

Citigroup Global Markets Limited

Pillar 3 Disclosures

March 2020



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Introduction

Citigroup Global Markets Limited's ('CGML') Pillar 3 disclosures for the quarter ended 31 March 2020 are made in accordance with Part 8 of the Capital Requirements Regulation ('CRR') and European Banking Authority ('EBA') guidelines on Pillar 3 disclosures. This document represents CGML on a consolidated basis.

CGML, Citi's principal UK operating subsidiary, is an international broker dealer, providing products and services for institutional clients. It is a market maker in equity, fixed income and commodity products across cash, over-the-counter ('OTC') derivatives and exchange traded markets, as well as a provider of investment banking capital markets and advisory services.

These disclosures do not constitute any form of financial statement and must not be relied upon in making any investment in or judgement on the group or any entity within the group.

Overview of Pillar 3

The CRD IV package, which came into effect on 1 January 2014 and implements the provisions of the Basel Capital Accord in the European Union ('EU'), mandates a framework of capital adequacy regulation for banks and investment firms incorporating three distinct pillars:

- Pillar 1 - prescribes the minimum capital requirements for such firms;
- Pillar 2 - addresses the associated supervisory review process; and
- Pillar 3 - specifies further public disclosure requirements in respect of their capital and risk profile.

Policy and verification

In accordance with Article 431 (3) of the CRR, CGML's Pillar 3 disclosure is prepared under a Citi EU Pillar 3 Standard, which outlines the principles and minimum standards to be applied when preparing Pillar 3 disclosures for legal entities within the EU. This Pillar 3 disclosure is governed by the UK Asset and Liability Committee ('ALCO').

Transitional Arrangements for the Adoption of IFRS 9

CGML has chosen not to apply the transitional arrangements introduced by regulation (EU) 2017/2395 for mitigating the impact of IFRS 9 on own funds and the treatment of certain large exposures.

Regulatory Developments

The UK's withdrawal from the EU

Since the outcome of the UK referendum on EU membership, Citi has put in place a formal program to deliver a co-ordinated response to the UK's decision to leave the European Union. Citi assumes that after the UK leaves the EU, the UK will lose its passporting abilities within the European Economic Area (EEA) and be required to operate under a third country regime. Citi's contingency planning focuses on designing and implementing a strategy that will allow Citi to continue servicing its clients throughout the UK and EEA with minimal disruption, whilst maintaining simplicity and transparency. Given the uncertainties in the final outcome of the UK's negotiations with the EU, CGML continues to progress with its contingency planning assuming a "Hard" Brexit scenario, without an extended transition period or an agreed deal. The main components of this planning are:

- To continue servicing EEA clients after the UK leaves the EU with minimal disruption, CGML will make use of cross-border licenses and exemptions available in EEA jurisdictions. In the remaining EEA jurisdictions where CGML cannot maintain current access arrangements, EEA clients will be serviced via Citigroup Global Markets Europe AG ('CGME') or Citibank Europe plc ('CEP').
- EEA client migrations from CGML to CGME and CEP commenced during 2019 for completion prior to the end of the transition period, currently 31 December, 2020.
- Activities in CGML's existing EEA branches in France, Italy and Spain have been transferred to newly established branches of CGME in these EEA locations.
- As a part of Day 1 strategy, centralisation of market risk will continue in CGML with inter-affiliate transactions subject to appropriate governance and controls as applicable today.
- Citi will continue to review and assess its planning assumptions for CGML in response to further developments in UK/EU negotiations.

COVID-19

The COVID-19 pandemic has had a significant impact on the economy and global regulators have responded with a range of measures to support firms through this period. Regulatory updates are still evolving and they vary by jurisdiction. They cover many topics including reductions in countercyclical capital buffers, the payment of dividends, the use of capital buffers and amendments to the CRR. These measures are intended to help firms to mitigate the economic impacts of the pandemic on their businesses and to allow them to continue to lend to the wider economy.

CRR 2/ CRD V

CGML will be impacted by a number of regulatory rule changes introduced by the Basel Committee on Banking Supervision (BCBS) and other standard setters that have been legislated for in Europe by CRR 2/CRD V. It is expected that following the UK's departure from the EU, the UK will continue to apply similar prudential regulation to that in force within the EU.

CRR 2/ CRD V was published in the Official Journal of the EU in June 2019. The majority of the package comes into force on 28 June 2021; however, some provisions have already been implemented, such as the Minimum Requirement for Own Funds and Eligible Liabilities ('MREL'), whilst other provisions have a longer implementation period, such as elements of Fundamental Review of the Trading Book ('FRTB'). Other key elements in CRR 2 include changes to Counterparty Credit Risk ('SA-CCR'), the Large Exposures framework and the Leverage Ratio.

CRR 3/ CRD VI

A further legislative package to revise the CRR (known as CRR 3) is expected to be published by the European Commission in 2020. This will incorporate other changes proposed by the BCBS such as a new Standardised Approach to Credit Risk ('SA-CR'), a new Credit Valuation Adjustment (CVA) framework, revisions to the approach to Securities Financing Transactions ('SFT'), further elements of FRTB, the Output Floor and a new Standardised Approach to Operational Risk.

Key Metrics

Table 1: Key Metrics (KM1)

	31 Mar 2020	31 Dec 2019	30 Sep 2019	30 Jun 2019	
	\$ million	\$ million	\$ million	\$ million	
Available capital (amounts)					
1	Common Equity Tier 1 (CET1) capital	14,100	14,492	14,547	14,501
2	Tier 1 capital	16,400	16,792	16,847	16,801
3	Total capital	21,000	21,392	21,447	21,401
Risk-weighted assets (amounts)					
4	Total risk-weighted assets (RWA)	149,481	132,613	145,837	146,596
Risk-based capital ratios as a percentage of RWA					
5	Common Equity Tier 1 ratio (%)	9.43%	10.93%	9.97%	9.89%
6	Tier 1 ratio (%)	10.97%	12.66%	11.55%	11.46%
7	Total capital ratio (%)	14.05%	16.13%	14.71%	14.60%
Additional CET1 buffer requirements as a percentage of RWA					
8	Capital conservation buffer requirement (%)	2.50%	2.50%	2.50%	2.50%
9	Countercyclical buffer requirement (%)	0.11%	0.46%	0.49%	0.41%
10	Bank G-SIB additional requirements (%)	0.00%	0.00%	0.00%	0.00%
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	2.61%	2.96%	2.99%	2.91%
12	CET1 available after meeting the bank's minimum capital requirements (%) ¹	3.70%	5.40%	4.30%	4.21%
Basel III Leverage Ratio ²					
13	Total Basel III leverage ratio measure	431,340	397,050	438,335	412,256
14	Basel III leverage ratio (%)	3.80%	4.23%	3.84%	4.08%
Liquidity Coverage Ratio ³					
15	Total HQLA	22,790	20,491	19,714	21,260
16	Total net cash outflow	9,833	9,292	9,864	11,944
17	LCR ratio (%)	232%	221%	200%	178%

¹ Basis of calculation for 'CET1 available after meeting the bank's minimum capital requirements' has been modified, with prior periods amended as appropriate.

² Leverage exposure is disclosed on a fully phased-in basis in accordance with the EU delegated act.

³ LCR daily average is calculated for CGML solo entity, as a consolidated LCR is not monitored on a daily basis (only monthly).

As at 31 March 2020, CGML's CET1 ratio was 9.43%, a decrease of 15bps from the prior quarter. A reduction in CET1 capital largely represents the impact of COVID-19, with an increased prudent valuation adjustment deduction due to widening bid/offer spreads, whilst RWAs increased \$16.8 billion over the period due to seasonal business activity, increased intercompany exposures and heightened market risk reflecting market volatility.

Own Funds & Risk Weighted Assets (RWA)

CGML complies with the CRD IV minimum capital requirements to ensure that sufficient capital is maintained to cover all relevant risks and exposures. For this purpose, the firm calculates capital charges including market risk, counterparty risk and operational risk per the CRR using internal models and standardised approaches.

CGML monitors its capital position on a daily basis, calculating its excess over both Pillar 1 and Pillar 2 minimum requirements. These excesses are subject to internal Capital Action Triggers, an internal limit to ensure that the entity holds a sufficient capital excess to permit timely management decisions in case of short-term stresses.

To assess the adequacy of capital to support current and expected future activities, the firm produces regular capital forecasts for CGML, taking into account both normal business conditions and a variety of stressed scenarios. On at least an annual basis CGML prepares an Internal Capital Adequacy Assessment Process ('ICAAP') document, setting out its risk appetite, capital requirements and associated policies and procedures.

Risk Weighted Assets

The following table provides an overview of RWAs, calculated in accordance with Article 92 of Capital Requirements Regulation, by risk type and calculation approach.

Table 2: Overview of RWA (OV1)

	31 Mar 2020	31 Dec 2019	31 Mar 2020
	RWAs	RWAs	Minimum capital requirements
	\$ million	\$ million	\$ million
1 Credit risk (excluding counterparty credit risk)	7,331	3,939	586
2 Of which the standardised approach	7,331	3,939	586
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 Counterparty credit risk (CCR)	75,699	72,338	6,056
7 Of which mark-to-market	57,604	56,550	4,608
8 Of which original exposure	-	-	-
9 Of which standardised approach	-	-	-
10 Of which internal model method (IMM)	11,039	8,689	883
11 Of which risk exposure amount for contributions to the default fund of a CCP	268	306	21
12 Of which CVA	6,788	6,793	543
13 Settlement Risk	345	81	28
14 Securitisation exposures in the banking book (after the cap)	150	77	12
14a Of which subject to revised securitisation framework	150	8	12
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	-	69	-
19 Market Risk	39,753	32,884	3,180
20 Of which the standardised approach	18,724	21,695	1,498
21 Of which IMA	21,029	11,189	1,682
22 Large Exposures	6,549	3,181	524
23 Operational risk	19,654	20,113	1,572
24 Of which basic indicator approach	-	-	-
25 Of which standardised approach	516	513	41
26 Of which advanced measurement approach	19,138	19,600	1,531
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	-	-	-
28 Floor adjustment	-	-	-
29 Total	149,481	132,613	11,958

CGML's RWAs increased \$16.9 billion, of which notable drivers:

- Credit Risk RWAs increased \$3.4 billion over the first quarter of 2020, primarily driven by an increase in intercompany exposures.
- Counterparty Credit Risk RWAs increased \$3.4 billion driven by seasonal business activity.
- Market Risk RWAs increased \$6.9 billion primarily driven by IMA resulting from heightened market volatility along with a change in the stress period in the stressed VaR calculation. A partial offset in market risk under the standardised approach was driven by a reduction in FX and emerging markets exposure.
- Large Exposures RWAs increased \$3.4 billion primarily driven by afore mentioned intercompany exposures.

Minimum Requirement for Own Funds and Eligible Liabilities (MREL)

From January 2019, systemically important banks were required to hold additional long term debt which could be made available to absorb losses from a failing institution, known as Total Loss Absorbing Capacity ('TLAC'). In the EU these requirements were introduced under CRR 2 as the Minimum Requirement for Own Funds and Eligible Liabilities ('MREL'), with effect from June 2019.

MREL is a requirement for firms to maintain a minimum amount of loss-absorbing resources over and above the own funds requirements. This helps to ensure that when firms fail, the resolution authority (the Bank of England) can use a firm's own financial resources to absorb losses and recapitalise the business so it can continue to provide critical functions without the need to rely upon public funds and without threatening financial market stability.

MREL resources can take the form of regulatory capital (own funds) and certain types of debt liabilities (eligible liabilities) that will be written down and/or converted to equity if a firm is likely to fail.

Under CRR 2, CGML as a material subsidiary of a non-EU Global Systemically Important Bank ('G-SIB') is subject to a minimum internal MREL, set as 16% of RWA and 6% of leverage exposures, subject to a 90% scalar.

Table 3: TLAC Key Metrics

	31 March 2020	31 December 2019	30 September 2019	30 June 2019
	\$ million	\$ million	\$ million	\$ million
Total loss absorbing capital (TLAC) available	26,500	26,892	26,947	26,401
Risk-weighted assets (RWA) and leverage exposure measure for TLAC purposes	-	-	-	-
Total RWA adjusted as permitted under the TLAC regime	149,481	132,613	145,837	146,596
Leverage exposure measure	431,340	397,050	438,335	412,256
TLAC ratios and buffers	-	-	-	-
TLAC (as a percentage of RWA adjusted as permitted under the TLAC regime)	18%	20%	18%	18%
TLAC (as a percentage of leverage exposure)	6.14%	6.77%	6.15%	6.40%

Counterparty Credit Risk

For UK regulatory reporting purposes, CGML uses the standardised approach in determining counterparty credit risk capital requirements, based on External Credit Assessment Institution ('ECAI') ratings for calculating RWAs. The measures of Exposure at Default ('EAD') used to determine these requirements are described below.

For Over-The-Counter ('OTC') derivatives, CGML uses two approaches: Internal Model Method ('IMM') and Current Exposure Method ('CEM'). For IMM, the firm uses a constant covariance Monte Carlo simulation of potential future exposure to determine an effective expected positive exposure ('EEPE') measure as an input to Citi's EAD calculation. The model is calibrated with historical volatilities subject to a set of independent internal validation and statistical back-testing standards. Additionally, the model utilises a standard supervisory alpha multiplication factor of 1.4. For those positions which fall outside of the scope of the firm's IMM model permission, CGML uses the CEM approach. This method assigns to each transaction a regulatory stipulated exposure based on the mark-to-market value and a measure of potential future exposure using a percentage of notional driven by residual maturity and the type of contract.

For Securities Financing Transactions ('SFTs'), CGML applies a supervisory volatility adjustment under the financial collateral comprehensive method for calculating its EAD. The calculation equals exposure less collateral after applying regulatory haircuts for security volatility adjustments and any applicable currency mismatches. The EAD is then used to calculate RWAs using the standardised approach.

Table 4: RWA flow statements of CCR exposures under the IMM (CCR7)

This table presents a flow statement explaining changes in the CCR RWAs determined under the IMM for CCR (derivatives) in accordance with Part Three, Title II, Chapter 6 of the CRR.

	RWAs	Capital requirements
	\$ million	\$ million
1 RWAs as at the end of the previous reporting period	8,689	696
2 Asset size	2,482	199
3 Credit quality of counterparties	(132)	(11)
4 Model updates (IMM only)	-	-
5 Methodology and policy (IMM only)	-	-
6 Acquisitions and disposals	-	-
7 Foreign exchange movements	-	-
8 Other	-	-
9 RWAs as at the end of the current reporting period	11,039	883

During Q1 2020, CCR RWAs increased by \$2,350 million primarily due to an increase in exposures valued under the IMM, with a slight reduction due to improvements in the credit quality of a small number of counterparties.

Market Risk

CGML uses a Value at Risk ('VaR') model to calculate market risk capital requirements for part of its trading portfolio under an Internal Model Approach ('IMA') permission granted by the Prudential Regulation Authority ('PRA'). The permission covers general market risk and issuer specific risk for a number of Rates, Credit, Equities and Commodities businesses. In addition to VaR based capital requirements, CGML is required to set aside capital in respect of Stressed VaR ('sVaR') and the Incremental Risk Charge ('IRC'). For the remainder of its trading portfolio, foreign currency and commodity positions, CGML uses the standardised method for calculating market risk.

Non-proprietary details of the scope of CGML's IMA permission are available in the Financial Services Register on the Financial Conduct Authority (FCA) website.

Table 5: RWA flow statements of market risk exposures under the IMA (MR2-B)

	VaR	sVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total capital requirements
	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
1 RWAs at 31 December 2019	2,493	5,043	3,653	-	-	11,189	895
1a Regulatory adjustment	(1,629)	(2,346)	(619)	-	-	(4,594)	(368)
1b RWAs at the previous quarter-end (end of the day)	864	2,697	3,034	-	-	6,595	528
2 Movement in risk levels	4,878	339	45	-	-	5,262	421
3 Model updates/changes	(44)	480	-	-	-	436	35
4 Methodology and policy	-	-	21	-	-	21	2
5 Acquisitions and disposals	-	-	-	-	-	-	-
6 Foreign exchange movements	-	-	-	-	-	-	-
7 Other	-	-	-	-	-	-	-
8a RWAs at the end of the reporting period (end of the day)	5,698	3,516	3,100	-	-	12,314	985
8b Regulatory adjustment	1,759	6,139	817	-	-	8,715	697
8 RWAs at 31 March 2020	7,456	9,655	3,917	-	-	21,029	1,682

RWAs under the IMA increased \$9.8 billion, primarily across VaR as a result of recent market volatility relating to COVID-19, with a further increase in stressed VaR primarily due to a change in the stress period used. Regulatory adjustments have been extended to include Risks Not in Models for VaR and sVaR

Glossary

ALCO	Asset and Liability Committee
BCBS	Basel Committee on Banking Supervision
CEM	Current Exposure Method
CGML	Citigroup Global Markets Limited
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment
EAD	Exposure at Default
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
EEPE	Effective Expected Positive Exposures
EU	European Union
FCA	Financial Conduct Authority
FRTB	Fundamental Review of the Trading Book
G-SIB	Global Systemically Important Bank
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IRC	Incremental Risk Charge
IMA	Internal Model Approach
IMM	Internal Model Method
LCR	Liquidity Coverage Ratio
MREL	Minimum Requirement for Eligible Liabilities
OTC	Over the Counter Derivatives
PRA	Prudential Regulation Authority
RWA	Risk Weighted Asset
SA-CCR	Standardised Approach for Counterparty Credit Risk
SA-CR	Standardised Approach to Credit Risk
SFT	Securities Financing Transaction
sVaR	Stressed Value-at-Risk
TLAC	Total Loss Absorbing Capacity
VaR	Value-at-Risk