

# BofA Securities Europe SA

## Pillar 3 Disclosure

As at 31 December 2020

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**Glossary**

ABS	Asset-Backed Security
ACPR	Autorité de Contrôle Prudentiel et de Résolution
AIRB	Advanced IRB
ALM	Asset and Liability Management
AMF	Autorité des Marchés Financiers
AT1	Additional Tier 1
BAC / BAC Group	Bank of America Corporation
BofASE SA	BofA Securities Europe SA
BofASE SA Board	BofASE SA Board of Directors
BofASE SA BRC	BofASE SA Board Risk Committee
BofASE SA MRC	BofASE SA Management Risk Committee
Capital Resources	BofASE SA's Capital Resources
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CCYB	Countercyclical Capital Buffer
CDO	Collateralised Debt Obligation
CDS	Credit Default Swap
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CMR	Contingent Market Risk
COVID-19	Coronavirus
CQS	Credit Quality Step
CRD	Capital Requirements Directive
CRD IV	Capital Requirements Directive IV
CRM	Comprehensive Risk Measure
CRO	Chief Risk Officer
CRR	Capital Requirements Regulations
CSA	Credit Support Annexes
CVA	Credit Valuation Adjustment
DFC	Default Fund Contributions
EaR	Earnings at Risk
EBA	European Banking Authority
ECAs	External Credit Assessment Institutions
ECAs	Export Credit Agencies
EEA	European Economic Area
EMEA	Europe, Middle East & Africa
ERC	Enterprise Risk Committee
ESG	Environmental, Social, and Governance
EU	European Union
EVE	Economic Value of Equity
FICC	Fixed-Income Currencies & Commodities
FIRB	Foundation IRB
Fitch	Fitch Ratings, Inc
FLU	Front Line Unit
FX	Foreign Exchange
G-SII	Global Systemically Important Institution
GDP	Gross Domestic Product

GMRA	Global Master Repurchase Agreement
GRM	Global Risk Management
HQLA	High Quality Liquid Assets
IAA	Internal Assessment Approach
ICAAP	Internal Capital 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 SA Independent Non-Executive Director
IRC	Incremental Risk Charge
ISDA	International Swap Dealers Association Master Agreement
LOB	Line of Business
LRP	BofA Securities Europe S.A. Liquidity Risk Policy
Minimum Capital Requirement	Pillar 1 Capital Requirement
Moody's	Moody's Investors Service, Inc.
MRM	Model Risk Management
NOMCO	BofASE SA Nominations Committee
Nomination Committee	BofASE SA Nomination Committee
OTC	Over-the-Counter
P&L	Profit and Loss
RAS	Risk Appetite Statement
REMCO	BofASE SA Remuneration Committee
Remuneration Committee	BofASE SA Remuneration Committee
Risk Framework	BAC's Risk Framework
RNIV	Risks Not in VaR
RTS	Regulatory Technical Standard
RWAs	Risk Weighted Assets
S&P	Standard & Poor's Financial Services LLC
SFA	Supervisory Formula Approach
SFT	Securities Financing Transaction
SREP	Supervisory Review and Evaluation Process
SSPE	Securitisation Special Purpose Entity
TCFD	Task Force for Climate-related Financial Disclosures
Trading VaR	Value at Risk used for management reporting purposes
TSCR	Total SREP Capital Requirement
U.S.	United States of America
UMR	Uncleared Margin Rules
VaR	Value at Risk
VM	Variation Margin

# BofA Securities Europe SA Pillar 3 Disclosure

1. Introduction  
As at 31 December 2020

### 1.1. Overview and Purpose of Document

This document contains the Pillar 3 disclosures as at 31 December 2020 in respect to its capital adequacy and risk management framework for BofA Securities Europe SA ("BofASE SA").

This document provides details on BofASE SA's capital resources ("Capital Resources"), regulatory defined Pillar 1 Capital Requirement ("Minimum Capital Requirement"), and Total SREP Capital Requirement ("TSCR") as prescribed by the Autorité de Contrôle Prudentiel et de Résolution ("ACPR"). It demonstrates that the BofASE SA has Capital Resources in excess of this requirement and maintains robust risk management and controls primarily in respect of the activities of BofASE SA.

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

#### 1.1.1. BofASE SA

BofASE SA is owned by NB Holdings Corporation (which holds 99.9% of BofASE SA) and Merrill Lynch Group Holdings I, L.L.C. (which holds 0.1% of BofASE SA), and its ultimate parent is Bank of America Corporation ("BAC" or "BAC Group"). BofASE SA'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").

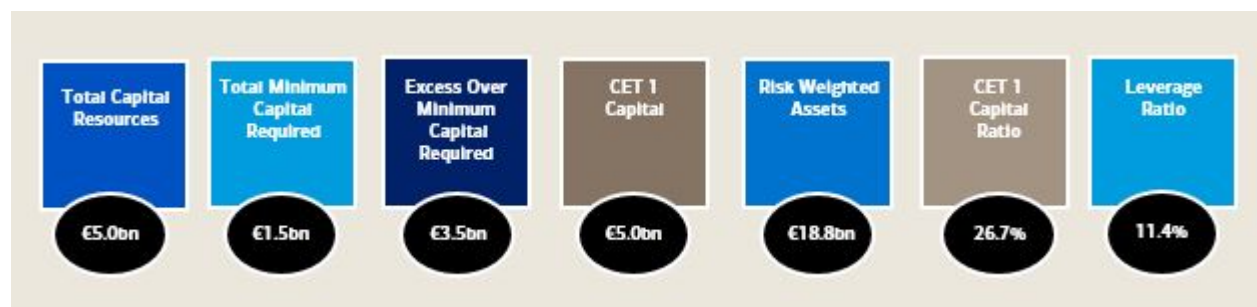
BofASE SA's head office is in France. BofASE SA is authorised as an investment firm by the "ACPR" and is regulated by the ACPR and the Autorité des Marchés Financiers ("AMF"). BofASE SA has the ability to trade throughout the European Economic Area.

As at 31 December 2020, BofASE SA was rated by Fitch Ratings, Inc ("Fitch") (AA- / F1+) and Standard & Poor's ("S&P") (A+ / A-1).

#### 1.1.2. BofASE SA's Capital Position at 31 December 2020

BofASE SA's Capital Resources consist entirely of Common Equity Tier 1 ("CET1") capital. As at 31 December 2020, BofASE SA's CET1 ratio was 26.7% which significantly exceeds the Pillar 1 CET1 requirement of 4.5%, and the reported Leverage ratio of 11.4% is in excess of the incoming minimum regulatory requirement of 3%.

**Figure 1.1.2.F1. – Summary of BofASE SA's Key Metrics as at 31 December 2020**



Note: All of BofASE SA's Tier 1 capital is CET1; therefore, CET1 Capital Ratio and Tier 1 Capital ratio are the same. Capital resources and ratios reflect the inclusion of 2020 audited retained earnings.

### 1.2. Basis of Preparation

The Basel Capital Accords provides 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 European Union ("EU") via the Capital

Requirements Directive ("CRD") and the Capital Requirements Regulation ("CRR") (collectively known as the Capital Requirements Directive IV ("CRD IV")). These new requirements took effect from 1 January 2014.

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, with additional guidance provided by the ACPR notice "Modalités de calcul et de publication des ratios prudentiels dans le cadre de la CRDIV", on an individual basis. These disclosures are updated annually in line with the accounting year end as at 31 December, unless otherwise stated. All tables are as at 31 December 2020, with prior year comparatives as at 31 December 2019. Moreover, these disclosures are also updated on half-yearly basis, with prior period comparatives.

BofASE SA financial statements are prepared in accordance with French Companies Law and Generally Accepted Accounting Practices.

Therefore, the information contained in these Pillar 3 disclosures may not be directly comparable with the Annual Report and Financial Statements, and the disclosure is 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 not controllable. 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 should consider the uncertainties and risks discussed in other publicly available disclosures of BAC.

Although 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 the 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 current article that was applicable until 31 December 2017.

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



Article 500c of CRR 'quick fix' relates to the exclusion of overshootings from the calculation of the back-testing addend in view of the COVID-19 pandemic.

This article provides a derogation from Article 366(3) of CRR that competent authorities may permit institutions to exclude overshootings that occurred in the firms' back-testing as long as such overshootings do not result from deficiencies in their internal models. Three Value at Risk ("VaR") back-testing overages during the COVID-19 period were removed following an application to the ACPR as part of the temporary treatment provided by Article 500c of CRR 'quick fix,' as these overshootings did not result from deficiencies in the internal model but were attributable to the extreme volatility observed amidst the COVID-19 period.

### 1.3. Disclosure Policy

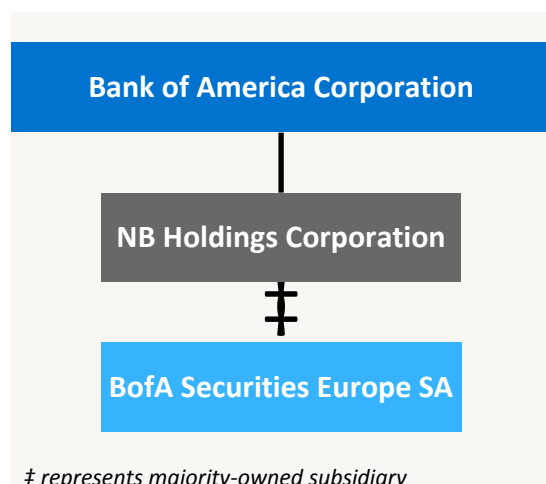
In accordance with CRR Article 431(3), BofASE SA has adopted a formal policy to comply with the disclosure requirements included in Part Eight. BofA Securities Europe SA Pillar 3 Disclosure Policy sets out the framework for assessing the appropriateness of disclosures, including the risk profile and the disclosures' verification and frequency.

### 1.4. Operation, Structure, and Organisation

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

The principal activities of BofASE SA 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 SA 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 2020

**2.1. Capital Resources****2.1.1. Summary of 2020 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 CET 1 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 13th May 2020, BofASE SA was granted a long term subordinated debt facility by an affiliate, NB Holdings Corporation. The facility has a credit limit of €920 million and maturity date of 14th May 2030. This facility is fully undrawn.

The capital resources of BofASE SA are set out in Table 2.1.2.T1. – Capital Resources.

BofASE SA's Capital Resources of €5B (2019: €4.8B) consist entirely of Tier 1 capital. All of BofASE SA's Tier 1 capital is made up of CET1.

**2.1.2. Key Movements in 2020**

BofASE SA's Capital Resources increased by €0.2B during 2020. The increase was mainly driven by a reduction in amounts required to be deducted from CET1 in respect of holdings of non-significant investments in financial sector entities in the year, as the amount of holdings net of eligible short positions decreased over the period.

**Table 2.1.2.T1. – Capital Resources**

(€ in Millions)	2020	2019
Common Equity Tier 1 (CET1) capital before regulatory adjustments	5,085	5,149
Total Regulatory Adjustments to Common Equity Tier 1 (CET1)	(48)	(308)
<b>Common Equity Tier 1 (CET1) Capital</b>	<b>5,037</b>	<b>4,841</b>
Additional Tier 1 (AT1) capital	—	—
<b>Tier 1 Capital (T1 = CET1 + AT1)</b>	<b>5,037</b>	<b>4,841</b>
<b>Tier 2 (T2) Capital</b>	<b>—</b>	<b>—</b>
<b>Total Capital (TC = T1 + T2)</b>	<b>5,037</b>	<b>4,841</b>

**2.1.3. Transferability of Capital within the Group**

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 2020 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 ("CCR")** 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 Mark-to-Market Method 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. It 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, having the following characteristics. Payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures. Also, 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 comprise 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 processes, people and systems or from external events (e.g., fraud, theft, legal and compliance risks, cyber-attacks or damage to physical assets). Capital requirements for operational risk are currently calculated under the Standardised Approach.

BofASE SA has adopted the standardised approach for calculating Counterparty Credit Risk, Credit Risk, and Operational Risk Capital Requirements. BofASE SA’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 SA uses ratings from External Credit Assessment Institutions (“ECAIs”) this includes, Moody’s Investors Service, Inc. (“Moody’s”), S&P, and Fitch.

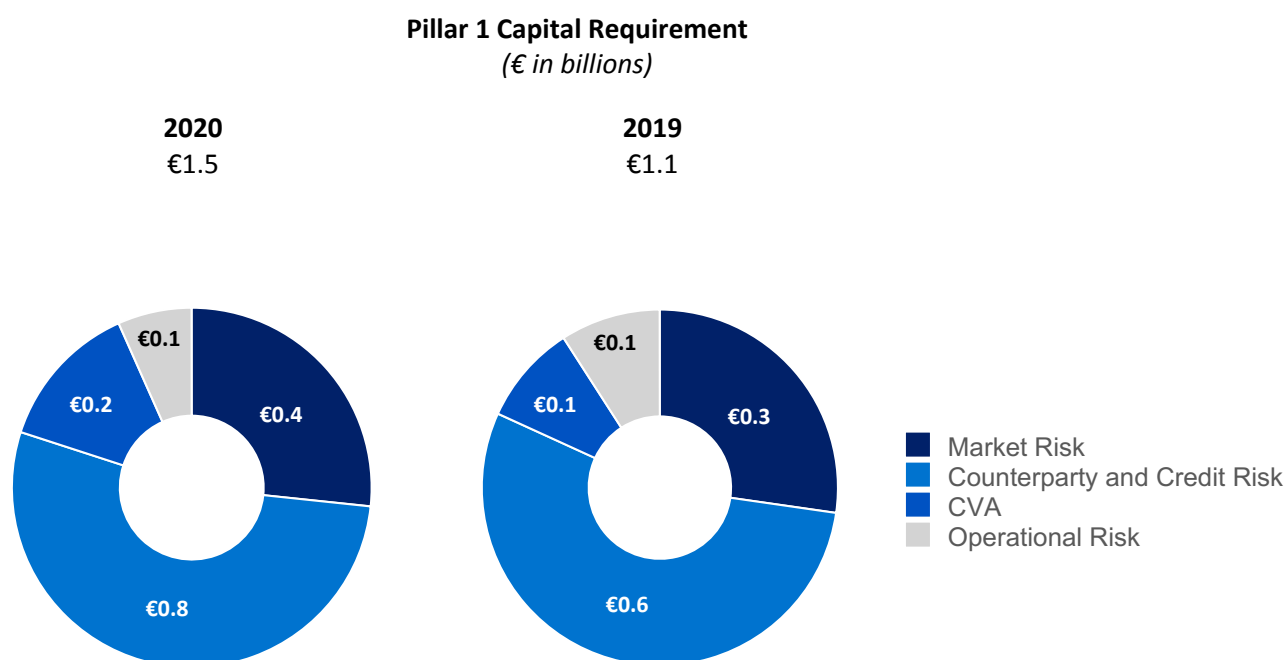
ECAI ratings are used for all relevant exposure classes. BofASE SA does not use Export Credit Agencies (“ECAs”). There have been no changes relating to the use of ECAIs or ECAs during the reporting period. BofASE SA does not transfer issuer and issue credit assessments onto items not included in the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

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 SA by risk type. BofASE SA calculates Pillar 1 capital requirements as 8% of RWAs in accordance with CRR.

BofASE SA is subject to a Pillar 1 Capital Requirement as set out in CRR. BofASE SA is also required to hold capital in addition to the Pillar 1 Capital Requirement to meet ACPR obligations and CRD buffers.

The Pillar 1 Capital Requirement principally comprises of Credit Risk, Market Risk, and Operational Risk requirements. At 31 December 2020, BofASE SA had a Pillar 1 Capital Requirement of €1.5B (2019: €1.1B) comprising of the risk requirements outlined in Figure 2.2.1.F1. – Summary of BofASE SA’s Pillar 1 Capital Requirement.

**Figure 2.2.1.F1. – Summary of BofASE SA's Minimum Capital Requirement****2.2.2. Key Movements in 2020**

BofASE SA's Pillar 1 Capital Requirement increased to €1.5B in 2020 from €1.1B in 2019. This was mainly driven by an increase in capital requirements for counterparty credit risk from greater exposure to derivatives, reflecting an increase in client activity throughout the year.

Table 2.2.2.T1. discloses a breakdown of the RWAs and Pillar 1 Capital Requirement of BofASE SA, broken down by risk types and calculation approaches compared to the previous year.

**Table 2.2.2.T1. – RWAs and Minimum Capital Requirement**

(€ in Millions)	BofASE SA		
	RWAs		Pillar 1 Capital Requirement
	2020	2019	2020
<b>Credit risk (excluding CCR)</b>	<b>265</b>	<b>434</b>	<b>21</b>
Of which the standardised approach	265	434	21
Of which the foundation IRB ("FIRB") approach	—	—	—
Of which the advanced IRB ("AIRB") approach	—	—	—
Of which equity IRB under the simple risk-weighted approach or the Internal Model Approach ("IMA")	—	—	—
<b>CCR</b>	<b>12,234</b>	<b>8,801</b>	<b>979</b>
Of which mark to market	8,005	5,305	640
Of which original exposure	—	—	—
Of which the standardised approach	—	—	—
Of which: comprehensive approach for credit risk mitigation (for Securities Financing Transaction ("SFTs"))	1,653	2,076	132
Of which internal model method ("IMM")	—	—	—
Of which risk exposure amount for contributions to the default fund of a CCP	319	107	25
Of which credit valuation adjustment	2,258	1,313	181
<b>Settlement risk</b>	<b>114</b>	<b>63</b>	<b>9</b>
<b>Securitisation exposures in the banking book (after the cap)</b>	<b>—</b>	<b>—</b>	<b>—</b>
Of which IRB approach	—	—	—
Of which IRB supervisory formula approach ("SFA")	—	—	—
Of which internal assessment approach ("IAA")	—	—	—
Of which standardised approach	—	—	—
<b>Market risk</b>	<b>5,017</b>	<b>3,433</b>	<b>401</b>
Of which the standardised approach	924	671	74
Of which IMA	4,093	2,762	327
<b>Large exposures</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Operational risk</b>	<b>1,203</b>	<b>1,234</b>	<b>96</b>
Of which basic indicator approach	—	—	—
Of which standardised approach	1,203	1,234	96
Of which advanced measurement approach	—	—	—
<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	<b>—</b>	<b>—</b>	<b>—</b>
Floor adjustment	—	—	—
<b>Total</b>	<b>18,832</b>	<b>13,966</b>	<b>1,507</b>

## 2.3. Capital Summary

### 2.3.1. Capital Position and Capital Ratio

BofASE SA's Capital Resources in excess of its Pillar 1 Capital Requirements at 31 December 2020 was €3.5B (2019: €3.7B).

Table 2.3.1.T1. – Capital Surplus over Minimum Capital Requirement and Tier 1 Ratio shows a summary of BofASE SA Capital position, BofASE SA is adequately capitalised with capital resources significantly in excess of the Pillar 1 Minimum Capital Requirement.

BofASE SA capital position is monitored and analysed on a daily basis. BofASE SA maintained capital surplus over its Pillar 1 Capital Requirement throughout the period.

An entity's Tier 1 ratio is the ratio of the Tier 1 Capital to RWAs. BofASE SA's RWAs increased in 2020 reflecting an increase in client activity throughout the year. BofASE SA's Tier 1 ratio was 26.7% at 31 December 2020.

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

(€ in Millions)	BofASE SA	
	2020	2019
Total Capital Resources	5,037	4,841
Total Pillar 1 Minimum Capital Requirement	1,507	1,117
<b>Surplus over Requirement</b>	<b>3,530</b>	<b>3,723</b>
Tier 1 Capital Resources	5,037	4,841
Risk Weighted Assets	18,832	13,966
<b>Tier 1 Capital Ratio</b>	<b>26.7 %</b>	<b>34.7 %</b>

## 2.4. Capital Management

BofASE SA views capital as an important source of financial strength. It 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 of capital is set to ensure that BofASE SA meets all regulatory capital requirements and to safeguard BofASE SA ability to continue as a going concern. 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 SA also conducts an Internal Capital Adequacy Assessment Process ("ICAAP") at least annually. The ICAAP is a key tool used to inform the BofASE SA Board of Directors ("BofASE SA Board") and the executive management on BofASE SA risk profile and capital adequacy. The BofASE SA ICAAP:

- Is designed to ensure the risks to which BofASE SA 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 SA maintains a capital position in line with pre and post stress goals

The ICAAP is also aligned to the recovery plan that prepares BofASE SA to restore its financial strength and viability during an extreme stress situation, laying out a set of defined actions aimed to protect 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 SA capital position. In addition, the recovery plan outlines clear predefined governance and processes set up to support timely, efficient, and effective monitoring, escalation, decision-making, and implementation of recovery options if a crisis event occurs.

BofASE SA ICAAP also assesses Pillar 2R at least annually. Pillar 2R is an additional amount of capital that BofASE SA is required to hold in order to cover risks that are not covered (or not entirely covered) by the Pillar 1 Minimum Capital Requirement. The ACPR reviews the ICAAP through its Supervisory Review and Evaluation Process ("SREP") and sets a Total SREP Capital Requirement ("TSCR"). The TSCR is the sum of the Pillar 1 Minimum Capital Requirement (8% of RWAs) and the Pillar 2R capital requirement.

As at 31 December 2020, BofASE SA's TSCR was set at 11.69% of RWAs.

## 2.5. Leverage Ratio

### 2.5.1. Summary

The Basel 3 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 will apply from 28 June 2021, include a binding minimum Leverage Ratio requirement of 3%, as well as a number of changes to the calculation of the exposure measure.

BofASE SA does not have a binding leverage requirement, however BofASE SA 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 SA's risk appetite.

BofASE SA's leverage ratios are in excess of the incoming minimum requirement at 11.4%, calculated based on the current CRR exposure measure.

**Table 2.5.1.T1. – Leverage Ratio**

	BofASE SA	
	2020	2019
Leverage Ratio	11.4%	9.5%

### 2.5.2. Key Movements in 2020

BofASE SA's leverage ratio increased during the year, from 9.5% at the end of 2019 to 11.4% at the end of 2020. This was due to a reduction in the Leverage Ratio exposure, mainly driven by a reduction in securities financing exposures throughout the course of the year.



# BofA Securities Europe SA

## Pillar 3 Disclosure

3. Liquidity Position and Encumbered and Unencumbered Assets  
As at 31 December 2020

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

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

**3.1.2. Liquidity Position**

As at 31 December 2020, BofASE SA was in compliance with its regulatory and internal liquidity requirements.

**3.1.3. Funding Profile**

BofASE SA does not issue debt to parties external to BAC and is not licensed to take deposits. BofASE SA primarily funds its balance sheet through wholesale secured funding, equity, and intercompany unsecured debt.

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

**3.2. Encumbered and Unencumbered Assets**

An asset shall be treated as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralise, or credit enhance any transaction from which it cannot be freely withdrawn.

Within BofASE SA, encumbered assets primarily comprise on / off balance sheet assets that are pledged as collateral against secured funding transactions; these include repurchase agreements, stock lending, and collateral swaps. In addition, BofASE SA's encumbered assets includes collateral posted against derivative contracts and securities covering shorts. Asset encumbrance is an integral part of BofASE SA's secured funding and collateral management process. Treasury monitors the funding requirement / surplus and models the liquidity impact relating to these activities on an ongoing basis.

This asset encumbrance disclosure, as at 31 December 2020, is prepared under the requirements of Regulation (EU) 2017 / 2295. The disclosure is based on accounting information prepared in accordance with French accounting standards.

BofASE SA conducts a significant portion of its business in EUR and USD.

BofASE SA primarily adopts standard collateral agreements and requires collateralisation at appropriate levels based on industry standard contractual agreements (mostly Credit Support Annexes ("CSAs") and Global Master Repurchase Agreements ("GMRAs")).

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

**Table 3.2.T1. – Encumbered and Unencumbered Assets<sup>(1)</sup>**

	2020			
	Carrying Amount of Encumbered Assets	Fair Value of Encumbered Assets	Carrying Amount of Unencumbered Assets	Fair Value of Unencumbered Assets
(€ in Millions)				
<b>Assets of the Reporting Institution<sup>(2)</sup></b>	<b>12,859</b>		<b>49,845</b>	
Equity Instruments	1,584		308	
Debt Securities	5,926	5,926	1,102	1,102
of which: Covered Bonds	22	22	6	6
of which: Asset-Backed Securities	—	—	—	—
of which: Issued by General Governments	5,546	5,546	960	960
of which: Issued by Financial Corporations	343	343	140	140
of which: Issued by Non-Financial Corporations	1	1	1	1
Other Assets <sup>(3)</sup>	5,070		48,451	

	2019			
	Carrying Amount of Encumbered Assets	Fair Value of Encumbered Assets	Carrying Amount of Unencumbered Assets	Fair Value of Unencumbered Assets
(€ in Millions)				
<b>Assets of the Reporting Institution<sup>(2)</sup></b>	<b>8,013</b>		<b>38,847</b>	
Equity Instruments	2,853		526	
Debt Securities	2,519	2,519	1,006	1,006
of which: Covered Bonds	39	39	10	10
of which: Asset-Backed Securities	—	—	—	—
of which: Issued by General Governments	2,170	2,170	871	871
of which: Issued by Financial Corporations	308	308	125	125
of which: Issued by Non-Financial Corporations	1	1	1	1
Other Assets <sup>(3)</sup>	2,641		37,247	

<sup>(1)</sup> Greyed out cell format stems from Regulatory Technical Standard (“RTS”) EC (EU) 2017/2295 Regulation asset encumbrance template, indicating not applicable disclosures. As a result of BofASE SA’s broker-dealer activity, fair value equals carrying value for securities.

<sup>(2)</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>(3)</sup> The majority of unencumbered Other Assets relate to derivative assets not available for encumbrance.

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. – Collateral Received**

	2020		2019	
	Fair Value of Encumbered Collateral Received or Own Debt Securities Issued	Fair Value of Collateral Received or Own Debt Securities Issued Available for Encumbrance	Fair Value of Encumbered Collateral Received or Own Debt Securities Issued	Fair Value of Collateral Received or Own Debt Securities Issued Available for Encumbrance
<i>(€ in Millions)</i>				
<b>Collateral Received by the Reporting Institution<sup>(1)</sup></b>	<b>19,917</b>	<b>7,049</b>	<b>16,801</b>	<b>6,658</b>
Loans on Demand	—	—	—	—
Equity Instruments	3,201	447	3,565	513
Debt Securities	15,882	2,262	13,236	3,466
of which: Covered Bonds	59	—	38	1
of which: Asset-Backed Securities	302	1,461	244	2,204
of which: Issued by General Governments	13,912	577	11,624	1,202
of which: Issued by Financial Corporations	1,170	22	964	45
of which: Issued by Non-Financial Corporations	379	11	243	20
Loans and Advances Other Than Loans on Demand	—	3,930	—	2,680
Other Collateral received	—	—	—	—
Own Debt Securities Issued Other than Own Covered Bonds or Asset-Backed Securities	—	—	—	—
Own Covered Bonds and Asset-Backed Securities Issued and Not Yet Pledged		—		—
<b>Total Assets, Collateral Received and Own Debt Securities Issued</b>	<b>32,876</b>		<b>25,836</b>	

<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. – Sources of Encumbrance**

	2020		2019	
	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
<i>(€ in Millions)</i>				
<b>Carrying Amount of Selected Financial Liabilities</b>	<b>18,534</b>	<b>20,092</b>	<b>14,693</b>	<b>14,779</b>

# BofA Securities Europe SA

## Pillar 3 Disclosure

4. Risk Management, Objectives, and Policy  
As at 31 December 2020

#### **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 SA). BAC adopted the 2021 Risk Framework in December 2020. The key enhancements from the 2020 Risk Framework include formalisation of a legal risk definition and how it is managed within the Legal control function as well as a new section to address how BAC defines and manages climate risk today.

BofASE SA 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 SA Board adopted the BAC 2021 Risk Framework in March 2021.

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

#### **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 SA 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 SA's reputation, each of which may adversely impact BofASE SA 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. It explains BofASE SA'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 SA. The Risk Framework sets forth roles and responsibilities for the management of risk by front line units (“FLUs”), independent risk management, other control functions, and Corporate Audit.

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

- Culture of managing risk well
- Risk appetite and risk limits
- 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 SA's businesses, namely: strategic, credit, market, liquidity, operational, compliance, and reputational risks.

##### **4.2.1. Culture of Managing Risk Well**

A culture of managing risk well is fundamental to BofASE SA's core values and its purpose, and how it drives responsible growth. It requires 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 SA's risk appetite. Sustaining a culture of managing risk well throughout the organisation is critical to the success of BofASE SA and is a clear expectation of BofASE SA's Executive Management team and its Board.

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

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

2. BofASE SA treats customers fairly and acts with integrity to support the long-term interests of its employees and customers. BofASE SA understands that improper conduct, behaviour, or practices by BofASE SA, its employees, or representatives could harm BofASE SA, the customers, or damage the integrity of the financial markets
3. As BofASE SA 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 SA employs models and methods to assess risk and better inform BofASE SA'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. Independent risk management provides independent oversight and effective challenge, while Corporate Audit provides independent assessment and validation
8. BofASE SA strives to be best-in-class by continually working to improve risk management practices and capabilities

#### **4.2.2. Risk Statement and Risk Appetite**

##### **Risk Statement**

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

BofASE SA'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 2020, BofASE SA has €5B of regulatory Capital Resources, consisting of CET1 capital of €5B. BofASE SA has a Tier 1 capital ratio of 26.7%. As at 31 December 2020, BofASE SA's leverage ratio is 11.4%.

The majority of BofASE SA regulatory counterparty and credit risk exposure by industry distribution are to clearing houses 30%, broker-dealers 25%, sovereigns 13% and banks 9%. 92% of BofASE SA's Counterparty and Credit Risk exposures are in the EMEA region. 73% of BofASE SA Counterparty and Credit Risk exposures have less than one year residual maturity and 90% are less than five years. BofASE SA has over 38% of exposures with counterparties externally rated between AAA and A- or equivalent. 58% of BofASE SA's exposures are to counterparties not rated by external rating agencies, the majority of which are to CCPs and Central Banks. Other exposures that BofASE SA has to unrated counterparties are to Financial or Non-Financial Corporates, which are also generally assessed internally as being of high quality. Credit risk is assessed as outlined in Section 4.3. Key Risk Types.

BofASE SA enters into transactions with affiliated companies in the BAC Group, primarily as a result of its own risk management purposes and receives intercompany loans for general liquidity management purposes. At 31 December 2020, BofASE SA had 45% of balances with affiliated companies (31% with MLI).

BofASE SA's Market Risk capital requirement is principally driven by BofASE SA's internal model based capital requirement and a standard rules charge on traded debt instruments. BofASE SA's capital requirements for market risk under standard approach is driven by interest rate risk, equity, collective investment undertakings and foreign exchange. 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 SA during 2020 was €17M.

BofASE SA 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 Risk Appetite Statement ("RAS"), established for BofASE SA, indicates the amount of capital, earnings, or liquidity BofASE SA 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 and Limits

BofASE SA's RAS indicates the amount of capital, earnings, or liquidity BofASE SA is willing to put at risk to achieve its strategic objectives and business plans, consistent with applicable regulatory requirements. The RAS ensures that BofASE SA maintains an acceptable risk profile that is in alignment with its strategic and capital plans. It is designed with the objective of ensuring that it is comprehensive for all key risks, relevant to the BofASE SA business and aligned with the risk management practices of BAC. The RAS is reviewed and approved by the BofASE SA Board at least annually.

BofASE SA'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 SA's overall capacity to take risk is limited; therefore, we prioritize the risks we take. Our risk capacity informs our risk appetite, which is the level and types of risk we are willing to take to achieve our business objectives
- **Financial strength to absorb adverse outcomes:** BofASE SA must maintain a strong and flexible financial position so we can weather challenging economic times and take advantage of organic growth opportunities. Therefore, we set objectives and targets for capital and liquidity that permit BofASE SA 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 SA's risk appetite and offer acceptable risk-adjusted returns for shareholders
- **Acceptable risks:** BofASE SA considers all types of risk including those that are difficult to quantify. Qualitative guidance within the RAS describes our approach to managing such risks throughout BofASE SA in a manner consistent with our culture. For example, actions considered in a line of business that unduly threaten BofASE SA's reputation should be escalated and restricted appropriately
- **Skills and capabilities:** BofASE SA seeks to assume only those risks we have the skills and capabilities to Identify, Measure, Monitor, and Control ("IMMC")

The quantitative framework for BofASE SA's RAS is designed to articulate the risks it will take in pursuit of strategic objectives that are both consistent with BofASE SA's financial resources and will avoid excessive risk taking. It comprises the BofASE SA Board and Management Risk Committee ("BofASE SA MRC") approved limits indicating the amount of risk BofASE SA is willing to take.

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.

Robust monitoring and reporting processes for Board-owned and MRC-owned limits are in place, with limit 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.

BofASE SA Management, MRC, Board Risk Committee ("BofASE SA BRC") and the Board monitor risk metrics relative to risk appetite limits and take action as necessary to proactively and effectively manage risk.



Risk appetite is aligned with BofASE SA'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, New Product Review and Approval - 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 SA'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.

The RAS covers the seven key risk types as defined in the Risk Framework. There are detailed qualitative statements for all of the key risk types within the Risk Framework and RAS. 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 from an economic value and earnings approach
- Liquidity Risk: Metrics relating to key liquidity coverage ratios
- Compliance & Operational Risk: Metrics for Non-Litigation Operational Losses, Residual Risk Level & Direction, Past Due Issues, Performance of Outsourced Services, and Potential Information Security Events (Global)

There are no quantitative risk appetite metrics for Reputational Risk but there are qualitative statements within the RAS.

The performance against the BofASE SA risk appetite is reviewed on a regular basis by the MRC. Limits are monitored by FLUs and risk management on a more frequent basis. Performance is also reported to the BRC and Board on a quarterly basis.

The BofASE SA Chief Risk Officer ("CRO") is the executive sponsor of the Risk Appetite Statement 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 SA MRC, BRC, and the Board.

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

#### **4.2.3. Risk Management Processes**

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 SA, thereby ensuring risks are appropriately considered, evaluated, and responded to in a timely manner.

BofASE SA'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 SA encourages a thorough challenge process and maintains processes to identify, escalate, and debate risks
- BofASE SA utilizes timely and effective escalation mechanisms for risk limit breaches

The FLUs have primary responsibility for managing risks inherent in their businesses. BofASE SA 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

Effective risk data management, aggregation, and reporting is critical to provide a clear understanding of current and emerging risks and enables BofASE SA 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 SA
- Robust risk quantification methods
- Timely, accurate, and comprehensive view of all material risks, including appropriate levels of disaggregation

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

#### 4.2.5. Risk Governance

BAC's risk governance principles serve as the cornerstone of the risk governance framework. The Code of Conduct, Risk Framework, RAS, and strategic plans are overarching documents that firmly embed BofASE SA'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 SA defines and manages risk. The RAS clearly indicates the risks BofASE SA is willing to accept. The strategic plans, for both BAC and BofASE SA, document strategies for the next three-year period.

#### Three Lines of Defence

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

<b>FLUs</b>	Own and proactively manage all risks in business activities
<b>Independent 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 SA'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 control functions 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 SA's key risks and risk management processes (inclusive of risk appetite).

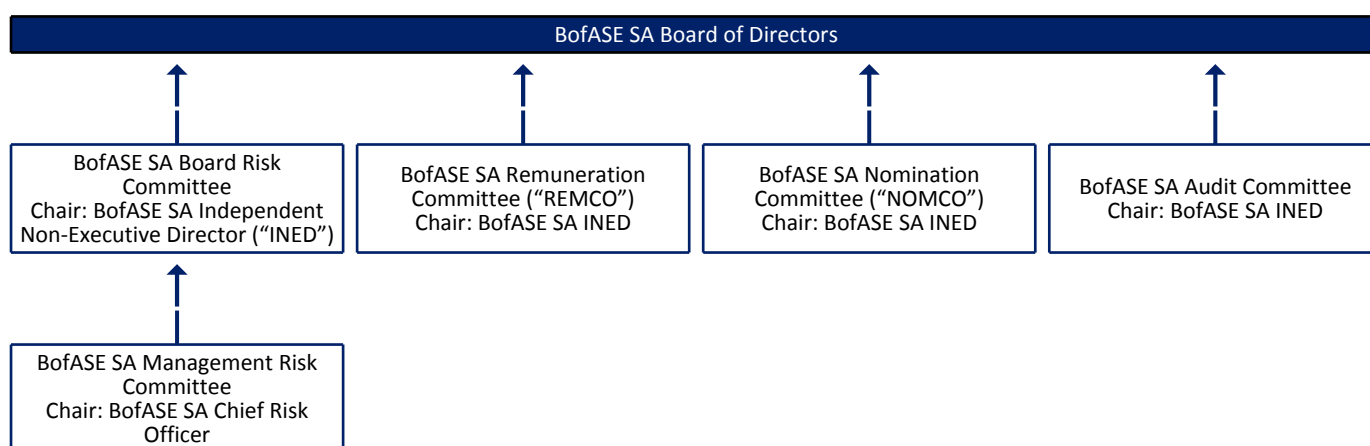
Corporate Audit is not responsible for setting or approving limits for risks which BofASE SA is exposed to. However, Corporate Audit conducts reviews, as appropriate, of the controls and monitoring of such limits.

Corporate Audit maintains independence from the BofASE SA's Businesses and Governance & Control Functions by reporting directly to the BofASE SA Audit Committee of the Board.

### Risk Governance Structure

The Board ensures suitable risk management and controls through the BRC, BofASE SA Audit Committee, BofASE SA Remuneration Committee, BofASE SA Nominations Committee and the MRC. The MRC conducts periodic reviews of reporting, including regulatory reporting and remediation plans, and escalate reporting to the BRC, the Board, or other committees, as appropriate, and review of risk management strategies to ensure their continuing effectiveness.

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



The BRC assists the 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 SA: strategic risk, market risk, credit risk, liquidity risk, operational risk, compliance risk, and reputational risk. The BRC met seven times during 2020.

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

The MRC reports to the BRC and is responsible for providing management oversight and approval of (or reviewing and recommending to the BRC, the Board, or other committees, as appropriate) strategic risk, market risk, credit risk, liquidity risk, operational risk, compliance risk, reputational risk, and stress testing activities as well as balance sheet, capital, and liquidity management. The MRC met twelve times during 2020.

The BofASE SA Audit Committee, established in 2020, assists the 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 BofASE SA Remuneration Committee (“Remuneration Committee”) and the BofASE SA Nomination Committee (“Nomination Committee”) of the Board assist the Board in fulfilling its oversight of the development of, and implementation of the firm’s remuneration policies and practices and nominates for the Board’s approval candidates to fill Board vacancies. The Remuneration Committee met five times during 2020 and the Nomination Committee met three times during 2020.

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

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

Before any appointment is made by the Board, the Nomination Committee is responsible for evaluating the balance of skills, knowledge, experience, and diversity on the 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 Nomination Committee shall consider the overall knowledge, skills, experience, and expertise represented on the 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 Nomination Committee 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 Board, including, but not limited to gender.

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

#### **General**

All appointments to the Board are made in compliance with BAC’s Background Check 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 Board require regulatory approval in line with ACPR’s requirements under the Appointment of Members of a Supervisory Body Regime.

Board member experience is detailed within individual director biographies in Appendix 1 - Directors Board Membership and Experience.

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

#### **4.2.6. Risk Declaration**

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

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

The Risk Management processes outlined above allow BofASE SA 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 SA 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 SA operates (such as competitor actions, changing customer preferences, product obsolescence, and technology developments).

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

Strategic risk is managed through the assessment of effective delivery of strategy. Strategic risk is monitored continuously by the Executive Management Team through a number of existing processes ranging from monitoring of financial and operating performance, through to the management of the Recovery Plan and also with the regular assessment of earnings and risk profile throughout the year. The Executive Management Team provides the BofASE SA 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.

Strategy execution and risk management involves a formal planning and approval process. The BofASE SA Strategic Plan is set within the context of overall risk appetite and the strategic planning process includes an evaluation of the internal and external environment and its strengths, weaknesses, opportunities, and threats.

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

The BofASE SA Strategic Plan is reviewed and signed-off by the Board. Strategic decisions relating to BofASE SA are presented and discussed at the BofASE SA BRC and the Board.

Routines exist to discuss the Strategic Risk implications of new, expanded or modified businesses, products or services and other strategic initiatives, and to provide approvals where appropriate.

Material risks are considered for capital and liquidity planning.

Independent risk management, Corporate Audit, and other control functions provide input, challenge, and oversight to FLUs and strategic decisions and initiatives relating to BofASE SA.

##### **Strategic Risk Reporting**

Regular updates to the BofASE SA Board on business performance and management of strategic risk take into account analyses of performance relative to the Strategic Plan, risk appetite, the strength of capital and liquidity positions, and stress tests (which address potential macroeconomic events, changing regulatory requirements and various market growth rate assumptions). This also includes an assessment of the level of inherent risk, control effectiveness, as well as the residual risk outlook.

#### **4.3.2. Credit Risk**

##### **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 SA commits to, or enters into, an agreement with a borrower or counterparty.

BofASE SA 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 SA manages credit risk to a 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 counterparties. Credit risk appetite is proactively reassessed as a counterparty's risk profile changes.

Credit risk management includes the following processes:

- Credit origination
- Portfolio management
- Loss mitigation activities

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

Sound risk management includes process to effectively identify, measure, and control risk. Risk management is both an essential component of BofASE SA's daily business activities and an integral part of its strategic, capital, and financial planning processes.

**Credit Origination**

As one of BAC's investment firms in the EU, BofASE SA offers a full suite of products across Equity Sales & Trading, FICC Sales & Trading, and Capital Markets. Traded products therefore account for the majority of BofASE SA's credit exposure.

Other than Traded Products, BofASE SA has limited Loan Product exposure. This relates to BofASE SA's default fund contributions ("DFC") that a broker dealer posts to central counterparties ("CCPs") as a condition of its memberships with them. DFC are considered as Loan Equivalent.

BofASE SA's credit processes align with BAC's credit policies and credit risk appetite across FLUs and are compliant with applicable laws, rules, and regulations. Credit Risk Management oversees decisions about the amount of credit to extend to counterparties consistent with BofASE SA'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 ensure portfolio asset quality remains within approved credit risk limits. New products and credit terms and conditions are differentiated based on risk, within the limits of risk appetite.

Counterparty credit risk in BofASE SA arises from the creditworthiness of BofASE SA's trading partners and varies by type of transaction. Credit Risk Management manages counterparty risk with specific policies, limits, and controls. BofASE SA has a clearly established process in place for on-boarding new counterparties, as well as for managing existing counterparties. Policies and processes for assuming credit risk are well documented without undue reliance on external credit assessments.

BofASE SA sets limits and tenor at the individual counterparty level and aggregate family level, based on the 'counterparties' risk profiles. Investment Advisor 'As Agent' limits can also be set as needed. BAC sets counterparty concentration limits also at country and industry levels. Mark-to-market exposure and potential exposure are measured taking applicable collateral into account. The principal exposure measure for a traded product is potential exposure, which governs pre-settlement exposure and represents a statistical estimate of the 95%-confidence; worst case' exposure that could be realized over the life of a transaction.



To determine regulatory capital requirements for derivative contracts, potential future credit exposures are considered which include the notional amount of the derivative multiplied by prescribed percentages as set out in the CRR.

Counterparty risk exposures are considered within the context of the broader credit risk portfolio across FLUs 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 SA 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 and monitoring limits. Credit risk may be hedged to mitigate exposure and to remain within BofASE SA credit risk appetite and return expectations.

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 borrower and counterparty level, the risks inherent in ongoing financial performance are reviewed. At the portfolio level, aggregate losses, credit performance, and concentrations in 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.

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

BofASE SA employs a range of techniques to actively mitigate counterparty credit risks, including increased frequency and intensity of portfolio monitoring for moderate to weak risk profiles, and transferring management of deteriorated commercial exposures to special asset officers.

As a broker-dealer, BofASE SA's main credit risk mitigation technique is accepting collateral that is permitted by documentation such as repurchase agreements or a CSA to an International Swap Dealers Association ("ISDA") Master Agreement.

BofASE SA credit risk exposure is net of collateral where legally enforceable netting agreements are recognised. In order to benefit from close-out netting / enforceability of collateral, written legal opinions are required to confirm (a) (i) the enforceability of close-out netting under a Master Agreement, (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, (b) where applicable for Uncleared Margin Rules ("UMR") purposes or otherwise, (i) the enforceability of collateral arrangements in respect of BofASE SA, 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. Credit risk management will consult with the Legal department to ensure that any necessary capacity and authority matters, country and enforceability issues and product approvals are addressed.

Generally, collateral is accepted in the form of cash and high grade government securities. All requests for non-standard collateral are approved through the Non-Standard Collateral Review Process.

Required collateral levels may vary depending on the credit quality of the party posting collateral. 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 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 calculated by Counterparty Credit Risk Portfolio Management. Any deviation from these is subject to approval following the “Agreements and Documentation Escalation Grid guidelines.” The standard haircut table for Eligible Collateral is maintained by Counterparty Credit Risk Portfolio Management and updated on at least an annual basis.

Valuations are carried out, generally daily, on market trading activities such as collateralised OTC derivatives. Collateral Management report and escalate collateral disputes and fails through established routines.

Derivative exposures are increasingly routed through CCPs in response to regulation changes being phased-in globally. UMR is a regulatory mandate requiring the exchange of Variation Margin (“VM”) and Initial Margin (“IM”) for uncleared OTC Derivative bilateral trades. UMR VM regulatory has been a requirement for all applicable counterparties since 1 March 2017; IM requirements are subject to a phase approach running from September 2016 (when it originally covered trading between the largest international banks and their subsidiaries) to September 2022 with smaller counterparties being added each year based on whether aggregate notionals amount of OTC derivative activity are above required threshold.

### **Credit Risk Governance**

BofASE SA Credit Risk Management is integrated into the BAC and BofASE SA governance structure. The Credit Risk governance structure enables a system of risk escalation, which includes the hierarchy and process to be followed for approvals, limit excesses, policy variances, and internally identified issues and emerging risks.

Credit risk policies form an important part of BAC’s and BofASE SA’s risk governance framework. Policies govern the extension of credit and the management of credit relationships in order to:

- Align day-to-day employee decision-making with the Risk Framework, Risk Appetite, and risk management objectives
- Foster understanding and compliance with all relevant laws, rules, regulations, and regulatory guidance
- Describe standards for underwriting and management of credit risk exposures
- Define approval authorities, including authorities for exceptions to policy and higher risk or specialized transactions

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.

FLU Credit oversees credit risk management processes and governance in accordance with BofASE SA’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, executive management, and boards of directors.

### **Credit Risk Reporting**

Transparency of credit risk is critical to effective risk management. To ensure appropriate transparency and escalation across FLUs, BAC Board and BofASE SA Board, 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 SA’s RAS credit risk limits is reported on an ongoing basis. The MRC receives a monthly Risk Appetite limits monitoring report and the Board receives quarterly reporting. The MRC materials provide additional information on the composition of the risk exposure. This includes exposure by sector, country, and traded product types and allow for the monitoring of potential concentration of risks. Weekly risk updates are provided to BofASE SA’s Chief Executive Officer (“CEO”).



### 4.3.3. Market Risk

#### 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, capital, or liquidity.

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

- Price risk is the risk to current or projected financial condition and resilience arising from changes in the value of either trading, investment, or asset and liability management (“ALM”) portfolios. It arises from financial transactions in interest rate, foreign exchange (“FX”), equity, commodities, and credit markets. These transactions are typically subject to daily price movements and are accounted for primarily on a mark-to-market basis, although accrual or hedge-accounted positions that include traded products are also relevant. Price risk includes the credit risk of traded products (e.g., the ability of an issuer to pay amounts due to satisfy contractual cashflows). It also includes market exposure that is contingent upon a counterparty default or a change made prior to maturity of a hedged or accrual accounted position
- Interest rate risk is the risk to current or projected financial condition and resilience arising when changes in interest rates impact expected future cash flows. 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 (options risk)
- Market risk has expanded the existing risk management framework to incorporate consideration of climate and environmental risks. Risk reporting and scenarios have been developed to identify and measure BofASE SA’s exposure to climate risk. Effective review and challenge are being provided into the LOB management of climate risk

#### Market Risk Measurement

At the asset and liability level, market risk is assessed by evaluating the impact of individual risk factors on individual exposures. At the aggregate level, price risk is assessed primarily through risk models, including VaR models. BofASE SA’s aggregate potential economic exposure, as well as earnings and capital sensitivity, to interest rate risk in the non-trading book is also assessed.

BofASE SA has been granted permission by the ACPR to use an Internal Model Approach for the following models in calculating regulatory capital for market risk: VaR, Stressed VaR, 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.

#### 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.

BofASE SA uses a historical simulation approach to calculate VaR. A hypothetical profit and loss (“P&L”) distribution is generated for the current portfolio using time series of historical risk factor changes via Risk Grids / Scenarios and Full Revaluation for benchmarking.

VaR is used for management reporting purposes (“Trading VaR”). Two measures are calculated: a version using three years of historic data and a version which uses a one-year period in order to reflect more recent market volatility. Both are calculated based on a 99% confidence level and have a one-day holding period.

While the historical simulation does not require explicit assumptions about the distribution of the underlying market variables, the general mathematical process that governs each risk factor's behaviour is modelled. The Specific Risk of equity and debt positions is captured in the VaR calculation by measuring each issuer's risk using its own history wherever possible. Where it is not possible, in the case of credit specific risk, the VaR model overlays a parameterized stochastic residual component to capture idiosyncratic risk. VaR calculations are performed for portfolios on a fully integrated basis, so no further assumption regarding correlation is necessary. In order 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.

Key differences between the model parameters used for regulatory capital and for internal management purposes are listed in the table below. In particular, regulatory standards require that Regulatory VaR only include the in-scope trading book positions, while Trading VaR also includes out-of-scope trading book positions. The IMA Permission defines which products may be included in the Regulatory VaR calculation.

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

Scope	Covered Positions as Defined by ACPR Approval	Covered Positions as Defined by ACPR Approval	Covered Positions and Non-Covered Positions
Liquidity horizon (holding period)	10 days (unscaled)	10 days (unscaled)	1 day
Historical Window	3 years	Worst 1 year back to 15/1/2007	1 year and 3 years

For positions with insufficient historical data for the VaR calculation, the process for establishing an appropriate proxy is based on fundamental and statistical analysis of the new product or less liquid position. This analysis identifies reasonable alternatives that replicate both the expected volatility and correlation to other market risk factors that the missing data would be expected to experience.

BofASE SA identifies and assesses any risks that are not adequately captured by its models on at least a quarterly basis and holds additional own funds against those risks. Pricing model parameters are being stress tested and capitalised in the Risks Not in VaR ("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 IRC model captures the incremental risk for products that are covered by credit specific risk approval.

The IRC model utilizes 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 users. The asset correlation for each pair of issuers is defined at the sector / region level. The model also captures the negative correlation between default and recovery rate, and the co-movement between the macroeconomic variable, and other market driven risk factors.

### Comprehensive Risk Measure

CRM estimates the potential losses, at a 99.9% confidence level, that the correlation trading portfolio (primarily tranches on credit index and bespoke credit portfolios, 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 utilizes 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.

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 organized into sectors and regions to take into account the correlated moves across industries or markets. In order to capture the correlation between names and the economy, the model uses an economy-wide factor that drives the evolution of all names and 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.

### **Market Risk Management**

FLUs are responsible for managing their risk (for instance through risk mitigating hedging), and any trading, hedging and investment activity is governed by policies which are designed to ensure all regulatory requirements are met. As one of the independent business risk teams in Global Risk Management and, along with other Governance and Control Functions, Global Markets Risk Management is responsible for establishing and overseeing the risk management governance structure for the Businesses which includes policies, limits, standards, controls, metrics and thresholds within the defined enterprise-wide and business-specific RAS.

BofASE SA adheres to the Global Markets Market Risk Policy and the Market Risk Limits Policy. In addition, a BofASE Market Risk Policy Supplement specifies additional corporate governance and regulatory requirements beyond those stated in the global policies and is approved by the MRC.

BofASE SA manages and monitors its market risk exposures in a way that reflects BofASE SA's Risk Framework. Assessing key exposures and setting and monitoring limits to ensure that BofASE SA operates within the approved risk appetite are at the core of BofASE SA's approach to managing market risk.

Robust monitoring and reporting processes for limits are in place, with limit breaches triggering appropriate notification and escalation. The MRC and the BRC review and recommend Risk Appetite limits for approval to the Board. VaR, stress, and sensitivity limits are set at various levels of granularity, ensuring extensive coverage of risks as well as accounting for correlations among risk factors.

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 SA portfolio. Markets Risk Management identifies points of weakness and concentrations in the BofASE SA portfolio or where the entity holds positions that are illiquid or which could be exposed to particular extreme tail events. Stress scenarios may be specifically designed to target potential vulnerabilities that are not always easy to capture or model using VaR, or where there may be difficulty in hedging or exiting positions in a timely fashion, or at a reasonable price, in an extreme event.

### **Market Risk Governance**

BofASE SA market risk is identified, monitored, and controlled by Global Markets Risk Management. The responsibilities of this independent control function include ownership of markets risk policy, calculating aggregated risk measures, establishing and monitoring position limits consistent with risk appetite, conducting daily reviews and

analysis of trading inventory, approving material risk exposures, approving new trades, and fulfilling regulatory requirements.

The IMA models used in BofASE SA are continually reviewed, evaluated, and enhanced so that they reflect the material risks in the trading portfolio. Global Risk Analytics develops, tests, monitors, and documents the IMA models. Model development documentation and testing includes model theoretical framework, assumptions and limitations, model development data, model performance, and model implementation. The ongoing monitoring includes outcomes analysis, benchmarking, and process verification. Model Risk Management ("MRM"), as an independent control function, conducts model validations following the implementation of a new model or a model change that requires validation and MRM approval is required before models are used. Model validation includes the following: Documentation Review, Review of Assumptions / Underlying Theory, Implementation Verification, Calibration / Estimation, Convergence, and Stability and Stress Tests. In addition, through the Ongoing Monitoring Review and Annual Model Review, MRM periodically reviews the performance of all models. Finally, MRM revalidates all models on a cycle based on the model risk rating.

Changes to IMA models used within BofASE SA are reviewed and approved prior to implementation and any material changes are reported to management through the appropriate management committees, as well as to the ACPR where required.

The effectiveness of the VaR methodology of BofASE SA is evaluated and monitored through backtesting, 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 backtesting 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 that the VaR methodology accurately represents those losses. Exceptions at the legal entity or business level, are documented and reported to the ACPR, as appropriate, as part of regulatory reporting processes.

On an annual basis, a stressed IRC and CRM are calculated for BofASE SA as part of BAC's Group-wide regulatory stress testing framework using a model based scalar. In particular, the impact of default for mark-to-market and capital purposes is assessed by shocking market observables to levels specified in the internal severely adverse scenario.

The calibration input data for the IRC and CRM models is validated through a Qualitative Assessment process. Spreads, recovery rates, and expected loss data is checked for spikes, jumps, and flat data. In order to monitor the model performance at the risk factor level, the simulated risk factor changes for spreads, defaults, and FX are compared against historically observed changes on a yearly basis.

### **Market Risk Reporting**

Transparency of market risks is critical to effective risk management. BofASE SA produces reports on exposure, including VaR, Stress, and Risk Factor sensitivities. BofASE SA also reports on risks such as yield curve shifts and twists, changes to implied volatility, correlations between market variables, and credit spreads.

Market risk reports are distributed to senior management within Markets Risk Management and, where appropriate, to relevant stakeholders, including FLUs and top of house senior management. Markets Risk Management also contributes to governance committee reports.

### **Exposures to Interest Rate Risk in the Banking Book**

Interest rate risk represents the most significant market risk exposure to our banking book balance sheet. Interest rate risk is evaluated and monitored from the perspective of both Earnings at Risk ("EaR") and Economic Value of Equity ("EVE") at least monthly. Interest Rate sensitivity on BofASE SA'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 High Quality Liquid Assets ("HQLA") portfolio.

Forward-looking forecasts of EaR are prepared. The baseline forecast takes into consideration expected future business growth, Assets and Liabilities Management (“ALM”) positioning, and the direction of interest rate movements as implied by the market-based forward rate paths. BofASE SA 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 SA'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 Banking Book over their remaining life using a baseline and shocked forward interest rate paths with the difference between the two representing EVE risk.

BofASE SA's overall goal is to manage interest rate risk so that movements in interest rates do not significantly adversely affect earnings or capital.

**Table 4.3.3.T2. – Interest Rate Risk in the Banking Book Sensitivity 2020**

(€ in Millions)	EVE		(€ in Millions)	EaR	
	-100bps	+100bps		-100bps	+100bps
EUR	—	-1	EUR	-1	-11
GBP	—	—	GBP	—	-2
SEK	—	—	SEK	—	—
USD	-2	1	USD	-4	28
Other	—	—	Other	-1	2
<b>Total</b>	<b>-2</b>	<b>—</b>	<b>Total</b>	<b>-7</b>	<b>17</b>

#### 4.3.4. Liquidity Risk

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

Each of the FLUs are accountable for managing liquidity risk within the BofASE SA Liquidity Risk Appetite by establishing appropriate processes to identify, measure, monitor and control the risks associated with their activities. Global Risk Management (“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 SA's liquidity risk management processes.

The BofASE SA Liquidity Risk Appetite is defined by the following:

- Internal Liquidity Stress Test (“ILST”) - 30 day = Prepositioned 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) 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 including Pillar 2 add-ons (Binding Constraint)
- Funding Risk Ratio = Internal liquidity measure for long term, structural liquidity requirements (similar to the Basel Net Stable Funding Ratio in force in June 2021)

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 SA 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.

### Liquidity Risk Governance

The 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:

- Board-owned Risk Appetite
- MRC-owned Management Level Appetite Limits
- Non-Risk Appetite Limits
- Early Warning Indicators

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

### Liquidity Risk Reporting

Daily liquidity reporting enables 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 MRC, Board, the BRC, and BofASE SA senior management.

#### 4.3.5. Compliance and Operational Risk

##### Definition

BofASE SA operates in a highly regulated environment. The complexity and volume of BofASE SA's products, services, and customers means that BofASE SA 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 SA's operational risk profile that must be anticipated and managed to mitigate adverse impacts to BofASE SA.

Compliance risk is the risk of legal or regulatory sanctions; material financial loss or damage to the reputation of the BofASE SA arising from the failure to comply with the requirements of applicable laws, rules, and regulations; and internal policies and procedures. BofASE SA is committed to the highest level of compliance and has no appetite for violations of legislative or regulatory requirements and seeks to anticipate and assess compliance risks to its core businesses and respond to these risks effectively should they materialise. While BofASE SA strives to prevent compliance violations in everything it does, it cannot fully eliminate compliance risk, but manage it by establishing permissible thresholds to reduce exposure to financial loss, reputational harm, or regulatory sanctions.



Operational risk is the risk of loss resulting from inadequate or failed processes, people, and systems or from external events. BofASE SA has designed an operational risk management program that incorporates and documents process for identifying, measuring, monitoring, controlling, and reporting operational risk information to executive management and the appropriate board of directors, or appropriate board-level committees. Operational risk is managed by establishing permissible thresholds to reduce exposure to financial loss, reputational harm, or regulatory sanctions.

BofASE SA adopts the Standardised approach for calculating operational risk capital requirements for Pillar 1. As part of the annual ICAAP, the adequacy of Pillar 1 regulatory capital requirements is assessed via scenario analysis and stress testing that considers the material Compliance and Operational risks documented within the BofASE SA Risk Self Assessment.

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

BofASE SA is committed to maintaining strong compliance and operational risk management practices across all FLUs and control functions. BofASE SA manages compliance and operational risk through an integrated set of controls and processes to address external and internal risks, including a complex and dynamic regulatory environment and the evolving products, services, and strategies of the FLUs and control functions. Every employee is responsible to understand these risks and to identify, mitigate, and escalate compliance and operational risks and issues.

FLUs and control functions are first and foremost responsible for managing all aspects of their businesses, including their compliance and operational risk. FLUs and control functions are required to understand their business processes and related risks and controls, including 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 control functions must also adhere to compliance and operational risk appetite limits to meet strategic, capital, and financial planning objectives. Finally, FLUs and control functions are responsible for the proactive identification, management, and escalation of compliance and operational risks.

BofASE SA has combined the Compliance and Operational Risk management control functions into a single integrated function under common leadership. This combination allows the BofASE SA to bring professionals with complementary subject matter expertise together to assess business processes. It also gives a broader view of the key compliance and operational risks facing the businesses and control functions, 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.

In regard to conduct risk, we have established protocols and structures so that conduct risk is governed and reported across BofASE SA. To enable appropriate and effective oversight of conduct risk, conduct-related information is evaluated by FLUs and control functions, and escalated to management, BofA Europe and BofASE Conduct Risk Council, or board governance routines as appropriate. BofASE SA has no tolerance for violations of conduct policies and procedures and while we strive to prevent conduct violations in everything we do, we cannot fully eliminate such risks. When potential employee misconduct is detected, we gather relevant information to evaluate the findings and take the appropriate disciplinary action. Furthermore, we evaluate trends and themes to determine whether any additional remedial actions or control improvements are needed.

The BofASE SA Compliance and Operational Risk Officer leads the combined organization, which, together with the FLUs and control functions, has responsibility for knowing what it means to conduct BofASE SA's daily activities within the limits of the compliance and operational risk appetites. Global Compliance and Operational Risk sets BAC-wide policies and standards and provides independent challenge and oversight to the FLUs and control functions. The Compliance and Operational Risk teams comprise subject matter experts who understand the front to back processes and controls by which BofASE SA delivers products and services, understand applicable laws, rules, and

regulations, and know whether the processes and controls are operating effectively. These 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. Global Compliance and Operational Risk also collaborates with other control functions to provide additional support for specific remediation efforts (e.g., high-profile Matters Requiring Attention) and shares responsibility with the FLUs, Global Risk Management and other control functions for mitigating risks, such as reputational risks and risks associated with improper conduct.

In addition, teams in Global Compliance and Operational Risk cover areas, such as Financial Crimes and Information Security / Cybersecurity, that affect multiple FLUs or control functions. These horizontal teams are responsible for, among other things, reviewing the FLUs' 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 Compliance and Operational Risk standards.

Finally, in some cases, Compliance and Operational Risk oversight is carried out by other control functions based on standards established by Global Compliance and Operational Risk. Areas not directly overseen by Global Compliance and Operational Risk are typically subject to laws, rules, and regulations that require specific expertise. These "indirect areas of coverage" are required to carry out specific activities to identify and report to Global Compliance and Operational Risk regarding specific compliance issues and the effectiveness of compliance risk management within these areas.

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

Global Compliance and Operational Risk employs a governance structure to escalate material risks and issues, as well as the changes to BofASE SA's compliance and operational risk policies and procedures. 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 SA.

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

Compliance and operational 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 as outlined in the Risk Identification sub-section (under the BofASE ICAAP Risk Management chapter), will be designated as material risks. All identified risks are documented in the BofASE Risk ID Inventory and all material compliance and operational risks are further documented in the BofASE Risk Self-Assessment process.

Compliance and Operational Risk reporting and escalation to senior management and the Board are essential to ensuring a clear understanding of current and emerging risks across BofASE SA, as well as whether BofASE SA is operating within Compliance and Operational Risk Appetite limits, so it can promptly take action to address out of tolerance risks. Reporting includes results of compliance and operational risk assessments, monitoring and testing results, regulator-identified issues, and other compliance and operational metrics. To support decision making within management routines and governance committees, significant compliance and operational risks and issues are escalated to management-level committees, board-level committees, and the Board.

#### **4.3.6. Reputational Risk**

##### **Definition**

Reputational risk is the potential risk that negative perceptions of BofASE SA conduct or business practices will adversely affect its profitability or operations.

Reputational Risk can stem from many of BofASE SA's activities, including those related to the management of the strategic, operational, or other risks, as well as the overall financial position. As a result, BAC evaluates the potential impact to the 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 BAC Group level, reputational risk is reviewed by the Enterprise Risk Committee ("ERC") and the MRC, 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 SA are considered as part of the EMEA Reputational Risk Committee (the "Reputational Risk Committee"), whose mandate includes consideration of reputational risk issues 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 SA might have an undisclosed or significant conflict of interest
- Business activities from which BofASE SA 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 SA 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 SA 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 SA 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 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 SA, aligned with BAC, does not set quantitative limits to define its associated Risk Appetite. Through proactive risk management, BofASE SA 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 control functions (Legal, Compliance, and Risk). This includes senior representatives from BofASE SA. The committee is co-chaired by the Regional Head and the 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 MRC and the BRC is informed of such matters through a BofASE SA specific report.

### **Reputational Risk Reporting**

The reporting of BofASE SA 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 SA Board Risk Committee 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 SA to manage the other risk considerations set out below.

### **4.4.1. Wrong-Way Risk**

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 SA 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 BAC's Risk Management Framework, several processes exist to control and monitor wrong-way risk, including reviews at the BAC Global Markets Risk Committee and BAC Credit Risk Committee.

**4.4.2. Impact of a Credit Rating Downgrade on OTC Collateral**

The full impact of a credit rating downgrade on BofASE SA 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 SA.

Based on the terms of various over-the-counter derivatives contracts and other trading agreements, a credit rating downgrade may result in BofASE SA posting additional collateral to counterparties or counterparties choosing to unwind or terminate specific transactions. In either case, BofASE SA 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 SA's internal liquidity stress testing. As at 31 December 2020, BofASE SA was in excess of both internal and regulatory liquidity requirements, with no additional outflows resulting from either a one-notch or two-notch downgrade scenario, in line with contractual obligations in OTC derivative contracts.

**4.4.3. Securitisation Risk Governance and Reporting**

Securitized products, in the form of Collateralized Loan Obligation and Asset-Backed Securities ("ABS"), are approved products for BofASE SA. Nevertheless, the entity did not engage in the secondary trading of these products in 2020. The monitoring and controls tools are in place via VaR based modelling and stress testing in case BofASE SA was to engage in trading of securitized products.

**4.4.4. Contingent Market Risk**

Contingent Market Risk ("CMR") arises from concentrated positions with a single counterparty or a subset of counterparties. Traditional exposure metrics, like potential exposure and credit valuation adjustment, trend towards zero with the rise of over collateralization and central clearing, while tail risk remains. This risk is captured by measuring concentrated positions while remaining agnostic to specific market scenarios and counterparty worthiness.

BofASE SA is subject to various BAC Group-level CMR limits by asset class and risk factor, based on appropriate measures and levels, taking into account market liquidity, risk appetite stress scenarios, and business rationale. Limits are reviewed and monitored by Counterparty Credit Risk Portfolio Management. Permanent limits are approved at the BAC Global Markets Risk Committee, or by delegated authority from that committee.

**4.4.5. 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 SA is subject to various BAC Group Pegged Currency limits for each pegged currency, across different ratings buckets and at the single name and portfolio level. Limits are reviewed and monitored by Counterparty Credit Risk Portfolio Management. Permanent limits are approved at the BAC Global Markets Risk Committee, or by delegated authority from that committee.

#### 4.4.6. New Products

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

BofASE SA complies with the New Product Review and Approval - Enterprise Policy, which establishes requirements designed to identify and mitigate risks associated with New Products. This Policy requires that New Products be assessed across all risk categories, including consistency with Risk Appetite, prior to product implementation.

Under this Policy, businesses are required to develop and maintain a New Product Review and Approval process and related procedures that address the identification, review, approval, and monitoring, including post implementation review of New Products and meets pre-defined minimum requirements in respect of governance, risk assessment, post implementation review, reporting, and required documentation.

#### 4.4.7. 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.

#### 4.4.8. Coronavirus

The global COVID-19 outbreak dominated markets, introducing significant volatility and weakening across the asset classes, particularly credit. Additional internal communication protocols were established between Risk and the Lines of Business to ensure management awareness of credit exposure, market volatility, liquidity and funding risks. Enhanced reporting was also produced for the Board committees. There has been enhanced regulatory engagement since the beginning of the COVID-19 period, with regular calls between the BofASE SA management team and the ACPR.

The impact of the COVID-19 pandemic on BofASE SA's operational risk environment has been identified, measured and monitored through a combination of existing and new activities. Front line units and control functions were required to consider the potential impact of COVID-19 through the quarterly Risk Identification process as well as Risk Self-Assessment process.

Compliance and Operational Risk, in conjunction with front line unit and control function partners, will continue to closely monitor if the pandemic environment is creating additional or elevated compliance or operational risk.

#### 4.4.9. Climate Change

Climate-related and environmental risk is the risk that climate change and environmental degradation or actions taken to mitigate climate change and environmental degradation could adversely affect BofASE SA's operations, business, and clients.

Climate-related and environmental risk is 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 temperature increases and sea level rises
- **Transition Risks:** Risks related to the transition to a lower-carbon economy, which may entail extensive policy, legal, technology, or market changes

Like all risks, climate-related and environmental risks require coordinated governance, clearly defined roles and responsibilities, and well-developed processes to ensure they are identified, measured, monitored, and controlled appropriately and in a timely manner. Both physical and transitional climate-related and environmental risks may manifest in BofASE SA's seven key risk types. BofASE SA is enhancing its risk management framework including risk governance, in line with industry standards and regulatory expectations, in order to manage climate-related and environmental risk. The changes being made are proportionate to the nature, scale, and complexity of BofASE SA's

businesses and over time the framework is expected to mature from a largely qualitative to a more quantitative basis.

A regional cross functional steering group has been established which is responsible for providing management oversight of activities related to climate-related and environmental risk and other Environmental, Social, and Governance (“ESG”) related regulatory requirements impacting Bank of America’s EMEA legal entities. This regional steering group includes representatives from across the three lines of defence as well as subject matter experts, and is connected to the global ESG and climate risk governance framework. BofASE SA’s Chief Risk Officer and other senior leaders are members of the steering group.

As part of a global bank, BofASE SA is working in line with the global climate risk management function that has been established within Bank of America. That function resides within Global Risk Management and oversees climate risk practices and shapes the approach to managing climate-related risks in alignment with the Risk Framework. Further detail on climate risk management, including strategy and scenario planning, risk management, governance, metrics and targets, is included in Bank of America’s Task Force for Climate-related Financial Disclosures (“TCFD”) Report and in the Environmental and Social Risk Policy Framework. Both these documents are available at [www.bankofamerica.com](http://www.bankofamerica.com).

## BofA Securities Europe SA Pillar 3 Disclosure

5. Further Detail on Capital Requirement, Capital Resources, Leverage,  
Securitisation, and Capital Buffers  
As at 31 December 2020

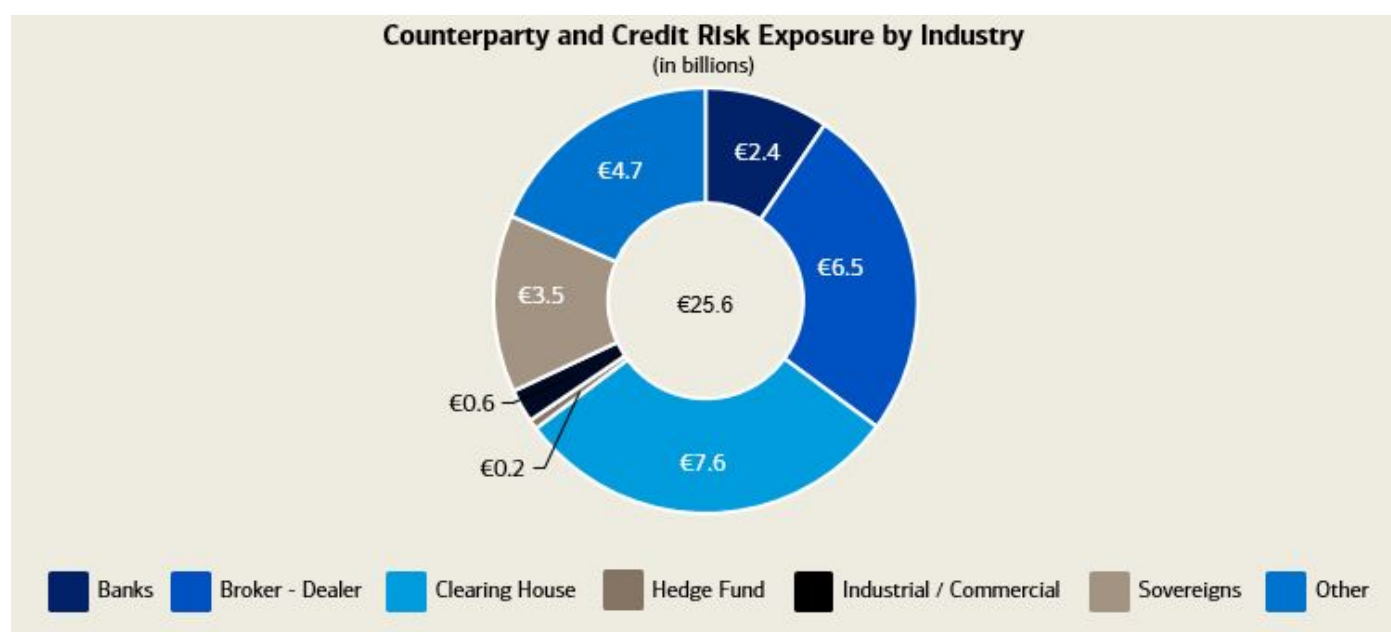
## 5.1. Pillar 1 Minimum Capital Requirement Summary

BofASE SA's Pillar 1 Minimum Capital Requirement is principally comprised of credit risk, counterparty credit risk, and market risk requirements.

The majority of BofASE SA's counterparty and credit risk exposure is against banks, broker-dealers, clearing houses, sovereigns and other financial counterparties. Further details can be found in Section 5.3. Counterparty and Credit Risk.

BofASE SA's Market Risk Capital Requirement is principally driven by BofASE SA'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.

**Figure 5.1.F1. – Minimum Capital Requirement Detail: Counterparty and Credit Risk Exposure**



## 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 SA 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 SA's Market Risk under the standardised approach, and Table 5.2.T2. presents a breakdown of BofASE SA's Market Risk under the IMA.

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

	2020	
	BofASE SA	
(€ in Millions)	RWAs	Capital Requirements
<b>Outright products</b>		
Interest rate risk (general and specific)	353	28
Equity and Collective Investment Undertakings risk (general and specific)	463	37
Foreign exchange risk	104	8
Commodity risk	3	0
<b>Options</b>		
Simplified approach	0	0
Delta-plus method	0	0
Scenario approach	0	0
Securitisation (specific risk)	0	0
<b>Total</b>	<b>924</b>	<b>74</b>

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

	2020	
	RWAs	Capital Requirements
(€ in Millions)		
<b>VaR</b>	<b>615</b>	<b>49</b>
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		9
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		49
<b>SVaR</b>	<b>1,123</b>	<b>90</b>
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		40
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)		90
<b>IRC</b>	<b>873</b>	<b>70</b>
Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		40
Average of the IRC number over the preceding 12 weeks		70
<b>Comprehensive risk measure</b>	<b>146</b>	<b>12</b>
Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)		8
Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		8
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)		12
<b>Other</b>	<b>1,336</b>	<b>107</b>
<b>Total</b>	<b>4,093</b>	<b>327</b>

**5.2.1. Internal Model Based Capital Requirement**

The model based regulatory capital requirement in BofASE SA is calculated based on the internal model (VaR) approved by the ACPR. BofASE SA 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.



**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 SA 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.

**Backtesting**

The VaR methodology is evaluated through a daily backtesting 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, backtesting 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.

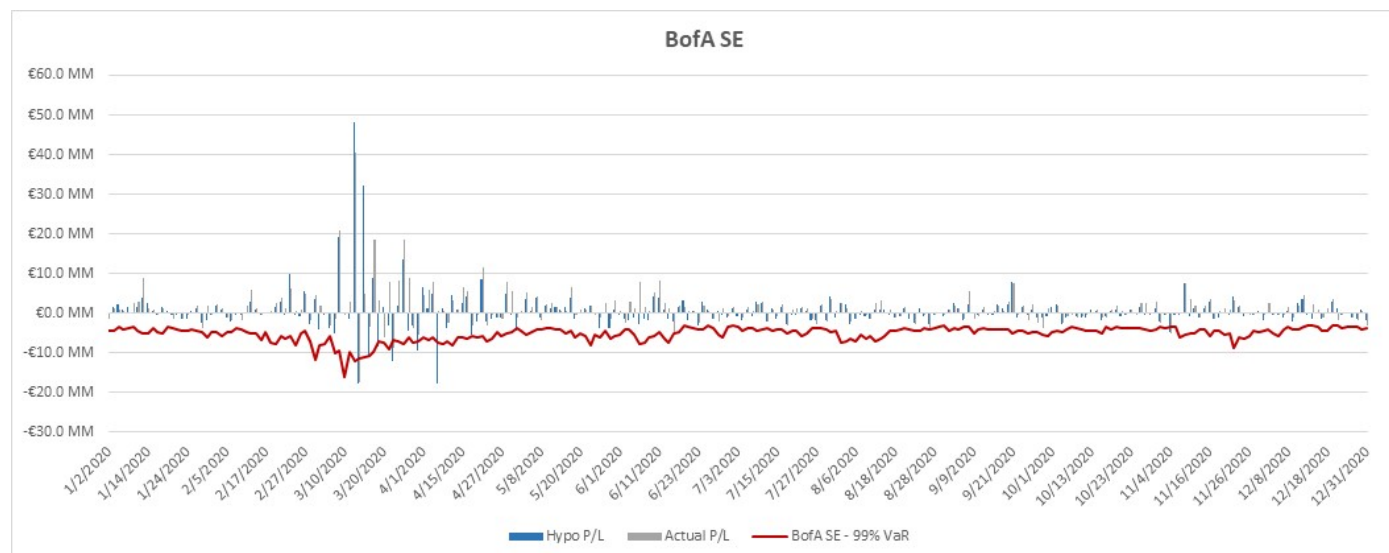
A backtesting overshooting occurs when a trading loss on day N exceeds the VaR value of the portfolio on day N-1. These overshoots are evaluated to understand the positions and market moves that produced the trading loss and to ensure that the VaR methodology accurately represents those losses.

The number of backtesting 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 2020, BofASE SA trading losses as measured by Hypothetical P&L exceeded the prior day's VaR on eight occasions, and as measured by Actual P&L exceeded the prior day's VaR on five occasions. The capital multiplier as at 31 December 2020 was 3.4, consistent with guidance provided by the Supervisory College of the ACPR, in application of the provisions of Article 500c of CRR.

The majority of backtesting overshootings occurred in the first half of the year reflecting market volatility caused by COVID-19, which impacted equity and FX directional and volatility risk factors. In the second half of the year, the entity experienced one backtesting overshooting on hypothetical and actual P&L together, driven by large movements in FX and equity volatility after the United States of America ("U.S.") election; as well as two backtesting overshootings on actual P&L only, driven by changes in Equity reserves.

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 Backtesting Results**

The actual and hypothetical P&L shown in the above graph is only for positions covered by the VaR model and not for the entirety of BofASE SA. The VaR measure shown is for regulatory VaR using a three-year look-back period and one-day holding period. Capital requirements covered by the VaR model (Pillar 1 capital requirements for VaR and Stressed VaR) total 35% of BofASE SA's Pillar 1 capital requirements for market risk and 9% of BofASE SA's total Pillar 1 minimum capital requirements.

**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, our 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 SA's performs stress testing to the trading portfolio, please refer to Section 4.3.3. Market Risk.

**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 SA. 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 SA 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 SA'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 our 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 SA'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 twelve months to 31 December 2020. 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)	2020
<b>VaR (10 day 99%)</b>	
Maximum value	66
Average value	17
Minimum value	7
Period end	9
<b>SVaR (10 day 99%)</b>	
Maximum value	129
Average value	37
Minimum value	10
Period end	40
<b>IRC (99.9%)</b>	
Maximum value	108
Average value	59
Minimum value	22
Period end	40
<b>Comprehensive risk capital charge (99.9%)</b>	
Maximum value	24
Average value	10
Minimum value	2
Period end	8

### 5.2.2. Capital Requirement under Standardised Approaches

In BofASE SA, 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 SA.

#### Commodity Market Risk

Commodity Market Risk is the regulatory capital requirement calculated on the global commodities investor product business in BofASE SA. 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 SA.

#### 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. It 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 SA has counterparty and credit risk exposure as a result of derivative trades, securities financing transactions, and other trading and non-trading book exposures.

BofASE SA measures counterparty and credit risk exposure on derivatives using a mark-to-market method, defined as mark-to-market plus a notional add-on.

The following section provides detailed information on BofASE SA's regulatory counterparty and credit risk exposures using the above mentioned approach. All exposures, unless stated otherwise, are post Credit Risk Mitigation and the application of Credit Conversion Factors.

**5.3.1. Counterparty and Credit Risk by Type**

Table 5.3.1.T1. sets out BofASE SA's counterparty and credit risk exposure by industry distribution. The majority of exposures of BofASE SA are against banks, broker-dealers, clearing houses, sovereigns and other financial counterparties. The ratings of counterparties are derived by referring to external credit ratings provided by Moody's, Fitch, and S&P for all exposure classes.

Counterparty and Credit Risk are combined for reporting purposes.

**Table 5.3.1.T1. – Counterparty and Credit Risk Exposure by Industry Distribution**

(€ in Millions)	2020
	BofASE SA
Bank	2,425
Broker Dealer	6,544
Central Counterparty, Clearing House / Exchange	7,591
Industrial and Commercial Companies	645
Energy and Commodities	194
Hedge Fund	190
Insurance	928
Sovereign & Government Related	3,455
Other Financial	3,601
<b>Total Exposure Value</b>	<b>25,575</b>

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

Further analysis for BofASE SA showing the geographical distribution of the exposure value is shown in Table 5.3.2.T1.

The geographical distribution is reported by analysing where the counterparty is based and is further analysed to show the breakdown by exposure class. The majority of BofASE SA's exposure sits within the EMEA region.

**Table 5.3.2.T1. – Counterparty and Credit Risk Exposure by Geographical Distribution**

(€ in Millions)	2020			
	BofASE SA			
	Asia	Americas	EMEA	Total
Central governments or central banks	—	—	2,821	2,821
Corporates	53	386	5,094	5,533
Institutions	93	914	10,829	11,836
Public sector entities	—	—	632	632
Regional governments or local authorities	—	—	2	2
Short-term Claims on institutions and corporate	5	602	4,142	4,749
Items Representing Securitisation Positions	—	—	2	2
<b>Total Exposures</b>	<b>150</b>	<b>1,902</b>	<b>23,523</b>	<b>25,575</b>

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

**Table 5.3.2.T2. – Counterparty and Credit Risk Exposure by Residual Maturity**

(€ in Millions)	2020			
	BofASE SA			
	Under 1 Year	One - Five Years	Over Five Years	Total
Central governments or central banks	2,761	7	53	2,821
Corporates	3,545	1,251	737	5,533
Institutions	7,483	2,929	1,425	11,836
Public sector entities	274	140	218	632
Regional governments or local authorities	2	—	—	2
Short-term Claims on institutions and corporate	4,749	—	—	4,749
Items Representing Securitisation Positions	2	—	—	2
<b>Total Exposure Value</b>	<b>18,815</b>	<b>4,327</b>	<b>2,433</b>	<b>25,575</b>

### 5.3.3. Counterparty and Credit Exposure by Credit Quality Step

A Credit Quality Step ("CQS") is a credit quality assessment scale as set out in CRR. The CQS is derived using ECAIs which include Moody's, Fitch, and S&P, where available.

Table 5.3.3.T1. analyses exposure values by exposure class and CQS, showing the position Pre and Post Credit Risk Mitigation.

BofASE SA complies with the standard association for mapping of external ratings of each nominated ECAI with the credit quality steps, which is published by the European Banking Authority ("EBA").

BofASE SA has over 38% of exposures with counterparties externally rated between AAA and A- or equivalent. 58% of BofASE SA's exposures are to counterparties not rated by external rating agencies, the majority of which are to CCPs and Central Banks.

Other exposures that BofASE SA has to unrated counterparties are to Financial or Non-Financial Corporates, which are also generally assessed internally as being of high quality. Credit risk is assessed as outlined in Section 4.3. Key Risk Types.

Table 5.3.3.T1. – Counterparty and Credit Risk Exposure by CQS

(€ in Millions)	2020	
	BofASE SA	
	Pre-Credit Risk Mitigation <sup>(1)</sup>	Post-Credit Risk Mitigation
<b>Central and Regional Governments or Central Banks</b>		
Credit Quality Step		
1	838	842
2	—	—
3	—	—
4	—	—
5	—	—
6	—	—
NR-Non Rated	1,981	1,981
<b>Total Exposure Value</b>	<b>2,819</b>	<b>2,823</b>
<b>Corporates</b>		
Credit Quality Step		
1	179	141
2	495	288
3	76	64
4	54	54
5	—	—
6	5	5
NR-Non Rated	5,443	4,980
<b>Total Exposure Value</b>	<b>6,252</b>	<b>5,533</b>
<b>Institutions</b>		
Credit Quality Step		
1	2,981	1,204
2	7,001	2,705
3	680	103
4	227	39
5	—	—
6	—	—
NR-Non Rated	7,713	7,785
<b>Total Exposure Value</b>	<b>18,602</b>	<b>11,836</b>
<b>Other<sup>(2)</sup></b>		
Credit Quality Step		
1	2,229	665
2	4,319	3,934
3	805	673
4	112	111
5	—	—
6	—	—
NR-Non Rated	—	—
<b>Total Exposure Value</b>	<b>7,465</b>	<b>5,383</b>
<b>Combined Total Exposure Value</b>	<b>35,138</b>	<b>25,575</b>

<sup>(1)</sup> Exposure Pre CRM includes the effect of Funded Credit Protection in the form of master netting agreements for Securities Financing Transactions.

<sup>(2)</sup> Other comprises of exposures to Claims on Institutions and Corporates with a Short-Term Credit Assessment, Public Sector Entities, and Securitisation.

**5.3.4. Credit Quality of Assets**

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 restructuring of a loan or advance by BofASE SA on terms that BofASE SA would not consider otherwise
- It is becoming probable that the borrower will enter bankruptcy or other financial reorganisation
- The disappearance of an active market for a security because of financial difficulties

A loan or advance that has been renegotiated 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 and / or
- 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 2020, BofASE SA did not recognise any specific or general credit risk adjustments.

**5.4. Securitisation**

As at 31 December 2020, BofASE SA had an immaterial amount of exposure as investor in securitisations. BofASE SA 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 Buffers**

The CCYB was introduced through CRD IV and is defined as the amount of CET1 capital that BofASE SA must calculate in accordance with the CRD as implemented by the ACPR. The CCYB is equal to BofASE SA’s total risk exposure amount multiplied by the weighted average of the CCYB rates that apply to exposures in the jurisdictions where BofASE SA’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% to 2.5% of RWAs, may be put in place for specified jurisdictions.

BofASE SA 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 2020.



During 2020, most other jurisdictions reduced their CCYB rates to zero in response to -19. Jurisdictions with a non-zero CCYB rate as at the end of 2020 were Hong Kong (1%), Norway (1%), Czech Republic (0.5%), Slovakia (1%), Luxembourg (0.25%), and Bulgaria (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. – BofASE SA CCYB - Exposures**

(€ in Millions)	BofASE SA			
	General Credit Exposures	Trading Book Exposures		Securitisation Exposures
	Exposure Value for Standardised Approach	Sum of Long and Short Positions of Trading Book Exposures for Standardised Approach	Value of Trading Book Exposures for Internal Models	Exposure Value for Standardised Approach
Norway	4	—	1	—
Hong Kong	9	—	—	—
Slovakia	—	—	—	—
Czech Republic	—	—	—	—
Luxembourg	1,330	—	—	—
Bulgaria	—	—	—	—
France	734	85	29	—
United States Of America	324	1	14	—
Other	3,248	65	295	2
<b>Total</b>	<b>5,650</b>	<b>152</b>	<b>340</b>	<b>2</b>

**Table 5.5.T2. – BofASE SA CCYB - Own Fund Requirements**

(€ in Millions)	BofASE SA					
	Own Funds Requirements				Own Funds Requirements Weights	Countercyclical Capital Buffer Rate
	of which: General Credit exposures	of which: Trading Book Exposures	of which: Securitisation Exposures	Total		
Norway	—	—	—	—	0.000	1.000 %
Hong Kong	1	—	—	1	0.001	1.000 %
Slovakia	—	—	—	—	0.000	1.000 %
Czech Republic	—	—	—	—	0.000	0.500 %
Luxembourg	106	—	—	107	0.194	0.250 %
Bulgaria	—	—	—	—	0.000	0.500 %
France	47	37	—	84	0.153	0.000 %
United States Of America	26	10	—	35	0.064	0.000 %
Other	249	74	—	322	0.587	0.000 %
<b>Total</b>	<b>429</b>	<b>121</b>	<b>—</b>	<b>550</b>	<b>1.000</b>	

**Table 5.5.T3. – Amount of Institution Specific Countercyclical Capital Buffer**

(€ in Millions)	2020
Total risk exposure amount	18,832
Institution specific countercyclical capital buffer rate	0.05 %
Institution specific countercyclical capital buffer requirement	9

The decrease in Institution Specific CCYB requirement from €19m in 4th Quarter 2019 to €9m in 4th Quarter 2020 is driven by lower CCYB rates at the end of 2020.

## 5.6. Capital Resources

Table 5.6.T1. shows a reconciliation between the accounting balance sheet values and the regulatory capital values of the items included in BofASE SA's Capital Resources. Further details on the composition of BofASE SA's capital resources are shown in Tables 5.6.1.T1 and 5.6.2.T1.

**Table 5.6.T1. – Regulatory Capital Resources and Reconciliation to Accounting Balance Sheet**

(€ in Millions)	2020
	BofASE SA
Called up Share Capital	5,276
Share Premium	—
Other Reserves	(127)
Profit and Loss Account	(64)
<b>CET1 Capital Before Deductions</b>	<b>5,085</b>
<i>Debit Valuation Adjustment</i>	<i>(19)</i>
<i>Prudential Valuation Adjustment</i>	<i>(29)</i>
<b>CET1 Capital</b>	<b>5,037</b>
Additional Tier 1 Capital	—
<b>Tier 1 Capital</b>	<b>5,037</b>
<b>Tier 2 Capital</b>	<b>—</b>
<b>Total Capital Resources (net of deductions)</b>	<b>5,037</b>

### Prudential Valuation Adjustment

Following the implementation of CRD IV in 2014, a requirement was introduced requiring a prudential valuation adjustment to be deducted from 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 CRR and related interpretive guidance.

**5.6.1. Capital Resources (Landscape)****Table 5.6.1.T1. – BofASE SA Capital Instrument Features**

Capital Instruments Main Features		BofASE SA		
		CET1	AT1	T2
1	Issuer	BofA Securities Europe SA	N/A	N/A
2	Unique identifier (e.g., CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	N/A	N/A
3	Governing law(s) of the instrument	French	N/A	N/A
<b>Regulatory Treatment</b>				
4	Transitional CRR rules	CET1	N/A	N/A
5	Post-transitional CRR rules	CET1	N/A	N/A
6	Eligible at solo/(sub-)consolidated/ solo & (sub-)consolidated	Solo	N/A	N/A
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares with full voting rights	N/A	N/A
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	EUR 5,276m	N/A	N/A
9	Nominal amount of instrument	EUR 10.00	N/A	N/A
9a	Issue price	EUR 10.00	N/A	N/A
9b	Redemption price	N/A	N/A	N/A
10	Accounting classification	Shareholders equity	N/A	N/A
11	Original date of issuance	EUR 0.05m 25 Sep 2018 EUR 540m 19 Nov 2018 EUR 2,086m 14 Jan 2019 EUR 2,650m 19 Jul 2019	N/A	N/A
12	Perpetual or dated	Perpetual	N/A	N/A
13	Original maturity date	No maturity	N/A	N/A
14	Issuer call subject to prior supervisory approval	No	N/A	N/A
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A
<b>Coupons / Dividends</b>				
17	Fixed or floating dividend/coupon	N/A	N/A	N/A
18	Coupon rate and any related index	N/A	N/A	N/A
19	Existence of a dividend stopper	No	N/A	N/A
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	N/A	N/A
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	N/A	N/A

Capital Instruments Main Features		BofASE SA		
		CET1	AT1	T2
21	Existence of step up or other incentive to redeem	No	N/A	N/A
22	Non-cumulative or cumulative	Non-cumulative	N/A	N/A
23	Convertible or non-convertible	Non-convertible	N/A	N/A
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	N/A
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
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	All liabilities	N/A	N/A
36	Non-compliant transitioned features	No	N/A	N/A
37	If yes, specify non-compliant features	N/A	N/A	N/A
38	Link to full terms and conditions of the instrument (signposting)	<a href="http://investor.bankofamerica.com">http://investor.bankofamerica.com</a>	N/A	N/A

<sup>(1)</sup> Insert 'N/A' if the question is not applicable

## 5.6.2. Capital Resources (continued)

Table 5.6.2.T1. – Own Funds Disclosure Template

(€ in Millions)	Amount at Disclosure Date
	BofASE SA
Capital instruments and the related share premium accounts	5,276
of which: Ordinary shares with full voting rights	5,276
Retained Earnings	(127)
Independently reviewed interim profits net of any foreseeable charge or dividend	(64)
Common Equity Tier 1 (CET1) capital before regulatory adjustments	5,085
<b>Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments</b>	
Prudential valuation adjustment	(29)
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(19)
Total Regulatory Adjustments to Common Equity Tier 1 (CET1)	(48)
<b>Common Equity Tier 1 (CET1) Capital</b>	5,037
Additional Tier 1 (AT1) capital: Instruments	—
Tier 1 Capital (T1 = CET1 + AT1)	5,037
<b>Tier 2 (T2) Capital: Instruments and Provisions</b>	
Capital instruments and the related share premium accounts	—
Tier 2 (T2) Capital	—
<b>Total Capital (TC = T1 + T2)</b>	5,037
<b>Total Risk Weighted Assets</b>	18,832
<b>Capital Ratios and Buffers</b>	
Common Equity Tier 1 (as a percentage of risk exposure amount)	26.7 %
Tier 1 (as a percentage of risk exposure amount)	26.7 %
Total Capital (as a percentage of risk exposure amount)	26.7 %
Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	7.1 %
of which: capital conservation buffer requirement	2.5 %
of which: countercyclical buffer requirement	0.1 %
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	18.7 %
<b>Amounts below the thresholds for deduction (before risk weighting)</b>	
Direct, indirect and synthetic holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	315
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	—
<b>Applicable caps on the inclusion of provisions in Tier 2</b>	
Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	—
Cap on inclusion of credit risk adjustments in T2 under standardised approach	124

There are no own funds items or adjustments that are subject to pre-regulation (EU) No 575 / 2013 treatment or prescribed residual amount of regulation (EU) No 575/2013 in BofASE SA.

**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. – Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures**

<i>(€ in Millions)</i>	<b>BofASE SA</b>
Total Assets as per Balance Sheet	51,781
Adjustments for Derivative Financial Instruments	(8,775)
Adjustments for Securities Financing Transactions	1,261
Adjustment for Off-Balance Sheet Items (i.e., conversion to credit equivalent amounts of off-balance sheet exposures)	7
Other Adjustments	(130)
<b>Leverage Ratio Exposure</b>	<b>44,143</b>

**Table 5.7.2.T2. – Leverage Ratio Common Disclosure**

(€ in Millions)	BofASE SA
<b>On-Balance Sheet Exposures (excluding derivatives and SFTs)</b>	
On-balance Sheet Items (excluding Derivatives, SFTs and fiduciary assets, but including Collateral)	18,919
Asset Amounts Deducted in Determining Tier 1 Capital	(29)
<b>Total On-Balance Sheet Exposures (excluding derivatives, SFTs and fiduciary assets)</b>	<b>18,891</b>
<b>Derivative Exposures</b>	
Replacement Cost Associated with Derivatives Transactions (net of Eligible Cash Variation Margin)	1,443
Add-on Amounts for PFE Associated with Derivatives Transactions (Mark-to-Market method)	22,243
Gross-up for Derivatives Collateral provided where deducted from the Balance Sheet Assets pursuant to the Applicable Accounting Framework	—
(Deductions of Receivables Assets for Cash Variation Margin provided in Derivatives Transactions)	(4,578)
(Exempted CCP leg of Client-Cleared Trade Exposures)	(7,397)
Adjusted Effective Notional Amount of Written Credit Derivatives	37,159
(Adjusted Effective Notional Offsets and Add-On Deductions for Written Credit Derivatives)	(32,879)
<b>Total Derivative Exposure</b>	<b>15,992</b>
<b>Securities Financing Transaction Exposures</b>	
Gross SFT Assets (With No Recognition of Netting), after Adjusting for Sales Accounting Transactions	13,154
(Netted Amounts of Cash Payables and Cash Receivables of Gross SFT Assets)	(5,161)
Counterparty Credit Risk Exposure for SFT Assets	1,261
<b>Total Securities Financing Transaction Exposures</b>	<b>9,254</b>
<b>Off-Balance Sheet Exposures</b>	
Off-balance Sheet Exposures at Gross Notional Amount	65
Adjustments for Conversion to Credit Equivalent Amounts	(59)
<b>Total Off-Balance Sheet Exposures</b>	<b>7</b>
<b>Exempted Exposures</b>	
<b>Capital and Total Exposures</b>	
Tier 1 Capital	5,037
<b>Total Leverage Ratio Exposures</b>	<b>44,143</b>
<b>Leverage Ratio</b>	
Leverage Ratio	11.4 %

**Table 5.7.2.T3. – Split of On-Balance Sheet Exposures (Excluding Derivatives and SFTs)**

(€ in Millions)	BofASE SA
<b>Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:</b>	<b>11,452</b>
Trading Book Exposures	7,950
Banking Book Exposures, of which:	3,501
Covered Bonds	—
Exposures treated as Sovereigns	2,833
Exposures to Regional Governments, MDB, International Organisations and PSE not treated as Sovereigns	—
Institutions	181
Secured by Mortgages of Immovable Properties	—
Corporate	339
Exposures in Default	—
Other Exposures (e.g., Equity, Securitisations, and other Non-Credit Obligation Assets)	148

### **5.7.3. Management of Risk of Excessive Leverage**

BofASE SA sets a leverage ratio risk appetite limit at an appropriate level to manage the risk of excessive leverage. Leverage ratio metrics are monitored and reviewed for consistency with the strategic plan and risk appetite statement, as well as being reviewed quarterly by the Board. This will include the actual reported leverage ratio, compared against the Board's risk appetite limit and regulatory minimums. The leverage ratio reinforces risk based requirements and limits the build up of excessive leverage.

Comprehensive risk management of excessive leverage is achieved through the risk appetite framework and quarterly Board oversight. A breach of a limit will trigger defined operational protocols, which set out specific governance, escalation and management actions at various trigger levels that align to the Board risk appetite and recovery plan indicators.



# BofA Securities Europe SA

## Pillar 3 Disclosure

6. Additional Information on Remuneration Disclosure  
As at 31 December 2020

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

The BofASE SA 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 No 575/2013 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 SA.

# BofA Securities Europe SA Pillar 3 Disclosure

7. Appendices  
As at 31 December 2020

## Appendix 1 - Directors Board Membership and Experience

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>	Joined Bank of America in 2004, Ms. Finucane is Vice Chairman of Bank of America Corporation and was Global Chief Strategy and Marketing Officer. Since joining the firm she has held a number of senior roles and is a member of the Company's executive management committee, she continues to lead globally on capital deployment, public policy, and environmental, social, and governance. Ms. Finucane is Chair of Bank of America Europe DAC and Group Non-Executive Director of BofA Securities Europe S.A. She is also a Group Non-Executive Director of Bank of America Charitable Foundation, Inc. She is a Non-Executive Director Carnegie Hall Society, Inc., National September 11 Memorial & Museum at the World Trade Centre Foundation, Inc., Brigham and Women's Hospital, Inc., Special Olympics, Inc., The Ireland Funds, and Partners Healthcare System, Inc. Ms. Finucane is an Independent Non-Executive Director of CVS Health Corp.	10	2
<b>Director</b>			
<b>Shannon Lilly</b>	Mr. Lilly joined Bank of America in 2005. He is the Strategic Asset and Liability Management Executive for Bank of America and a member of the Treasury leadership team. Mr. Lilly was appointed as a Group Non-Executive Director of Bank of America Europe DAC on 4 October 2019, and serves as an Executive Director and Deputy CEO of BofA Securities Europe S.A. As deputy CEO, he is responsible to the CEO to oversee and be accountable for the effective management of BofASE, for implementing the BofASE strategy, and for managing BofASE's risk profile through appropriate governance and control consistent with the risk management framework. In addition, Mr. Lilly is a Non-Executive Director of Merrill Lynch B.V.	3	1
<b>Director</b>			
<b>Thomas Montag</b>	Mr. Thomas K. Montag is chief operating officer of Bank of America, president of Global Banking and Markets, and a member of the company's executive management team. Mr. Montag is responsible for all of the businesses that serve companies and institutional investors, including middle-market commercial and large corporate clients, and institutional investor clients, including BofA Global Research and the global markets sales and trading businesses. Previously, he was president of Global Banking and Markets at Bank of America Merrill Lynch. He joined Merrill Lynch as executive vice president and head of global sales and trading in 2008, prior to the company's merger with Bank of America. Mr. Montag serves on the board of directors of Mervin Manufacturing, NYU Langone Medical Center, and the Japan Society. He is a trustee of Northwestern University, an advisory board member for the Stanford Institute for Economic Policy Research, a member of the board of the Partnership for New York City, and a trustee of the Riverdale Country School.	8	3
<b>Director</b>			
<b>Bruce Thompson</b>	Mr. Thompson joined Bank of America in 1996, and he has held a number of senior positions within the firm; as Chief Risk Officer in 2010, and subsequently as Chief Financial Officer in 2011, a position he held until 2015. Mr. Thompson was appointed as Vice Chairman of Bank of America in 2016. He is Chief Executive Officer and Executive Director of Bank of America Europe DAC and Non-Executive Director of BofA Securities Europe SA. Mr. Thompson is a member of the Darden School Foundation Board of Trustees at the University of Virginia serving on the Audit / Finance Committee, and is a member of the Board of Trustees of Allegheny College in Meadville, PA., serving on the Executive Committee. Mr. Thompson resigned as CEO and Executive Director of Bank of America Europe DAC on 18 December 2020.	3	1
<b>Director</b>			
<b>Sanaz Zaimi</b>	Ms. Sanaz Zaimi is head of Global Fixed Income, Currencies and Commodities Sales at Bank of America, and is a member of the company's executive management team. She also serves as Chief Executive Officer of BofA Securities Europe SA, Bank of America's EU broker-dealer, and is the Country Executive for France. Ms. Zaimi is a member of a number of the company's senior executive committees, including the Management Committee and the Operating Committee of Bank of America, the Global Banking and Markets Management Committee, the Global Banking and Markets Global Reputation Risk Committee, and the Company's Global Environment, Social and Governance Committee. She is also active within the organisation in driving diversity and inclusion, and is committed to developing the company's charitable partnerships in France.	2	2
<b>Director &amp; CEO</b>	Ms. Zaimi joined Bank of America in 2010 from Goldman Sachs where she was a Partner, and previously held positions at Deutsche Bank and Smith Barney. She has extensive industry knowledge, with over 25 years of experience in financial markets. Ms. Zaimi sits on the Board of Directors for Kennedy Wilson.		
<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.	14	5
<b>Director (outside) &amp; Chairman</b>			
<b>Pierre Fleuriot</b>	Appointed in August 2019 as a non-executive director of the BofA Securities Europe S.A. Board. Mr. Fleuriot 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.	7	5
<b>Director (outside)</b>	Previously served as the CEO of Credit Suisse for France, Belgium, and Luxembourg from 2009 to 2016 & 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.		

		No. Of Directorships	
		Total	Excluding non-commercial and counting group appointments as one
<b>Marie-Hélène Sartorius</b>	Marie-Hélène Sartorius was appointed in October 2020 as a non-executive director of the BofA Securities Europe S.A. 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 fifteen 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.	6	5
<b>Director (outside)</b>			

**Appendix 2 – Supplementary Disclosure Templates**

The following table shows the total and average net amount of exposures as at 31 December 2020 for BofASE SA.

**Table A2.T1. – EU CRB-B Total and Average Net Amount of Exposures**

(€ in Millions)	Dec-20	
	Net value of exposures at the end of the period	Average net exposures over the period
Central governments or central banks	2,709	3,243
Institutions	157	441
Corporates	161	281
Claims on institutions and corporate with a short-term credit assessment	205	391
Other exposures <sup>(1)</sup>	122	259
<b>Total</b>	<b>3,354</b>	<b>4,616</b>

<sup>(1)</sup> Other exposures comprises of exposures to International Organisations.

Over the course of 2020, net exposures have increased, primarily from an increase in exposures to central governments and central banks.

The following table shows the effect of all CRM techniques as at 31 December 2020 for BofASE SA.

**Table A2.T2. – EU CR4 Standardised Approach - Credit Risk Exposure and CRM Effects**

(€ in Millions)	Dec-20					
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
Central governments or central banks	2,709	—	2,709	—	—	0 %
Public sector entities	121	—	121	—	—	0 %
Institutions	157	—	157	—	35	22 %
Corporates	161	—	161	—	160	99 %
Claims on institutions and corporate with a short-term credit assessment	139	65	139	—	71	51 %
<b>Total</b>	<b>3,289</b>	<b>65</b>	<b>3,289</b>	<b>—</b>	<b>265</b>	<b>8 %</b>

Over the course of 2020, exposures have increased, primarily from an increase in exposures to central governments and central banks.

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

The following table shows the breakdown of exposures under the standardised approach by exposure class and risk weight as at 31 December 2020 for BofASE SA.

**Table A2.T3. – EU CR5 Standardised Approach**

(€ in Millions)	Dec-20																	Total	Of which unrated
	Risk Weight																		
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted			
Central governments or central banks	2,709	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,709	1,936	
Public sector entities	121	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	121	—	
Institutions	—	—	—	—	146	—	11	—	—	—	—	—	—	—	—	—	157	2	
Corporates	—	—	—	—	—	—	3	—	—	158	—	—	—	—	—	—	161	158	
Claims on institutions and corporate with a short-term credit assessment	—	—	—	—	—	—	138	—	—	2	—	—	—	—	—	—	139	—	
Total	2,831	—	—	—	146	—	151	—	—	160	—	—	—	—	—	—	3,289	2,096	

Over the course of 2020, exposures have increased, primarily from an increase in exposures to central governments and central banks.

The following table shows the impact of netting and collateral held on derivative and SFT exposures held as at 31 December 2020 for BofASE SA.

**Table A2.T4. – EU CCR5-A Impact of Netting and Collateral Held on Exposure Value**

(€ in Millions)	Dec-20						
	Gross positive fair value or net carrying amount	Netting benefits		Netted current credit exposure	Collateral held		Net credit exposure
		Applied	Not Applied		Used	Not Used	
Derivatives	36,052	(27,488)	(19)	8,566	(7,390)	(6,932)	1,174
SFTs	38,135	(36,726)	(81)	1,410	—	(693)	1,410
<b>Total</b>	<b>74,188</b>	<b>(64,214)</b>	<b>(100)</b>	<b>9,976</b>	<b>(7,390)</b>	<b>(7,626)</b>	<b>2,583</b>

Note: These values can differ from the Accounting balance sheet for example, due to differences in netting and off balance sheet items.

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

The following table shows exposures to credit derivative transactions broken down between derivatives bought or sold for BofASE SA.

**Table A2.T5. – EU CCR6 Credit Derivatives Exposures**

(€ in Millions)	Dec-20		
	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
<b>Notionals</b>			
Single-name credit default swaps	—	—	10,454
Index credit default swaps	—	—	48,250
Other credit derivatives	153	153	15,288
<b>Total Notional</b>	<b>153</b>	<b>153</b>	<b>73,992</b>
<b>Fair Values</b>			
Positive fair value (asset)	—	1	1,319
Negative fair value (liability)	—	—	(1,299)

Over the course of 2020, the notional amount of credit derivatives increased, primarily on index credit default swaps.



**Table A2.T6. – EU OV1 Semi-Annual Overview of RWAs**

(€ in Millions)	BofASE SA		
	RWAs		Pillar 1 Minimum Capital Requirement
	Q4 2020	Q2 2020	Q4 2020
<b>Credit risk (excluding CCR)</b>	<b>265</b>	<b>439</b>	<b>21</b>
Of which the standardised approach	265	439	21
Of which the foundation IRB ("FIRB") approach	—	—	—
Of which the advanced IRB ("AIRB") approach	—	—	—
Of which equity IRB under the simple risk-weighted approach or the IMA	—	—	—
<b>CCR</b>	<b>12,234</b>	<b>11,499</b>	<b>979</b>
Of which mark to market	8,005	7,749	640
Of which original exposure	—	—	—
Of which the standardised approach	—	—	—
Of which: comprehensive approach for credit risk mitigation (for SFTs)	1,653	1,936	132
Of which internal model method ("IMM")	—	—	—
Of which risk exposure amount for contributions to the default fund of a CCP	319	174	25
Of which CVA	2,258	1,640	181
<b>Settlement risk</b>	<b>114</b>	<b>26</b>	<b>9</b>
<b>Securitisation exposures in the banking book (after the cap)</b>	<b>—</b>	<b>—</b>	<b>—</b>
Of which IRB approach	—	—	—
Of which IRB supervisory formula approach ("SFA")	—	—	—
Of which internal assessment approach ("IAA")	—	—	—
Of which standardised approach	—	—	—
<b>Market risk</b>	<b>5,017</b>	<b>5,363</b>	<b>401</b>
Of which the standardised approach	924	1,137	74
Of which IMA	4,093	4,226	327
<b>Large exposures</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Operational risk</b>	<b>1,203</b>	<b>1,245</b>	<b>96</b>
Of which basic indicator approach	—	—	—
Of which standardised approach	1,203	1,245	96
Of which advanced measurement approach	—	—	—
<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	<b>—</b>	<b>—</b>	<b>—</b>
Floor adjustment	—	—	—
<b>Total</b>	<b>18,832</b>	<b>18,572</b>	<b>1,507</b>

BofASE SA's RWAs were broadly flat in 4th Quarter 2020 compared to 2nd Quarter 2020.

The following table shows a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method for BofASE SA as at 31 December 2020.

**Table A2.T7. – EU CCR1 Analysis of CCR Exposure by Approach**

(\$ in Millions)	Dec-20						
	Notional	Replacement Cost/Current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
Mark to market		1,393	28,248			12,118	7,876
Original exposure	n/a					n/a	n/a
Standardised approach		n/a		n/a	n/a	n/a	n/a
IMM (for derivatives & SFTs)				n/a	n/a	n/a	n/a
Financial collateral simple method (for SFTs)						n/a	n/a
Financial collateral comprehensive method (for SFTs)						2,485	1,641
VaR for SFTs						n/a	n/a
<b>Total</b>							<b>9,517</b>

The following table shows the extent of the use of CRM techniques as at 31 December 2020 for BofASE SA.

**Table A2.T8. – EU CR3 CRM Techniques Overview**

(\$ in Millions)	Dec-20				
	Exposures unsecured – Carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total loans	56	—	—	—	—
Total debt securities	1,098	—	—	—	—
<b>Total exposures</b>	<b>1,154</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Of which defaulted	—	—	—	—	—

Over the course of 2020, there have been no material changes.

## Appendix 3 – Index

Table A3.T1. – Index

Article	Article Name	Article Reference Detail	Description	Document Reference	Page Reference
431	Scope of disclosure requirements	431(1)	Requirement to publish Pillar 3 disclosures	Section 1.2. Basis of Preparation	7
		431(2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information	Section 4.3.5. Compliance and Operational Risk (Not Applicable - BofASE SA uses Standardised Approach for Operational Risk as referenced in this section)	38
		431(3)	Institutions shall adopt a formal policy to comply with the disclosure requirements in Part Eight of CRR	Section 1.3. Disclosure Policy	9
		431(4)	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	Section 4.4.7. Equities Exposures in the Non-Trading Book Section 5.4. Securitisation	44, 56
		432(2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected	Section 1.1. Overview and Purpose of Document (Not Applicable - BofASE SA has not omitted any information which is proprietary or confidential.)	7
		432(3)	Where 432(2) applies this must be stated in the disclosures, and more general information must be disclosed		
		432(4)	Use of 432 (1), (2) or (3) is without prejudice to scope of liability for failure to disclose material information		
433	Frequency of disclosure	433	Disclosures must be published once a year at a minimum, and more frequently if necessary	Section 1.2. Basis of Preparation	7
434	Means of disclosures	434(1)	To include all disclosures in one appropriate medium, or provide clear cross-references	Section 1.2. Basis of Preparation Section 1.3. Disclosure Policy The remuneration disclosure is published separately and is signposted in Section 6. Additional Information on Remuneration Disclosure of this document	7, 9, 65
		434(2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy the Pillar 3 disclosure requirements if appropriate	Section 1.2. Basis of Preparation (Not Applicable - BofASE does not prepare disclosures under other requirements)	7
435	Risk management objectives and policies	435(1)(a)-(d)	Objectives and policies for each separate category of risk	Section 4.3. Key Risk Types Section 4.4. Other Risk Considerations	28, 42
		435(1)(e)	Risk declaration	Section 4.2.6. Risk Declaration	28
		435(1)(f)	Risk statement	Section 4.2.2. Risk Statement and Risk Appetite	23
		435(2)(a)	Number of directorships held by Board members	Appendix 1 - Directors Board Membership and Experience	68
		435(2)(b)	Directors' knowledge, skills and experience	Appendix 1 - Directors Board Membership and Experience	68
		435(2)(b)-(c)	Board recruitment and diversity policy	Section 4.2.5. Risk Governance	26
		435(2)(d)-(e)	Risk committees and risk information	Section 4.2.5. Risk Governance	26
436	Scope of application	436(a)	Name of institution	Section 1.1. Overview and Purpose of Document	7
		436(b)	Basis of consolidation	Section 1.2. Basis of Preparation	7
		436(c)	Impediments to transfer of own funds between parent and subsidiaries	Section 2.1.3. Transferability of Capital within the Group	11
		436(d)	Capital shortfalls in any subsidiaries outside the scope of consolidation	Not Applicable	n/a
		436(e)	Use of articles on derogations from a) prudential requirements or b) liquidity requirements for individual subsidiaries	Not Applicable	n/a

Article	Article Name	Article Reference Detail	Description	Document Reference	Page Reference
437	Own funds	437(1)(a)	Reconciliation of regulatory capital amounts to balance sheet	Table 5.6.T1. – Regulatory Capital Resources and Reconciliation to Accounting Balance Sheet	58
		437(1)(b)	Description of the main features of Capital Instruments issued	Table 5.6.1.T1. – BofASE SA Capital Instrument Features	59
		437(1)(c)	Full terms and conditions of Capital Instruments issued		
		437(1)(d)-(e)	Disclosure of prudential filters, deductions, and any restrictions applied to the calculation of own funds	Table 5.6.2.T1. – Own Funds Disclosure Template	61
		437(1)(f)	Where institutions disclose capital ratios calculated using elements of own funds determined on a different basis	Section 5.5. Capital Buffers Section 5.6. Capital Resources (Not Applicable - BofASE SA does not disclose capital ratios calculated using elements of own funds on a different basis)	56, 58
438	Capital requirements	438(a)	Approach to assessing adequacy of capital levels	Section 2.4. Capital Management	15
		438(b)	Result of ICAAP on demand from authorities.	Section 2.4. Capital Management	15
		438(c)	RWA amounts for credit risk for each Standardised approach exposure class.	Table 2.2.2.T1. – RWAs and Minimum Capital Requirement	14
		438(d)	Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class	Section 2.1.1. Summary of 2020 Capital Resources Section 5.3. Counterparty and Credit Risk (Not Applicable - BofASE SA does not use the Internal Ratings Based Approach)	11, 52
		438(e)	Capital requirements amounts for market risk, settlement risk, or large exposures	Table 2.2.2.T1. – RWAs and Minimum Capital Requirement	14
		438(f)	Capital requirement amounts for operational risk		
		438 last paragraph	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach	4.4. Other Risk Considerations (Not Applicable - BofASE SA does not use the simple risk weight approach)	42
439	Exposure to counterparty credit risk	439(a)	Discussion of process to assign internal capital and credit limits to CCR exposures	Section 4. Risk Management, Objectives, and Policy	21
		439(b)	Discussion of process to secure collateral and establishing reserves		
		439(c)	Discussion of management of wrong-way exposures	Section 4.4. Other Risk Considerations	42
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		439(e)	Derivation of net derivative credit exposure	Table A2.T4. – EU CCR5-A Impact of Netting and Collateral Held on Exposure Value	71
		439(e) and (f)	Derivation of derivative exposures and exposure values for applicable counterparty credit risk methods	Table A2.T7. – EU CCR1 Analysis of CCR Exposure by Approach	74
		439(g) and (h)	Notional amounts of credit derivatives	Table A2.T5. – EU CCR6 Credit Derivatives Exposures	72
		439(i)	Estimate of alpha, if applicable	Section 2.1.1. Summary of 2020 Capital Resources Section 4.3.2. Credit Risk (Not Applicable - BofASE uses the standardised approach for calculating Counterparty Credit Risk exposures)	11, 29
440	Capital buffers	440	Countercyclical buffer	Section 5.5. Capital Buffers	56
441	Indicators of global systemic importance	441	Disclosure of the indicators of global systemic importance	Section 1.1.1. BofASE SA (Not Applicable - BofASE has not been identified as being of global systemic importance)	7
442	Credit risk adjustments	442(a)	Definitions of past due and impaired	Section 5.3.4. Credit Quality of Assets	56
		442(b)	Approaches for calculating specific and general credit risk adjustments		
		442(c)	Total and average net credit risk exposures pre-CRM and by exposure class	Table A2.T1. – EU CRB-B Total and Average Net Amount of Exposures	70
		442(d)	Geographical breakdown of credit risk exposures pre-CRM and by exposure class	Table 5.3.2.T1. – Counterparty and Credit Risk Exposure by Geographical Distribution	53
		442(e)	Industry breakdown of credit risk exposures pre-CRM and by exposure class	Table 5.3.1.T1. – Counterparty and Credit Risk Exposure by Industry Distribution	53
		442(f)	Breakdown of credit risk exposures pre-CRM by residual maturity and exposure class	Table 5.3.2.T2. – Counterparty and Credit Risk Exposure by Residual Maturity	54
		442(g)	Impaired and past due exposures, specific and general credit risk adjustments, and impairment charges for the period, by industry	Section 5.3.4. Credit Quality of Assets  BofASE SA has no impaired or past due exposures, and no specific or general credit risk adjustments to disclose at the disclosure date	56
		442(h)	Impaired and past due exposures, and amounts of specific and general credit risk adjustments by geographical area		
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		444(c)	Description of the process used to transfer credit assessments to non-trading book items		
		444(d)	Mapping of external rating to CQS	Section 5.3.3. Counterparty and Credit Exposure by Credit Quality Step	54
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445	Exposure to market risk	445	Position risk, large exposures, FX, settlement risk, commodities risk and specific interest rate risk of securitisation positions	Table 5.2.T1. – EU MR1 Market Risk under the Standardised Approach Table 2.2.T1. – RWAs and Minimum Capital Requirement	48, 14
446	Operational risk	446	Approaches used to calculate own funds requirements for operational risk	Section 2.2.1. Summary of 2020 Capital Requirement	11
447	Exposures in equities not included in the trading book	447	Exposures in equities not included in the trading book	Section 4.4.7. Equities Exposures in the Non-Trading Book	44
448	Exposure to interest rate risk on positions not included in the trading book	448	Exposure to interest rate risk on positions not included in the trading book	Section 4.3.3. Market Risk - Exposures to Interest Rate Risk in the Banking Book subheading	36
449	Exposure to securitisation positions	449(a)	Objectives in relation to securitisation activity	Section 5.4. Securitisation  As at 31 December 2020, BofASE SA had an immaterial amount of exposure as investor in securitisations. BofASE SA 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.	56
		449(b)	Nature of other risks in securitised assets, including liquidity		
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		449(f)	Processes in place to monitor changes in credit and market risks of securitisation exposures, and how the processes differ for re-securitisation exposures		
		449(g)	Description of the institution's policies with respect to hedging and unfunded protection to mitigate the risks of retained securitisation and re-securitisation exposures		
		449(h)	Approaches to the calculation of risk-weighted assets for securitisations		
		449(i)	Types of SSPEs used to securitise third-party exposures as a sponsor		
		449(j)	Summary of accounting policies for securitisations		
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		449(l)	Description of Internal Assessment Approach where the IRB approach is used		
		449(m)	Explanation of significant changes in quantitative disclosures		
		449(n)	As appropriate, separately for the Banking and trading book securitisation exposures:		
		449(n)(i)	Amount of outstanding exposures securitised		
		449(n)(ii)	On balance sheet securitisation retained or purchased, and off balance sheet exposures		
		449(n)(iii)	Amount of assets awaiting securitisation		
		449(n)(iv)	Early amortisation treatment; aggregate drawn exposures, capital requirements		
		449(n)(v)	Deducted or 1,250%-weighted securitisation positions		
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		449(o)	Separately for the trading and the non-trading book:		
		449(o)(i)	Retained and purchased positions and associated capital requirements, broken down by risk-weight bands		
		449(o)(ii)	Retained and purchased re-securitisation positions before and after hedging and insurance; exposure to financial guarantors broken down by credit worthiness		
		449(p)	Impaired assets and recognised losses related to exposures securitised by the institution and held in the banking book, by exposure type.		
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452	Use of the IRB Approach to credit risk	452(a)	Permission for use of the IRB approach from the competent authority	Section 2.1.1. Summary of 2020 Capital Resources - BofASE uses the standardised approach for calculating Credit Risk exposures)	11
		452(b)	Explanation of:		
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		452(b)(ii)	Use of internal ratings for purposes other than capital requirement calculations;		
		452(b)(iii)	Management and recognition of credit risk mitigation;		
		452(b)(iv)	Controls around ratings systems.		
		452(c)(i)-(v)	Description of ratings processes for each IRB asset class, provided separately.		
		452(d)	Exposure values by IRB exposure class, separately for Advanced and Foundation IRB.		
		452(e)-(f)	For each exposure class, disclosed separately by obligor grade: Total exposure, separating loans and undrawn exposures where applicable, and exposure-weighted average risk weight.		
		452(g)	Actual specific risk adjustments for the period and explanation of changes.		
		452(h)	Commentary on drivers of losses in preceding period.		
		452(i)	Estimates against actual losses for sufficient period, and historical analysis to help assess the performance of the rating system over a sufficient period.		
		452(j)	For all IRB exposure classes:		
		452(j) (i)-(ii)	Where applicable, PD and LGD by each country where the bank operates.		
453	Use of credit risk mitigation techniques	453(a)	Use of on and off-balance sheet netting	Section 4.3.2. Credit Risk - Loss and Credit Risk Mitigation Activities subheading	32
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		453(e)	Market or credit risk concentrations within credit mitigation taken	Table A2.T8. – EU CR3 CRM Techniques Overview Table A2.T2. – EU CR4 Standardised Approach - Credit Risk Exposure and CRM Effects	74, 70
		453(f)	Exposure value covered by eligible collateral		
454	Use of the Advanced Measurement Approaches to operational risk	454	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	Section 2.1.1. Summary of 2020 Capital Resources (Not applicable - BofASE uses the standardised approach for calculating Operational Risk)	11

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		455(a)(iii)	Stress testing applied to the portfolios		
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		455(e)	Market risk internal model based own funds requirements	Table 5.2.T2. – EU MR2-A Market Risk under the IMA	48
		455(f)	Weighted average liquidity horizon for portfolios covered by internal models for IRC and CRM	Section 5.2.1. Internal Model Based Capital Requirement - Incremental Risk Charge and Comprehensive Risk Measure subheadings	50, 51
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