Citigroup Global Markets Limited

Pillar 3 Disclosures

September 2020

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Introduction

Citigroup Global Markets Limited's ('CGML') Pillar 3 disclosures for the quarter ended 30 September 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.

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 transition period ends, 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. In November 2020, the UK Treasury, in conjunction with the PRA and FCA, delayed the implementation of CRR 2 in the UK until 1 Jan 2022. This will apply to SA-CCR, the Large Exposures framework and the Leverage Ratio.

CRR 3/ CRD VI

A further proposal to revise the CRR (known as CRR 3) is expected to be published by the European Commission in 2021. 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)

		30 September 2020	30 June 2020	31 March 2020	31 December 2019	30 September 2019
	Available capital	**$ million**	**$ million**	**$ million**	**$ million**	**$ million**
1	Common Equity Tier 1 (CET1)	15,440	14,452	14,100	14,492	14,547
2	Tier 1	17,740	16,752	16,400	16,792	16,847
3	Total capital	22,340	21,352	21,000	21,392	21,447
	Risk-weighted assets					
4	Total risk-weighted assets (RWA)	145,724	144,713	149,481	132,613	145,837
	Risk-based capital ratios as a percentage of RWA					
5	Common Equity Tier 1 ratio (%)	10.60%	9.99%	9.43%	10.93%	9.97%
6	Tier 1 ratio (%)	12.17%	11.58%	10.97%	12.66%	11.55%
7	Total capital ratio (%)	15.33%	14.76%	14.05%	16.13%	14.71%
	Additional CET1 buffer requirements as a percentage of RWA					
8	Capital conservation buffer requirement (%)	2.50%	2.50%	2.50%	2.50%	2.50%
9	Countercyclical buffer requirement (%)	0.05%	0.05%	0.11%	0.46%	0.49%
10	Bank G-SIB and/or D-SIB additional requirements (%)	0.00%	0.00%	0.00%	0.00%	0.00%
11	Total of bank CET1 specific buffer requirements (%)	2.55%	2.55%	2.61%	2.96%	2.99%
12	CET1 available after meeting the bank's minimum capital requirements (%)	4.53%	4.42%	3.70%	5.40%	4.30%
	Basel III Leverage Ratio [1]					-
13	Total Basel III leverage ratio measure	437,135	427,658	431,340	397,050	438,335
14	Basel III leverage ratio (%)	4.06%	3.92%	3.80%	4.23%	3.84%
	Liquidity Coverage Ratio [2]					
15	Total HQLA	24,772	25,942	22,790	20,491	19,714
16	Total net cash outflow	12,548	10,537	9,833	9,292	9,864
17	LCR ratio (%)	197%	246%	232%	221%	200%

1 Leverage exposure is disclosed on a fully phased-in basis in accordance with the EU delegated act.
2 LCR daily average is calculated for CGML solo entity, as a consolidated LCR is not monitored on a daily basis (only monthly).

As at 30 September 2020, CGML's CET1 ratio stands at 10.6%, an increase of 61bps over the last quarter. This represents an increase in CET1 capital of $1.0 billion following a capital injection, whilst total RWA remained stable over the period.

CGML's leverage ratio increased 14bps to 4.06%, primarily driven by afore mentioned increase in CET1 capital, partially offset by an increase in leverage exposures.

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)

		30 September 2020	30 June 2020	30 September 2020
		RWAs	RWAs	Minimum capital requirements
		$ million	$ million	$ million
1	**Credit risk (excluding CCR)**	**4,702**	**3,732**	**376**
2	Of which the standardised approach	4,702	3,732	376
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**	**69,927**	**65,335**	**5,594**
7	Of which mark to market	53,340	49,224	4,267
8	Of which original exposure	-	-	-
9	Of which the standardised approach	-	-	-
10	Of which internal model method (IMM)	10,270	9,806	822
11	Of which risk exposure amount for contributions to the default fund of a CCP	325	349	26
12	Of which CVA	5,991	5,956	479
13	**Settlement risk**	**98**	**152**	**8**
14	**Securitisation exposures in the banking book**	**105**	**143**	**8**
14a	Of which subject to the revised securitisation framework	105	143	8
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	-	-	-
19	**Market risk**	**46,462**	**51,875**	**3,717**
20	Of which the standardised approach	21,416	20,903	1,713
21	Of which IMA	25,047	30,972	2,004
22	**Large exposures**	**2,502**	**748**	**200**
23	**Operational risk**	**21,928**	**22,728**	**1,754**
24	Of which basic indicator approach	-	-	-
25	Of which standardised approach	553	528	44
26	Of which advanced measurement approach	21,375	22,200	1,710
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**-**	**-**	**-**
28	**Floor adjustment**	**-**	**-**	**-**
29	**Total**	**145,724**	**144,713**	**11,658**

RWAs increased by $1.0 billion over the period, primarily driven by:

- A $5.5 billion increase across Credit Risk and Counterparty Credit Risk primarily driven by seasonal business activity
- Market Risk RWA decreased $5.4 billion primarily driven by IMA as market volatility observed in early 2020 has dropped from the time series used for the calculations.
- A $1.7 billion increase in Large Exposures is driven by seasonal business activity.

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

	30 September 2020 $ million	30 June 2020 $ million	31 March 2020 $ million	31 December 2019 $ million	30 September 2019 $ million
Total loss absorbing capital (TLAC) available	28,340	27,352	26,500	26,892	26,947
Risk-weighted assets (RWA) and leverage exposure measure for TLAC purposes					
Total RWA adjusted as permitted under the TLAC regime	145,724	144,713	149,481	132,613	145,837
Leverage exposure measure	437,135	427,658	431,340	397,050	438,335
TLAC ratios and buffers					
TLAC (as a percentage of RWA adjusted as permitted under the TLAC regime)	19%	19%	18%	20%	18%
TLAC (as a percentage of leverage exposure)	6.48%	6.40%	6.14%	6.77%	6.15%

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 $ million	Capital requirements $ million
1	**RWAs at 30 June 2020**	**9,806**	**784**
2	Asset size	451	36
3	Credit quality of counterparties	13	1
4	Model updates (IMM only)	-	-
5	Methodology and policy (IMM only)	-	-
6	Acquisitions and disposals	-	-
7	Foreign exchange movements	-	-
8	Other	-	-
9	**RWAs at 30 September 2020**	**10,270**	**822**

During Q3 2020, CCR RWAs under IMM increased $0.5 billion primarily driven by an increase in trades valued under IMM.

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	Comprehe-nsive risk measure	Other	Total RWAs	Total capital requirements
		$ million	$ million	$ million	$ million	$ million	$ million	$ million
1	**RWAs at 30 June 2020**	**12,421**	**12,586**	**5,965**	**-**	**-**	**30,972**	**2,478**
1a	*Regulatory adjustment*	(8,879)	(8,311)	(3)	-	-	(17,194)	(1,375)
1b	*RWAs at the previous quarter-end (end of the day)*	3,542	4,275	5,961	-	-	13,779	1,102
2	Movement in risk levels	(860)	127	840	-	-	107	9
3	Model updates/changes	(441)	(243)	-	-	-	(684)	(55)
4	Methodology and policy	-	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-	-
6	Foreign exchange movements	-	-	-	-	-	-	-
7	Other	(0)	(1)	-	-	-	(1)	(0)
8a	*RWAs at the end of the reporting period (end of the day)*	2,242	4,159	6,802	-	-	13,202	1,056
8b	*Regulatory adjustment*	4,663	7,180	2	-	-	11,845	948
8	**RWAs at 30 September 2020**	**6,905**	**11,339**	**6,803**	**-**	**-**	**25,047**	**2,004**

Market Risk RWA's calculated under the internal model approach (IMA) decreased $5.9 billion primarily driven by VaR as market volatility from early 2020 dropped from the time series used in the calculation, with a smaller impact observed due to changes in model parameters.

Glossary

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