3; EU CCR4	Separately, the exposure values and the exposure values after credit risk mitigation associated with each credit quality step, by exposure class, as well as the exposure values deducted from own funds and point (g) of Article 452 (IRB approach to credit risk)	Table A2.T7. – CCR3 Standardised Approach – CCR Exposures by Regulatory Exposure Class and Risk Weights	106
		439(m)	EU CCR1	For institutions using the Simplified standardised approach for counterparty credit risk or the original exposure method, the size of their on- and off-balance-sheet derivative business as calculated in accordance with Article 273a(1) or (2), as applicable	5.3.3. Counterparty Credit Risk Exposure	74
440	Disclosure of countercyclical capital buffers	440 (a)	EU CCyB1	The geographical distribution of the exposure amounts and risk-weighted exposure amounts of its credit exposures used as a basis for the calculation of their countercyclical capital buffer	5.5. Capital Buffer Requirements	76
		440 (b)	EU CCyB2	Amount of their institution-specific countercyclical capital buffer		
441	Disclosure of indicators of global systemic importance	441	N/A	Disclosure of the indicators of global systemic importance	Not Applicable - BofASE has not been identified as being of global systemic importance	N/A

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
442	Disclosure of exposures to credit risk and dilution risk	442(a)	EU CRB	Definitions of past due and impaired	Section 5.3.4. Credit Quality of Assets (EU CRB)	75
		442(b)		Approaches for calculating specific and general credit risk adjustments		
		442(c)	EU CR1; EU CR2a; EU CQ1; EU CQ2; EU CQ4; EU CQ5; EU CQ6; EU CQ7; EU CQ8	Information on the amount and quality of performing, non-performing and forborne exposures for loans, debt securities and off-balance-sheet exposures	Table A2.T1. – EU CR1 Performing and Non-performing Exposures and Related Provisions	99
					Table A2.T5. – EU CQ3 Credit quality of performing and non-performing exposures by past due days	104
					5.3.2. Credit Risk Exposure Geographic Distribution and Maturity Profile Detail	72
					5.3.1. Credit Risk by Type	72
		442(d)	EU CQ3	Ageing analysis of accounting past due exposures	Table A2.T5. – EU CQ3 Credit quality of performing and non-performing exposures by past due days	104
		442(e)	EU CR1; EU CQ1; EU CQ7; EU CQ4; EU CQ5	Gross carrying amounts of defaulted and non-defaulted exposures, accumulated specific and general credit risk adjustments, accumulated write-offs taken against those exposures and net carrying amounts and their distribution by geographical area and industry type and for loans, debt securities and off-balance-sheet exposures	5.3.2. Credit Risk Exposure Geographic Distribution and Maturity Profile Detail	72
					5.3.1. Credit Risk by Type	72
443	Unencumbered assets	443	EU CR1; EU CR2; EU CR2a; EU CQ1; EU CQ2; EU CQ4; EU CQ5; EU CQ6; EU CQ7; EU CQ8	Changes in the gross amount of defaulted on- and off-balance-sheet exposures, including opening and closing balances and gross amount of any exposures reverted to non-defaulted status or subject to a write-off	Table A2.T1. – EU CR1 Performing and non-performing exposures and related provisions	99
					5.3.2. Credit Risk Exposure Geographic Distribution and Maturity Profile Detail	73
443	Unencumbered assets	443	EU AE1; EU AE2; EU AE3; EU AE4	Encumbered and unencumbered assets	3.2. Encumbered and Unencumbered Assets (EU AE4)	24
444	Disclosure of the use of the Standardised Approach	444(a)	EU CRD	Names of the ECAIs used in the calculation of Standardised approach risk-weighted assets and reasons for any changes	2.2.1.1. Use of the Standardised Approach (EU CRD)	19
		444(b)		Exposure classes associated with each ECAI		
		444(c)		Description of the process used to transfer credit assessments to non-trading book items		
		444(d)		Mapping of external rating to CQS		
		444(e)	EU CR4; EU CR5; EU CC1	Exposure value pre and post-credit risk mitigation, by CQS	5.3.3. Counterparty Credit Risk Exposure Table A2.T3. – EU CR4 Standardised Approach - Credit Risk Exposure and CRM Effects Table A2.T4. – EU CR5 Standardised Approach	74, 102, 103

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
445	Disclosure of exposure to market risk	445	EU MR1	Information on <b>interest rate risk (general and specific), equity risk (general and specific), FX risk, commodity risk, options (Simplified, Delta Plus and Scenario approaches) and Securitisation (specific risk)</b>	5.2. Market Risk	65
446	Disclosure of operational risk management	446(a)	EU ORA; EU OR1	Institutions shall disclose the following information about their operational risk management: (a) the approaches for the assessment of own funds requirements for operation risk that the institution qualifies for;	5.8. Operational Risk 4.3.5. Operational Risk and Compliance Risk (EU ORA)	93 55
		446(b)		(b) where the institution makes use of it, a description of the methodology set out in Article 312(2), which shall include a discussion of the relevant internal and external factors being considered in the institution's advanced measurement approach;	BofASE does not use the advanced measurement approach for Operational Risk	N/A
		446(c)		(c) in the case of partial use, the scope and coverage of the different methodologies used.	BofASE does not use, or make partial use of, the advanced measurement approach for Operational Risk	N/A
447	Disclosure of key metrics	447(a)	EU KM1	Composition of own funds requirements	Table 2.1.2.T1. – EU KM1 Key Metrics Template	16
		447(b)		Total risk exposure amount		
		447(c)		Additional own funds requirements based on SREP		
		447(d)		Combined capital buffer requirement		
		447(e)		Leverage ratio and the total exposure measure		
		447(f)		Information in relation to the liquidity coverage ratio		
		447(g)		Information in relation to the net stable funding requirement		
		447(h)	EU KM2 (for Resolution Entities) ; EU ILAC (for non-Resolution Entities)	Own funds and eligible liabilities ratios and their components, numerator and denominator, as calculated in accordance with Articles 92a and 92b, where applicable	Not applicable - BofASE is not subject to the provisions of arts 92a and 92b	n/a

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
448	Disclosure of exposures to interest rate risk on positions not held in the trading book	448(1)(a)	EU IRRBB1	Changes in the economic value of equity calculated under six supervisory shock scenarios for the current and previous disclosure periods	4.3.3.1. Exposures to Interest Rate Risk on positions not held in the trading book (EU IRRBBA)	52
		448(1)(b)		Changes in the net interest income calculated under two supervisory shock scenarios for the current and previous disclosure periods		
		448(1)(c)	EU IRRBBA	Description of key modelling and parametric assumptions used to calculate changes in the economic value of equity and in the net interest income required under points (a) and (b)		
		448(1)(d)		Explanation of the significance of the risk measures disclosed under points (a) and (b) of this paragraph and of any significant variations of those risk measures since the previous disclosure reference date		
		448(1)(e)		Description of how the interest rate risk of nontrading book activities is defined, measured, mitigated, and controlled, including: (i) description of the specific risk measures used to evaluate changes in economic value of equity and in net interest income; (ii) description of the key modelling and parametric assumptions used in internal measurement systems; (iii) description of the interest rate shock scenarios used to estimate the Interest Rate Risk; (iv) recognition of the effect of hedges against Interest Rate Risks; and (v) an outline of how often the evaluation of the Interest Rate Risk occurs		
		448(1)(f)		Description of the overall risk management and mitigation strategies for Interest Rate Risk		
		448(1)(g)		Average and longest repricing maturity assigned to non-maturity deposits		
		448(2)	For Information	By way of derogation from paragraph 1 of this Article, the requirements set out in points (c) and (e)(i) to (e)(iv) shall not apply to institutions that use the standardised methodology or the simplified standardised methodology		

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
449	Disclosure of exposures to securitisation positions	449(a)	EU SECA	Description of securitisation and re-securitisation activities	Section 4.4.7. Securitisation Risk Governance and Reporting (EU SECA)	62 75
		449(b)		Type of risks that there is exposure to in securitisation and re-securitisation activities		
		449(c)		Approaches for calculating the risk-weighted exposure amounts that they applied to securitisation activities		
		449(d)		A list of Securitisation Special Purpose Entities ("SSPEs") falling into any of the following categories, with a description of their types of exposures to those SSPEs, including derivative contracts: (i) SSPEs which acquire originated exposures (ii) Sponsored SSPEs (iii) SSPEs and other legal entities for which securitisation-related services, such as advisory, asset servicing or management services, are provided (iv) SSPEs included in regulatory scope of consolidation		
		449(e)		Any legal entities to which support has been disclosed as having been provided		
		449(f)		List of affiliated legal entities that invest in originated securitisations or in securitisation positions issued by sponsored SSPEs	Section 5.4. Securitisation	
		449(g)		Summary of their accounting policies for securitisation activity, including where relevant a distinction between securitisation and re-securitisation positions	As at 31 December 2022, BofASE had an immaterial amount of exposure as investor in securitisations. BofASE has not acted as an originator or sponsor to any securitisations.	
		449(h)		Names of the ECAs used for securitisations and the types of exposure for which each agency is used		
		449(i)		Where applicable, a description of the Internal Assessment Approach including the structure of the internal assessment process and the relation between internal assessment and external ratings		
		449(j)	EU SEC1; EU SEC2	Separately for the trading book and the non-trading book, the carrying amount of securitisation exposures, including information on transfer of significant credit risk	Based on materiality no further disclosures for exposure to securitisation positions are made in this document.	
		449(k)(i)	EU SEC3; EU SEC4	For non-trading book activities, the aggregate amount of securitisation positions as originator or sponsor and the associated risk-weighted assets and capital requirements by regulatory approaches		
		449(k)(ii)		For non-trading book activities, the aggregate amount of securitisation positions as investor and the associated risk-weighted assets and capital requirements by regulatory approaches		
		449(l)	EU SEC 5	For exposures securitised by the institution, the amount of exposures in default and the amount of the specific credit risk adjustments made during the current period, both broken down by exposure type		
449a	Disclosure of environmental, social and governance risks (ESG risks)	449a	List of templates and tables per EBA/ITS/2022/01	Large institutions which have issued securities in a regulated market of a Member State shall disclose information on ESG risks, including physical risks and transition risks	N/A - Art 449a does not apply to BofASE as the entity does not issue securities in a regulated market of a Member State	N/A

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
450	Disclosure of remuneration policy	450(1)	For Information	Institutions shall disclose the following information regarding their remuneration policy and practices for those categories of staff whose professional activities have a material impact on the risk profile of the institutions:	Section 6.1. Remuneration Disclosure	95
		450(1)(a)	EU REMA	information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, where applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;		
		450(1)(b)		information about the link between pay of the staff and their performance;		
		450(1)(c)		the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria;		
		450(1)(d)		the ratios between fixed and variable remuneration set in accordance with point (g) of Article 94(1) of Directive 2013/36/EU;		
		450(1)(e)		information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based;		
		450(1)(f)		the main parameters and rationale for any variable component scheme and any other non-cash benefits;		
		450(1)(g)	EU REM4; EU REM5	aggregate quantitative information on remuneration, broken down by business area;		
		450(1)(h)	EU REM1; EU REM2; EU REM3	aggregate quantitative information on remuneration, broken down by senior management and members of staff whose professional activities have a material impact on the risk profile of the institutions,		
		450(1)(i)	EU REM4; EU REM5	the number of individuals that have been remunerated EUR 1 million or more per financial year, with the remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and with the remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million;		
		450(1)(j)	EU REMA	upon demand from the relevant Member State or competent authority, the total remuneration for each member of the management body or senior management;		
		450(1)(k)		information on whether the institution benefits from a derogation laid down in Article 94(3) of Directive 2013/36/EU.		
		450(2)	For Information	For large institutions, the quantitative information on the remuneration of institutions' collective management body referred to in this Article shall also be made available to the public, differentiating between executive and non-executive members Institutions shall comply with the requirements set out in this Article in a manner that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities and without prejudice to Regulation (EU) 2016/679 of the European Parliament and of the Council		

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
451	Disclosure of the leverage ratio	451(1)(a)	EU LR1; EU LR2; EU LR3	The leverage ratio, and whether any transitional provisions are applied	5.7.2. Additional Detail on Leverage Ratio	89
		451(1)(b)		Breakdown of leverage ratio exposure measure and reconciliation to financial statements		
		451(1)(c)		Where applicable, the amount of derecognised fiduciary items	Not Applicable - As at 31 December 2022, BofASE does not have any derecognised fiduciary items	N/A
		451(1)(d)	EU LRA	Description of the processes used to manage the risk of excessive leverage	5.7.3. Management of Risk of Excessive Leverage (EU LRA)	92
		451(1)(e)		Factors that impacted the leverage ratio during the year	2.5.2. Key Movements in 2022 (EU LRA)	22
		451(2)	EU LR1; EU LR2; EU LR3	Public development credit institutions shall disclose the leverage ratio without the adjustment to the total exposure measure	Not applicable - BofA Europe is not a public development credit institution	N/A
		451(3)		In addition to points (a) and (b), large institutions shall disclose the leverage ratio and the breakdown of the total exposure measure based on averages	5.7.2. Additional Detail on Leverage Ratio	89
451a	Disclosure of liquidity requirements	451a(1)	For Information	Institutions subject to Part Six shall disclose information on liquidity coverage ratio, net stable funding ratio and liquidity risk management in accordance with this Article	Information only	N/A
		451a(2)	EU LIQ1; EU LIQB	Information in relation to the liquidity coverage ratio, including for the preceding 12 months for each quarter the average LCR based on end-of-the-month observations, average total liquid assets and averages of liquidity outflows, inflows and net liquidity outflows	3.3. LCR Disclosures (EU LIQB)	27
		451a(3)	EU LIQ2	Information in relation to the net stable funding ratio, including quarter-end figures of net stable funding ratio for each quarter of the relevant disclosure period and overviews of the amounts of both available and required stable funding	3.4. NSFR Disclosures	30
		451a(4)	EU LIQA	Arrangements, systems, processes and strategies put in place to identify, measure, manage and monitor their liquidity risk	4.3.4. Liquidity Risk (EU LIQA)	54



Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
452	Disclosure of the use of the IRB Approach to credit risk	452(a)	EU CRE; EU CR6-A	Permission for use of the IRB approach from the competent authority	N/A BofASE uses the standardised approach for calculating Credit Risk exposures	N/A
		452(b)		For each exposure class, percentage of the total exposure value of each exposure class subject to the Standardised Approach as well as the part of each exposure class subject to a roll-out plan		
		452(c)(i)-(iv)		Control mechanisms for rating systems at the different stages of model development, controls and changes, including information on (i) relationship between the risk management function and the Corporate Audit function; (ii) Rating system review; (iii) procedure to ensure the independence of the function in charge of reviewing the models from the functions responsible for the development of the models; and (iv) procedure to ensure the accountability of the functions in charge of developing and reviewing the models		
		452(d)		Role of the functions involved in the development, approval and subsequent changes of the credit risk models		
		452(e)		Scope and main content of the reporting related to credit risk models		
		452(f)(i)-(iii)		Description of the internal ratings process by exposure class, including the number of key models used with respect to each portfolio and a brief discussion of the main differences between the models within the same portfolio, covering (i) definitions, methods and data for estimation and validation of PD; (ii) the definitions, methods and data for estimation and validation of LGD; and (iii) definitions, methods and data for estimation and validation of conversion factors		
		452(g)(i)-(v)	EU CR6	In relation to each exposure class: (i) gross on-balance-sheet exposure; (ii) off-balance-sheet exposures prior to the conversion factors; (iii) exposures after applying the relevant conversion factor and credit risk mitigation; (iv) any model, parameter or input relevant for the understanding of the risk weighting and the resulting risk exposure amounts; and (v) values referred to in points (i) to (iv) where permission received to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts		
		452(h)	EU CR9; EU CR9.1	Estimates of PDs against the actual default rate for each exposure class over a longer period		

Article	Article Name	Article Reference Detail	Template or Table per Regulation (EU) 2021/637	Description	Document Reference	Page Reference
453	Disclosure of the use of credit risk mitigation techniques	453(a)	EU CRC	Use of on and off-balance-sheet netting	4.3.2. Credit Risk (EU CCRA, EU CRA, EU CRC)	45
		453(b)		Eligible collateral evaluation and management		
		453(c)		Types of collateral used		
		453(d)		Main types of guarantor and credit derivative counterparty, and creditworthiness		
		453(e)		Market or credit risk concentrations within credit mitigation taken		
		453(f)	EU CR3	Total exposure value not covered by any eligible credit protection and the total exposure value covered by eligible credit protection after applying volatility adjustments	Table A2.T2. – EU CR3 CRM Techniques Overview: Disclosure of the Use of Credit Risk Mitigation Techniques	101
		453(g)	EU CR4; EU CR7-A; EU CR7	Corresponding conversion factor and credit risk mitigation associated with the exposure and the incidence of credit risk mitigation techniques with and without substitution effect	Table A2.T3. – EU CR4 Standardised Approach - Credit Risk Exposure and CRM Effects	102
		453(h)	EU CR4	On- and off-balance-sheet exposure value by exposure class before and after the application of conversion factors and any credit risk mitigation		
		453(i)		For each exposure class, risk-weighted exposure amount and ratio between risk-weighted exposure amount and exposure value after applying conversion factor and credit risk mitigation		
		453(j)	EU CR7-A; EU CR7	Risk-weighted exposure amount before and after recognition of the credit risk mitigation impact of credit derivatives under the IRB approach	Not applicable - BofASE does not use the IRB approach	N/A
454	Disclosure of the use of the Advanced Measurement Approaches to operational risk	454	EU ORA; EU OR1	For institutions using the Advanced Measurement Approaches to operational risk, a description of the use of insurance or other risk transfer mechanisms to mitigate operational risk	Not applicable - BofASE uses the standardised approach for calculating Operational Risk	N/A
455	Use of Internal Market Risk Models	455(a)(i)	EU MRB	Characteristics of the market risk models	4.3.3. Market Risk (EU MRA, EU MRB) 5.2. Market Risk 5.2.1. Internal Model Based Capital Requirement (EU MRB)	48, 65, 67
		455(a)(ii)		Methodologies used to measure IRC and CRM		
		455(a)(iii)		Stress testing applied to the portfolios		
		455(a)(iv)		Approaches used for back-testing and model validation		
		455(b)		Scope of the internal model permission		
		455(c)		Policies and procedures for determining trading book classification and compliance with prudential valuation requirements	5.2.1. Internal Model Based Capital Requirement (EU MRB)	67
		455(d)	EU MR3	Highest, lowest and mean values over the year of VaR, SVaR, IRC and CRM		
		455(e)	EU MR2-A	Market risk internal model based own funds requirements		
		455(f)	EU MRB	Weighted average liquidity horizon for portfolios covered by internal models for IRC and CRM	4.3.3 Market Risk 5.2.1. Internal Model Based Capital Requirement (EU MRB)	48 67
		455(g)	EU MR4	Comparison of end-of-day VaR measures compared with one day changes in the portfolio's value	Table A2.T3. – EU CR4 Standardised Approach - Credit Risk Exposure and CRM Effects	102