BANK OF AMERICA

ML UK Capital Holdings Limited
Including Merrill Lynch International

Pillar 3 Disclosure
As at 31 December 2019

Contents

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Glossary

AT1	Additional Tier 1 Capital
BAC / the Enterprise	Bank of America Corporation
BRC	Board Risk Committee
CCR	Counterparty Credit Risk
CCYB	Countercyclical Capital Buffer
CEEMEA	Central and Eastern Europe, Middle East, and Africa
CET1	Common Equity Tier 1
CMR	Contingent Market Risk
COR	Corporate Operational Risk team
CQS	Credit Quality Step
CRD IV	Capital Requirements Directive IV
CRM	Comprehensive Risk Measure
CRR	Capital Requirements Regulation
CSA	Credit Support Annex
CVA	Credit Valuation Adjustment
DVA	Debit Valuation Adjustment
EBA	European Banking Authority
ECAIs	External Credit Assessment Institutions
EEA	European Economic Area
EMEA	Europe, Middle East and Africa
UK & CEEMEA CRO	UK & CEEMEA Chief Risk Officer
EU	European Union
EWI	Early Warning Indicator
FCA	Financial Conduct Authority
Fitch	Fitch Ratings, Inc.
FLU	Front Line Unit
FPC	Financial Policy Committee
FRS 101	Financial Reporting Standard 101 'Reduced Disclosure Framework’
FX	Foreign Exchange
GMRAs	Global Master Repurchase Agreements
GRM	Global Risk Management
G-SII	Global Systemically Important Institutions
HQLA	High Quality Liquid Assets
IAS	International Accounting Standard
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IM	Initial Margin
IMA	Internal Models Approach
IMMC	Identify, Measure, Monitor, and Control
IRC	Incremental Risk Charge
ISDA	International Swaps Dealers Association Master Agreement
LCR	Liquidity Coverage Ratio
MDB	Multilateral Development Banks
MLI / the Company	Merrill Lynch International
MLUKCH / the Group	ML UK Capital Holdings Limited
Moody’s	Moody’s Investors Service, Inc.
MRC	Management Risk Committee
O-SII	Other Systemically Important Institutions
UMR	Uncleared Margin Rules
PRA	Prudential Regulation Authority
P&L	Profit and Loss
RAS	Risk Appetite Statement
RNIV	Risk Not in VaR
RSA	Risk Self-Assessment
RWAs	Risk Weighted Assets
S&P	S&P Global Ratings, Inc.
SFT	Secured Financing Transaction
SPE	Special Purpose Entities
SREP	Supervisory Review and Evaluation Process
TCR	Total Capital Requirement
UMR	Uncleared Margin Rules
VaR	Value at Risk
VM	Variation Margin

ML UK Capital Holdings Limited
Including Merrill Lynch International

1 Introduction
As at 31 December 2019

1.1 Overview and Purpose of Document

This document contains the Pillar 3 disclosure as at 31 December 2019 in respect of the capital and risk management of ML UK Capital Holdings Limited (“MLUKCH”), its sole operating subsidiary, Merrill Lynch International (“MLI” or the "Company”), and its other non-operating subsidiaries (together the "Group” or the "MLUKCH Group”).

Capital Requirements Directive IV (“CRD IV”), the European Union (“EU”) legislation implementing Basel III, came into effect on 1st January 2014, mandating the quality and quantity of capital that firms are required to hold, introducing an EU wide liquidity regime and establishing leverage requirements. 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.

MLUKCH’s ultimate parent company is Bank of America Corporation (“BAC” or the "Enterprise”) and it acts predominantly as the holding company for MLI. In accordance with the Capital Requirements Regulation (“CRR”), the MLUKCH Group complies with the Pillar 3 requirements on a consolidated basis. As its sole operating subsidiary, the information set out in this document predominately relates to MLI.

This document provides detail on the Group’s and MLI’s available capital resources (“Capital Resources”), regulatory defined Pillar 1 Minimum Capital Requirement (“Minimum Capital Requirement”), and Total Capital Requirement (“TCR”) as prescribed by the Prudential Regulation Authority (“PRA”). It demonstrates that the Group and MLI have Capital Resources in excess of this requirement and maintains robust risk management and controls primarily in respect of the activities of MLI.

To further increase transparency, this document also includes information on the Group’s and the Company’s capital requirements in respect of the Countercyclical Capital Buffer (“CCYB”).

1.1.1 MLUKCH

The MLUKCH Group is supervised on a consolidated basis in the United Kingdom ("UK") by the PRA and the Financial Conduct Authority (“FCA”). The principal activity of MLUKCH is to act as a holding company for MLI. MLUKCH also acts as a holding company for a small number of non-operating subsidiaries.

MLUKCH is not itself a risk taking entity, and the risk is booked in its operating subsidiary MLI, where the business is managed. The only risk that MLUKCH has is in respect of its intercompany funding activities, primarily from funding provided to MLI.

As MLUKCH is a holding company, the qualitative disclosures regarding risk management and governance are relevant to the subsidiaries where the activity is conducted and recorded. In this respect, unless otherwise stated, discussion herein relates primarily to MLI. For the purpose of this document, quantitative disclosures for the MLUKCH Group are presented on a consolidated basis unless stated otherwise.

For a full BAC organisation chart, please refer to the investor relations website at http://investor.bankofamerica.com.

1.1.2 MLI

The Company’s immediate parent is MLUKCH. The ultimate parent of the Company is BAC. MLI is BAC’s largest entity outside the United States of America and helps serve the core financial needs of global corporations and institutional investors.

The Company's head office is in the UK with branches in Dubai and Qatar along with a representative office in Zurich. The Company has the ability to conduct business with international clients and trade throughout the European Economic Area ("EEA"). The Company is authorised and regulated by the PRA and regulated by the FCA.

As at 31 December 2019, MLI was rated by Fitch Ratings, Inc. (“Fitch”) (A+ / F1) and S&P Global Ratings, Inc. (“S&P”) (A+ / A-1).

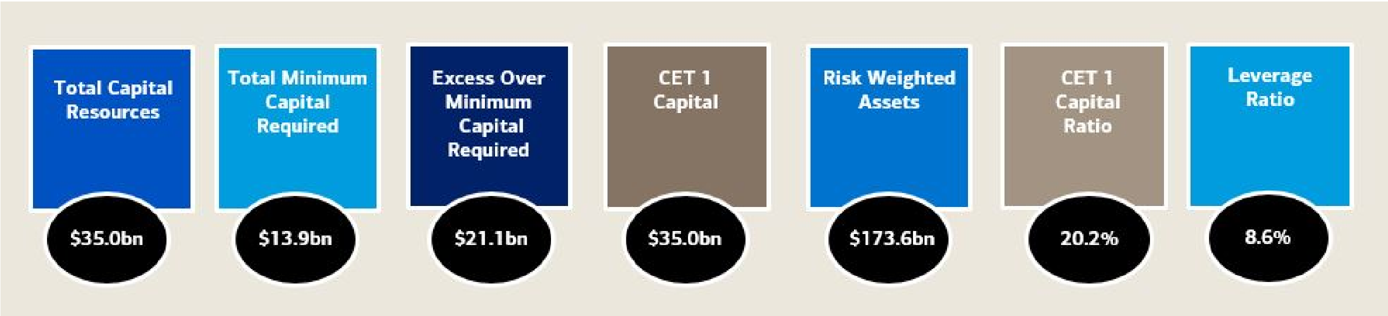
1.1.3 Other Entities

Other entities, although consolidated into the Group, are not separately disclosed in this document on the grounds of materiality.

1.1.4 MLI's Capital Position at 31 December 2019

Figure 1 illustrates MLI's key capital metrics. MLI's Capital Resources consist entirely of Common Equity Tier 1 ("CET1") capital and MLI continues to maintain capital ratios and resources significantly in excess of its minimum requirement.

Figure 1.1.4 F1. Summary of MLI's Key Metrics as at 31 December 2019



Note: All of MLI's Tier 1 capital is CET1, therefore CET1 Capital Ratio and Tier 1 Capital Ratio are the same.

1.2 Basis of Preparation

The information contained in these Pillar 3 disclosures has been prepared in accordance with the Basel III rule framework, for the purpose of explaining the basis on which the Group and MLI have prepared and disclosed certain information about the management of risks and application of regulatory capital adequacy rules and concepts. It therefore does not constitute any form of financial statement of MLUKCH or its subsidiaries, or of the wider Enterprise, and as such, is not prepared in accordance with International Financial Reporting Standards ("IFRS") or Financial Reporting Standard 101 'Reduced Disclosure Framework' ("FRS 101"). Therefore the information is not directly comparable with the Annual Report and Financial Statements, and the disclosure is not required to be audited by external auditors. In addition, the report does not constitute any form of contemporary or forward looking record or opinion on the Group, the Company, or the Enterprise. Although the Pillar 3 disclosure is intended to provide transparent information on a common basis, the information contained in this document may not be directly comparable with the information provided by other banks.

The basis of consolidation of the Group used for prudential purposes is the same as the consolidation used for accounting purposes. Figures for the Group are presented on a consolidated basis. Figures for MLI are presented on a solo basis.

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

Transitional Impact of IFRS 9

IFRS 9 addresses the classification, measurement, and recognition of financial assets and financial liabilities. It replaces the guidance in International Accounting Standard 39 ("IAS 39") - Financial Instruments: Recognition and Measurement that relates to the classification and measurement of financial instruments.

Based on materiality no further disclosures for the transitional impact of IFRS 9 are made in this document.

1.3 Operation, Structure and Organisation

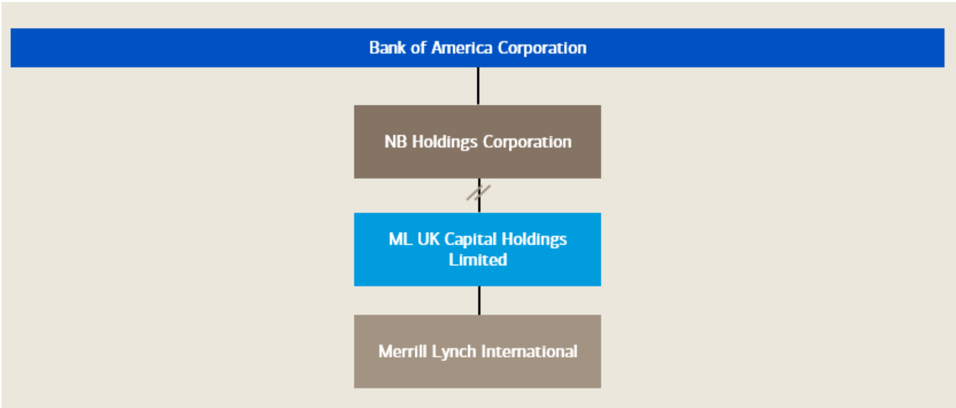
MLI has a key role within the wider BAC group by providing non-US market access for Global Banking and Global Markets clients. MLI is BAC's primary Global Markets trading entity in Europe, Middle East and Africa ("EMEA").

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

For a full BAC organisation chart, please refer to the investor relations website at http://investor.bankofamerica.com

Pursuant to the disclosure requirements under the PRA's Group Financial Support Instrument, and in accordance with the general principles set out in Articles 431-434 of the CRR, neither MLUKCH or MLI have entered into any financial support agreements with any EEA group entities.

Figure 1.3 F1. High Level Ownership Chart



//represents indirect ownership relationship

ML UK Capital Holdings Limited
Including Merrill Lynch International

2 Capital Resources and Minimum Capital Requirement
As at 31 December 2019

2.1 Capital Resources

2.1.1 Summary of 2019 Capital Resources

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

Tier 1 capital is the primary component of MLI and the Group’s Capital Resources. All of MLI and the Group’s Tier 1 capital is made up of CET1.

2.1.2 Key Movements in 2019

MLI’s Capital Resources remained flat in the year ending 2019 at $35.0bn. Table 2.1.2 T1 shows a breakdown of the capital resources of MLI and the Group.

Table 2.1.2 T1. Capital Resources

	MLI		MLUKCH Group	
(Dollars in Millions)	2019	2018	2019	2018
Ordinary Share Capital	**7,933**	7,933	**2,926**	2,926
Share Premium	**4,499**	4,499	**—**	—
Other Reserves	**9,187**	9,192	**1,082**	1,082
Profit and Loss Account [(1), (2)]	**13,981**	13,806	**30,775**	30,655
Total Tier 1 Capital Before Deductions	**35,600**	35,431	**34,783**	34,662
Deferred Tax Asset	**(342)**	(270)	**(342)**	(270)
Defined Benefit Pension Fund Asset (net of associated deferred tax liability)	**(243)**	(181)	**(243)**	(181)
Tier 1 Capital	**35,015**	34,980	**34,198**	34,211
Total Tier 2 Capital Before Deductions	**—**	—	**800**	800
Tier 2 Capital	**—**	—	**800**	800
Total Capital Resources (net of deductions)	**35,015**	34,980	**34,998**	35,011

(1) Profit and loss account is shown on a regulatory basis. See Table 5.7 T1 for a reconciliation to the accounting balance sheet.
(2) Profit and loss account reflects the inclusion of 2019 audited earnings after deduction of any foreseeable dividends.

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 Pillar 1 Minimum Capital Requirement

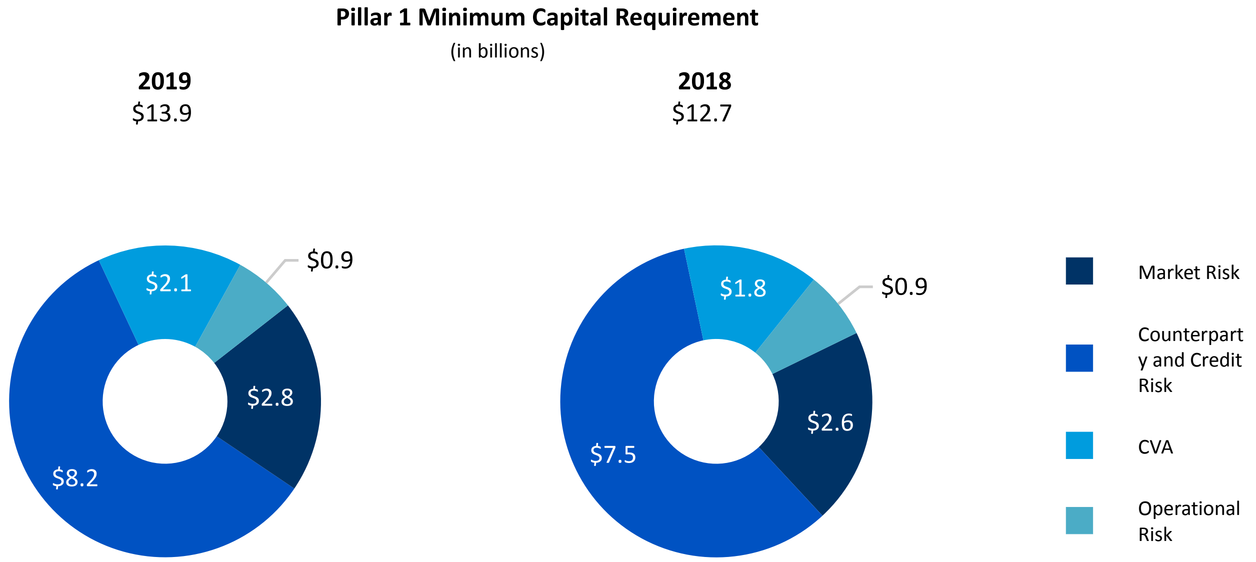
2.2.1 Summary of 2019 Capital Requirement

MLI and the Group are subject to a Pillar 1 Minimum Capital Requirement as set out in the CRR. MLI and the Group are also required to hold capital in addition to the Pillar 1 Minimum Capital Requirement to meet local PRA obligations and CRD IV buffers.

The Pillar 1 Minimum Capital Requirement principally comprises of Credit Risk, Market Risk, and Operational Risk requirements.

MLI has a Pillar 1 Minimum Capital Requirement of $13.9bn (2018: $12.7bn) comprising of the risk requirements outlined in Figure 2.2.1 F1.

Figure 2.2.1 F1. Summary of MLI's Pillar 1 Minimum Capital Requirement



2.2.2 Key Movements in 2019

MLI's Pillar 1 Minimum Capital Requirement increased year-on-year from $12.7bn to $13.9bn

The increase was primarily driven by an increase in the counterparty and credit risk capital requirements from securities financing and derivative counterparty exposures.

Table 2.2.2 T1. RWAs and Minimum Capital Requirement

		MLI			MLUKCH Group		
		RWAs		Minimum capital requirement	RWAs		Minimum capital requirement
	(Dollars in Millions)	2019	2018	2019	2019	2018	2019
1	**Credit risk (excluding CCR)**	**6,759**	**5,933**	**541**	**6,766**	**5,160**	**541**
2	Of which the standardised approach	6,759	5,933	541	6,766	5,160	541
3	Of which the foundation IRB (FIRB) approach	—	—	—	—	—	—
4	Of which the advanced IRB (AIRB) approach	—	—	—	—	—	—
5	Of which equity IRB under the simple risk-weighted approach or the IMA	—	—	—	—	—	—
6	**CCR**	**115,038**	**106,470**	**9,203**	**115,045**	**106,410**	**9,204**
7	Of which mark to market	52,198	50,502	4,176	52,204	50,501	4,176
8	Of which original exposure	—	—	—	—	—	—
9	Of which the standardised approach						
9a	Of which: comprehensive approach for credit risk mitigation (for SFTs)	36,502	32,678	2,920	36,502	32,619	2,920
10	Of which internal model method (IMM)	—	—	—	—	—	—
11	Of which risk exposure amount for contributions to the default fund of a CCP	641	1,327	51	641	1,327	51
12	Of which CVA	25,698	21,962	2,056	25,698	21,962	2,056
13	**Settlement risk**	**609**	**285**	**49**	**609**	**285**	**49**
14	**Securitisation exposures in the banking book (after the cap)**	**4,887**	**3,214**	**391**	**4,887**	**3,214**	**391**
15	Of which IRB approach	—	—	—	—	—	—
16	Of which IRB supervisory formula approach (SFA)	—	—	—	—	—	—
17	Of which internal assessment approach (IAA)	—	—	—	—	—	—
18	Of which standardised approach	4,887	3,214	391	4,887	3,214	391
19	**Market risk**	**34,820**	**32,579**	**2,786**	**35,592**	**33,512**	**2,847**
20	Of which the standardised approach	15,683	13,253	1,255	16,456	14,186	1,316
21	Of which IMA	19,136	19,326	1,531	19,136	19,326	1,531
22	**Large exposures**	—	—	—	—	—	—
23	**Operational risk**	**11,170**	**10,670**	**894**	**11,105**	**10,670**	**888**
24	Of which basic indicator approach	—	—	—	—	—	—
25	Of which standardised approach	11,170	10,670	894	11,105	10,670	888
26	Of which advanced measurement approach	—	—	—	—	—	—
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**342**	**127**	**27**	—	—	—
28	Floor adjustment	—	—	—	—	—	—
29	**Total**	**173,625**	**159,277**	**13,890**	**174,004**	**159,250**	**13,920**

Table 2.2.2 T1 shows a breakdown of the Risk Weighted Assets ("RWAs") and Minimum Capital Requirement of MLI and the Group.

2.2.3 Pillar 1 Minimum Capital Requirement Approach

Within the Group, MLI has adopted the standardised approach for calculating Counterparty Credit Risk, Credit Risk, and Operational Risk Capital Requirements. In order to adhere to the standardised rules in CRD IV, MLI uses external ratings from External Credit Assessment Institutions ("ECAIs") based on a combination of Moody's Investors Service, Inc. ("Moody's"), S&P Global Ratings, Inc. ("S&P"), and Fitch.

MLI’s approach for Market Risk is a combination of models approved by the PRA, including Value at Risk ("VaR"), and the standardised approach. The Group applies the standardised approach to all other exposures.

2.2.4 Pillar 2A and Total Capital Requirement

Pillar 2A is an additional amount of capital that MLI and the Group are required to hold in order to cover risks that are not covered (or not entirely covered) by the Pillar 1 Minimum Capital Requirement. Pillar 2A is assessed by MLI at least annually as part of the Internal Capital Adequacy Assessment Process (“ICAAP”). The PRA reviews the ICAAP through its Supervisory Review and Evaluation Process (“SREP”) and sets a Total Capital Requirement (“TCR”). The TCR is the sum of the Pillar 1 Minimum Capital Requirement (8% of RWAs) and the Pillar 2A capital requirement.

As at 31 December 2019, MLI and the Group’s TCRs were set at 10.7% of RWAs.

2.2.5 Internal Capital Adequacy Assessment Process ("ICAAP")

As the sole operating subsidiary of the MLUKCH Group, MLI's ICAAP is completed at least annually in compliance with CRD IV and the PRA Rulebook with all conclusions also deemed applicable to the Group. The ICAAP assesses the capital adequacy of MLI in relation to current and future activities and ensures that MLI maintains an appropriate amount of capital relative to the risks to which it is exposed. The ICAAP forms a key part of the governance framework and covers MLI’s risk appetite; strategy and financial plans; capital and risk management; and stress testing. The ICAAP is also aligned to the recovery and resolution plan that prepares MLI 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 countermeasures that are designed to mitigate different types of stress scenarios that would threaten MLI's 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.

2.3 Capital Resources vs. Pillar 1 Minimum Capital Requirement and Tier 1 Capital Ratio

2.3.1 Capital Resources vs. Pillar 1 Minimum Capital Requirement

Table 2.3.2 T1 outlines that MLI and the Group’s Total Capital Resources are significantly in excess of the Minimum Pillar 1 Capital Requirement.

MLI's capital resources in excess of its minimum capital requirements have decreased from $22.2bn to $21.1bn.

The Group’s capital resources in excess of its minimum capital requirements are $21.1bn as at 31 December 2019.

Capital Resources and Pillar 1 Minimum Capital Requirement for MLI are monitored and analysed on a daily basis. Both MLI and the Group continuously maintain a surplus over the Pillar 1 Minimum Capital Requirement.

2.3.2 Tier 1 Ratio

An entity’s Tier 1 ratio is the ratio of Tier 1 Capital to RWAs. RWAs have increased in 2019, primarily driven by an increase in the counterparty and credit risk RWAs from securities financing and derivative counterparty exposures.

Following on from the changes outlined above, MLI's Tier 1 ratio has decreased year-on-year from 22.0% to 20.2%.

The Group’s Tier 1 ratio was 19.7% as at 31 December 2019.

Table 2.3.2 T1. Capital Surplus over Minimum Capital Requirement and Tier 1 Ratio

	MLI		MLUKCH Group	
(Dollars in Millions)	2019	2018	2019	2018
Total Capital Resources	**35,015**	34,980	**34,998**	35,011
Total Minimum Capital Requirement	**13,890**	12,742	**13,920**	12,740
Surplus over Requirement	**21,125**	22,237	**21,078**	22,272
Tier 1 Capital Resources	**35,015**	34,980	**34,198**	34,211
Risk Weighted Assets	**173,625**	159,277	**174,004**	159,250
Tier 1 Capital Ratio	**20.2%**	22.0%	**19.7%**	21.5%

2.4 Reconciliation of Accounting Balance Sheet to Regulatory Exposure Amounts

2.4.1 Mapping of Financial Statement Categories with Regulatory Risk Categories

Table 2.4.1 T1 shows MLI's accounting balance sheet and breaks down the carrying values of each line item between the relevant regulatory risk framework(s) to which they are allocated.

There are no differences between MLI's accounting balance sheet and the carrying values included under the scope of the regulatory consolidation of the Group.

Table 2.4.1 T1. EU LI1 Differences Between Accounting and Regulatory Scopes of Consolidation and the Mapping of Financial Statement Categories with Regulatory Risk Categories

	2019					
	b	c	d	e	f	g
(Dollars in Millions)	Carrying values under scope of regulatory consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets						
Pension	324	—	—	—	—	324
Investments	238	238	—	—	—	—
Long inventory positions	204,831	482	153,739	538	194,980	—
Debt securities at Fair Value through Other Comprehensive Income	3,612	3,612	—	—	—	—
Resale agreements and securities borrowed transactions	106,939	—	106,721	—	77,018	—
Debtors	60,317	14,139	40,690	—	—	5,487
Cash at bank and in hand	5,500	5,500	—	—	—	—
Total assets	**381,761**	**23,971**	**301,150**	**538**	**271,999**	**5,811**
Liabilities						
Bank loans and overdraft	1,000	—	—	—	—	1,000
Short inventory positions	176,295	—	153,837	73	167,296	—
Repurchase agreements and securities loaned transactions	87,399	—	87,399	—	65,034	—
Creditors	67,853	11,967	42,432	—	10,656	13,454
Creditors: Amounts falling due after more than one year	12,662	4,119	—	—	—	8,543
Total liabilities	**345,209**	**16,087**	**283,667**	**73**	**242,986**	**22,996**

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

2.4.2 Differences between the Financial Statements' Carrying Value Amounts and the Exposure Amounts used for Regulatory Purposes

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

Table 2.4.2 T1. EU LI2 Main Sources of Differences between Regulatory Exposure Amounts and Carrying Values in Financial Statements

	a	b	c	d
(Dollars in Millions)	Total	Credit risk framework	CCR framework	Securitisation framework
Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	**375,950**	**23,971**	**301,150**	**538**
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	**322,212**	**16,087**	**283,667**	**73**
Total net amount under the regulatory scope of consolidation	**53,737**	7,884	17,482	465
Off-balance sheet amounts	**(73,838)**	3,059	(77,006)	108
Differences in valuations and other differences	**(262)**	90	(352)	—
Differences due to different netting rules, other than those already included in row 2	**6,397**	505	5,850	42
Differences due to potential future credit exposure	**106,059**	—	106,004	55
Adjustments for volatility adjustments and collateral not used	**130,395**	3,072	127,324	—
Exposure amounts considered for regulatory purposes	**222,488**	**14,610**	**179,303**	**671**

Explanations of Differences between Accounting and Regulatory Exposure Amounts

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

Off-Balance Sheet Amounts

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

Netting Rules

- Under the FRS101 accounting framework, financial assets and liabilities are offset, and the net amount is reported on the balance sheet where the Company currently has a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously
- Under the regulatory framework, netting is applied for the calculation of exposures if there is legal certainty and the positions are managed on a net collateralised basis. This typically means that more netting is recognised under the regulatory framework than under the accounting framework

Collateral Allocation

- The amounts of collateral used as credit risk mitigation under the regulatory framework are adjusted using volatility adjustments to reflect, for example, currency and maturity mismatches

Potential Future Credit Exposure

- In the calculation of regulatory exposure amounts for derivative contracts, an add-on is calculated for potential future credit exposure based on the notional amount of a derivative

Differences in Valuations

Where assets or liabilities are measured at fair value on the balance sheet, certain valuation adjustments are made under the FRS101 accounting framework in order to reasonably reflect the fair value. These valuation adjustments are not considered as part of the regulatory exposure amounts, where the unadjusted mark-to-market values of the contracts or securities are used as the basis for the calculation.

See below for further details on valuation methodologies, the process of independent price verification, and valuation adjustments.

Valuation Methodologies and Independent Price Verification

The Group has various processes and controls in place so that fair value is reasonably estimated. A model validation policy governs the use and control of valuation models used to estimate fair value. This policy requires review and approval of models by personnel who are independent of the front office and also requires periodic reassessments of models so that they continue to perform as designed. In addition, detailed reviews of trading gains and losses are conducted on a daily basis by personnel who are independent of the front office.

A price verification group, which is also independent of the front office, utilizes available market information including executed trades, market prices, and market observable valuation model inputs so that fair values are reasonably estimated. The Group performs due diligence procedures over third-party pricing service providers in order to support their use in the valuation process. Where market information is not available to support internal valuations, independent reviews of the valuations are performed and any material exposures are escalated through a management review process.

Valuation Adjustments

A Credit Valuation Adjustment (“CVA”) is recorded on the Group’s derivative assets, including credit default protection purchased, in order to properly reflect the credit risk of counterparties. CVA is based on a modelled expected exposure that incorporates current market risk factors including changes in market spreads and non-credit related market factors that affect the value of a derivative. The exposure also takes into consideration credit mitigants such as legally enforceable master netting agreements and collateral. The Group also records a funding valuation adjustment to include funding costs on uncollateralized derivatives and derivatives where the Group is not permitted to reuse the collateral it receives. The Group also calculates a Debit Valuation Adjustment (“DVA”) to properly reflect our own credit risk exposure as part of the fair value of derivative liabilities. DVA is deducted from CET1 capital if there is a gain and added back if there is a loss.

Prudential Valuation Adjustment

Following the implementation of CRD IV in 2014, a requirement was introduced requiring a prudential valuation adjustment to be deducted from MLI and the Group’s Tier 1 Capital Resources. There is an established valuation control policy and prudent valuation guidelines which set out the policies and procedures for the determination of price verification and prudent valuation in accordance with the requirements of CRD IV and related interpretive guidance.

2.5 Leverage Ratio

2.5.1 Summary

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

The CRR does not currently include a binding minimum Leverage Ratio requirement. In June 2019, amendments to the CRR were published in the Official Journal of the EU as Regulation (EU) 2019/876. These amendments included a binding minimum Leverage Ratio requirement of 3%, as well as a number of changes to the calculation of the exposure measure. These amendments apply from 28th June 2021. MLI’s and the Group’s leverage ratios are in excess of the incoming minimum requirement at 8.6% and 8.4% respectively, calculated based on the current CRR exposure measure.

Table 2.5.1 T1. Leverage Ratio

	MLI		MLUKCH Group	
	2019	2018	2019	2018
Leverage Ratio	**8.6%**	**9.1%**	**8.4%**	**9.0%**

2.5.2 Key Movements in 2019

The Company and the Group's leverage ratios both decreased during the year due to an increase in the leverage ratio exposure measure, primarily due to increased securities financing and derivative exposures.

ML UK Capital Holdings Limited

Including Merrill Lynch International

3 Liquidity Position and Encumbered and Unencumbered Assets
As at 31 December 2019

3.1 Liquidity Position

3.1.1 Regulatory Requirement

The MLUKCH Group is subject to CRD IV, CRR, and PRA liquidity requirements through which it must demonstrate self-sufficiency for liquidity purposes.

The MLUKCH Group is subject to the Liquidity Coverage Ratio ("LCR"), which requires the Group to hold a sufficient buffer of eligible High Quality Liquid Assets ("HQLA") to cover potential cash outflows during the first 30 days of a liquidity stress event.

3.1.2 Liquidity Position

As of 31 December 2019, MLI, as MLUKCH's sole operating subsidiary, was in compliance with its regulatory and internal liquidity requirements.

3.1.3 Funding Profile

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

These funding sources are used to support the Group'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 the MLUKCH Group, 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, the Group's encumbered assets include collateral posted against derivative contracts and securities covering shorts. Asset encumbrance is an integral part of the Group's secured funding and collateral management process. Corporate Treasury monitors the funding requirement / surplus and models the liquidity impact relating to these activities on an ongoing basis.

The business model of MLI, as the sole operating subsidiary in the Group and primary driver of asset encumbrance, has remained relatively stable over time with the types of encumbered assets remaining consistent. There are no significant intragroup encumbrances. MLI conducts a significant portion of its business in USD, EUR, and GBP.

This asset encumbrance disclosure, as of 31 December 2019, is prepared in accordance with the Commission Delegated Regulation (EU) 2017/2295 of 4 September 2017 supplementing Regulation (EU) No 575/2013. The disclosure is based on accounting information prepared in accordance with international accounting standards.

MLI, as the primary driver of asset encumbrance in the Group, 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 and fair value of certain assets of the Company and the Group split between those encumbered and unencumbered.

Table 3.2 T1. Encumbered and Unencumbered Assets[1]

MLI	2019			
(Dollars in Millions)	Carrying Amount of Encumbered Assets	Fair Value of Encumbered Assets	Carrying Amount of Unencumbered Assets	Fair Value of Unencumbered Assets
Assets of the Company[2]	**90,041**		**327,892**	
Equity Instruments	30,553		11,398	
Debt Securities	19,762	19,762	5,540	5,540
of which: Covered Bonds	2	2	—	—
of which: Asset-Backed Securities	578	578	129	129
of which: Issued by General Governments	12,786	12,786	3,587	3,587
of which: Issued by Financial Corporations	4,004	4,004	1,247	1,247
of which: Issued by Non-Financial Corporations	2,338	2,338	304	304
Other Assets[3]	36,802		311,007	

	2018			
(Dollars in Millions)	Carrying Amount of Encumbered Assets	Fair Value of Encumbered Assets	Carrying Amount of Unencumbered Assets	Fair Value of Unencumbered Assets
Assets of the Company[2]	**75,002**		**341,659**	
Equity Instruments	25,349		9,343	
Debt Securities	19,426	19,426	5,222	5,222
of which: Covered Bonds	69	69	2	2
of which: Asset-Backed Securities	924	924	211	211
of which: Issued by General Governments	10,451	10,451	3,616	3,616
of which: Issued by Financial Corporations	4,731	4,731	1,249	1,249
of which: Issued by Non-Financial Corporations	2,029	2,029	388	388
Other Assets[3]	30,540		325,472	

MLUKCH Group	2019			
(Dollars in Millions)	Carrying Amount of Encumbered Assets	Fair Value of Encumbered Assets	Carrying Amount of Unencumbered Assets	Fair Value of Unencumbered Assets
Assets of the Group[(2)]	**90,041**		**324,906**	
Equity Instruments	30,553		11,398	
Debt Securities	19,762	19,762	5,540	5,540
of which: Covered Bonds	2	2	—	—
of which: Asset-Backed Securities	578	578	129	129
of which: Issued by General Governments	12,786	12,786	3,587	3,587
of which: Issued by Financial Corporations	4,004	4,004	1,247	1,247
of which: Issued by Non-Financial Corporations	2,338	2,338	304	304
Other Assets[(3)]	36,802		308,021	

	2018			
(Dollars in Millions)	Carrying Amount of Encumbered Assets	Fair Value of Encumbered Assets	Carrying Amount of Unencumbered Assets	Fair Value of Unencumbered Assets
Assets of the Group[(2)]	**75,002**		**336,918**	
Equity Instruments	25,349		9,343	
Debt Securities	19,426	19,426	5,222	5,222
of which: Covered Bonds	69	69	2	2
of which: Asset-Backed Securities	924	924	211	211
of which: Issued by General Governments	10,451	10,451	3,616	3,616
of which: Issued by Financial Corporations	4,731	4,731	1,249	1,249
of which: Issued by Non-Financial Corporations	2,029	2,029	388	388
Other Assets[(3)]	30,540		320,701	

[(1)] Greyed out cell format stems from RTS EC (EU) 2017/2295 Regulation asset encumbrance template, indicating not applicable disclosures. As a result of the Group's broker-dealer activity, fair value equals carrying value for securities.
[(2)] 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 table 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.
[(3)] The majority of unencumbered Other Assets relates to derivative assets not available for encumbrance.

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

Table 3.2 T2. Collateral Received

	MLI			
	2019		2018	
(Dollars in Millions)	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
Collateral Received by the Company[(1)]	**286,796**	**56,795**	**257,396**	**53,650**
Loans on Demand	—	—	—	—
Equity Instruments	56,295	7,739	73,346	9,075
Debt Securities	231,241	24,582	184,050	18,680
of which: Covered Bonds	340	5	133	3
of which: Asset-Backed Securities	309	14,138	79	15,127
of which: Issued by General Governments	219,590	9,716	172,375	3,043
of which: Issued by Financial Corporations	7,380	629	9,159	601
of which: Issued by Non-Financial Corporations	3,370	486	2,620	169
Loans and Advances Other Than Loans on Demand	—	24,577	—	24,410
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		—		—
Total Assets, Collateral Received and Own Debt Securities Issued	**369,898**		**334,080**	

	MLUKCH Group			
	2019		2018	
(Dollars in Millions)	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
Collateral Received by the Group[(1)]	**286,796**	**56,795**	**257,396**	**53,650**
Loans on Demand	—	—	—	—
Equity Instruments	56,295	7,739	73,346	9,075
Debt Securities	231,241	24,582	184,050	18,680
of which: Covered Bonds	340	5	133	3
of which: Asset-Backed Securities	309	14,138	79	15,127
of which: Issued by General Governments	219,590	9,716	172,375	3,043
of which: Issued by Financial Corporations	7,380	629	9,159	601
of which: Issued by Non-Financial Corporations	3,370	486	2,620	169
Loans and Advances Other Than Loans on Demand	—	24,577	—	24,410
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		—		—
Total Assets, Collateral Received and Own Debt Securities Issued	**369,898**		**334,080**	

[(1)] 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.

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

	MLI			
	2019		2018	
(Dollars in Millions)	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
Carrying Amount of Selected Financial Liabilities	**210,359**	**216,769**	**166,637**	**170,276**

	MLUKCH Group			
	2019		2018	
(Dollars in Millions)	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
Carrying Amount of Selected Financial Liabilities	**210,359**	**216,769**	**166,637**	**170,276**

3.3 LCR Disclosures

3.3.1 LCR Disclosure Requirements

The objective of the LCR disclosure requirements (EBA/GL/2017/01, dated 21/06/2017) is to provide market participants with information to assess EU banks' liquidity positions and risk management. The Guidelines allow credit institutions which are neither Global Systemically Important Institutions ("G-SIIs") nor Other Systemically Important Institutions ("O-SIIs"), or institutions which choose to disclose their LCR voluntarily, to disclose using a simplified template. This simplified template includes only the liquidity buffer, total net cash outflows, and LCR. MLI and the MLUKCH Group are not credit institutions, and both choose to disclose their LCR voluntarily via the simplified disclosure.

3.3.2 LCR Disclosure Template

Table 3.3.2 T1 discloses average weighted values of the liquidity buffer, total net cash outflows, and the LCR of MLI and of the MLUKCH Group.

Table 3.3.2 T1. LCR Disclosure

	MLI			
(Dollars in Millions)	Total weighted value (average)			
Quarter ending on	**31-Mar-19**	**30-Jun-19**	**30-Sep-19**	**31-Dec-19**
Number of data points used in the calculation of averages	**12**	**12**	**12**	**12**
Liquidity Buffer	27,304	28,293	29,155	29,962
Total Net Cash Outflows	12,260	12,226	12,720	13,886
Liquidity Coverage Ratio (%)	225%	233%	232%	219%

	MLUKCH Group			
(Dollars in Millions)	Total weighted value (average)			
Quarter ending on	**31-Mar-19**	**30-Jun-19**	**30-Sep-19**	**31-Dec-19**
Number of data points used in the calculation of averages	**12**	**12**	**12**	**12**
Liquidity Buffer	27,304	28,293	29,155	29,962
Total Net Cash Outflows	12,248	12,205	12,697	13,860
Liquidity Coverage Ratio (%)	226%	234%	232%	219%

Note: The disclosed values and figures within the liquidity buffer, total net cash outflows, and LCR are simple averages of the preceding twelve LCR monthly reporting observations for each quarter.

ML UK Capital Holdings Limited
Including Merrill Lynch International

4 Risk Management, Objectives, and Policy
As at 31 December 2019

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. BAC adopted the 2020 Risk Framework in December 2019. The key enhancements from the 2019 Risk Framework include revisions within the Functional roles section to provide additional detail around the roles of the horizontal and vertical risk teams and within the Compliance and Operational risk section that provide additional clarity around coverage / oversight responsibilities of model risk and conduct risk.

The MLUKCH Group, including the sole operating subsidiary MLI, 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 Board of MLI adopted the BAC 2020 Risk Framework in March 2020.

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

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 the Group to serve its customers and deliver for BAC shareholders. If not managed well, risks can result in financial loss, regulatory sanctions and penalties, and damage to the Group's reputation, each of which may adversely impact the Group's ability to execute its business strategies. Managing risk well is fundamental to delivering on the Enterprise's strategy for responsible growth.

The Risk Framework applies to all employees. It provides an understanding of the Group'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 the Group. 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 the Group's risk management approach:

- Culture of managing risk well
- Risk appetite and 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 the Group'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 the Group's core values and its purpose, and how it drives responsible growth. It requires focus on risk in all activities and encourages the necessary mindset and behaviour to enable effective risk management and promote sound risk-taking within the Group's risk appetite. Sustaining a culture of managing risk well throughout the organisation is critical to the success of the Group and is a clear expectation of the Group's executive management team and its Board of Directors.

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

1. Managing risk well protects the Group and its reputation and enables the Group to deliver on its purpose and strategy
2. The Group treats customers fairly and acts with integrity to support the long-term interests of its employees, customers, and shareholders. The Group understands that improper conduct, behaviour, or practices by the Group, its employees, or representatives could harm the Group, shareholders, or customers, or damage the integrity of the financial markets
3. As the Group 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 the Group employs models and methods to assess risk and better inform the Group's decisions, proactive debate and a thorough challenge process lead to the best outcomes

6. Lines of business 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. The Group 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

MLI, MLUKCH's sole operating subsidiary, is BAC's largest operating subsidiary outside the US and serves the core financial needs of global corporations and institutional investors.

The MLUKCH Group's risk profile reflects the principal activities of MLI which are to provide a wide range of financial services globally for business originated in EMEA, Asia Pacific, and the Americas; to act as a broker and dealer in financial instruments; and to provide corporate finance advisory services. The Company also provides a number of post trade related services including settlement and clearing services to third-party clients.

As at 31 December 2019, the Group's total assets prepared in accordance with FRS 101 totalled $376bn, and for MLI standalone $382bn, and comprised principally of derivative assets, equities, fixed income securities, and sale and repurchase transaction positions. 32% of balances are with affiliated companies (MLI: 32%). As at 31 December 2019, the Group has $35bn of regulatory Capital Resources (MLI: $35bn), mainly consisting of CET1 capital of $34.2bn (MLI: $35bn). The Group has a Tier 1 capital ratio of 19.7% (MLI: 20.2%). The Group's twelve-month average LCR was 219%.

MLI has transactions with affiliated companies in the BAC Group, primarily as a result of utilising affiliate counterparties to gain access to certain markets and products, both on behalf of clients in order to provide efficient market access and for its own risk management purposes. MLI also typically deposits cash with affiliates and provides / receives intercompany loans for general liquidity management purposes.

Consistent with the business strategy, the Group's largest Counterparty and Credit Risk industry sectors based on regulatory capital exposures are banks 20% and clearing houses 23%. 54% of the Group's Counterparty and Credit Risk requirement is based on exposures within the EMEA region and 65% of Counterparty and Credit Risk related exposures mature in less than one year. The Group has over 38% of exposures with counterparties externally rated between AAA and A- or equivalent. Although generally assessed internally as being of high quality, 55% of exposures in the Group are to counterparties not rated by external rating agencies. Credit risk is assessed as outlined at 4.3 Key Risk Types.

Market risk for the Group is generated by the activities in the interest rate, foreign exchange ("FX"), credit, equity, and commodities markets. In addition, the values of asset and liabilities could change due to market liquidity, correlations across markets, and expectations of market volatility. Average regulatory VaR for MLI during 2019 was $35m.

MLI 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.

Risk Appetite and Limits

The Risk Appetite Statement ("RAS"), established for MLI, indicates the amount of capital, earnings, and liquidity MLI is willing to put at risk to achieve its strategic objectives and business plans, consistent with applicable regulatory requirements. The RAS ensures that MLI 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 MLI business, and aligned with the risk management practices of BAC. The RAS is reviewed and approved by the MLI Board at least annually.

MLI's risk appetite is designed to be consistent with the aggregate risk appetite at the BAC level and is based on several principals:

- Overall risk capacity: Our 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: We 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 MLI 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 our risk appetite and offer acceptable risk-adjusted returns for shareholders

- Acceptable risks: We consider all types of risk including those that are difficult to quantify. Qualitative guidance within the Risk Appetite Statement describes our approach to managing such risks throughout MLI in a manner consistent with our culture. For example, actions considered in a line of business that unduly threaten MLI's reputation should be escalated and restricted appropriately

- Skills and capabilities: We seek to assume only those risks we have the skills and capabilities to identify, measure, monitor, and control

The quantitative framework for MLI's RAS is designed to articulate the risks it will take in pursuit of strategic objectives that are both consistent with MLI's financial resources and will avoid excessive risk taking. It comprises Board and Management Risk Committee ("MRC") approved limits indicating the amount of risk MLI 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 approved limits are in place, with limit breaches triggering appropriate notification and escalation based on the severity of the breach as defined by magnitude or frequency.

Breach resolution plans include a written description of the root causes and how a breach will be resolved. Management and the MRC, Board Risk Committee ("BRC"), and 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 MLI'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. Risk appetite is also considered within the New Product Review and Approval Policy and processes, and within decisions around any acquisitions and divestitures. Managing risk well and embracing the Risk Framework are considered as part of compensation and performance management decisions.

The quantitative and qualitative elements of MLI'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 Risk Appetite Statement. In addition, there is a suite of quantitative metrics for the following risk types:

- Strategic: Metrics relating to Capital and Leverage and are provided in addition to stress loss limits

- Credit Risk: Forward looking stress and baseline metrics in addition to concentration limits aligned to credit quality using internal risk rating, geography, and industry

- Market Risk: Metrics relating to trading Value at Risk (“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, Past Due Issues, and Financial Crimes

The performance against the MLI risk appetite is reviewed on a monthly basis by the MLI MRC. Limits are monitored by front line units and risk management on a more frequent basis. Performance is also reported to the MLI BRC and provided to the Board on a quarterly basis.

The MLI CRO 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 trigger or limit levels. When exposures breach trigger and limit levels, they are escalated as appropriate to management bodies including the Board, BRC, and MRC.

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

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

The FLUs have primary responsibility for managing risks inherent in their businesses. The Group employs an effective risk management process, referred to as Identify, Measure, Monitor, and Control ("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 the Group 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 the Group
- 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 MLI Management bodies as appropriate.

4.2.5 Risk Governance

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

Three Lines of Defence

MLI has clear ownership and accountability for managing risk across three lines of defence: FLUs, independent risk management, and Corporate Audit. The Company 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 the Company.

FLUs	Own and proactively manage all risks in business activities
Independent Risk Management	Oversee risk-taking activities within the FLUs and across the enterprise, and provide independent assessment of effective challenge of risks
Corporate Audit	Provide independent validation through testing of key processes and controls

Corporate Audit

Corporate Audit supports the Company'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 done by conducting independent assessments and validation through testing of key processes and controls across the Company.

Corporate Audit team 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 business, and legislative and regulatory requirements. The annual planning process directs timely and flexible testing of the Company's highest risks and risk management processes (inclusive of risk appetite).

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

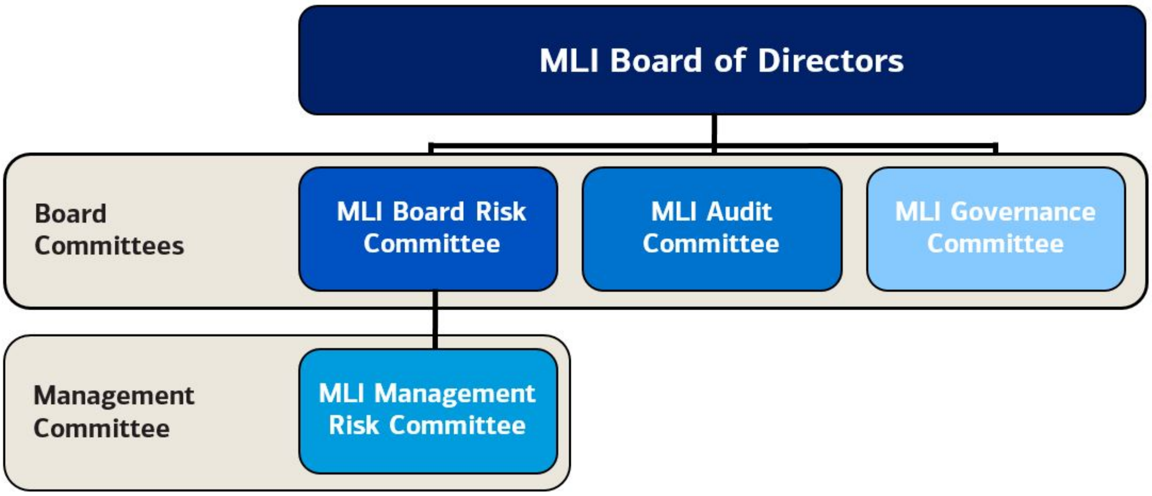
Corporate Audit maintains independence from the Company's Businesses and Governance & Control Functions by reporting directly to the Audit Committee of the Board.

Risk Governance Structure

The MLUKCH Board is responsible for oversight of adequate risk management and controls for the Group. The principal activity of MLUKCH is to act as a holding company for MLI, the sole operating subsidiary in the Group. MLUKCH is not itself a risk taking entity, and the risk in the Group is booked in MLI, where the business is managed. As a result, the majority of the risk governance for the Group is conducted at MLI, where that risk is incurred.

The MLI Board ensures suitable risk management and controls through the BRC, the MLI Audit Committee, the MLI Governance Committee, and the MRC, also conducting 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. MLI 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 the Company: strategic risk, market risk, credit risk, liquidity risk, operational risk, compliance risk, and reputational risk. The MLI BRC met four times during 2019.

The MRC reports to the BRC and is responsible for providing management oversight and approval of (or reviewing and recommending to the MLI BRC, the MLI 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 MLI MRC met eleven times during 2019.

The MLI Audit Committee assists the MLI Board in fulfilling its oversight responsibilities relating to MLI's internal financial controls, the preparation and integrity of MLI's financial statements, MLI's relationship with its external auditor, and the performance and independence of MLI's Internal Audit and Compliance functions. The MLI Audit Committee met five times during 2019.

The Governance Committee of the MLI Board (the "MLI Governance Committee") assists the MLI Board in fulfilling its oversight of the development of, and implementation of the firm's remuneration policies and practices and nominates for the MLI Board's approval candidates to fill Board vacancies. The MLI Governance Committee acts as the nomination committee and the remuneration committee of the MLI Board. The MLI Governance Committee met five times during 2019.

MLI Director Selection and Diversity Policy

The MLI Governance Committee, in consultation with the Company's shareholder, the Company's CEO and Chair, identifies and evaluates individual candidates for their qualifications to become directors and recommends qualified candidates to the Board to fill vacancies as the need arises. Before any appointment is made by the MLI Board, the MLI Governance 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 for the MLI Governance Committee, in identifying suitable candidates the MLI Governance Committee shall consider the overall knowledge, skills, experience, and expertise represented on the MLI 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 MLI Governance 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 MLI Board, including, but not limited to, gender. The MLI Governance Committee periodically considers the representation of women on the MLI Board as part of director succession planning.

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

MLUKCH Director Selection and Diversity Policy

Members of the MLUKCH Board, along with representatives from HR, Subsidiary Corporate Governance, and Legal, are responsible for identifying and approving Board candidates to fill its Board vacancies as and when they arise.

The MLUKCH Board considers candidates from a wide range of backgrounds and considers candidates on merit and against objective criteria and with due regard for the benefits of diversity on the Board, including gender representation, taking care that appointees have sufficient time available to devote to the position.

General

All appointments to the MLI Board are made in compliance with Bank of America's Background Check Policy and are subject to successful completion of numerous background checks, as required: Identification, Credit, Criminal, Global Sanctions, Media, Directorship, Professional Qualification, Employment, and Education checks. In addition, executive directors and board and committee chairs appointed to the MLI Board require regulatory pre-approval in line with the PRA and FCA's requirements under the Senior Managers Regime.

Board member experience is detailed within individual director biographies (Appendix I).

The independent risk management functions led by the MLI Chief Risk Officer ("CRO") have operational responsibility for risk management of MLI and ensuring appropriate reporting and escalation to the MLI Board.

In 2019 there were no changes to the Head of Compliance and Operational Risk, Head of Corporate Audit, or Chief Risk Officer during the year.

The MLUKCH Board has reviewed the effectiveness of the risk management arrangements of the Group and confirms that the measures outlined are adequate to facilitate the management of risk in the context of the Group's profile and strategy.

4.2.6 Risk Declaration

The principal activity of MLUKCH is to act as a holding company for MLI, the sole operating subsidiary in the Group. MLUKCH is not itself a risk taking entity, and the risk in the Group is booked in MLI, where the business is managed. The MLUKCH Board has reviewed the effectiveness of the risk management arrangements of the Group and confirms that the measures outlined are adequate to facilitate the management of risk in the context of the Group's profile and strategy.

4.3 Key Risk Types

The risk management processes outlined above allow the Group, through the sole operating subsidiary, MLI, to manage risks across the seven key risk types: strategic, credit, market, liquidity, operational, compliance, and reputational. Details of how risk is managed within MLI are given below.

4.3.1 Strategic Risk

Definition

Strategic Risk is the risk that results 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 MLI 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 MLI 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 MLI 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 MLI Strategic Plan is reviewed and signed-off by the MLI Board. Strategic decisions relating to MLI are presented and discussed at the MLI BRC and the MLI 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. Independent risk management, Corporate Audit, and other control functions provide input, challenge, and oversight to FLUs and strategic decisions and initiatives relating to MLI.

Strategic Risk Reporting

Regular updates to the MLI 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).

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 MLI commits to, or enters into, an agreement with a borrower or counterparty.

MLI 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

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

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

Credit risk management includes the following processes:

- Credit origination
- Portfolio management
- Loss mitigation activities

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

Credit Origination

As BAC's main investment firm outside of the US, MLI's credit strategy and origination is focused on its trading, securities, and derivatives activities which account for the majority of its credit exposure.

MLI'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 borrowers consistent with MLI's credit risk appetite.

Counterparties' credit risk profiles are assessed through risk modeling, underwriting, and asset analysis, while considering current and forward-looking views on economic, industry, and borrower outlooks to ensure portfolio asset quality within FLUs 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 MLI arises from the creditworthiness of MLI's trading partners and varies by type of transaction. Credit risk management manages counterparty risk with specific policies, limits, and controls.

Based on counterparties' risk profiles, limits and tenors are set at the individual counterparty level and aggregate family level. Investment Advisor "As Agent" limits can also be set as needed. Mark-to-market exposure and potential exposure are measured taking applicable collateral into account. Counterparty concentration limits are also set at country and industry levels. 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.

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 credit has been extended, processes are in place to monitor 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 keep credit risk appetite and return within 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

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

MLI maintains appropriate levels of capital in compliance with all applicable regulatory requirements to absorb unexpected losses. During a credit cycle, MLI may experience a concentration of losses and would intensify efforts to mitigate losses, balancing fiduciary responsibilities to protect asset values with MLI's principles to serve its customers.

MLI employs a range of techniques to actively mitigate counterparty credit risks. MLI accepts collateral that it is permitted by documentation such as repurchase agreements or a CSA to an International Swaps Dealers Association Master Agreement ("ISDA"). For derivatives, required collateral levels may vary depending on the credit quality of the party posting collateral. Generally, collateral is accepted in the form of cash and high grade government securities.

MLI nets collateral against the applicable derivative fair value 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 MLI, 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.

Daily valuations are carried out on market trading activities such as collateralized OTC derivatives and structured finance trades in support of margining requirements. All requests for non-standard collateral are approved through the Non-Standard Collateral Review Process. Collateral Management report and escalate collateral disputes and fails through established routines.

Derivatives exposure are increasingly routed through Central Counterparties 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 was effective for Initial Margin September 1, 2016 for the largest international bank holding companies and their subsidiaries with a further phased-in compliance based on aggregate trading notionals annually every September until 2020. UMR regulatory Variation Margin was effective for all applicable counterparties on March 1, 2017.

The main type of collateral that MLI accepts for its Global Markets business consists of US Dollar Cash and Government bonds from investment grade G7 countries. Any such 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 Credit Officer approval. The standard haircut table for Eligible Collateral is maintained by Counterparty Credit Risk Portfolio Management and updated on at least an annual basis.

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

Credit risk mitigation taken by MLI to reduce credit risk may result in credit or market risk concentrations (as per 4.4 Other Risk Considerations). Guarantees that are treated as eligible credit risk mitigation are marked as an exposure against the guarantor and aggregated with other credit exposure to the guarantor. Limit monitoring at the counterparty level is then used for monitoring of concentrations in line with Enterprise policy.

Credit Risk Governance

MLI Credit Risk Management is integrated into the BAC and MLI governance structure as described earlier in the document. 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 MLI'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, rule, 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.

At the FLU level, independent risk management oversees credit risk management processes and governance in accordance with MLI'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 and MLI Boards, and executive management, comprehensive and actionable credit risk reporting containing the required granularity of content for each level of seniority is produced.

Regular reporting for management and board committees includes monitoring of credit exposure against approved risk appetite limits, as well as more detailed credit information covering total outstanding volumes, industry and geographic concentrations, and credit quality trends. Credit risk reporting enables appropriate risk escalation.

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. 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 ALM portfolios. It arises from financial transactions in interest rate, foreign exchange, 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 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. MLI's aggregate potential economic exposure, as well as earnings and capital sensitivity, to interest rate risk in the non-trading book is also assessed.

MLI has been granted permission by the PRA to use an Internal Model Approach ("IMA") for the following models in calculating regulatory capital for market risk: Value at 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.

VaR

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

VaR for regulatory capital calculations ("Regulatory VaR") is equivalent to a 99% confidence level, has a ten-day holding period, and uses three years of historic data. Actual 10-day historical moves capture both serial correlation in the market data and non-linearity of exposures.

Stressed VaR for regulatory capital calculations is equivalent to a 99% confidence interval, has a 10-day overlapping holding period and uses a historical window that is calibrated to a continuous 12-month period that maximises the resulting VaR calculation for MLI. A scalar is applied to correct for autocorrelation introduced by the use of overlapping holding periods.

VaR is also 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 equivalent to a 99% confidence level and have a one-day holding period.

MLI uses a historical simulation approach to calculate VaR. A hypothetical 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. 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

Parameter	MLI Regulatory VaR	MLI Stressed VaR	MLI Trading VaR
Scope	Covered positions as defined by PRA approval	Covered positions as defined by PRA approval	Covered 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.

MLI 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-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")

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 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

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

MLI manages and monitors its market risk exposures in a way that reflects MLI's Risk Framework. Assessing key exposures and setting and monitoring limits to ensure that MLI operates within the approved risk appetite are at the core of MLI'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 BRC review and recommend Risk Appetite limits for approval to the MLI 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 MLI portfolio. Markets Risk Management identifies points of weakness and concentrations in the MLI 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

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.

On an annual basis, the MLI CRO provides written attestation to the PRA that the internal approaches for which the firm has received permission comply with regulatory requirements.

IMA models 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 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 PRA where required.

The effectiveness of the VaR methodology 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 PRA, as appropriate, as part of regulatory reporting processes.

On a quarterly basis, a stressed IRC and CRM are calculated as part of the enterprise regulatory stress testing framework. In particular, the impact of default for mark-to-market and capital purposes is assessed by shocking market observables to levels specified in the Federal Reserve Bank’s Supervisory Adverse and Supervisory Severely Adverse scenarios.

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 monthly basis.

Market Risk Reporting

Transparency of market risks is critical to effective risk management. MLI produces reports on exposure, including VaR, Stress and Risk Factor sensitivities. MLI 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. Markets Risk Management also contributes to governance committee reports.

Exposures to Interest Rate Risk in the Non Trading Book

Exposures to Interest Rate Risk in the Non Trading 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 and Economic Value of Equity at least monthly. The funding of client facing activities create interest rate sensitive positions on MLI's balance sheet.

Forward-looking forecasts of Earnings at Risk (EaR) are prepared. The baseline forecast takes into consideration expected future business growth, ALM positioning and the direction of interest rate movements as implied by the market-based forward rate paths. MLI then measure and evaluate 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, MLI's balance sheet position is continually monitored in order to maintain an acceptable level of exposure to interest rate changes.

Economic Value of Equity (EVE) is calculated measuring the changes in Net 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.

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

$ Millions	EVE	
	-100bps	+100bps
USD	32	(30)
JPY	(2)	14
EUR	0	(4)
GBP	0	0
Other	0	0
Total	30	(20)

$ Millions	EaR	
	-100bps	+100bps
USD	161	(174)
JPY	(10)	81
EUR	0	(27)
GBP	(45)	74
Other	(11)	12
Total	96	(36)

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

The MLI LRP describes the Liquidity Risk roles and responsibilities including requirements for liquidity risk limits, stress testing, analytics and reporting, and recovery planning.

Each of the FLUs are accountable for managing liquidity risk within the MLI 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 MLI’s liquidity risk management processes.

The MLI 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 NBH) 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 PRA Pillar 2 add-ons (Binding Constraint)

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 the treatment of risk and limit recalibration.

Liquidity Risk Governance

The MLI 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. 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 metrics 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 Management Risk Committee 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 MLI Board, BRC, MRC and Senior Management.

4.3.5 Compliance and Operational Risk

Definition

MLI operates in a highly regulated environment. The complexity and volume of the company's products, services, and customers mean it is subject to numerous laws, rules, and regulations that define the regulatory requirements we must satisfy across the jurisdictions in which we operate. Changes to existing products and services, new product innovations in delivery of services, expanding markets, and changes to our technology infrastructure create changes to MLI's operational risk profile that must be anticipated and managed to mitigate adverse impacts to the company.

Compliance risk is the risk of legal or regulatory sanctions, material financial loss, or damage to MLI's reputation arising from the failure of the company to comply with the requirements of applicable laws, rules, and regulations and our internal policies and procedures. MLI is committed to the highest level of compliance and has no appetite for violations of legislative or regulatory requirements. We seek to anticipate and assess compliance risks to our core businesses and respond to these risks effectively should they materialize. While we strive to prevent compliance violations in everything we do, we cannot fully eliminate compliance risk, but manage it by establishing permissible thresholds to reduce our exposure to financial loss, reputational harm, and / or regulatory sanctions.

Operational risk is the risk of loss resulting from inadequate or failed processes, people, and systems or from external events. We have designed an operational risk management program that meets the Standardised Approach criteria under CRR Article 320, and incorporates and documents our process for identifying, measuring, monitoring, controlling, and reporting operational risk information to executive management and the appropriate boards of directors, or appropriate board-level committees. We manage operational risk by establishing permissible thresholds to reduce our exposure to financial loss, reputational harm, and / or regulatory sanctions

Compliance and Operational Risk Management

MLI is committed to maintaining strong compliance and operational risk management practices across all FLUs and control functions. We manage 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 has a responsibility 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 across MLI.

The Global Compliance and Operational Risk Executive leads the organization, which, together with the FLUs and control functions, have responsibility for knowing what it means to conduct the company's daily activities within the limits of our compliance and operational risk appetites. The UK & CEEMEA ("Central and Eastern Europe, Middle East, and Africa") Compliance and Operational Risk Executive, together with the FLUs and control functions, is charged with these responsibilities for MLI. Global Compliance and Operational Risk sets Company-wide policies and standards, which are adhered to by MLI, 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 we deliver our products and services, understand applicable laws, rules, and regulations, and know whether our 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 our 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 ("GRM"), 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 Global Financial Crimes and Information Security / Cyber Security, which can impact 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 our 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.

Conduct Risk Management

Conduct risk is the risk of improper actions, behaviours, or practices by the Company, its employees, or representatives that are illegal, unethical, or contrary to the Company’s core values. The impact of improper conduct could result in harm to the Company, its shareholders, or its customers, damage the integrity of the financial markets, or negatively impact the Company’s reputation. Conduct risk has the potential to create additional risks such as reputational risk. Reputational risk can occur due to operational risk events such as mis-selling. The Compliance and Operational Risk framework is used to assess and mitigate these types of events.

We manage Conduct Risk by:

- Establishing a culture that reinforces expectations of proper conduct: The management of conduct risk begins with establishing a culture reflective of our purpose to help make our customers’ financial lives better and delivering our responsible growth strategy. We do this by embedding our core values of delivering together, acting responsibly, realizing the power of our people, and trusting the team in how we run the Company every day. Throughout the employee life cycle, we reinforce our culture and conduct expectations. Our hiring practices, performance management programs, compensation approach, and growth strategies reflect our commitment to our customers, strong risk management,and growing in a responsible manner. We expect our employees to act in accordance with the guidelines we have set forth and we continually invest in our employees through ongoing leadership engagement, communications, and training that reinforces and reminds them of our purpose and values
- Understanding how conduct risk arises: Conduct risk can arise when an employee fails to:
    - Act in accordance with laws, rules and regulations,
    - Behave in accordance with established professional standards and behaviours, and / or
    - Comply with internal policies, procedures, and all other established guidelines
- Designing our infrastructure and implementing controls and processes to prevent and identify potential conduct risk: Our Company culture requires our employees to be vigilant about upholding our Code of Conduct, and sets the expectation that speaking up is not only accepted but expected. Employees are empowered to report concerns of possible conduct risk through such channels as the ethics and whistle-blower hotlines or our Global Human Resources team so that it can be addressed promptly. We have also established a centralized investigations team so that we have consistency in our evaluation of conduct-related matters and are able to more easily identify trends and themes
- Managing employee misconduct incidents: When we become aware of potential employee misconduct, we have dedicated resources and processes to investigate and manage the incidents thoroughly. We have established protocols and structures so that conduct risk is governed and reported across the Company. To enable appropriate and effective oversight of conduct risk, we report conduct-related information to FLUs and control functions, and escalate to management and board governance routines as appropriate

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 the company’s compliance and operational risk policies and procedures. Global Compliance and Operational Risk reporting is presented to the MLI MRC and then the MLI BRC, in addition to the Audit Committee for Compliance Risk related items, with both the BRC and Audit Committee reporting to the Board. The goal of having this governance structure is to drive accountability for risk management, including decision making, oversight, and escalation at all levels throughout MLI.

Compliance and Operational Risk Reporting

Compliance and Operational Risk reporting and escalation to senior management and the Board is essential to ensuring a clear understanding of current and emerging risks across MLI, as well as whether we are operating within our Compliance and Operational Risk Appetite limits, so we 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 of Directors.

4.3.6 Reputational Risk

Definition

Reputational Risk is the potential risk that negative perceptions of BACs conduct or business practices will adversely affect its profitability or operations through an inability to establish new or maintain existing customer / client relationships or otherwise impact relationships with key stakeholders, such as investors, regulators, employees, and the community.

Reputational Risk can stem from many of BACs activities, including those related to the management of the strategic, operational, compliance, credit, 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 manages reputational risk through established policies and controls in the business and risk management processes to mitigate reputational risks in a timely manner and through proactive monitoring and identification of potential reputational risk events. In addition, Reputational Risk is also reflected as one of the considerations in the assessment of operational risk scenarios.

At the Enterprise level, Reputational Risk is reviewed by the Enterprise Risk Committee (“ERC”) and the Management Risk Committee (“MRC”), which provide primary oversight of Reputational Risk. Additionally, top reputational risks are reviewed by the Global Risk Management (“GRM”) Leadership team and the BAC Board.

Reputational risk items relating to MLI are considered as part of the EU / UK & CEEMEA Reputational Risk Committee, whose mandate includes consideration of Reputational Risk issues and provision of 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 EU / UK & CEEMEA Reputational Risk Committee for review and approval where elevated level of Reputational Risk are present. Examples of activities could include:

- Business activities that present significant legal, regulatory or headline risk
- Violations of, or deviations from, BAC 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 BAC might have an undisclosed or significant conflict of interest
- Business activities from which BAC 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 MLIs reputation or suggest the need for close scrutiny
- Business activities that present the risk of creating information or security breaches or consumer privacy issues, including public disclosure of information
- Business activities that may present environmental or social risks due to actions by MLI or any of the parties involved

- Business activities or practices that may follow longstanding 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 MLI 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 Reputational 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, BAC does not set quantitative limits for the level of acceptable risk. Through proactive risk management, BAC seeks to minimise both the frequency and impact of reputational events.

Reputational Risk Governance

BAC has an appropriate organisational and governance structure in place to ensure strong oversight at both the enterprise and business levels.

The EU / UK & CEEMEA Reputational Risk Committee membership consists of executive representation from Markets, Global Corporate and Investment Banking and control functions (Legal, Compliance and Risk), this includes senior representatives from MLI. The committee is co-chaired by the Regional Presidents and CROs. The EU / UK & CEEMEA 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 EU / UK & CEEMEA Reputational Risk Committee is a sub-committee of both the EU, UK & CEEMEA Regional Risk Committee and the Global Reputational Risk Committee and is applicable to all key legal operating entities in the region. Items requiring increased attention may be escalated from the EU / UK & CEEMEA Reputational Risk Committee to the Global Reputational Risk Committee as appropriate. MLI MRC and the BRC is informed of such matters through a MLI specific report.

Reputational Risk Reporting

The reporting of MLI reputational risk issues is captured as part of the management routines for the EU / UK & CEEMEA Reputational Risk Committee. Issues that are identified and presented for discussion are included in reporting. Tracking of items presented to the EU / UK & CEEMEA Reputational Risk Committee is maintained through reporting which provides detail such as the description of the reputational risk issue, the geographical jurisdiction of the issue, the reason for escalation and the decision reached by the EU / UK & CEEMEA Reputational Risk Committee and which legal entity the issue relates to. Summary reporting of the EU / UK & CEEMEA Reputational Risk Committee issues is provided to the EU, UK & CEEMEA Regional Risk Committee on a quarterly basis as part of the control function support papers. In addition, the EU / UK & CEEMEA Reputational Risk Committee provides updates to the MLI BRC on a quarterly basis through a standing agenda item.

4.4 Other Risk Considerations

Wrong-way Risk

Wrong-way risk exists when there is adverse correlation between a 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.

MLI 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 WWR exposures. Forums have been established to review potential situations of wrong-way risk, and depending on the nature of the wrong way risk, Risk Management may require pre-trade approval or apply various portfolio limits. In keeping with the Risk Framework, several processes exist to control and monitor wrong-way risk including reviews at the BAC Global Markets Risk Committee and the BAC Credit Risk Committee.

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 CVA trend towards zero with the rise of overcollateralization 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.

MLI is subject to various Enterprise-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.

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.

MLI is subject to various Enterprise 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.

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.

Climate Change

MLI is enhancing its risk management framework including risk governance, in line with industry standards and regulatory requirements, in order to manage the financial risks from climate change. The changes will be proportionate to the nature, scale, and complexity of MLI's businesses and over time the framework is expected to mature from a qualitative to a more quantitative basis. MLI currently applies a judgemental approach to the assessment of financial risks arising.

Impact of a Credit Rating Downgrade on OTC Collateral

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

Based on the terms of various over-the-counter derivatives contracts and other trading agreements, a credit rating downgrade may result in MLI posting additional collateral to counterparties or counterparties choosing to unwind or terminate specific transactions. In either case, MLI 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 MLI's internal liquidity stress testing and regulatory liquidity requirements. As of 31 December 2019, MLI was in excess of both internal and regulatory liquidity requirements, with a one-notch and two-notch downgrade scenario resulting in $69m and $334m of incremental additional outflows, respectively.

Securitisation Risk Governance and Reporting

MLI is active in all classes of securitisation issuances, trading senior, mezzanine and residual tranches to facilitate client activity. Although asset-backed securities are the dominant driver of the capital requirement for securitisation positions, MLI is also active in all classes of collateralised loan obligation issuance and also has certain derivative positions collateralised by ABS. Monitoring and controls are in place via VaR based modelling, stress testing and market value limits.

New Products

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

MLI complies with the BAC New Product Review and Approval 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 predefined minimum requirements in respect of Governance, Risk Assessment, Post Implementation review, reporting, and required documentation.

BANK OF AMERICA

ML UK Capital Holdings Limited

Including Merrill Lynch International

5 Further Detail on Capital Requirement, Capital Resources, Leverage, Securitisation, and Capital Buffers

As at 31 December 2019

5.1 Minimum Capital Requirement Summary

MLI and the Group's Minimum Capital Requirement primarily arises from counterparty and credit risk and market risk. Figures 5 and 6 illustrate MLI's counterparty and credit risk exposure by industry and Market Risk Capital Requirement by type, respectively.

The majority of MLI's counterparty and credit risk exposure is against banks, broker-dealers, and clearing houses.

MLI's Market Risk Capital Requirement is principally driven by MLI's internal model based capital requirement and a standard rules charge on traded debt instruments. Further detail on Market Risk can be found in 5.3 Market Risk.

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

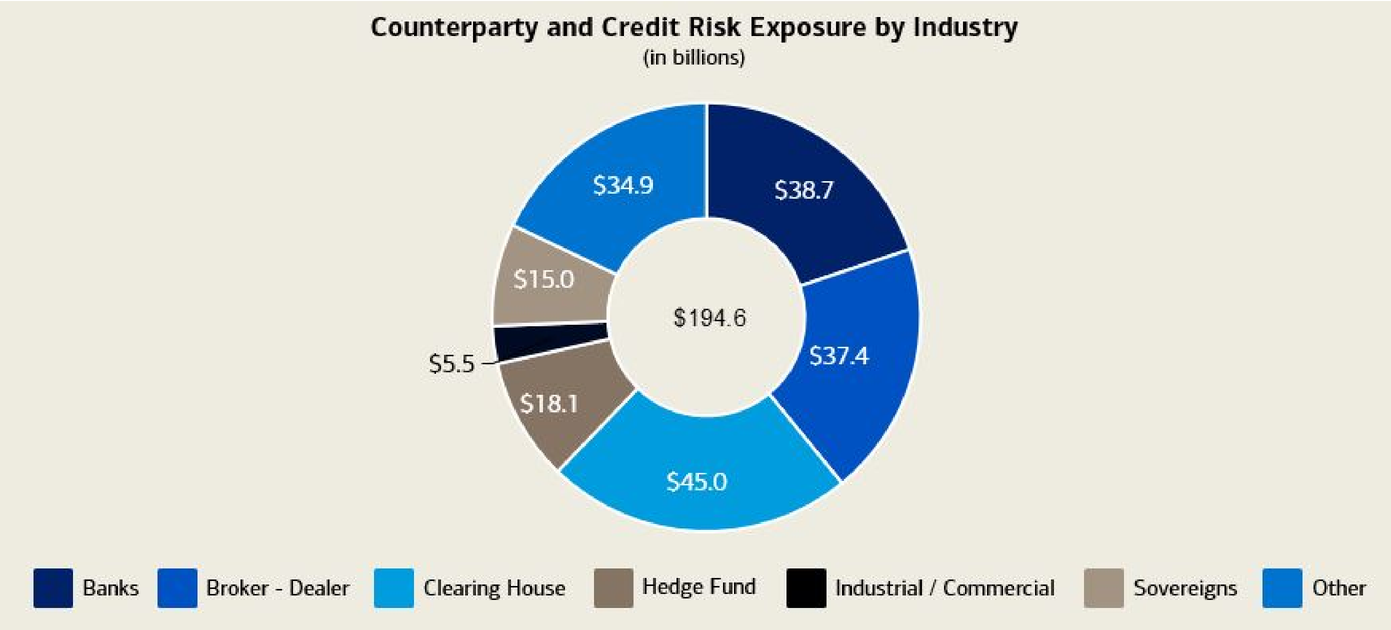
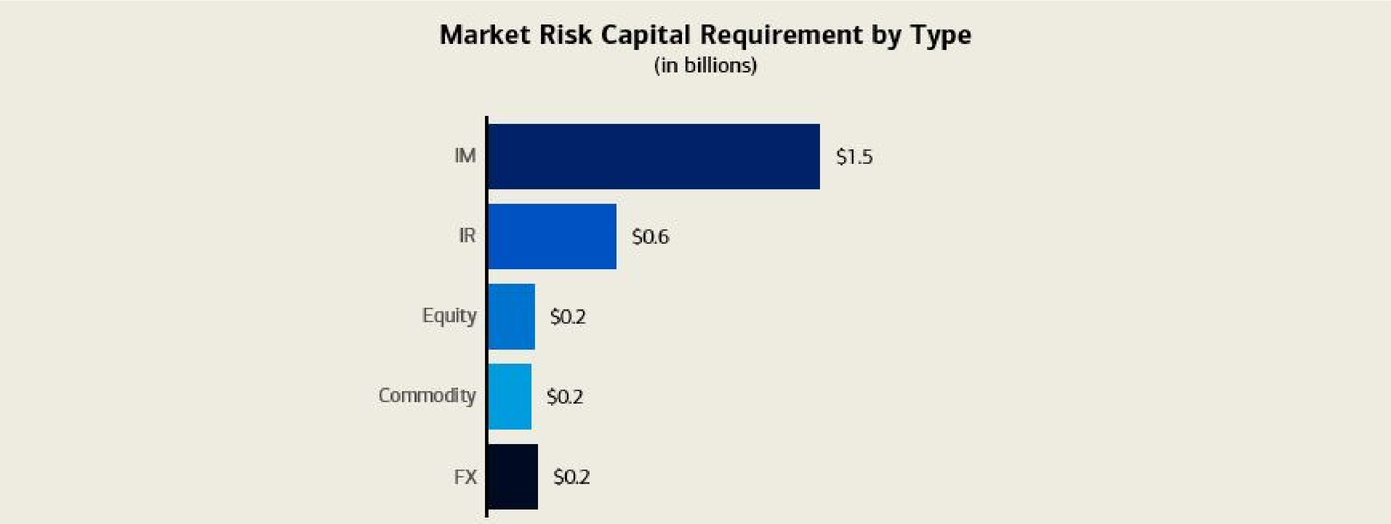


Figure 5.1 F2. Minimum Capital Requirement Detail: Market Risk Capital Requirement



5.2 Additional Detail on Minimum Requirements for Own Funds and Eligible Liabilities

As part of amendments to the CRR which were published in the Official Journal of the EU as Regulation (EU) 2019/876, the international standard to meet a minimum amount of Total Loss Absorbing Capacity ("TLAC") became effective for certain types of Investment Firms and Credit Institutions in June 2019. In the CRR this is referred to as Minimum Requirements for Own Funds & Eligible Liabilities ("MREL").

Firms that are material subsidiaries of a non-EU Global Systemically Important Institution ("G-SII") per the CRR definition are required to hold a minimum amount of MREL. BAC is a non-EU G-SII and MLI and the MLUKCH Group meet the definition of material subsidiary, and are therefore subject to this requirement.

MREL resources are comprised of qualifying capital resources and eligible liabilities. In order for liabilities that are not capital resources to qualify as eligible, they must meet certain criteria such as having a minimum residual maturity of at least one year, and being subordinated to other operating liabilities.

MLI and MLUKCH have not issued any eligible liabilities, and therefore total MREL resources is equal to Tier 1 capital. The following table shows MLI and MLUKCH's key metrics relating to MREL requirements.

Table 5.2 T1. Key Metrics - MREL Requirements

	2019	
(Dollars in Millions)	**MLI**	**MLUKCH Group**
Total MREL Resources Available	35,015	34,198
Total RWA	173,625	174,004
MREL as a percentage of RWA	20.2%	19.7%
Leverage Ratio Exposure Measure	409,452	405,523
MREL as a percentage of Leverage Ratio Exposure Measure	8.6%	8.4%
Excluded Liabilities	326,518	322,665

5.3 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. MLI 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 CRD IV.

Table 5.3 T1 presents a breakdown of MLI and the Group's Market Risk under the standardised approach and Table 5.3 T2 presents a breakdown of MLI's Market Risk under the IMA. Table 5.3 T3 shows a reconciliation of movements in RWAs under the IMA for MLI's Market Risk. Further detail on the components follows the tables.

MLI is the only entity in the Group with an internal model permission for market risk therefore Table 5.3 T2 is presented for MLI only. Market Risk under the IMA is the same for MLI and the Group.

Table 5.3 T1. EU MR 1 Market Risk under the Standardised Approach

	2019			
	MLI		MLUKCH Group	
(Dollars in Millions)	RWAs	Capital requirements	RWAs	Capital requirements
Outright products				
Interest rate risk (general and specific)	6,162	493	6,458	517
Equity and Collective Investment Undertakings risk (general and specific)	2,528	202	2,929	234
Foreign exchange risk	2,946	236	2,987	239
Commodity risk	2,558	205	2,558	205
Options				
Simplified approach	—	—	—	—
Delta-plus method	206	16	206	16
Scenario approach	—	—	—	—
Securitisation (specific risk)	1,283	103	1,318	105
Total	**15,683**	**1,255**	**16,456**	**1,316**

Table 5.3 T2. EU MR 2-A Market Risk under the IMA

	2019	
(Dollars in Millions)	RWAs	Capital requirements
VaR	**1,180**	**94**
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		38
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		94
SVaR	**3,216**	**257**
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		138
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)		257
IRC	**4,903**	**392**
Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		392
Average of the IRC number over the preceding 12 weeks		320
Comprehensive risk measure	**1,464**	**117**
Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)		77
Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		81
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)		117
Other	**8,374**	**670**
Total	**19,136**	**1,531**

Table 5.3 T3. EU MR 2-B RWA Flow Statements of Market Risk Exposures under the IMA

	2019						
(Dollars in Millions)	VaR	SVaR	IRC	CRM	Other	Total RWAs	Total capital requirements
RWAs at previous quarter end	1,075	2,515	4,705	1,674	11,988	21,957	1,757
Movement in the risk levels	105	701	198	(210)	(3,614)	(2,820)	(226)
RWAs at the end of the reporting period	1,180	3,216	4,903	1,464	8,374	19,137	1,531

Market risk capital requirements under the IMA decreased during the quarter, mainly driven by a reduction in Risks Not in VaR ("RNIV") add-ons with impacts spread across Equity, Global Rates and Currencies, and Counterparty Portfolio Management.

5.3.1 Internal Model Based Capital Requirement

Within the MLUKCH Group, the model based regulatory capital requirement in MLI is calculated based on the internal model (VaR) approved by the PRA. MLI, as the sole operating subsidiary in the Group, 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 CRD IV.

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 percent 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 MLI uses VaR as a risk management tool, please refer to the Market Risk key risk type in 4.3 Key Risk Types.

Regulatory VaR

Regulatory VaR is a variation of VaR in which a 10-day holding period is used with rolling actual 10-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 Profit and Loss (“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 2019, MLI trading losses as measured by hypothetical P&L exceeded the prior day’s VaR on five occasions, and as measured by actual P&L exceeded the prior day’s VaR on one occasion.

Two overshootings on hypothetical P&L occurred in March, primarily as a result of increased market volatility in emerging markets rates and FX. One overshooting occurred on both hypothetical and actual P&L on the same date in May, driven by increased market volatility in U.S. Dollar interest rates.

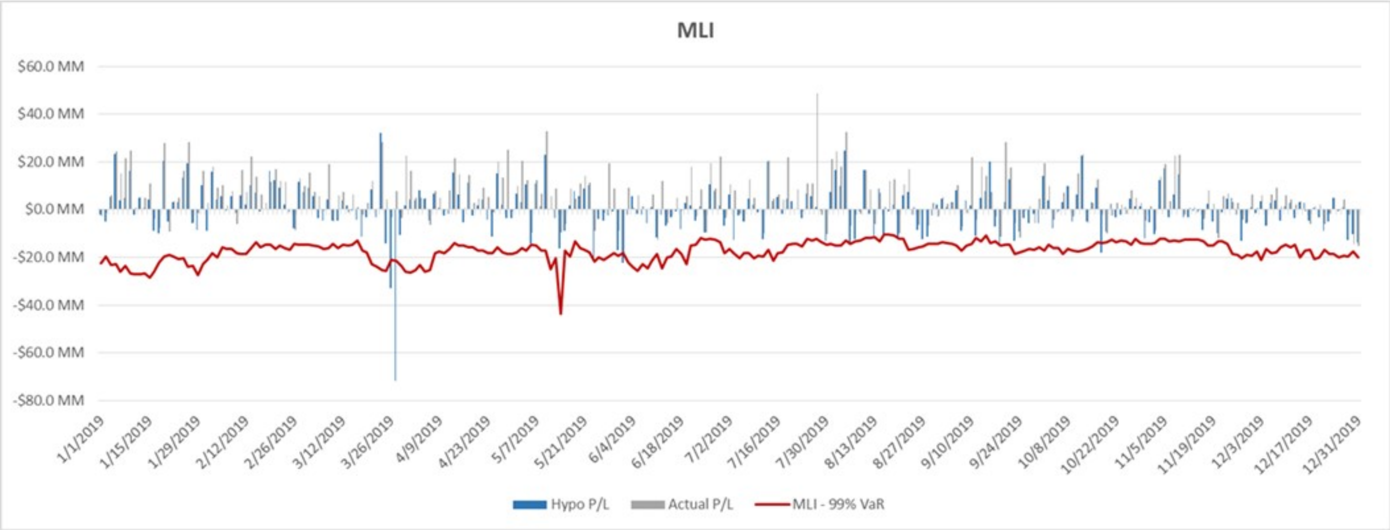
One overshooting on hypothetical P&L occurred in August, due to increased market volatility in interest rates, and to risks not in VaR. The driver of the overshooting was separately capitalised by an RNiV.

One overshooting on hypothetical P&L occurred in October, driven by volatility in various macro risk factors.

The results are illustrated in the chart below.

Figure 5.3.1 F1. EU MR 4 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 entirely of MLI. 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 13% of MLI's Pillar 1 capital requirements for market risk and 3% of MLI's total Pillar 1 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 MLI 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 MLI. 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 percent confidence level, the Company 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

The Company'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 percent 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 5.3.1 T1 shows MLI'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 half-year ending 31 December 2019. Both VaR and Stressed VaR include a price volatility cross risk add-on.

Table 5.3.1 T1. MR 3 IMA Values for Trading Portfolios

(Dollars in Millions)	2019
VaR (10 day 99%)	
Maximum value	52
Average value	29
Minimum value	14
Period end	38
SVaR (10 day 99%)	
Maximum value	178
Average value	71
Minimum value	37
Period end	138
IRC (99.9%)	
Maximum value	392
Average value	253
Minimum value	135
Period end	392
Comprehensive risk capital charge (99.9%)	
Maximum value	93
Average value	74
Minimum value	61
Period end	77

5.3.2 Capital Requirement under Standardised Approaches

Within the MLUKCH Group, regulatory capital required is calculated on traded debt instruments that are not part of the scope of the internal models permission granted by the PRA to MLI. 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

Within the Group, 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 PRA to MLI.

Commodity Market Risk

Within the Group, Commodity Market Risk is the regulatory capital requirement calculated on the global commodities investor product business in MLI. The positions are grouped by maturity with a different weighting applied to each maturity band.

FX Market Risk

Within the Group, 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 PRA to MLI.

Option Market Risk Requirement

Within the Group, 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 PRA to MLI. It attracts a delta equivalent treatment, with additional regulatory capital requirement calculated for convexity risk (gamma risk) and volatility risk (vega risk).

5.4 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. MLI has counterparty and credit risk exposure as a result of derivative trades, securities financing transactions, and other trading book exposures. Both MLI and the Group also have non-trading book exposures.

Within the MLUKCH Group, MLI 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 MLI and the MLUKCH Group'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.

5.4.1 Counterparty and Credit Risk by Type

Table 5.4.1 T1 sets out MLI and the Group's counterparty and credit risk exposure by industry distribution. The majority of exposures of MLI and the Group are against banks, broker-dealers and clearing houses. 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 5.4.1 T1. Counterparty and Credit Risk Exposure by Industry Distribution

(Dollars in Millions)	MLI	MLUKCH Group
Bank	38,703	38,727
Broker Dealer	37,393	37,393
Central Counterparty, Clearing House/Exchange	45,015	45,503
Industrial and Commercial Companies	5,515	5,515
Energy and Commodities	1,007	1,007
Hedge Fund	18,077	18,077
Insurance	4,535	4,535
Sovereign & Government Related	15,011	15,027
Other Financial	29,386	29,242
Total Exposure Value	**194,643**	**195,026**

5.4.2 Counterparty and Credit Exposure Geographic Distribution and Maturity Profile Detail

Further analysis for MLI and the Group showing the geographical distribution of the exposure value is shown in Table 5.4.2 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 MLI and the Group's exposure sits within EMEA and Americas, reflecting MLI's global business activities.

Table 5.4.2 T1. Counterparty and Credit Risk Exposure by Geographical Distribution

	2019			
	MLI			
(Dollars in Millions)	Asia	Americas	EMEA	Total
Corporates	10,644	27,430	23,180	**61,254**
Institutions	7,215	18,447	61,368	**87,030**
Short-term Claims on institutions and corporate	3,927	17,075	9,551	**30,553**
Central Governments or Central Banks	2,903	992	7,779	**11,674**
Other [(1)]	293	442	3,397	**4,132**
Total Exposures	**24,982**	**64,386**	**105,274**	**194,643**

	2019			
	MLUKCH Group			
(Dollars in Millions)	Asia	Americas	EMEA	Total
Corporates	10,644	27,430	23,173	**61,247**
Institutions	7,215	18,947	61,368	**87,530**
Short-term Claims on institutions and corporate	3,927	17,075	9,562	**30,564**
Central Governments or Central Banks	2,919	992	7,779	**11,690**
Other [(1)]	292	305	3,397	**3,995**
Total Exposures	**24,998**	**64,750**	**105,278**	**195,026**

[(1)] Other comprises of exposures to International Organisations, Multilateral Development Banks, Public Sector Entities, Regional Governments or Local Authorities, Exposures Secured by Mortgages on Immovable Property, Exposures in Default, Equity Exposures, Items Associated with Particularly High Risk, Other Items and Items Representing Securitisation Positions.

Table 5.4.2 T2 splits MLI and the Group's Counterparty and Credit Risk exposure values at the end of the year by residual maturity and exposure class

Table 5.4.2 T2. Counterparty and Credit Risk Exposure by Residual Maturity

	2019			
	MLI			
(Dollars in Millions)	Under 1 Year	One - Five Years	Over Five Years	Total
Corporates	41,106	11,927	8,222	**61,254**
Institutions	40,807	30,713	15,509	**87,030**
Short-term Claims on institutions and corporate	30,553	—	—	**30,553**
Central Governments or Central Banks	11,178	75	422	**11,674**
Other [(1)]	2,538	267	1,326	**4,132**
Total Exposure Value	**126,182**	**42,982**	**25,478**	**194,643**

	2019			
	MLUKCH Group			
(Dollars in Millions)	Under 1 Year	One - Five Years	Over Five Years	Total
Corporates	41,102	11,926	8,219	**61,247**
Institutions	41,287	30,734	15,509	**87,530**
Short-term Claims on institutions and corporate	30,564	—	—	**30,564**
Central Governments or Central Banks	11,193	75	422	**11,690**
Other [(1)]	2,538	267	1,190	**3,995**
Total Exposure Value	**126,684**	**43,003**	**25,339**	**195,026**

[(1)] Other comprises of exposures to International Organisations, Multilateral Development Banks, Public Sector Entities, Regional Governments or Local Authorities, Exposures Secured by Mortgages on Immovable Property, Exposures in Default, Equity Exposures, Items Associated with Particularly High Risk, Other Items and Items Representing Securitisation Positions.

5.4.3 Counterparty and Credit Exposure by Credit Quality Step

Table 5.4.3 T1 analyses exposure values by exposure class and Credit Quality Step ("CQS"), showing the position Pre and Post-Credit Risk Mitigation.

A CQS is a credit quality assessment scale as set out in CRD IV. The CQS is derived by referring to ECAIs including Moody's, Fitch, and S&P, where available.

MLI complies with the standard association for mapping of external ratings of each nominated ECAI with the credit quality steps, which is published by the EBA.

The Group and MLI both have over 38% of exposures with counterparties externally rated between AAA and A- or equivalent. Although generally assessed internally as being of high quality, 55% of exposure in the Group (MLI: 56%) is to counterparties not rated by external rating agencies. Credit risk is assessed as outlined at 4.3 Key Risk Types.

Table 5.4.3 T1. Counterparty and Credit Risk Exposure by CQS

	2019			
	MLI		MLUKCH Group	
(Dollars in Millions)	Pre-Credit Risk Mitigation [1]	Post-Credit Risk Mitigation	Pre-Credit Risk Mitigation [1]	Post-Credit Risk Mitigation
Central and Regional Governments or Central Banks				
Credit Quality Step				
1	5,910	5,847	5,910	5,847
2	1,132	1,129	1,147	1,144
3	6	6	6	6
4	208	208	208	208
5	26	26	26	26
6	—	—	—	—
NR-Non Rated	4,623	4,626	4,623	4,626
Total Exposure Value	**11,905**	**11,841**	**11,921**	**11,857**
Corporates				
Credit Quality Step				
1	1,684	1,317	1,684	1,317
2	8,038	6,223	8,038	6,223
3	3,451	3,359	3,451	3,359
4	677	225	677	225
5	42	41	42	41
6	14	14	14	14
NR-Non Rated	80,225	50,074	74,275	50,068
Total Exposure Value	**94,132**	**61,254**	**88,182**	**61,247**
Institutions				
Credit Quality Step				
1	16,289	12,691	16,302	12,704
2	28,685	17,753	28,685	17,753
3	5,363	1,858	5,363	1,858
4	2,343	2,303	2,830	2,791
5	447	288	447	288
6	282	15	282	15
NR-Non Rated	55,814	52,121	55,814	52,121
Total Exposure Value	**109,224**	**87,030**	**109,724**	**87,530**
Other [2]				
Credit Quality Step				
1	5,546	2,952	5,547	2,953
2	26,519	26,535	26,529	26,545
3	2,578	2,629	2,578	2,629
4	916	953	916	953
5	25	25	25	25
6	266	208	266	208
NR-Non Rated	1,216	1,216	1,080	1,079
Total Exposure Value	**37,067**	**34,517**	**36,941**	**34,392**
Combined Total Exposure Value	**252,328**	**194,643**	**246,768**	**195,026**

[1] Exposure Pre CRM includes the effect of Funded Credit Protection in the form of master netting agreements for Securities Financing Transactions

[2] Other comprises of exposures to International Organisations, Multilateral Development Banks, Public Sector Entities, Short-term Claims on Institutions and Corporates, Exposures Secured by Mortgages on Immovable Property, Exposures in Default, Equity Exposures, Items Associated with Particularly High Risk, Other Items and Items Representing Securitisation Positions

5.4.4 Credit Quality of Assets

A financial asset is past due when the counterparty has failed to make a payment when contractually due. 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 the Company on terms that the Company 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.

Under IFRS 9, the Company recognises loss allowances for expected credit losses ("ECL") on the following financial instruments that are not measured at fair value through profit and loss ("FVPL");

- Financial assets that are debt instruments;
- Financial guarantee contracts issued; and
- Loan commitments issued

Loss allowances are recognised at an amount equal to 12-month ECL for financial instruments on which credit risk has not increased significantly since their initial recognition. Loss allowances for financial instruments where there has been a significant increase in credit risk are measured at lifetime ECL. 12-month ECL are the portion of ECL that result from default events on a financial instrument that are possible within the 12 months after the reporting date. Lifetime ECL are the expected credit losses that result from all possible default events over the expected life of the financial instrument. The ECL amount assessed on the Company's exposures is not considered to be significant.

For regulatory purposes, a default shall be considered to have occurred with regard to a particular obligor when either or both of the following have taken place:

a) the Group considers that the obligor is unlikely to pay its credit obligations in full, without recourse by the Group to actions such as realising security;

b) the obligor is past due more than 90 days on any material credit obligation to the Group.

As at 31 December 2019, the Company did not have any third party credit exposures that were more than 90 days past due but were not considered to be credit-impaired.

5.5 Securitisation

5.5.1 Securitisation Activities

Within the Group, MLI acts as investor in securitisations. MLI has also historically acted as originator of securitisations but did not originate any securitisations in 2019. MLI does not currently act as sponsor for any securitisations.

MLI's main involvement in relation to securitisation activity is to act as a secondary market maker. MLI has engaged in securitisation activities related to commercial and residential mortgage loans, corporate loans, and other types of financial instruments. Where MLI acts as derivative counterparty to a securitisation, the derivatives are typically interest rate swaps.

5.5.2 Regulatory Capital Treatment

MLI uses the Standardised Approach to calculate the capital requirements on its securitisation positions that are not held in the correlation trading portfolio. This approach uses rating agency credit ratings to determine risk weights. MLI uses ratings from three ECAIs: Moody's, S&P and Fitch.

The approach used for the calculation of capital requirements for the correlation trading portfolio is discussed in 5.3 Market Risk.

Regulation (EU) 2017 / 2402 and Regulation (EU) 2017 / 2401 were published in the official journal of the EU in December 2017 implementing a new securitisation framework in the EU and setting out prudential requirements for credit institutions and investment firms. The regulations applied from 1 January 2019.

In respect of securitisations the securities of which were issued before 1 January 2019, MLI continued to apply the provisions set out in Part Three, Title II, Chapter 5 and Article 337 of the CRR until 31 December 2019, as required under the transitional provisions of the new regulations.

5.5.3 Accounting Treatment

MLI accounts for its interests in Special Purpose Entities ("SPEs") in accordance with IFRS 10: Consolidated Financial Statements, which establishes the criteria for when one entity is deemed to control another entity. IFRS 10 defines control as follows: "an investor controls an investee when it is exposed, or has the rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee". In assessing control all relevant factors are considered including qualitative and quantitative aspects.

The consolidation analysis is reassessed whenever there is a change in the substance of the relationship between MLI and an SPE, for example, when the nature of the MLI's involvement or the governing rules, contractual arrangements or capital structure of the SPE change. Further, the full population is reassessed every quarter-end. The review process includes all stakeholders, including FLUs.

Whether the transfer of assets to an SPE in a securitisation transaction is treated as a sale or financing depends on whether the derecognition requirements of IFRS 9 - Financial Instruments are met.

The 'derecognition' criteria are satisfied if:

a. substantially all the risks and rewards associated with the assets have been transferred, in which case, they are derecognised in full; or

b. MLI neither transfers nor retains substantially all the risks and rewards of ownership, and has not retained control, in which case the assets are derecognised in their entirety and the Group, through MLI recognises separately as assets or liabilities any rights and obligations created or retained in the transfer, otherwise if MLI has retained control, the assets continue to be recognised to the extent of the MLI's continuing involvement.

Transactions where derecognition of the assets transferred to a SPE has occurred are treated as sales or partial sales of those assets. The difference between the carrying amount of the assets transferred and the consideration received is recorded in current period net operating income.

Assets that have been transferred to an unconsolidated SPE which fail the 'derecognition' requirements in IFRS 9 are treated as financing arrangements and will remain on MLI's balance sheet, with a corresponding liability recognised for the proceeds received. These assets are classified as trading assets and the corresponding liabilities are classified as Creditors: Amounts falling due after one year. The assets are measured at fair value through P&L and the liabilities at amortised cost or fair value through P&L under a fair value option election.

Synthetic securitisations arise where the underlying assets are not sold to the SPE, instead credit derivatives are used to transfer the economic risk of the underlying assets. The Group, through MLI, may or may not hold the underlying assets and may or may not transfer other HQLAs to the SPE as security for the principal of the notes issued. Synthetic securitisations are accounted for under the same accounting policies to those summarised above with the associated credit derivatives accounted for at fair value through P&L in accordance with the requirements of IFRS 9.

MLI's retained interests in securitisation transactions are valued in accordance with the Accounting Policies, as set out in MLI's Annual Financial Statements. These interests comprise loans and securities, which are classified as trading assets and measured at fair value through P&L. These will accordingly be included within the fair value disclosures in Note 31 in the MLI Annual Financial Statements. Other interests include, for example, agreement between MLI to receive the fee payable by the SPE over several years (at an increased rate) and off-balance sheet liquidity facilities (e.g. in a credit-linked note structure) provided to the SPE. Neither MLUKCH nor MLI provide financial support to its SPEs.

5.5.4 Securitisation Risk Governance and Reporting

Please refer to Securitisation Risk Governance and Reporting in Section 4.4 Other Risk Considerations.

5.5.5 Securitisation Exposures

The following tables provide a summary of the outstanding exposures securitised by the Group to which the Group continues to have exposure as at 31 December 2019 and the aggregate amount of such securitisation exposure in the trading book and non-trading book.

The Group does not have any exposures to securitisations which are subject to early amortisation treatment.

Table 5.5.5 T1. Outstanding Exposures Securitised (Originator)

(Dollars in Millions)	Outstanding Exposures Securitised
Traditional Securitisations	
Residential Mortgages	800
Commercial Mortgages	—
Loans to Corporates or SMEs	—
Other Assets	978
Traditional Total	**1,778**
Synthetic Securitisations	
Residential Mortgages	—
Commercial Mortgages	—
Loans to Corporates or SMEs	—
Other Assets	3,077
Synthetic Total	**3,077**

Table 5.5.5 T2. Current Exposure by Exposure Type to Securitisations

	Current Exposure			
	Trading Book		Non-trading Book	
(Dollars in Millions)	Purchased	Off BS / Derivatives	Purchased	Off BS / Derivatives
Traditional Securitisations				
Residential Mortgages	259	7	46	74
Commercial Mortgages	45	—	7	4
Loans to Corporates or SMEs	4	—	2	—
Other Assets	14	43	410	101
Traditional Total	**322**	**50**	**465**	**179**
Synthetic Securitisations				
Residential Mortgages	—	—	—	1
Commercial Mortgages	—	—	—	—
Loans to Corporates or SMEs	—	—	—	—
Other Assets	—	—	5	20
Synthetic Total	**—**	**—**	**5**	**21**

Table 5.5.5 T3. Securitisation Positions Risk Weighted at 1,250%

(Dollars in Millions)	Trading Book Exposure	Non-trading Book Exposure
Residential Mortgages	27	61
Commercial Mortgages	8	7
Loans to Corporates or SMEs	4	2
Other Assets	43	281
Total	**82**	**352**

Table 5.5.5 T4. Securitisation Exposures and Capital Requirements by Risk Weight

	Trading		Non-Trading	
(Dollars in Millions)	Exposure	Capital	Exposure	Capital
Securitisations				
10% to <50%	206	3	114	2
50% to <100%	19	1	66	3
100% to <350%	6	—	56	5
350% to <1250%	59	17	81	30
1250%	57	57	221	221
Securitisations Total	**347**	**78**	**539**	**261**
Re-securitisations				
10% to <50%	—	—	—	—
50% to <100%	—	—	—	—
100% to <350%	—	—	—	—
350% to <1250%	—	—	—	—
1250%	25	25	130	130
Re-Securitisations Total	**25**	**25**	**130**	**130**

The Group has $25m of unhedged exposure to re-securitisations in the trading book. The exposure to non-trading book re-securitisations in the above table is shown net of credit risk mitigation, which reduced the exposure by $26m. This credit risk mitigation is not provided by financial guarantor.

5.6 Capital Buffers

The CCYB was introduced through CRD IV and is defined as the amount of CET1 capital MLI and the Group must calculate in accordance with CRD IV as implemented by the PRA. The CCYB is equal to MLI and the Group's total risk exposure amount multiplied by the weighted average of the CCYB rates that apply to exposures in the jurisdictions where MLI and the Group'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 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.

Under CRD IV, MLI and the Group should face the same CCYB rates as domestic institutions on its cross-border exposures under the international reciprocation process. The UK CCYB rate was 1% effective as at 31 December 2019. In December 2019 the FPC announced that the UK CCYB will increase to 2% with binding effect from 16 December 2020.

In terms of other jurisdictions, the FPC recognised the CCYB rates of Hong Kong (2%), Norway (2.5%), Sweden (2.5%), Czech Republic (1.5%), Iceland (1.75%), Slovakia (1.5%), Lithuania (1%), Denmark (1%), France (0.25%), Ireland (1%) and Bulgaria (0.5%) on exposures of UK institutions, which were applicable as at 31 December 2019.

Table 5.6 T1 outlines the components of relevant credit exposures used in the calculation of CCYB by country.

Table 5.6 T1. MLI CCYB - Exposures

	MLI			
	General Credit Exposures	Trading Book Exposures		Securitisation Exposures
(Dollars in Millions)	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	37	11	17	—
Sweden	317	44	79	—
Hong Kong	237	11	33	—
Slovakia	—	—	—	—
Czech Republic	34	1	—	—
Iceland	—	—	—	—
Lithuania	—	—	—	—
Denmark	237	1	13	—
France	600	73	207	50
Ireland	4,091	3	2	171
Bulgaria	—	1	—	—
United Kingdom	8,999	633	18	277
United States Of America	15,594	250	429	73
Other	33,524	459	1,617	98
Total	**63,670**	**1,488**	**2,414**	**669**

Table 5.6 T2. MLI CCYB - Own Fund Requirements

	MLI					
	Own Funds Requirements				Own funds requirements weights	Countercyclical Capital Buffer rate
(Dollars in Millions)	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
Norway	1	—	—	1	—	2.500%
Sweden	20	44	—	64	0.010	2.500%
Hong Kong	19	23	—	42	0.007	2.000%
Slovakia	—	—	—	—	—	1.500%
Czech Republic	3	—	—	3	—	1.500%
Iceland	—	—	—	—	—	1.750%
Lithuania	—	—	—	—	—	1.000%
Denmark	18	13	—	31	0.005	1.000%
France	47	53	23	123	0.020	0.250%
Ireland	323	11	70	405	0.065	1.000%
Bulgaria	—	—	—	—	—	0.500%
United Kingdom	675	232	197	1,104	0.177	1.000%
United States Of America	1,041	105	68	1,213	0.194	0.000%
Other	2,607	614	33	3,254	0.522	0.000%
Total	**4,755**	**1,094**	**391**	**6,240**	**1.000**	

Table 5.6 T3. MLI CCYB - Amount of institution-specific CCYB

(Dollars in Millions)

Total risk exposure amount	173,625
Institution specific countercyclical capital buffer rate	0.292%
Institution specific countercyclical capital buffer requirement	507

Table 5.6 T4. MLUKCH Group CCYB - Exposures

	MLUKCH Group			
	General Credit Exposures	Trading Book Exposures		Securitisation Exposures
(Dollars in Millions)	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	37	11	17	—
Sweden	317	44	79	—
Hong Kong	237	11	33	—
Slovakia	—	—	—	—
Czech Republic	34	1	—	—
Iceland	—	—	—	—
Lithuania	—	—	—	—
Denmark	237	1	13	—
France	600	73	207	50
Ireland	4,091	3	2	171
Bulgaria	—	1	—	—
United Kingdom	8,992	782	18	277
United States Of America	15,597	278	429	73
Other	33,385	465	1,617	98
Total	**63,526**	**1,670**	**2,414**	**669**

Table 5.6 T5. MLUKCH Group CCYB - Own Fund Requirements

	MLUKCH Group					
	Own Funds Requirements				Own funds requirements weights	Countercyclical Capital Buffer rate
(Dollars in Millions)	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
Norway	1	—	—	1	—	2.500 %
Sweden	20	44	—	64	0.010	2.500 %
Hong Kong	19	23	—	42	0.007	2.000 %
Slovakia	—	—	—	—	—	1.500 %
Czech Republic	3	—	—	3	—	1.500 %
Iceland	—	—	—	—	—	1.750 %
Lithuania	—	—	—	—	—	1.000 %
Denmark	18	13	—	31	0.005	1.000 %
France	47	53	23	123	0.020	0.250 %
Ireland	323	11	70	405	0.065	1.000 %
Bulgaria	—	—	—	—	—	0.500 %
United Kingdom	674	234	197	1,105	0.178	1.000 %
United States Of America	1,041	105	68	1,214	0.195	0.000 %
Other	2,580	615	33	3,228	0.519	0.000 %
Total	**4,727**	**1,098**	**391**	**6,216**	**1.000**	

Table 5.6 T6. MLUKCH Group CCYB - Amount of institution-specific CCYB

(Dollars in Millions)

Total risk exposure amount	174,004
Institution specific countercyclical capital buffer rate	0.294%
Institution specific countercyclical capital buffer requirement	511

5.7 Capital Resources

Table 5.7 T1 shows a reconciliation between the accounting balance sheet values and the regulatory capital values of the items included in MLI and the Group's Capital Resources. Further details on the composition of MLI and the Group's capital resources are shown in tables 5.7 T2 , 5.7 T3 and 5.7 T4.

Table 5.7 T1. Regulatory Capital Resources Reconciliation to Accounting Balance Sheet

	2019	
(Dollars in Millions)	MLI	MLUKCH Group
Ordinary Share Capital	7,933	2,926
Share Premium	4,499	—
Other Reserves	9,187	1,082
Profit and Loss Account	13,981	30,775
Profit and Loss Account (Accounting Balance Sheet Value)	*14,933*	*31,727*
Dividends declared in respect of year end profits	*(191)*	*(191)*
Debit Valuation Adjustment	*(118)*	*(118)*
Prudential Valuation Adjustment	*(644)*	*(644)*
Tier 1 Capital Before Deductions	35,600	34,783
Deferred Tax Asset	(342)	(342)
Defined Benefit Pension Fund Asset (net of associated deferred tax liability)	(243)	(243)
Tier 1 Capital	**35,015**	**34,198**
Subordinated Liabilities (After Regulatory Adjustments)	—	800
Subordinated Liabilities (Accounting Balance Sheet Value)	—	*800*
Amortisation and Other Adjustments	—	—
Tier 2 Capital	—	**800**
Total Capital Resources (net of deductions)	**35,015**	**34,998**

Table 5.7 T2. MLUKCH Group Capital Instrument Features

		MLUKCH Group		
Capital Instruments Main Features		**CET1**	**AT1**	**T2**
1	Issuer	ML UK Capital Holdings	N/a	ML UK Capital Holdings
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	N/a	Private Placement
3	Governing law(s) of the instrument	English	N/a	English
Regulatory Treatment				
4	Transitional CRR rules	CET1	N/a	T2
5	Post-transitional CRR rules	CET1	N/a	T2
6	Eligible at solo/(sub-)consolidated/ solo & (sub-)consolidated	Consolidated	N/a	Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares with full voting rights	N/a	Subordinated Loan
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	$2,926m comprising nominal and premium	N/a	USD 800m
9	Nominal amount of instrument	$1.00	N/a	USD 800m
9a	Issue price	$1.00 30 Dec 2015	N/a	USD 800m
9b	Redemption price	N/a	N/a	N/a
10	Accounting classification	Shareholders equity	N/a	Liability - amortised cost
11	Original date of issuance	30-Dec-15	N/a	27-Nov-15
12	Perpetual or dated	Perpetual	N/a	Dated
13	Original maturity date	No maturity	N/a	27-Nov-26
14	Issuer call subject to prior supervisory approval	No	N/a	No
15	Optional call date, contingent call dates and redemption amount	N/a	N/a	No issuer call date. However, may repay in whole or in part at par on any date if a Regulatory Event or Tax Event occurs, subject to prior supervisory approval.
16	Subsequent call dates, if applicable	N/a	N/a	N/a
Coupons / Dividends				
17	Fixed or floating dividend/coupon	N/a	N/a	Floating
18	Coupon rate and any related index	N/a	N/a	1month USD LIBOR plus 227 bps per annum
19	Existence of a dividend stopper	No	N/a	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	N/a	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	N/a	Mandatory
21	Existence of step up or other incentive to redeem	No	N/a	No
22	Noncumulative or cumulative	Non-cumulative	N/a	Cumulative
23	Convertible or non-convertible	Non-convertible	N/a	Non-convertible
24	If convertible, conversion trigger(s)	N/a	N/a	N/a
25	If convertible, fully or partially	N/a	N/a	N/a
26	If convertible, conversion rate	N/a	N/a	N/a
27	If convertible, mandatory or optional conversion	N/a	N/a	N/a
28	If convertible, specify instrument type convertible into	N/a	N/a	N/a
29	If convertible, specify issuer of instrument it converts into	N/a	N/a	N/a
30	Write-down features	No	N/a	No
31	If write-down, write-down trigger(s)	N/a	N/a	N/a
32	If write-down, full or partial	N/a	N/a	N/a
33	If write-down, permanent or temporary	N/a	N/a	N/a
34	If temporary write-down, description of write-up mechanism	N/a	N/a	N/a
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	All subordinated liabilities - Column 3	N/a	All liabilities except the subordinated liabilities
36	Non-compliant transitioned features	No	N/a	No
37	If yes, specify non-compliant features	N/a	N/a	N/a

(') Insert 'N/A' if the question is not applicable

Table 5.7 T3. MLI Capital Instrument Features

		MLI		
Capital Instruments Main Features		**CET1**	**AT1**	**T2**
1	Issuer	Merrill Lynch International	N/a	N/a
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	N/a	N/a
3	Governing law(s) of the instrument	English	N/a	N/a
Regulatory Treatment				
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)	$12,432m comprising nominal and premium	N/a	N/a
9	Nominal amount of instrument	1.00	N/a	N/a
9a	Issue price	$1.00 19 Dec 2012 $4.76 18 Nov 2014	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	$6,735m 19 Dec 2012 $1,198m 18 Nov 2014	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
Coupons / Dividends				
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
21	Existence of step up or other incentive to redeem	No	N/a	N/a
22	Noncumulative 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

(') Insert 'N/A' if the question is not applicable

Table 5.7 T4. Own Funds Disclosure Template [1]

Transitional Own Funds Disclosure Template	Amount at Disclosure Date	
	MLI	MLUKCH Group
Capital instruments and the related share premium accounts	12,432	2,926
of which: Ordinary shares with full voting rights	12,432	2,926
Retained earnings	14,831	31,680
Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	9,049	939
Independently reviewed interim profits net of any foreseeable charge or dividend	48	—
Common Equity Tier 1 (CET1) capital before regulatory adjustments	36,362	35,544
Common Equity Tier 1 (CET1) Capital: Regulatory Adjustments		
Prudential valuation adjustment	(644)	(644)
Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	(33)	(33)
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(118)	(118)
Defined-benefit pension fund assets (negative amount)	(243)	(243)
Deferred tax assets arising from temporary differences	(309)	(309)
Total Regulatory Adjustments to Common Equity Tier 1 (CET1)	(1,346)	(1,346)
Common Equity Tier 1 (CET1) Capital	**35,015**	**34,198**
Additional Tier 1 (AT1) capital: Instruments	—	—
Tier 1 Capital (T1 = CET1 + AT1)	35,015	34,198
Tier 2 (T2) Capital: Instruments and Provisions		
Capital instruments and the related share premium accounts	—	800
Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	—	—
Tier 2 (T2) Capital	—	800
Total Capital (TC = T1 + T2)	35,015	34,998
Total Risk Weighted Assets	173,625	174,004
Capital Ratios and Buffers		
Common Equity Tier 1 (as a percentage of risk exposure amount)	20.2%	19.7%
Tier 1 (as a percentage of risk exposure amount)	20.2%	19.7%
Total Capital (as a percentage of risk exposure amount)	20.2%	20.1%
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 0-SII buffer), expressed as a percentage of risk exposure amount)	7.3%	7.3%
of which: capital conservation buffer requirement	2.5%	2.5%
of which: countercyclical buffer requirement	0.3%	0.3%
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	12.2%	12.1%
Amounts below the thresholds for deduction (before risk weighting)		
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)	1,660	1,660
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the insti-tution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	137	—
Applicable caps on the Inclusion of provisions In Tier 2		
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	1,197	1,193

[1] 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 MLI or the Group.

5.8 Leverage

5.8.1 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.

5.8.2 Additional Detail on Leverage Ratio

Table 5.8.2 T1. Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures

(Dollars in Millions)	MLI
Total Assets as per Balance Sheet	381,761
Adjustments for Derivative Financial Instruments	124
Adjustments for Securities Financing Transactions	24,478
Adjustment for Off-Balance Sheet Items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	4,631
Other Adjustments	(1,543)
Leverage Ratio Exposure	**409,452**

In accordance with article 4(2) of Regulation (EU) 2016 / 200 on the disclosure of leverage ratio, this table is not disclosed for the Group as the Group does not publish financial statements at the consolidated level.

Table 5.8.2 T2. Leverage Ratio Common Disclosure

(Dollars in Millions)	MLI	MLUKCH Group
On-Balance Sheet Exposures (excluding derivatives and SFTs)		
On-balance Sheet Items (excluding Derivatives, SFTs and fiduciary assets, but including Collateral)	120,839	116,775
Asset Amounts Deducted in Determining Tier 1 Capital	(1,250)	(1,250)
Total On-Balance Sheet Exposures (excluding derivatives, SFTs and fiduciary assets)	**119,589**	**115,525**
Derivative Exposures		
Replacement Cost Associated with Derivatives Transactions (net of Eligible Cash Variation Margin)	15,836	15,909
Add-on Amounts for PFE Associated with Derivatives Transactions (Mark-to-Market method)	111,987	112,232
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)	(30,181)	(30,181)
(Exempted CCP leg of Client-Cleared Trade Exposures)	(7,396)	(7,396)
Adjusted Effective Notional Amount of Written Credit Derivatives	192,320	192,320
(Adjusted Effective Notional Offsets and Add-On Deductions for Written Credit Derivatives)	(128,768)	(128,767)
Total Derivative Exposure	**153,799**	**154,117**
Securities Financing Transaction Exposures		
Gross SFT Assets (With No Recognition of Netting), after Adjusting for Sales Accounting Transactions	230,106	230,106
(Netted Amounts of Cash Payables and Cash Receivables of Gross SFT Assets)	(116,029)	(116,029)
Counterparty Credit Risk Exposure for SFT Assets	17,356	17,356
Total Securities Financing Transaction Exposures	**131,433**	**131,433**
Off-Balance Sheet Exposures		
Off-balance Sheet Exposures at Gross Notional Amount	16,180	14,347
Adjustments for Conversion to Credit Equivalent Amounts	(11,548)	(9,899)
Total Off-Balance Sheet Exposures	**4,631**	**4,448**
Exempted Exposures		
Capital and Total Exposures		
Tier 1 Capital	35,015	34,198
Total Leverage Ratio Exposures	**409,452**	**405,523**
Leverage Ratio		
Leverage Ratio	8.6%	8.4%

Table 5.8.2 T3. Split of On-Balance Sheet Exposures (Excluding Derivatives, SFTs and exempted exposures)

(Dollars in Millions)	MLI	MLUKCH Group
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	**87,127**	**83,064**
Trading Book Exposures	60,894	61,041
Banking Book Exposures, of which:	26,234	22,023
Exposures treated as Sovereigns	6,414	6,414
Exposures to Regional Governments, MDB, International Organisations and PSE not treated as Sovereigns	554	554
Institutions	1,796	1,796
Secured by Mortgages of Immovable Properties	2	2
Corporate	15,865	11,748
Exposures in Default	6	6
Other Exposures (Eg Equity, Securitisations, and other Non-Credit Obligation Assets)	1,597	1,502

5.8.3 Management of Excessive Leverage Ratio

MLI sets a leverage ratio risk appetite limit at an appropriate level above the expected regulatory minimum (calculated in accordance with CRR Article 429).

Leverage ratio metrics are monitored and reviewed for consistency with the strategic plan and risk appetite statement, and are reviewed quarterly by the Board. This will include 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.

A breach of the ratio will trigger protocols as set out in the MLI Capital Management Policy, where specific governance, escalation and management actions are set out at various trigger levels that align to the Board risk appetite and recovery plan indicators.

Excessive leverage ratio is also managed through Regulatory Capital management Reports, the following metrics are monitored:

- Tier 1 Capital Ratio
- Excess over CET 1 Risk Appetite
- Total Capital Ratio
- Excess over Total Capital Risk Appetite Trigger
- Excess over Internal TLAC Risk Appetite Trigger

Comprehensive risk management of excessive leverage is achieved through the risk appetite framework and quarterly Board oversight, with clear management actions in the event of limits breaches as set out in the Capital Management Policy.

ML UK Capital Holdings Limited
Including Merrill Lynch International

6 Additional Information on Remuneration Disclosure
As at 31 December 2019

6.1 Remuneration Disclosure

The required remuneration disclosure providing qualitative information on relevant remuneration policies and practices, in addition to quantitative remuneration information on Material Risk Takers (inclusive of those performing duties for MLI), made in accordance with Article 450 of the Capital Requirements Regulation No 575 / 2013, is separately published on BAC's corporate website (http://investor.bankofamerica.com) and should be deemed part of the Pillar 3 Disclosure for the Group.

BANK OF AMERICA

ML UK Capital Holdings Limited
Including Merrill Lynch International

7 Appendices
As at 31 December 2019

Appendix 1 – MLUKCH and MLI Directors Board Membership and Experience

MLUKCH Directors Board Membership and Experience

		No. Of Directorships	
		Total	Excluding non-commercial and counting group appointments as one
Martin Butler Chief Financial Officer UK & CEEMEA	Joined the organisation in 1988, becoming Chief Financial Officer for European Debt in 1997. Further senior management roles followed, including head of Global Equity ISS and head of European Business Finance. Became EMEA Chief Financial Officer with the Bank of America - Merrill Lynch merger in 2009, assuming the additional role of International Treasury Executive in 2012. Currently Chief Financial Officer for UK & CEEMEA as well as a member of the regional Executive Committee. Additional internal board memberships include MLI.	5	1
Bernard Mensah President UK & CEEMEA	President of UK and CEEMEA as well as co-head of Global FICC Trading. Chief Executive Officer of Merrill Lynch International, Bank of America's largest subsidiary; Head of BANA London Branch; and a member of Bank of America's Management Committee. Joined the firm in 2010 from Goldman Sachs where he ran the Asia Credit and Convertibles business based in Hong Kong and Tokyo prior to becoming a Partner and global head of Bank Loan and Distressed Trading.	4	1
Jennifer Taylor Head of Compliance and Operational Risk UK & CEEMEA	Joined the organisation in 1997, responsible for the legal coverage of structured finance transactions. Held various General Counsel roles across Asia Pacific (APAC) before assuming the role of General Counsel for all Merrill Lynch businesses in the APAC region. Assumed the role of Chief Administration Officer for Asia in 2006, later being appointed Chief Operating Officer of the region before returning to the UK to act as Chief Operating Officer for EMEA in 2013. Appointed regional Head of Compliance and Operational Risk in 2017. Also a member of the regional Executive Committee.	2	1
Peter O'Flynn Chief Risk Officer UK & CEEMEA	Joined the organisation in 2011, being appointed EMEA Credit Risk Executive in October 2014, prior to becoming Chief Risk Officer for UK & CEEMEA and a member of the regional Executive Committee. Before joining the organization, Peter was a Regional Chief Credit Officer at Barclays Capital and a member of the Barclays Capital Credit and Underwriting Committees.	1	1

Note: The table outlines the directors that served at 31 December 2019.

MLI Directors Board Membership and Experience

With the exception of Peter O'Flynn and Jennifer Taylor, the above directors of MLUKCH also served on the MLI Board. In addition, the following directors served on the MLI Board as at 31 December 2019:

		No. Of Directorships	
		Total	Excluding non-commercial and counting group appointments as one
Susan Bies Chair/Non Executive Director (Resigned 1 January 2020)	Current Board member of Bank of America Corporation, Bank of America California, National Association and Bank of America, National Association and a member of the Risk and Governance Committees. Member of Federal Reserve Board of Governors, 2001-2007. Executive Officer for First Tennessee National Corporation, including Chief Financial Officer, Chief Risk Officer, auditor, chair of asset/liability committee, 1979-2001. Previously Board member of Zurich Insurance Group, chair of Risk Committee and member of Audit Committee, 2008-2018	4	1
Richard Keys Non Executive Director	A chartered accountant with international experience and over 40 years of senior management experience. Non-Executive director and Chair of the Governance Committee of Merrill Lynch International; Non-Executive director, Chair of the Audit and Risk Committee and member of the Nominations and Transformation Review Committees of NATS Holding Limited; Non-Executive Chair and director of Glaziers Hall Limited; and Non-Executive director and Chair of the Group Audit and Risk Committee at the Department for Transport. Formerly a Non-Executive director and member of the Audit Committee, Remuneration and Nominations Committees of Wessex Water Services Limited; Non-Executive director, Chair of the Audit Committee and member of Risk Committee at Sainsbury's Bank plc; Non-Executive director and Chair of the Audit and Risk Committee of the Department for International Development; and Council member and Chair of the Audit Committee of the University of Birmingham.	5	3
Pierre de Weck Non Executive Director	Independent director of Bank of America Corporation; Bank of America California, National Association; Bank of America, National Association; Merrill Lynch International; and Chair of the Board of directors of 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
Rosemary Thorne Non Executive Director	Non-Executive director and Chair of the Audit Committee of Merrill Lynch International and Solvay SA. Previously non-executive directorship positions include Non-Executive director and Chair of the Audit and Risk Committees of Santander UK plc, Non-Executive director and Chair of the Audit Committee of Smurfit Kappa Group plc, Senior Independent Director and Chair of the Audit Committee for Virgin Radio Holdings Limited, Non-Executive director of Cadbury Schweppes plc, and Non-Executive director and Chair of the Audit Committee for Royal Mail plc and for the Department for Education and Employment. Formerly executive director and CFO of J Sainsbury plc, Bradford & Bingley plc and Ladbrokes Coral Group plc and a member of the Financial Reporting Council.	2	2
Lesley White Non Executive Director	Non-Executive director of Merrill Lynch International. Head of Global Commercial Banking International for Bank of America, providing a single point of management across the full spectrum of solutions the bank provides to the subsidiaries of its U.S. headquartered Commercial Banking clients. Over 25 years' experience in transaction banking, the majority of which has been in international cash management within a European context. Prior to re-joining Bank of America Merrill Lynch in 2010, Ms. White was head of International Cash Management (ICM) for Europe and CEEMEA at RBS and held a variety of roles at ABN AMRO, including regional product responsibility within CEEMEA; client strategy and alignment for European clients; and running the Solutions Advisory team. She has also held management roles within Citigroup's GTS business and as head of Electronic Banking for Credit Lyonnais.	1	1
Julien Bahurel Head of Equities	Joined the organisation in 2013, becoming Head of Equities in 2014. Formerly Global Head of Equity Derivatives Sales and Head of European Equity Distribution. Member of the Merrill Lynch International Board, MLI Management Risk Committee, Global Equities Senior Leadership Team, EMEA Executive Committee, EMEA Reputational Risk Committee and the EMEA Regional Risk Committee. Also a Board member of the Association for Financial Markets in Europe (AFME).	2	1

Note: The table outlines the directors that served at 31 December 2019. Susan Bies resigned from the MLI Board on 1 January 2020 and Pierre de Weck was appointed Chair of the Board of directors of MLI on 1 January 2020. Thomas Woods was appointed Non Executive Director of MLI on 10 March 2020.

Appendix 2 – Supplementary Disclosure Templates

Table A2 T1. EU LI3 Outline of the Differences in the Scopes of Consolidation (Entity by Entity)

2019						
Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Proportional consolidation	Neither consolidated nor deducted	Deducted	
ML UK Capital Holdings Limited	Full consolidation	X				Holding Company
Merrill Lynch International	Full consolidation	X				Investment Firm
MLPF&S Ltd	Full consolidation	X				Entity used for intercompany funding
Bank of America Merrill Lynch UK Pension Plan Trustees Limited	Full consolidation	X				Trustee of the Bank of America Merrill Lynch UK Pension Plan and Merrill Lynch (UK) Defined Contribution Plan
Merrill Lynch Nominees Limited	Full consolidation	X				Nominee company for affiliated companies
Citygate Nominees Limited	Full consolidation	X				Nominee company for affiliated companies
S. N. C. Nominees Limited	Full consolidation	X				Nominee company for affiliated companies
N.Y. Nominees Limited	Full consolidation	X				Nominee company for affiliated companies
Chetwynd Nominees Limited	Full consolidation	X				Nominee company for affiliated companies
Fundo de Investimento Financeiro Multimercado Iceberg	Full consolidation	X				Brazilian multi-market investment fund
Pyxis LTD	Full consolidation	X				Special purpose entity
Ironwood Trustee (Pty) Ltd	Full consolidation	X				Special purpose entity
Newgate Funding Plc	Full consolidation	X				Special purpose entity
Oxygen - Series 17, 21 and 43	Full consolidation	X				Special purpose entity

Table A2 T2. EU CRB-B Total and Average Net Amount of Exposures

	2019	
(Dollars in Millions)	Net value of exposures at the end of the period	Average net exposures over the period
Central governments or central banks	6,266	8,701
Institutions	4,012	5,489
Corporates	27,992	20,874
Claims on institutions and corporate with a short-term credit assessment	800	899
Other Exposures[1]	1,302	1,282
Total	**40,373**	**37,246**

[1] Other comprises of exposures to International Organisations, Multilateral Development Banks, Public Sector Entities, Regional Governments or Local Authorities, Exposures Secured by Mortgages on Immovable Property, Exposures in Default, Equity Exposures, Items Associated with Particularly High Risk and Other Items

Table A2 T3. EU CRB-C Geographical Breakdown of Exposures

	2019													
	EMEA	United Kingdom	Luxembourg	Saudi Arabia	Other EMEA Countries [1]	**Americas**	United States Of America	Curacao	Other American Countries [1]	**Asia**	Japan	Other Asia	Other Geographical Areas [2]	**Total**
(Dollars in Millions)	**Net value**													
Central governments or central banks	**5,167**	3,501	—	—	1,667	**15**	—	—	15	**1,084**	1,084	—	—	6,266
Institutions	**2,980**	92	768	1,000	1,119	**706**	578	—	128	**326**	—	326	—	4,012
Corporates	**11,324**	8,696	1,402	1	1,225	**15,887**	7,552	8,032	302	**781**	276	505	—	27,992
Claims on institutions and corporate with a short-term credit assessment	**418**	16	17	78	307	**253**	242	—	11	**129**	2	127	—	800
Other exposures	**486**	5	15	—	466	**273**	107	—	167	—	—	—	542	1,302
Total	**20,375**	**12,310**	**2,203**	**1,079**	**4,784**	**17,135**	**8,479**	**8,032**	**624**	**2,321**	**1,362**	**959**	**542**	**40,373**

[1] Only countries which have exposures greater than $1bn have been disclosed separately. Other countries within a given region have been aggregated together as "Other Countries"

[2] 'Other Geographical areas' comprises of exposures to International Organisations and Multilateral Development Banks

Table A2 T4. EU CRB-D Concentration of Exposures by Industry or Counterparty Types

	2019					
(Dollars in Millions)	**Bank**	**Broker Dealer**	**Other Financial**	**Sovereign & Government Related**	**Other [1]**	**Total**
Central governments or central banks	—	—	—	6,266	—	6,266
Institutions	1,687	2,299	2	—	25	4,012
Corporates	304	2,064	23,469	—	2,155	27,992
Claims on institutions and corporate with a short-term credit assessment	597	202	—	—	—	800
Other exposures	93	5	255	948	—	1,302
Total	**2,681**	**4,571**	**23,726**	**7,215**	**2,180**	**40,373**

[1] Industry classification of "Other" comprises of Energy & Commodities, Industrial & Commercial Companies, Insurance, Central Counterparties and Hedge Fund

Table A2 T5. EU CRB-E Maturity of Exposures

	2019				
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years & No stated maturity	Total
(Dollars in Millions)	Net exposure value				
Central governments or central banks	3,302	2,686	—	1	**5,988**
Institutions	987	327	—	15	**1,330**
Corporates	78	14,805	73	314	**15,269**
Claims on institutions and corporate with a short-term credit assessment	589	201	—	—	**790**
Other exposures	—	931	—	335	**1,266**
Total	**4,956**	**18,950**	**73**	**665**	**24,643**

Table A2 T6. EU CR1-A Credit quality of Exposures by Exposure Class and Instrument

	2019						
	Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
(Dollars in Millions)	Defaulted exposures	Non-defaulted exposures					
Central governments or central banks	—	6,266	—	—	—	—	6,267
Institutions	3	4,012	—	—	—	—	4,016
Corporates	1	27,992	—	—	—	—	27,993
Claims on institutions and corporate with a short-term credit assessment	—	800	—	—	—	—	800
Other exposures	1	1,296	—	—	—	—	1,297
Exposures in default (1)	6	—	—	—	—	—	6
Total	**6**	**40,367**	**—**	**—**	**—**	**—**	**40,373**
of which: Loans	3	5,425	—	—	—	—	5,428
of which: Debt Securities	3	3,813	—	—	—	—	3,816
of which: Off-balance-sheet exposures	—	15,729	—	—	—	—	15,729

(1) In line with EBA guidance, defaulted exposures are shown both as "Exposures in Default" and in the exposure class that corresponded to the exposure before default. Any duplication is not included in the "Total" row

Table A2 T7. EU CR1-B Credit Quality of Exposures by Industry or Counterparty Types

	2019						
	Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
(Dollars in Millions)	Defaulted exposures	Non-defaulted exposures					
Bank	1	2,680	—	—	—	—	2,681
Broker Dealer	2	4,568	—	—	—	—	4,571
Other Financial	2	23,725	—	—	—	—	23,726
Sovereign & Government Related	1	7,214	—	—	—	—	7,215
Other (1)	—	2,180	—	—	—	—	2,180
Total	**6**	**40,367**	**—**	**—**	**—**	**—**	**40,373**

(1) Industry classification of "Other" comprises of, Energy & Commodities, Industrial & Commercial Companies, Insurance, Central Counterparties and Hedge Fund

Table A2 T8. EU CR1-C Credit Quality of Exposures by Geography

	2019						
	Gross carrying values of						
(Dollars in Millions)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
EMEA	**3**	**20,372**	**—**	**—**	**—**	**—**	**20,375**
United Kingdom	—	12,310	—	—	—	—	12,310
Luxembourg	—	2,203	—	—	—	—	2,203
Saudi Arabia	—	1,079	—	—	—	—	1,079
Other EMEA Countries [1]	3	4,780	—	—	—	—	4,784
Americas	**2**	**17,133**	**—**	**—**	**—**	**—**	**17,135**
United States Of America	2	8,477	—	—	—	—	8,479
Curacao	—	8,032	—	—	—	—	8,032
Other Americas Countries [1]	1	623	—	—	—	—	624
Asia	**—**	**2,321**	**—**	**—**	**—**	**—**	**2,321**
Japan	—	1,362	—	—	—	—	1,362
Other Asia Countries	—	959	—	—	—	—	959
Other Geographical Areas [2]	**—**	**542**	**—**	**—**	**—**	**—**	**542**
Total	**6**	**40,367**	**—**	**—**	**—**	**—**	**40,373**

[1] Only countries which have exposures greater than $1bn have been disclosed separately. Other countries within a given region have been aggregated together as "Other Countries"

[2] Other Geographical Areas comprises exposures to International Organisations and Multilateral Development Banks

No template for EU CR1-D Ageing of Past-Due Exposures is included in document because there are no balances past due to disclose.

Table A2 T9. EU CR1-E Non-Performing and Forborne Exposures

	2019												
	Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collateral and financial guarantees received	
		Of which performing but past due > 30 days and <= 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures
(Dollars in Millions)					Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne		
Loans	5,428	—	—	3	3	—	—	—	—	—	—	—	—
Debt Securities	3,816	—	—	3	3	—	—	—	—	—	—	—	—
Off-balance-sheet exposures	15,729	—	—	—	—	—	—	—	—	—	—	—	—

No template for EU CR2-A Changes in Stock of General and Specific Credit Risk Adjustment is included in the document because there are no credit risk adjustments to disclose.

Table A2 T10. EU CR2-B Changes in the Stock of Defaulted and Impaired Loans and Debt Securities

(Dollars in Millions)	2019 Gross carrying value defaulted exposures
Opening balance	**8**
Loans and debt securities that have defaulted or impaired since the last reporting period	—
Returned to non-defaulted status	—
Amounts written off	—
Other changes	(2)
Closing balance	**6**

Table A2 T11. EU CR3 CRM Techniques – Overview

	2019				
(Dollars in Millions)	Exposures unsecured – Carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total loans	1,318	—	4,110	—	—
Total debt securities	3,816	—	—	—	—
Total exposures	**5,134**	**—**	**4,110**	**—**	**—**
Of which defaulted	6	—	—	—	—

Table A2 T12. EU CR4 Standardised approach – Credit Risk Exposure and CRM Effects

	2019					
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
(Dollars in Millions)	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
Central governments or central banks	5,988	278	5,988	278	496	8%
Regional governments or local authorities	—	21	—	21	21	100%
Public sector entities	384	—	384	—	—	0%
Multilateral development banks	99	—	99	—	—	0%
International organisations	443	—	443	—	—	0%
Institutions	1,330	2,683	1,330	395	959	56%
Corporates	15,269	12,723	3,451	1,001	4,429	99%
Retail	—	—	—	—	—	0%
Secured by mortgages on immovable property	2	—	2	—	2	100%
Exposures in default	6	—	6	—	9	150%
Items associated with particularly high risk	89	—	89	—	133	150%
Covered bonds	—	—	—	—	—	0%
Claims on institutions and corporate with a short-term credit assessment	790	10	791	204	589	59%
Collective investments undertakings	—	—	—	—	—	0%
Equity exposures	238	—	238	—	443	186%
Other Items	5	14	5	14	19	100%
Total	**24,643**	**15,729**	**12,827**	**1,913**	**7,101**	**48%**

Table A2 T13. EU CR5 Standardised Approach

	2019																	
	Risk Weight																Total	Of which unrated
(Dollars in Millions)	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted		
Central governments or central banks	4,904	—	—	—	1,084	—	—	—	—	279	—	—	—	—	—	—	**6,266**	238
Regional governments or local authorities	—	—	—	—	—	—	—	—	—	21	—	—	—	—	—	—	**21**	21
Public sector entities	384	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**384**	—
Multilateral development banks	99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**99**	—
International organisations	443	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**443**	—
Institutions	—	—	—	—	1,098	—	36	—	—	580	—	—	—	11	—	—	**1,725**	483
Corporates	—	—	—	—	1	—	319	—	—	4,117	4	—	—	12	—	—	**4,452**	4,063
Retail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**—**	—
Secured by mortgages on immovable property	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	**2**	2
Exposures in default	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	**6**	6
Items associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	89	—	—	—	—	—	**89**	89
Covered bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**—**	—
Claims on institutions and corporate with a short-term credit assessment	—	—	—	—	—	—	839	—	—	129	27	—	—	—	—	—	**995**	—
Collective investments undertakings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**—**	—
Equity exposures	—	—	—	—	—	—	—	—	—	101	—	137	—	—	—	—	**238**	238
Other Items	—	—	—	—	—	—	—	—	—	19	—	—	—	—	—	—	**19**	19
Total	**5,830**	**—**	**—**	**—**	**2,182**	**—**	**1,194**	**—**	**—**	**5,249**	**125**	**137**	**—**	**23**	**—**	**—**	**14,740**	**5,159**

Table A2 T14. EU CCR1 Analysis of CCR Exposure by Approach

	2019						
(Dollars in Millions)	Notional	Replacement Cost/Current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
Mark to market		12,209	174,780			83,612	52,055
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)						49,918	36,444
VaR for SFTs						n/a	n/a
Total							88,499

Table A2 T15. EU CCR2 CVA Capital Charge

	2019	
(Dollars in Millions)	Exposure value	RWAs
Total portfolios subject to the advanced method	—	—
(i) VaR component (including the 3× multiplier)	—	—
(ii) SVaR component (including the 3× multiplier)	—	—
All portfolios subject to the standardised method	68,373	25,698
Based on the original exposure method	—	—
Total subject to the CVA capital charge	**68,373**	**25,698**

Table A2 T16. EU CCR8 Exposures to CCPs

	2019	
(Dollars in Millions)	EAD post CRM	RWAs
Exposures to QCCPs (total)		**1,510**
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	36,142	723
(i) OTC derivatives	23,226	465
(ii) Exchange-traded derivatives	10,027	201
(iii) SFTs	2,889	58
(iv) Netting sets where cross-product netting has been approved	—	—
Segregated initial margin	—	
Non-segregated initial margin	7,271	145
Prefunded default fund contributions	978	641
Alternative calculation of own funds requirements for exposures	—	8,707
Exposures to non-QCCPs (total)		—

Table A2 T17. EU CCR3 Standardised Approach – CCR Exposures by Regulatory Portfolio and Risk

	2019												
	Risk Weight											Total	Of which unrated
(Dollars in Millions)	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others		
Central governments or central banks	2,099	—	—	—	45	6	—	—	3,259	—	—	**5,408**	4,252
Regional governments or local authorities	19	—	—	—	45	—	—	—	82	—	—	**146**	115
Public sector entities	580	—	—	—	734	—	—	—	32	—	—	**1,346**	763
Multilateral development banks	602	—	—	—	—	—	—	—	—	—	—	**602**	—
International organisations	67	—	—	—	—	—	—	—	—	—	—	**67**	67
Institutions	—	43,877	—	—	17,397	21,758	—	—	756	15	—	**83,803**	50,192
Corporates	—	—	—	—	1,316	5,904	—	—	49,088	115	—	**56,424**	45,634
Retail	—	—	—	—	—	—	—	—	—	—	—	**—**	—
Claims on institutions and corporate with a short-term credit assessment	—	—	—	—	632	25,622	—	—	2,450	854	—	**29,558**	—
Other Items	—	—	—	—	—	—	—	—	—	—	—	**—**	—
Total	**3,367**	**43,877**	**—**	**—**	**20,168**	**53,290**	**—**	**—**	**55,666**	**984**	**—**	**177,353**	**101,023**

Table A2 T18. EU CCR5-A Impact of Netting and Collateral Held on Exposure Values

	2019						
	Gross positive fair value or net carrying amount	Netting benefits		Netted current credit exposure	Collateral held		Net credit exposure
(Dollars in Millions)		Applied	Not Applied		Used	Not Used	
Derivatives	179,582	(147,993)	(441)	31,590	(23,163)	(25,354)	8,426
SFTs	572,629	(547,512)	(4,353)	25,117	—	(28,263)	25,117
Total	**752,210**	**(695,505)**	**(4,795)**	**56,707**	**(23,163)**	**(53,617)**	**33,543**

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

Table A2 T19. EU CCR5-B Composition of Collateral for Exposures to CCR

	2019			
	Collateral used in derivative transactions		Collateral used in SFTs	
(Dollars in Millions)	Fair Value of collateral received	Fair Value of collateral posted	Fair Value of collateral received	Fair Value of collateral posted
Cash	36,537	34,413	235,909	265,550
Non Cash	15,094	10,890	390,813	307,079
Total	**51,631**	**45,303**	**626,723**	**572,629**

Table A2 T20. EU CCR6 Credit Derivatives Exposures

	2019		
	Credit derivative hedges		
(Dollars in Millions)	Protection bought	Protection sold	Other credit derivatives
Notionals			
Single-name credit default swaps	9,942	7,120	127,107
Index credit default swaps	2,709	1,205	196,645
Other credit derivatives	50	307	38,240
Total Notional	**12,701**	**8,632**	**361,992**
Fair Values	—	—	—
Positive fair value (asset)	424	402	5,005
Negative fair value (liability)	(171)	(294)	(4,967)

Table A2 T21. EU OV1 Quarterly Overview of RWAs

		MLI			MLUKCH Group		
		RWAs		Minimum capital requirement	RWAs		Minimum capital requirement
	(Dollars in Millions)	Q4 2019	Q3 2019	Q4 2019	Q4 2019	Q3 2019	Q4 2019
1	**Credit risk (excluding CCR)**	**6,759**	**4,373**	**541**	**6,766**	**4,261**	**541**
2	Of which the standardised approach	6,759	4,373	541	6,766	4,261	541
3	Of which the foundation IRB (FIRB) approach	—	—	—	—	—	—
4	Of which the advanced IRB (AIRB) approach	—	—	—	—	—	—
5	Of which equity IRB under the simple risk-weighted approach or the IMA	—	—	—	—	—	—
6	**CCR**	**115,038**	**122,701**	**9,203**	**115,045**	**122,652**	**9,204**
7	Of which mark to market	52,198	58,371	4,176	52,204	58,376	4,176
8	Of which original exposure	—	—	—	—	—	—
9	Of which the standardised approach	—	—	—	—	—	—
9a	Of which: comprehensive approach for credit risk mitigation (for SFTs)	36,502	35,378	2,920	36,502	35,323	2,920
10	Of which internal model method (IMM)	—	—	—	—	—	—
11	Of which risk exposure amount for contributions to the default fund of a CCP	641	521	51	641	521	51
12	Of which CVA	25,698	28,432	2,056	25,698	28,432	2,056
13	**Settlement risk**	**609**	**118**	**49**	**609**	**118**	**49**
14	**Securitisation exposures in the banking book (after the cap)**	**4,887**	**3,836**	**391**	**4,887**	**3,836**	**391**
15	Of which IRB approach	—	—	—	—	—	—
16	Of which IRB supervisory formula approach (SFA)	—	—	—	—	—	—
17	Of which internal assessment approach (IAA)	—	—	—	—	—	—
18	Of which standardised approach	4,887	3,836	391	4,887	3,836	391
19	**Market risk**	**34,820**	**39,237**	**2,786**	**35,592**	**39,663**	**2,847**
20	Of which the standardised approach	15,683	17,279	1,255	16,456	17,706	1,316
21	Of which IMA	19,136	21,957	1,531	19,136	21,957	1,531
22	**Large exposures**	**—**	**3,472**	**—**	**—**	**2,194**	**—**
23	**Operational risk**	**11,170**	**11,170**	**894**	**11,105**	**11,105**	**888**
24	Of which basic indicator approach	—	—	—	—	—	—
25	Of which standardised approach	11,170	11,170	894	11,105	11,105	888
26	Of which advanced measurement approach	—	—	—	—	—	—
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**342**	**445**	**27**	**—**	**—**	**—**
28	Floor adjustment	—	—	—	—	—	—
29	**Total**	**173,625**	**185,352**	**13,890**	**174,004**	**183,828**	**13,920**

MLI and the Group's Minimum Capital Requirement decreased during the quarter. This was primarily driven by a decrease in counterparty credit risk and credit valuation adjustment (CVA) capital requirements from derivative exposures and a decrease in Market Risk under the IMA due to a decrease in Risks not in VaR (RNIV) add-ons.

Appendix 3 – Index

Article	Article Name	Article Reference Detail	Description	Document Reference	Page Number (s)
431	Scope of disclosure requirements	431(1)	Requirement to publish Pillar 3 disclosures	MLI and MLUKCH Group publish Pillar 3 disclosures	n/a
		431(2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information	Not applicable	n/a
		431(3)	Institutions shall adopt a formal policy to comply with the disclosure requirements in Part Eight of CRR	Separate document: MLUKCH & MLI Pillar 3 Disclosure Policy	n/a
		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	Where disclosures are omitted on the basis of materiality it is stated in the relevant document sections	n/a
		432(2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected	Not applicable	n/a
		432(3)	Where 432(2) applies this must be stated in the disclosures, and more general information must be disclosed	Not applicable	n/a
		432(4)	Use of 432 (1), (2) or (3) is without prejudice to scope of liability for failure to disclose material information	Not applicable	n/a
433	Frequency of disclosure	433	Disclosures must be published once a year at a minimum, and more frequently if necessary	MLI and MLUKCH Group publish Pillar 3 disclosures annually at minimum, with quarterly disclosures also published in accordance with EBA guidelines EBA/GL/2014/14	n/a
434	Means of disclosures	434(1)	To include all disclosures in one appropriate medium, or provide clear cross-references	All Pillar 3 disclosures required under Part Eight of CRR are included in this document with the exception of the disclosure for remuneration policy required under CRR article 450. The remuneration disclosure is published seperately and is signposted in Section 6. (Additional Information on Remuneration Disclosure) of this document.	n/a
		434(2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy the Pillar 3 disclosure requirements if appropriate	Not applicable	n/a
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	33
		435(1)(e)	Risk declaration	Section 4.2.6 Risk Declaration	33
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		435(2)(d)-(e)	Risk committees and risk information	Section 4.2.5 Risk Governance	30
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		436(c)	Impediments to transfer of own funds between parent and subsidiaries	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 Number (s)
437	Own funds	437(1)(a)	Reconciliation of regulatory capital amounts to balance sheet	Table 5.7 T1.: Regulatory Capital Resources Reconciliation to Accounting Balance Sheet	65
		437(1)(b)	Description of the main features of Capital Instruments issued	Table 5.7 T2.: MLUKCH Group Capital Instrument Features; Table 5.7 T3.: MLI Capital Instrument Features	66, 67
		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 5.7 T4.: Own Funds Disclosure Template	68
		437(1)(f)	Where institutions disclose capital ratios calculated using elements of own funds determined on a different basis	Not Applicable	n/a
438	Capital requirements	438(a)	Approach to assessing adequacy of capital levels	Section 2.2.5: Internal Capital Adequacy Assessment Process ("ICAAP")	14
		438(b)	Result of ICAAP on demand from authorities.	Not Applicable	n/a
		438(c)	Capital requirement amounts for credit risk for each Standardised approach exposure class.	Table 2.2.2 T1.: RWAs and Minimum Capital Requirement Table A2 T12. EU CR4 Standardised approach – Credit Risk Exposure and CRM Effects	13, 81
		438(d)	Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class	Not Applicable	n/a
		438(e)	Capital requirements amounts for market risk, settlement risk, or large exposures	Table 2.2.2 T1: RWAs and Minimum Capital Requirement	13
		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	Not Applicable	n/a
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	26
		439(b)	Discussion of process to secure collateral and establishing reserves		
		439(c)	Discussion of management of wrong-way exposures	4.4 Other Risk Considerations	45
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		439(e)	Derivation of net derivative credit exposure	Table A2 T18.: EU CCR5-A – Impact of netting and collateral held on exposure values	84
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				Table A2 T15: EU CCR2 – Credit valuation adjustment (CVA) capital charge	83
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		439(g) and (h)	Notional amounts of credit derivatives	Table A2 T20: EU CCR6 – Credit derivatives exposures	85
		439(i)	Estimate of alpha, if applicable	Not Applicable	n/a
440	Capital buffers	440	Countercyclical buffer	Section 5.6 Capital Buffers	62
441	Indicators of global systemic importance	441	Disclosure of the indicators of global systemic importance	Not required for UK firms that are not G-SIIs	n/a

Article	Article Name	Article Reference Detail	Description	Document Reference	Page Number (s)
442	Credit risk adjustments	442(a)	Definitions of past due and impaired	Section 5.4.4: Credit Quality of Assets	59
		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 T2: EU CRB-B – Total and average net amount of exposures Table A2 T6: EU CR1-A – Credit quality of exposures by exposure classes and instruments	77, 79
		442(d)	Geographical breakdown of credit risk exposures pre-CRM and by exposure class	Table A2 T3: EU CRB-C – Geographical breakdown of exposures	78
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443	Unencumbered assets	443	Encumbered and unencumbered assets	Section 3.2 Encumbered and Unencumbered Assets	20
444	Use of ECAIs	444(a)	Names of the ECAIs used in the calculation of Standardised approach risk-weighted assets and reasons for any changes	Section 2.2.3 Minimum Capital Requirement Approach; 5.4.1 Counterparty and Credit Risk by Type; 5.4.3 Counterparty and Credit Exposure by Credit Quality Step	13, 55, 57
		444(b)	Exposure classes associated with each ECAI		
		444(c)	Description of the process used to transfer credit assessments to non-trading book items		
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		444(e)	Exposure value pre and post-credit risk mitigation, by CQS	Table A2 T13 EU CR5 – Standardised approach Table A2 T17. EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk	82, 84
445	Exposure to market risk	445	Position risk, large exposures, FX, settlement risk, commodities risk and specific interest rate risk of securitisation positions	Table 5.3 T1. EU MR 1 Market Risk under the Standardised Approach Table 2.2.2 T1: RWAs and Minimum Capital Requirement	51, 13
446	Operational risk	446	Approaches used to calculate own funds requirements for operational risk	Section 2.2.3 Minimum Capital Requirement Approach	13
447	Exposures in equities not included in the trading book	447	Exposures in equities not included in the trading book	Section 4.4 Other Risk Considerations	45
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	36

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449	Exposure to securitisation positions	449(a)	Objectives in relation to securitisation activity	Section 5.5.1 Securitisation Activities	59
		449(b)	Nature of other risks in securitised assets, including liquidity	Section 4.4 Other Risk Considerations - Securitisation Risk Governance and Reporting	45
		449(c)	Risks in re-securitisation activity from seniority of underlying securitisations and underlying assets		
		449(d)	The different roles played by the institution in the securitisation process	Section 5.5.1 Securitisation Activities	59
		449(e)	Indication of the extent of involvement in roles played		
		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	Section 4.4 Other Risk Considerations - Securitisation Risk Governance and Reporting	45
		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	Not applicable. MLI has no retained exposures.	n/a
		449(h)	Approaches to the calculation of risk-weighted assets for securitisations	Section 5.5.2 Regulatory Capital Treatment	60
		449(i)	Types of SSPEs used to securitise third-party exposures as a sponsor	Not applicable. MLI does not currently act as sponsor.	n/a
		449(j)	Summary of accounting policies for securitisations	Section 5.5.3 Accounting Treatment	60
		449(k)	Names of the ECAIs used for securitisations	Section 5.5.2 Regulatory Capital Treatment	60
		449(l)	Description of Internal Assessment Approach where the IRB approach is used	Not applicable. MLI uses standardised approach not IRB.	n/a
		449(m)	Explanation of significant changes in quantitative disclosures	For any changes that are significant in quantitative disclosures, key movements are explained where applicable under the relevant tables	n/a
		449(n)	As appropriate, separately for the Banking and trading book securitisation exposures:		n/a
		449(n)(i)	Amount of outstanding exposures securitised	Table 5.5.5 T1. Outstanding Exposures Securitised (Originator)	61
		449(n)(ii)	On balance sheet securitisation retained or purchased, and off balance sheet exposures	Table 5.5.5 T2. Current Exposure by Exposure Type to Securitisations	61
		449(n)(iii)	Amount of assets awaiting securitisation	None	n/a
		449(n)(iv)	Early amortisation treatment; aggregate drawn exposures, capital requirements	Not applicable. See Section 5.5.5 Securitisation Exposures.	n/a
		449(n)(v)	Deducted or 1,250%-weighted securitisation positions	Table 5.5.5 T3. Securitisation Positions Risk Weighted at 1,250%	62
		449(n)(vi)	A summary of securitisation activity of the current period, including the amount of exposures securitised and recognised gains or losses on sales	Section 5.5.1 Securitisation Activities	59
		449(o)	Separately for the trading and the non-trading book:	Table 5.5.5 T4. Securitisation Exposures and Capital Requirements by Risk Weight	62
		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.	Not applicable. All trading book and non-trading book exposures originated and securitised by MLI have been derecognised.	n/a
		449(q)	Outstanding exposures securitised by the institution and subject to a capital requirement for market risk, broken down into traditional and synthetic, by exposure type;		
		449(r)	Whether the institution has provided non-contractual financial support to securitisation vehicles	No non-contractual financial support provided	n/a
450	Remuneration policy	450	Remuneration Disclosure	Section 6.1 Remuneration Disclosure	73

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451	Leverage	451(1)(a)	The leverage ratio, and whether any transitional provisions are applied	Section 2.5.1 Leverage Ratio Summary Table 2.5.1 T1. Leverage Ratio	17,18
		451(1)(b)	Breakdown of leverage ratio exposure measure and reconciliation to financial statements	Table 5.8.2 T1. Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures Table 5.8.2 T2. Leverage Ratio Common Disclosure Table 5.8.2 T3. Split of On-Balance Sheet Exposures (excluding derivatives, SFTs and exempted exposures)	69,70
		451(1)(c)	Where applicable, the amount of derecognised fiduciary items	Not Applicable	n/a
		451(1)(d)	Description of the processes used to manage the risk of excessive leverage	Section 5.8.3 Management of Excessive Leverage Ratio	70
		451(1)(e)	Factors that impacted the leverage ratio during the year	Section 2.5.2 Key Movements in 2019	18
452	Use of the IRB Approach to credit risk	452(a)	Permission for use of the IRB approach from the competent authority	Not applicable. MLI does not usethe IRB approach.	n/a
		452(b)	Explanation of:		
		452(b)(i)	Internal rating scales, mapped to external ratings;		
		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 Key Risk Types; Credit Risk; Loss and Credit Risk Mitigation Activities	33
		453(b)	Collateral valuation management		
		453(c)	Types of collateral used		
		453(d)	Main types of guarantor and credit derivative counterparty, and creditworthiness		
		453(e)	Market or credit risk concentrations within credit mitigation taken		
		453(f)	Exposure value covered by eligible collateral	Table A2 T11. EU CR3 – CRM techniques – Overview Table A2 T12. EU CR4 – Standardised approach – credit risk exposure and CRM effects	81
		453(g)	Exposures covered by guarantees or credit derivatives		
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	Not Applicable	n/a

Article	Article Name	Article Reference Detail	Description	Document Reference	Page Number (s)
455	Use of Internal Market Risk Models	455(a)(i)	Characteristics of the market risk models	Section 4.3.3 Market Risk Section 5.3 Market Risk	36, 50
		455(a)(ii)	Methodologies used to measure incremental default and migration risk (IRC) and comprehensive risk measure (CRM)		
		455(a)(iii)	Stress testing applied to the portfolios		
		455(a)(iv)	Approaches used for back-testing and model validation		
		455(b)	Scope of the internal model permission		
		455(c)	Policies and procedures for determining trading book classification and compliance with prudential valuation requirements	Explanations of Differences between Accounting and Regulatory Exposure Amounts; Section 5.3.1 Internal Model Based Capital Requirement	16, 52
		455(d)	Highest, lowest and mean values over the year of VaR, SVaR, IRC and CRM	Table 5.3.1 T1: MR3 – IMA values for trading portfolios	54
		455(e)	Market risk internal model based own funds requirements	Table 5.3 T2.: EU MR2-A – Market risk under the IMA Table 5.3 T3.: EU MR2-B – RWA flow statements of market risk exposures under the IMA	51
		455(f)	Weighted average liquidity horizon for portfolios covered by internal models for IRC and CRM	Section 5.3.1 Internal Model Based Capital Requirement Incremental Risk Charge; Comprehensive Risk Measure subheading under Section 5.3.1.	52, 53
		455(g)	Comparison of end-of-day VaR measures compared with one day changes in the portfolio's value	Figure 5.3.1 F1.: EU MR4 – Comparison of VaR estimates with gains/losses	53