

Citigroup Global Markets Limited

Pillar 3 Disclosures

30 June 2018



Contents

- 1. Introduction 4
- 2. Own Funds and Capital Adequacy 6
 - 2.1. Own Funds..... 6
 - 2.2. Capital Adequacy 8
- 3. Leverage..... 9
- 4. Credit Risk 12
- 5. Counterparty Credit Risk 19
- 6. Market Risk 26
 - 6.1. IMA Approach..... 26
 - 6.2. Standardised Approach..... 29
- 7. Business Continuity Management 30
 - 7.1. Governance..... 30
 - 7.2. Contingency and Business Continuity Planning..... 30
 - 7.3. Recovery Planning 31
 - 7.4. Documentation and Training 31
- 8. Conflict of Interest Policy 32
 - 8.1. Internal Alerts and Breach 32

List of Tables

Table 1: Key Metrics for CGML.....	5
Table 2: Own funds disclosure.....	6
Table 3: OV1 - Overview of RWAs.....	8
Table 4: Summary reconciliation of accounting assets and leverage ratio exposures.....	9
Table 5: Leverage ratio common disclosure.....	10
Table 6: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	11
Table 7: CR1-A - Credit quality of exposures by exposure class and instrument	12
Table 8: CR1-B: Credit quality of exposures by industry or counterparty types.....	14
Table 9: CR1-C - Credit quality of exposures by geography.....	15
Table 10: CR3 - CRM techniques – Overview.....	16
Table 11: CR4 - Standardised approach – Credit risk exposure and CRM effects	16
Table 12: CR5 - Standardised approach - Risk Weighted.....	18
Table 13: CCR1: Analysis of CCR exposure by approach	19
Table 14: CCR2 - Credit valuation adjustment (CVA) capital charge	20
Table 15: CCR8 - Exposures to CCPs.....	21
Table 16: CCR3 Standardised approach – CCR exposures by regulatory portfolio and risk	22
Table 17: CCR7- RWA flow statements of CCR exposures under the IMM.....	23
Table 18: CCR5-A - Impact of netting and collateral held on exposure values.....	23
Table 19: CCR5-B - Composition of collateral for exposures to CCR.....	24
Table 20: CCR6: Credit derivatives exposures.....	24
Table 21: MR2-A - Market risk under the IMA.....	26
Table 22: MR2-B - RWA flow statements of market risk exposures under the IMA	27
Table 23: MR3 - IMA values for trading portfolios.....	27
Table 24: MR4 - Comparison of VaR estimates with gains/losses.....	28
Table 25: MR1 - Market risk under the standardised approach.....	29

1. Introduction

This document contains the Pillar 3 disclosures for the half year to 30 June 2018, for Citigroup Global Markets Limited (CGML), Citi's principal UK operating subsidiary.

The disclosures are made in accordance with Part 8 of the Capital Requirements Regulation (CRR) within the Capital Requirements Directive (CRD IV) package and the European Banking Authority (EBA) Pillar 3 disclosures guidelines (EBA/GL/2016/11). Where they are not considered relevant to CGML's activities, specific rows and columns in the tables disclosed have been omitted. The disclosures are published in the Investor Relations section of Citi's website.

In accordance with the EBA guidelines, this report is produced and published quarterly, with increased disclosures in the semi-annual and annual publications. These disclosures were verified and approved in line with our policy on disclosure controls and procedures at the appropriate senior oversight committee, the (CGML Capital Committee).

CGML is Citi's primary international broker-dealer. It has a major presence as a dealer, market maker and underwriter in equity and fixed income securities and offers risk based solutions to producers, consumers and investors in commodity markets. CGML also provides advisory services to a wide range of corporate, institutional and government clients. CGML's trading activities encompass cash, exchange traded and Over the Counter (OTC) derivative markets. Its major counterparties are institutions, investment banks, investment managers, insurers and hedge funds. It also has moderate trading exposure to corporate clients.

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.

CGML maintains regulatory capital which is comfortably above the minimum regulatory requirements.

Transitional arrangements for the adoption of IFRS 9

CGML has decided 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. CGML has concluded that the impact of IFRS 9 adoption is immaterial; and therefore the reported own funds, capital and leverage ratios already reflect the full impact of IFRS 9.

This decision reflects the nature of CGML's business and, in particular, the absence of a loan book on CGML

Table 1: Key Metrics for CGML

	Jun-18	Mar-18	Dec-17	Sep-17
Available capital (amounts)	\$million	\$million	\$million	\$million
1 Common Equity Tier 1 (CET1)	13,978	12,829	12,270	12,351
2 Tier 1	16,278	14,629	14,070	14,151
3 Total capital	20,888	19,339	18,082	17,133
Risk-weighted assets (amounts)				
4 Total risk-weighted assets (RWA)	148,319	147,390	130,256	132,364
Risk-based capital ratios as a percentage of RWA				
5 Common Equity Tier 1 ratio (%)	9.42%	8.70%	9.42%	9.33%
6 Tier 1 ratio (%)	10.98%	9.93%	10.8%	10.69%
7 Total capital ratio (%)	14.08%	13.12%	13.88%	12.49%
Additional CET1 buffer requirements as a percentage of RWA				
8 Capital conservation buffer requirement (2.5% from 2019) (%)	1.88%	1.88%	1.25%	1.25%
9 Countercyclical buffer requirement (%)	0.27%	0.06%	0.06%	0.06%
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)	2.14%	1.94%	1.31%	1.31%
12 CET1 available after meeting the bank's minimum capital requirements (%)	1.08%	0.57%	1.74%	1.70%
Basel III Leverage Ratio				
13 Total Basel III leverage ratio measure	444,274	423,091	385,170	389,864
14 Basel III leverage ratio (%) (row 2/row 13)	3.66%	3.46%	3.65%	3.63%
Liquidity Coverage Ratio				
15 Total HQLA	17,601	21,872	19,832	19,144
16 Total net cash outflow	11,586	12,182	12,392	11,949
17 LCR ratio (%)	151.92%	179.54%	160.04%	160.21%

Notes:

- Capital and RWA are calculated without applying the transitional arrangements within the CRR.
- The CET1 requirement for CGML increased by 0.20% to 2.14% in June 2018, in line with the UK Countercyclical Buffer (CCyB) rate which rose from 0% to 0.5%. This resulted in a 0.27% CCyB requirement in June 2018.
- The reported Liquidity Coverage Ratio (LCR) for CGML on a solo basis. The estimate of the impact on reporting on a consolidated basis will result in an increase of the High Quality Liquid Assets (HQLA) of approximately \$1.1-1.2 billion and Net Outflows of \$500-600 million due to outflows from structured notes. The net impact on the LCR surplus would be approximately \$600 million representing an approximate 5% increase in the ratio.
- The Leverage Ratio (LR) increased by 0.20% to 3.66% quarter on quarter between March 2018 and June 2018 due to an increase in Tier 1 Capital. However, the LR remained stable in the half year to June 2018 from December 2017 as the increase in Tier1 capital was offset by the leverage exposure.

2. Own Funds and Capital Adequacy

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 requirements for market risk, counterparty risk and operational risk based upon a number of internal models and standardised approaches, as well as recognising a number of credit risk mitigation techniques in calculating the requirements for credit and counterparty risk.

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 that sets out its risk appetite, capital requirements and associated policies and procedures.

2.1. Own Funds

This disclosure has been prepared using the format set out in Annex IV of the final 'Implementing technical standards with regard to disclosure of own funds requirements for institutions' (Commission implementing regulation- EU 1423/2013).

This table shows the components of regulatory capital as at 30 June 2018.

Table 2: Own funds disclosure

Own funds disclosure template		30/06/18	31/12/17
		\$ million	\$ million
Common Equity Tier 1 (CET1) capital: Instruments and reserves			
1	Capital Instruments and the related share premium accounts	1,500	1,500
2	Retained earnings	1,563	951
3	Accumulated other comprehensive instruments (and other reserves)	12,054	11,053
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	-	-
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	15,116	13,504
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments	(517)	(487)
8	Intangible assets (net of related tax liabilities)	(185)	(179)
10	Deferred tax asset 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)	(3)	-
15	Defined-benefit pension fund assets	(348)	(478)
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	(82)	(88)
20c	of which: securitisation positions	(66)	(80)
20d	of which: free deliveries	(16)	(8)
24	CET1 capital elements or deductions - other	(3)	(3)
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(1,138)	(1,234)
29	Common Equity Tier 1 (CET1) capital	13,978	12,270
Additional Tier 1 (AT1) capital: instruments			
30	Capital instruments and the related share premium accounts	2,300	1,800
	of which: classified as equity under applicable accounting standards	2,300	1,800
36	Additional Tier 1 (AT1) capital before regulatory adjustments	2,300	1,800

Table 2: Own funds disclosure – continued

		30/06/18	31/12/17
		\$ million	\$ million
Additional Tier 1 (AT1) capital: regulatory adjustments			
44	Additional Tier 1 (AT1) capital	2,300	1,800
45	Tier 1 capital (T1 = CET1 + AT1)	16,278	14,070
Tier 2 (T2) capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	4,610	4,012
51	Tier 2 (T2) capital before regulatory adjustments	4,610	4,012
57	Total regulatory adjustments to Tier 2 (T2) capital	-	-
58	Tier 2 (T2) capital	4,610	4,012
59	Total capital (TC = T1 + T2)	20,888	18,082
60	Total risk weighted assets	148,319	130,256
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	9.42%	9.42%
62	Tier 1 (as a percentage of total risk exposure amount)	10.98%	10.80%
63	Total capital (as a percentage of total risk exposure amount)	14.08%	13.88%
64	Institution specific buffer requirement	6.64%	5.81%
65	of which: capital conservation buffer requirement	1.88%	1.25%
66	of which: countercyclical buffer requirement	0.27%	0.06%
67	of which: systemic risk buffer requirement	0.00%	0.00%
67a	of which: Other Systemically Important Institution (O-SII) buffer	0.00%	0.00%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	1.08%	1.74%

Notes:

CGML's CET1 capital increased by \$1,600 million due to the following main drivers;

- A capital contribution of \$1,000 million; and
- Inclusion of 2017 audited year end profit of \$384 million.

2.2. Capital Adequacy

The following table sets out CGML's Pillar 1 minimum capital requirements and Risk Weighted Assets (RWAs).

Table 3: OV1 - Overview of RWAs

This table provides an overview of total RWAs forming the denominator of the risk-based capital requirements calculated in accordance with Article 92 of the CRR.

	RWAs 30-Jun-18	RWAs 31-Dec-17	Minimum capital requirements 30-Jun-18
	\$ million	\$ million	\$ million
1 Credit risk (excluding CCR)	2,568	2,157	205
2 Of which the standardised approach	2,568	2,157	205
6 CCR	87,960	71,074	7,037
7 Of which mark to market	67,417	54,460	5,393
10 Of which internal model method (IMM)	9,907	8,822	793
11 Of which risk exposure amount for contributions to the default fund of a CCP	198	341	16
12 Of which CVA	10,438	7,450	835
13 Settlement risk	91	106	7
14 Securitisation exposures in the banking book (after the cap)	9	-	-
18 Of which standardised approach	9	-	-
19 Market risk	36,067	38,169	2,885
20 Of which the standardised approach	19,607	23,050	1,569
21 Of which IMA	16,460	15,119	1,317
22 Large exposures	2,874	-	230
23 Operational risk	18,751	18,750	1,500
26 Of which advanced measurement approach	18,751	18,750	1,500
29 Total	148,319	130,256	11,865

Notes:

The Risk Weighted Assets (RWAs) increased by \$18,063 million, primarily driven by;

- An increase of \$16,886 million in Over the Counter (OTC) derivatives Potential Future Exposure (PFE);
- An increase of \$2,988 million in Credit Valuation Adjustments risk (CVA) risk, reflecting the rise in OTC exposures; and
- An increase of \$2,874 million in Large exposures risk on intercompany exposures on trading exposures and cash balances.

3. Leverage

CGML's leverage ratio was calculated in accordance with CRD IV, by dividing fully loaded Tier 1 capital by the total of the entity's on and off-balance sheet exposures. The disclosures are prepared in the format set out in EBA's Implementing Technical Standards (ITS) (EU) 2016/200).

CGML manages the risk of excessive leverage continually through various internal tools which are monitored and controlled through the monthly UK ALCO process. CGML's leverage exposures and capital are measured against internal triggers set to ensure that the entity holds a sufficient capital excess to permit timely management decisions in case of short term stresses. The UK ALCO is the primary governance committee for the management of CGML's balance sheet. Amongst the responsibilities of the UK ALCO are the provision of balance sheet oversight of trends and business mix, ensuring prudent legal entity balance sheet management and overseeing the local regulatory requirements related to the balance sheet. The UK ALCO and CGML Board of Directors are also responsible for reviewing CGML's liquidity position on a daily basis.

The following table sets out CGML's leverage ratio at June 2018.

Table 4: Summary reconciliation of accounting assets and leverage ratio exposures

This table summarises the total leverage exposure, comprising of the total assets in the statutory financial statement and other regulatory adjustments for leverage purposes.

		30/06/18	31/12/17
		\$ million	\$ million
1	Total assets as per published financial statements	410,950	377,942
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-	-
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	-	-
4	Adjustments for derivative financial instruments	(4,727)	(22,705)
5	Adjustment for securities financing transactions (SFTs)	38,604	30,593
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	-	-
	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure EU-6a in accordance with Article 429(7) of Regulation (EU) No 575/2013)	-	-
	(Adjustment for exposures excluded from the leverage ratio total exposure measure in EU-6b accordance with Article 429(14) of Regulation (EU) No 575/2013)	(624)	(659)
7	Other adjustments		
8	Leverage ratio total exposure measure	444,203	385,170

The total assets as per the balance sheet for CGML are on a solo basis, the group does not publish financial statements at the consolidated level.

Table 5: Leverage ratio common disclosure

This table shows the breakdown of the Leverage exposure disclosed in Table 4 - Summary reconciliation of accounting assets and leverage ratio exposures and the leverage ratio.

		30/06/18	31/12/17
		\$ million	\$ million
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	100,850	93,078
2	(Asset amounts deducted in determining Tier 1 capital)	(624)	(659)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	100,226	92,419
Derivative exposures			
4	Replacement cost associated with <i>all</i> derivatives transactions (i.e. net of eligible cash variation margin)	23,974	22,539
5	Add-on amounts for PFE associated with <i>all</i> derivatives transactions (mark- to-market method)	132,656	102,257
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-	-
8	(Exempted CCP leg of client-cleared trade exposures)	(7,952)	(8,859)
9	Adjusted effective notional amount of written credit derivatives	657,874	581,323
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(644,293)	(570,557)
11	Total derivatives exposures	162,259	126,704
SFT exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	143,114	135,455
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-
14	Counterparty credit risk exposure for SFT assets	38,604	30,593
15	Agent transaction exposures	-	-
16	Total securities financing transaction exposures	181,718	166,048
Other off-balance sheet exposures			
17	Off-balance sheet exposures at gross notional amount	-	-
18	(Adjustments for conversion to credit equivalent amounts)	-	-
Capital and total exposure measure			
20	Tier 1 capital	16,278	14,070
21	Leverage ratio total exposure measure	444,203	385,170
Leverage ratio			
22	Leverage ratio	3.66%	3.65%
Choice on transitional arrangements and amount of derecognised fiduciary items			
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased in	

Notes:

CGML's leverage ratio remained stable at 3.66% in June 2018. Tier 1 capital increased by \$2,208 million, and the increase in leverage exposure was largely attributed to the below.

- An increase in PFE of \$30,399 million driven by OTC derivatives activities; and
- A further increase in Securities Financing Transactions (SFTs) of \$15,671 million due to Agency Securities Lending trades.

Table 6: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

		30/06/2018	31/12/2017
		\$ million	\$ million
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	100,850	93,078
EU-2	Trading book exposures	98,423	91,441
EU-3	Banking book exposures, of which:	2,427	1,637
EU-4	Covered bonds	-	-
EU-5	Exposures treated as sovereigns	220	325
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	-	-
EU-7	Institutions	300	113
EU-8	Secured by mortgages of immovable properties	-	-
EU-9	Retail exposures	-	-
EU-10	Corporate	379	29
EU-11	Exposures in default	-	-
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	1,528	1,170

4. Credit Risk

As CGMLs exposures are primarily generated as a result of trading book activity, the following tables in this section have not been completed:

- CR1-D: Ageing of past-due exposures;
- CR1-E: Non-performing and forborne exposures;
- CR2-A: Changes in the stock of general and specific credit risk adjustments; and
- CR2-B: Changes in the stock of defaulted and impaired loans and debt securities.

Table 7: CR1-A - Credit quality of exposures by exposure class and instrument

		Gross carrying values		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures					
As at 30 June 2018		\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
Standardised approach								
16	Central governments or central banks	-	220	-	-	-	-	220
17	Regional governments or local authorities	-	-	-	-	-	-	-
18	Public sector entities	-	-	-	-	-	-	-
19	Multilateral development banks	-	-	-	-	-	-	-
20	International organisations	-	-	-	-	-	-	-
21	Institutions	-	665	-	-	-	-	665
22	Corporates	-	1,008	-	-	-	-	1,008
23	<i>Of which: SMEs</i>	-	-	-	-	-	-	-
28	Exposures in default	-	-	-	-	-	-	-
29	Items associated with particularly high risk	-	3	-	-	-	-	3
30	Covered bonds	-	-	-	-	-	-	-
31	Claims on institutions and corporates with a short-term credit assessment	-	1,240	-	-	-	-	1,240
32	Collective investments undertakings	-	-	-	-	-	-	-
33	Equity exposures	-	61	-	-	-	-	61
34	Other exposures	-	224	-	-	-	-	224
35	Total standardised approach	-	3,420	-	-	-	-	3,420
36	Total							
37	Of which: Loans & Receivables	-	1,883	-	-	-	-	1,883
38	Of which: Debt Securities	-	61	-	-	-	-	61
39	Of which: Off-balance sheet exposures	-	-	-	-	-	-	-

Table 7: CR1-A - Credit quality of exposures by exposure class and instrument continued

		Gross carrying values of				Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non- defaulted exposures	Specific credit risk adjustment	General credit risk adjustment			
As at 31 December 2017		\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	
Standardised approach								
16	Central governments or central banks	-	204	-	-	-	204	
17	Regional governments or local authorities	-	-	-	-	-	-	
18	Public sector entities	-	-	-	-	-	-	
19	Multilateral development banks	-	-	-	-	-	-	
20	International organisations	-	-	-	-	-	-	
21	Institutions	-	386	-	-	-	386	
22	Corporates	-	791	-	-	-	791	
23	Of which: SMEs	-	-	-	-	-	-	
28	Exposures in default	-	-	-	-	-	-	
29	Items associated with particular high risk	-	-	-	-	-	-	
30	Covered bonds	-	-	-	-	-	-	
31	Claims on institutions and corporates with a short-term credit assessment	-	979	-	-	-	979	
32	Collective investments undertakings	-	-	-	-	-	-	
33	Equity exposures	-	34	-	-	-	34	
34	Other exposures	-	156	-	-	-	156	
35	Total standardised approach	-	2,551	-	-	-	2,551	
36	Total							
37	Of which: Loans	-	1,116	-	-	-	1,116	
38	Of which: Debt securities	-	34	-	-	-	34	
39	Of which: Off-balance-sheet exposures	-	-	-	-	-	-	

Note:

- CGML's non-defaulted exposure rose by \$869 million to \$3,420 million at June 2018. This is mainly due to increased Institutions and Claims on institutions and corporates with a short-term credit assessment by \$279 million and \$261 million respectively. This was largely due to increases in margin accounts and loans and other receivables.

Table 8: CR1-B: Credit quality of exposures by industry or counterparty types

	Gross carrying values of			General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment				
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
4 Electricity, gas, steam and air conditioning supply	-	-	-	-	-	-	-
10 Information and communication	-	-	-	-	-	-	-
11 <i>Real estate activities</i>	-	31	-	-	-	-	31
12 Professional, scientific and technical activities	-	7	-	-	-	-	7
13 Administrative and support service activities	-	-	-	-	-	-	-
14 Public administration and defence, compulsory social security	-	220	-	-	-	-	220
18 Other services	-	3,163	-	-	-	-	3,163
19 Total	-	3,420	-	-	-	-	3,420
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
4 Electricity, gas, steam and air conditioning supply	-	-	-	-	-	-	-
10 Information and communication	-	-	-	-	-	-	-
11 Real estate activities	-	30	-	-	-	-	30
12 Professional, scientific and technical activities	-	18	-	-	-	-	18
13 Administrative and support service activities	-	-	-	-	-	-	-
14 Public administration and defence, compulsory social security	-	204	-	-	-	-	204
18 Other services	-	2,299	-	-	-	-	2,299
19 Total	-	2,551	-	-	-	-	2,551

Note:

- Exposures to Other services increased by \$864 million to \$3,163 million at June 2018 mainly driven by a rise in Financial and insurance activities. This is attributable to margin accounts for trade executions, cash balances and other receivables.

Table 9: CR1-C - Credit quality of exposures by geography

	Gross carrying values of						Net values
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
United Kingdom	-	1,783	-	-	-	-	1,783
Germany	-	332	-	-	-	-	332
Belgium	-	278	-	-	-	-	278
Rest of EU	-	95	-	-	-	-	95
United States of America	-	384	-	-	-	-	384
Other countries	-	20	-	-	-	-	20
Korea, Republic	-	151	-	-	-	-	151
Taiwan	-	100	-	-	-	-	100
Other countries	-	117	-	-	-	-	117
Russian Federation	-	31	-	-	-	-	31
South Africa	-	23	-	-	-	-	23
Other countries	-	65	-	-	-	-	65
Bahamas	-	30	-	-	-	-	30
Other countries	-	12	-	-	-	-	12
Total	-	3,420	-	-	-	-	3,420
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
United Kingdom	-	1,411	-	-	-	-	1,411
Rest of EU	-	216	-	-	-	-	216
United States of America	-	493	-	-	-	-	493
Canada	-	27	-	-	-	-	27
Taiwan	-	76	-	-	-	-	76
South Korea	-	71	-	-	-	-	71
Rest of APAC	-	115	-	-	-	-	115
Egypt	-	36	-	-	-	-	36
Russia	-	24	-	-	-	-	24
Rest of EMEA	-	50	-	-	-	-	50
LATAM	-	32	-	-	-	-	32
Total	-	2,551	-	-	-	-	2,551

Note:

- Exposures to the United Kingdom and rest of European Union (EU) increased by \$372 million and \$489 million respectively, this is partially offset of \$109 million in the United State of America due to change in composition of trade activities.

Table 10: CR3 - CRM techniques – Overview

		Exposures unsecured – Carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
	As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million
1	Total loans	1,883	-	-	-	-
2	Total debt securities	61	-	-	-	-
3	Total exposures	1,944	-	-	-	-
4	Of which defaulted	-	-	-	-	-
	As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million
1	Total loans	1,116	-	-	-	-
2	Total debt securities	34	-	-	-	-
3	Total exposures	1,150	-	-	-	-
4	Of which defaulted	-	-	-	-	-

Note;

- Total loans increased by \$767 million, mainly driven by \$495 million due to other group undertakings and \$272 million due to third parties.

Table 11: CR4 - Standardised approach – Credit risk exposure and CRM effects

Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance- sheet amount	Off-balance- sheet amount	On-balance- sheet amount	Off-balance- sheet amount	RWAs	RWA density
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
Central governments or central banks	220	-	220	-	549	250.00%
Regional government or local authorities	-	-	-	-	-	0.00%
Public sector entities	-	-	-	-	-	0.00%
Multilateral development banks	-	-	-	-	-	0.00%
International organisations	-	-	-	-	-	0.00%
Institutions	665	-	665	-	245	36.82%
Corporates	1,008	-	1,008	-	1,006	99.87%
Retail	-	-	-	-	-	0.00%
Secured by mortgages on immovable property	-	-	-	-	-	0.00%
Exposures in default	-	-	-	-	-	0.00%
Exposures associated with particularly high risk	3	-	3	-	4	150.00%
Covered bonds	-	-	-	-	-	0.00%
Institutions and corporates with a short-term credit assessment	1,240	-	1,240	-	467	37.69%
Collective investment undertakings	-	-	-	-	-	0.00%
Equity	61	-	61	-	61	100.00%
Other items	224	-	224	-	235	104.90%
Total	3,420	-	3,420	-	2,568	75.08%

Table 11: CR4 - Standardised approach – Credit risk exposure and CRM effects continued

	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million	%
Central governments or central banks	204	-	204	-	511	250.00%
Regional government or local authorities	-	-	-	-	-	0.00%
Public sector entities	-	-	-	-	-	0.00%
Multilateral development banks	-	-	-	-	-	0.00%
International organisations	-	-	-	-	-	0.00%
Institutions	386	-	386	-	210	54.30%
Corporates	791	-	791	-	791	100.00%
Exposures in default	-	-	-	-	-	0.00%
Higher risk categories" should read	-	-	-	-	-	0.00%
Covered bonds	-	-	-	-	-	0.00%
Institutions and corporates with a short-term credit assessment	979	-	979	-	445	45.40%
Collective investment undertakings	-	-	-	-	-	0.00%
Equity	34	-	34	-	34	100.00%
Other items	156	-	156	-	167	107.00%
Total	2,551	-	2,551	-	2,157	84.60%

Notes:

- The RWA density is defined as the total risk-weighted exposures divided by exposures post CCF and post CRM.
- The increases are primarily driven by exposures to Institutions and corporates with a short-term credit as noted in Table 7: CR1-A.

Table 12: CR5 - Standardised approach - Risk Weighted

\$ million	Risk weight (%)														Of which	
	0	2	4	20	35	50	75	100	150	250	370	1250	Others	Deducted		Total
Exposure classes																
As at 30 June 2018																
Central governments or central banks	-	-	-	-	-	-	-	-	-	220	-	-	-	-	220	220
Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	306	-	351	-	8	-	-	-	-	-	-	665	314
Corporates	-	-	-	-	-	3	-	1,005	-	-	-	-	-	-	1,008	1,002
Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	3	-	-	-	-	-	3	3
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	539	-	683	-	18	-	-	-	-	-	-	1,240	-
Collective investment undertakings	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-
Equity	-	-	-	-	-	-	-	61	-	-	-	-	-	-	61	61
Other items	-	-	-	-	-	-	-	217	-	7	-	-	-	-	224	224
Total	-	-	-	845	-	1,037	-	1,309	3	227	-	-	-	-	3,420	1,823
Exposure classes																
As at 31 December 2017																
Central governments or central banks	-	-	-	-	-	-	-	-	-	204	-	-	-	-	204	204
Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	54	-	266	-	66	-	-	-	-	-	-	386	117
Corporates	-	-	-	-	-	-	-	791	-	-	-	-	-	-	791	791
Exposures in default	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	-	-	-	186	-	772	-	22	-	-	-	-	-	-	979	-
Collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity	-	-	-	-	-	-	-	34	-	-	-	-	-	-	34	34
Other items	-	-	-	-	-	-	-	149	-	7	-	-	-	-	156	156
Total	-	-	-	240	-	1,038	-	1,061	-	212	-	-	-	-	2,551	1,302

5. 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 expected positive exposure (EPE) 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. 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 which is a percentage of notional driven by residual maturity and the type of contract, i.e. interest rate, equities etc.

Table 13: CCR1: Analysis of CCR exposure by approach

This table provide a comprehensive view of the methods used by CGML to calculate Counterparty Credit Risk (CCR) regulatory requirements and the main parameters used within each method. This excludes CVA charges or exposures cleared through a CCP.

	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
1 Mark to market		10,927	36,749			33,200	23,275
4 IMM (for derivatives and SFTs)				21,903	1	15,645	9,836
5 Of which securities financing transactions							
6 Of which derivatives and long settlement transactions				21,903	1	15,645	9,836
7 Of which from contractual cross-product netting						-	-
8 Financial collateral simple method (for SFTs)						-	-
9 Financial collateral comprehensive method (for SFTs)						55,008	43,599
10 VaR for SFTs							
11 Total							76,710

Table 13: CCR1: Analysis of CCR exposure by approach continued

	Replacement cost/current		Potential future credit	EEPE Multiplier		EAD post CRM	RWAs
	Notional market value	\$ million	exposure	\$ million	\$ million	\$ million	\$ million
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
1 Mark to market		20,180	86,296			27,413	19,115
4 IMM (for derivatives) Of which securities financing transactions				18,786	1	13,418	8,798
5 Of which derivatives transactions Of which from contractual cross-product netting				18,786	1	13,418	8,798
7 Financial collateral simple method (for SFTs)						-	-
8 Financial collateral comprehensive method (for SFTs)						-	-
9 VaR for SFTs						48,052	34,941
10 VaR for SFTs						-	-
11 Total							62,854

Notes:

The counterparty credit risk RWA increased by \$23,692 million to \$86,546 million at June 2018 due to the following;

- Increase in Mark to Market (MtM) and Internal Model methods (IMM) mainly due to increase in OTC derivatives exposures by \$5,198 million;
- Financial collateral comprehensive method (FCCM) for SFTs increased by \$8,658 million mainly driven by increased activities in Agency Securities Lending trades.

Table 14: CCR2 - Credit valuation adjustment (CVA) capital charge

This table provides the regulatory calculations for CVA under the standardised and advanced method approaches.

	As at 30 June 2018		As at 31 December 2017	
	Exposure value	RWAs	Exposure value	RWAs
	\$ million	\$ million	\$ million	\$ million
1 Total portfolios subject to the advanced method	12,084	2,515	10,993	1,709
2 (i) VaR component (including the 3x multiplier)		877		636
3 (ii) SVaR component (including the 3x multiplier)		1,638		1,073
4 All portfolios subject to the standardised method	20,660	7,923	17,604	5,741
5 Total subject to the CVA capital charge	32,744	10,438	28,597	7,450

Note:

- CVA RWA increased by \$2,988 million, primarily driven by \$2,182 million in standardised method reflecting the increase in OTC derivatives activities.

Table 15: CCR8 - Exposures to CCPs

This table provides a comprehensive picture of the institution's exposures to CCPs. In particular, the template includes all types of exposures (due to operations, margins, and contributions to default funds) and related capital requirements.

	As at 30 June 2018		As at 31 December 2017	
	EAD post CRM	RWAs	EAD post CRM	RWAs
	\$ million	\$ million	\$ million	\$ million
1 Exposures to QCCPs (total)		812		769
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	16,298	572	15,283	384
3 (i) OTC derivatives	5,458	183	3,151	63
4 (ii) Exchange-traded derivatives	8,069	249	7,451	222
5 (iii) SFTs	2,771	140	4,681	99
6 (iv) Netting sets where cross-product netting has been approved	-	-	-	-
7 Segregated initial margin	-	-	-	-
8 Non-segregated initial margin	2,053	41	2,171	44
9 Prefunded default fund contributions	623	199	652	341
10 Alternative calculation of own funds requirements for exposures	-	-	-	-
11 Exposures to non-QCCPs (total)				
12 Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-	-	-
13 (i) OTC derivatives	-	-	-	-
14 (ii) Exchange-traded derivatives	-	-	-	-
15 (iii) SFTs	-	-	-	-
16 (iv) Netting sets where cross-product netting has been approved	-	-	-	-
17 Segregated initial margin	-	-	-	-
18 Non-segregated initial margin	-	-	-	-
19 Prefunded default fund contributions	-	-	-	-
20 Unfunded default fund contributions	-	-	-	-

Notes:

- In line with the EBA 'extension of the transitional period related to exposures to CCPs (No 648/2012)' an Implementing Regulation (EU) 2018/815 was published in June 2018 allowing firms to continue to treat exposures to CCPs as QCCP exposures for an additional six months until December 15, 2018.
- Exposures to Central Counterparties increased by \$1,015 million primarily driven by increased OTC trade activities of \$2,307 million. This was offset by a \$1,910 million decrease in SFT transactions.

Table 16: CCR3 Standardised approach – CCR exposures by regulatory portfolio and risk

This table provides a breakdown of Counterparty Credit Risk exposures and risk-weighted by portfolio (type of counterparties) and by risk weight (riskiness attributed according to the standardised approach).

Exposure classes	Risk weight								Total	Of which unrated
	0%	2%	4%	20%	50%	100%	150%	Others		
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
1 Central governments or central banks	4,619	-	-	985	1	12,410	-	-	18,015	12,802
2 Regional government or local authorities	-	-	-	566	-	11	4	-	581	4
3 Public sector entities	-	-	-	212	-	787	-	-	999	742
4 Multilateral development banks	-	-	-	-	-	-	-	-	-	-
5 International organisations	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	13,707	4,110	6,816	28,818	487	1,384	-	55,322	11,092
7 Corporates	-	-	-	480	1,795	40,313	903	-	43,491	39,551
8 Retail Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-
9	-	-	-	207	3,053	99	436	-	3,795	-
10 Other items	-	-	-	-	-	-	-	-	-	-
11 Total	4,619	13,707	4,110	9,266	33,667	54,107	2,727	-	122,203	64,191
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
1 Central governments or central banks	3,611	-	-	973	9	10,663	-	-	15,256	10,742
2 Regional government or local authorities	56	-	-	747	-	22	-	-	825	-
3 Public sector entities	3,599	-	-	293	-	342	-	-	4,234	1,727
4 Multilateral development banks	-	-	-	-	-	-	-	-	-	-
5 International organisations	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	13,797	3,651	4,753	23,896	740	27	-	46,863	14,994
7 Corporates	-	-	-	710	886	33,324	9	-	34,929	31,803
9 Institutions and corporates with a short-term credit assessment	-	-	-	68	2,385	92	1,673	-	4,218	35
10 Other items	-	-	-	-	-	-	12	-	12	-
Exposures in default	-	-	-	-	-	-	12	-	12	-
11 Total	7,267	13,797	3,651	7,543	27,176	45,181	1,722	-	106,337	59,301

Notes:

Standardised counterparty credit risk exposures increased \$15,866million, mainly driven by;

- An increase of \$6,491 million to \$33,667 million in the 50% risk weighted exposures, driven by OTC derivative trades of \$4,143 million and \$2,282 million of SFT transactions.

- An increase of \$8,926 million driven by SFTs and a further increase of \$2,010 million in the OTC derivatives transactions in the 100% risk weighted exposures.
- 150% risk weighted exposures increased by \$1,001 million due to a recent EBA guidance.

Table 17: CCR7- RWA flow statements of CCR exposures under the IMM

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.

	As at 30 June 2018		As at 31 December 2017	
	RWA amounts	Capital requirements	RWA amounts	Capital requirements
	\$ million	\$ million	\$ million	\$ million
1 RWAs as at the end of the previous reporting period	11,335	907	9,539	763
2 Asset size	(2,791)	(223)	(716)	(57)
3 Credit quality of counterparties	(30)	(2)	-	-
4 Model updates (IMM only)	1,393	111	-	-
5 Methodology and policy (IMM only)	0	0	-	-
7 Foreign exchange movements	0	0	-	-
9 RWAs as at the end of the current reporting period	9,907	793	8,823	706

Notes:

Counterparty credit risk RWAs rose by \$1,084 million driven by;

- An increase in model updates due to new PRA approved products migrated from Mark to market into the IMM; and
- A decrease in exposures valued under the IMM.

Table 18: CCR5-A - Impact of netting and collateral held on exposure values

The table provides an overview of the impact of netting and collateral held on exposures for SFT and derivatives, including exposures arising from transactions cleared through a CCP.

		Gross positive fair value			Netted current credit exposure	Collateral held	Net credit exposure
		or net carrying amount	Netting benefits				
As at 30 June 2018		\$ million	\$ million	\$ million	\$ million	\$ million	
1	Derivatives	356,741	262,226	94,515	40,329	64,426	
2	SFTs	409,312	(20,940)	388,371	396,451	57,778	
4	Total	766,053	241,286	482,886	436,780	122,204	
As at 31 December 2017		\$m	\$m	\$m	\$m	\$m	
1	Derivatives	347,831	267,610	80,221	102,329	53,603	
2	SFTs	398,193	(21,700)	376,493	347,454	52,734	
4	Total	746,024	245,910	456,714	449,782	106,337	

Netted current credit exposure increased for both derivatives and SFTs due to rise in trading activities.

Table 19: CCR5-B - Composition of collateral for exposures to CCR

This table shows the breakdown of all types of collateral posted or received by CGML to support or reduce Counterparty Credit Risk exposures related to derivative transactions or to SFTs, including transactions cleared through a CCP.

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
Cash	-	24,193	-	20,728	13,385	34,652
Debt	1,350	10,183	-	5,176	261,571	266,934
Equity	153	-	-	0	69,095	69,000
Other	-	93	-	325	0	0
Total	1,503	34,470	-	26,230	344,051	370,587
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
Cash	-	15,198	-	13,690	47,282	65,090
Debt	12	14,270	582	11,053	194,871	190,694
Equity	-	60	-	-	50,020	46,004
Other	-	-	-	-	56,583	61,120
Total	12	29,528	582	24,743	348,775	362,907

Unsegregated derivatives collateral received increased by \$4,942 million due to a rise in trading activities.

Table 20: CCR6: Credit derivatives exposures

The table below illustrates the extent of CGML's exposures to credit derivative transactions broken down between derivatives bought or sold.

	Credit derivative hedges		Other credit derivatives	
	Protection bought	Protection sold	Protection bought	Protection sold
As at 30 June 2018	\$ million	\$ million	\$ million	\$ million
Notionals				
Single-name credit default sw aps	768	439	257,246	257,566
Index credit default sw aps	865	754	378,390	376,728
Total return sw aps			291	138
Credit options			14,720	14,603
Other credit derivatives			7,683	8,840
Total notionals	1,634	1,192	658,329	657,874
Fair values				
<i>Positive fair value (asset)</i>	18	0	2,328	12,882
<i>Negative fair value (liability)</i>	0	(26)	(12,832)	(2,278)

Table 20: CCR6: Credit derivatives exposures – continued

	Credit derivative hedges		Other credit derivatives	
	Protection bought	Protection sold	Protection bought	Protection sold
As at 31 December 2017	\$ million	\$ million	\$ million	\$ million
Notionals				
Single-name credit default sw aps	725.17	434	270,290	269,548
Index credit default sw aps	770	716	282,607	281,589
Total return sw aps	-	-	258	109
Credit options	-	-	26,948	26,948
Other credit derivatives	-	-	3,407	3,129
Total notionals	1,496	1,150	583,511	581,323
Fair values				
<i>Positive fair value (asset)</i>	0	29	1,050	15,562
<i>Negative fair value (liability)</i>	(39)	0	(15,646)	(1,002)

6. Market Risk

CGML uses a Value at Risk (VaR) model to calculate market risk capital requirements for the majority of its trading portfolio under an Internal Models Approach (IMA) permission granted by the PRA. The permission covers general market risk and issuer specific risk for a number of Fixed Income, 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).

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

6.1. IMA Approach

Table 21: MR2-A - Market risk under the IMA

This table display the components of the own funds requirements under the IMA for market risk.

	As at 30 June 2018		As at 31 December 2017	
	RWAs requirements	Capital	RWAs requirements	Capital
	\$ million	\$ million	\$ million	\$ million
1 VaR (higher of values a and b)	4,228	338	3,460	277
(a) Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		185		164
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		338		277
2 SVaR (higher of values a and b)	8,242	659	7,237	579
(a) Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		529		369
Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms)		659		579
(b) (Article 366 of the CRR)				
3 IRC (higher of values a and b)	3,989	319	4,423	354
Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		222		331
(a) CRR				
(b) Average of the IRC number over the preceding 12 weeks Comprehensive risk measure (higher of values a, b and c)		319		354
4	-	-	-	-
Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)				
(a) CRR				
Average of the risk number for the correlation trading portfolio over the preceding 12 weeks				
(b) the preceding 12 weeks				
8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio				
(c) (Article 338(4) of the CRR)				
5 Other	-	-	-	-
6 Total	16,460	1,317	15,120	1,210

Table 22: MR2-B - RWA flow statements of market risk exposures under the IMA

The table presents a flow statement explaining variations in the market RWAs.

	VaR	SVaR	IRC	Other	Total RWAs	Total capital requirements
	\$ million	\$ million	\$ million	\$ million	\$ million	\$ million
1 RWAs at 31 March 2018	4,392	9,158	4,793	0	18,343	1,467
1a <i>Regulatory adjustment</i>	(1,278)	(1,022)	(693)	0	(2,993)	(239)
<i>RWAs at the previous quarter-end (end of the day)</i>	3,114	8,137	4,100	0	15,351	1,228
2 Movement in risk levels	(670)	(1,400)	(1,319)	0	(3,388)	(271)
3 Model updates/changes	(136)	(129)	0	0	(264)	(21)
4 Methodology and policy	0	0	0	0	0	0
5 Acquisitions and disposals	0	0	0	0	0	0
6 Foreign exchange movements	0	0	0	0	0	0
7 Other	0	0	0	0	0	0
<i>RWAs at the end of the reporting period (end of the day)</i>	2,309	6,609	2,780	0	11,698	936
8a <i>Regulatory adjustment</i>	1,920	1,634	1,209	0	4,762	381
8 RWAs at 30 June 2018	4,228	8,242	3,989	0	16,460	1,317

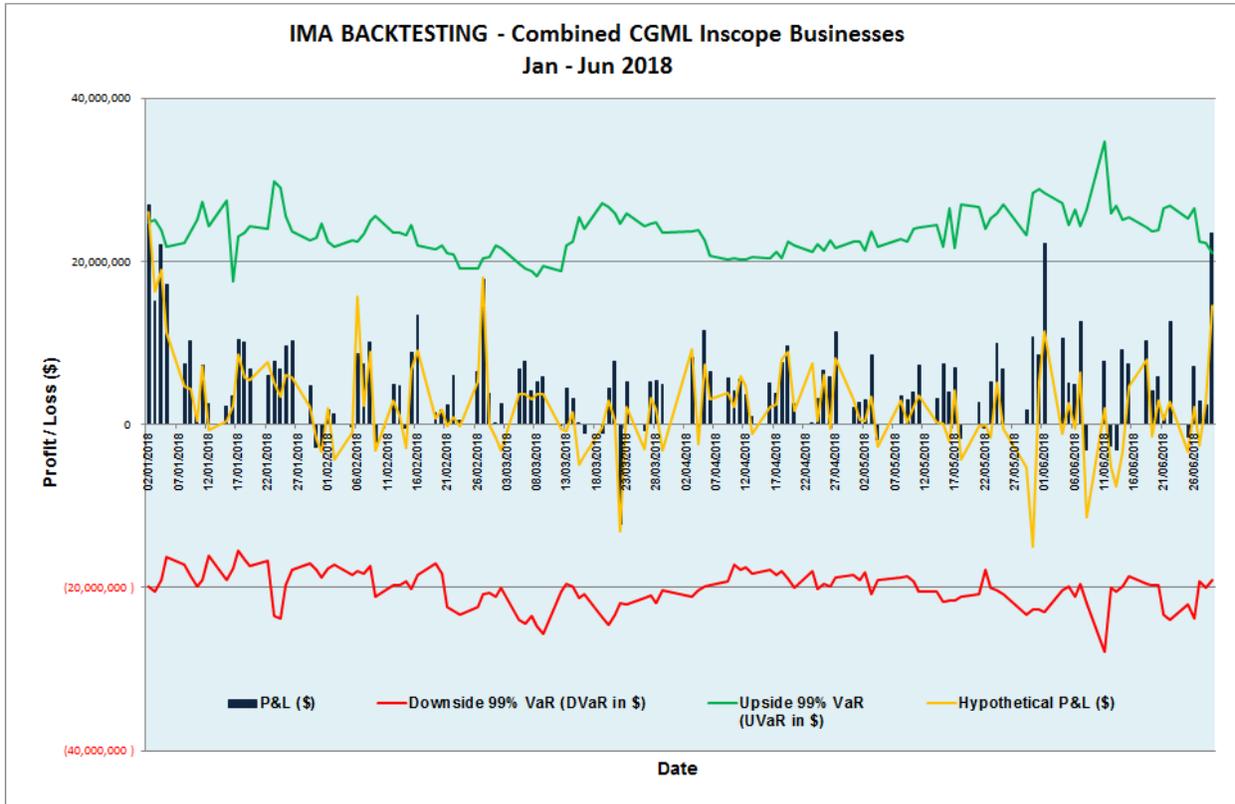
Table 23: MR3 - IMA values for trading portfolios

This table displays the values (maximum, minimum, average and the ending for the reporting period) resulting from the different types of models approved to be used for computing the regulatory capital charge at the group level, before any additional capital charge is applied on the value in accordance with Article 365 in Part Three, Title V, Chapter 5 of the CRR.

	30-Jun-18	31-Dec-17
	\$ million	\$ million
VaR (10 day 99%)		
1 Maximum value	151	81
2 Average value	62	48
3 Minimum value	38	30
4 Period end	58	46
SVaR (10 day 99%)		
5 Maximum value	210	268
6 Average value	96	88
7 Minimum value	32	7
8 Period end	90	69
IRC (99.9%)		
9 Maximum value	543	482
10 Average value	331	248
11 Minimum value	202	149
12 Period end	202	324
Comprehensive risk capital charge (99.9%)		
13 Maximum value	-	-
14 Average value	-	-
15 Minimum value	-	-
16 Period end	-	-

Table 24: MR4 - Comparison of VaR estimates with gains/losses

The table presents a comparison of the results of estimates from the regulatory VaR model approved with both hypothetical and actual trading outcomes, in order to highlight the frequency and the extent of the backtesting exceptions and to give an analysis of the main outliers in backtested results.



There were two upside exceptions in the half year to June 2018, primarily driven by the Rates and Equities businesses.

6.2. Standardised Approach

Although CGML uses the standardised approach to calculate regulatory capital requirements for only a small proportion of the trading portfolio, nonetheless, this generates a larger number in terms of RWAs and capital that the firm needs to be hold against these assets.

Table 25: MR1 - Market risk under the standardised approach

The table display the components of own funds requirements under the standardised approach for market risk.

	As at 30 June 2018		As at 31 December 2018	
	RWAs	Capital requirements	RWAs	Capital requirements
	\$ million	\$ million	\$ million	\$ million
Outright products				
1 Interest rate risk (general and specific)	8,728	698	8,887	711
2 Equity risk (general and specific)	4,883	391	10,603	848
3 Foreign exchange risk	2,982	239	1,851	148
4 Commodity risk	1,487	119	1,000	80
Options				
5 Simplified approach	0	0	-	-
6 Delta-plus method	70	6	-	-
7 Scenario approach	1,142	91	558	45
8 Securitisation (specific risk)	316	25	150	12
9 Total	19,607	1,569	23,050	1,844

Notes:

Market risk under standardised approach decreased by \$3,443 million, driven by;

- A decrease in Equity risk of \$5,720 million due to Funds PRR; and
- An increase in Foreign exchange risk of \$1,131 million in the Eurozone countries.

7. Business Continuity Management

7.1. Governance

In line with the requirements of the EBA Guidelines on internal governance under Directive 2013/36/EU (EBA/GL/2017/11), the following section provides an overview of CGML's Business Continuity Management Framework.

Citi's Continuity of Business (CoB) Policy and Standards require all Citi businesses, including those businesses under GCML, to implement a CoB Program that includes; Assessment processes, Crisis Management Plans, Recovery Planning, Testing, Maintenance, Independent Review, Monitoring and Reporting, as well as Training and Awareness.

The Citi Business Continuity Management organisation is responsible for developing and managing the enterprise-wide CoB policy, standards, tools and guidance. The organisation reports to management on a monthly basis and provides annual reporting of the effectiveness of and business compliance with this policy to the Audit Committees of Citigroup Inc. and Citibank, N.A.

The CoB Policy (section 2.1) requires each business to define a structure of CoB Entities, or business units, for purposes of CoB documentation and testing.

As stated in the CoB Policy, "Citi's CoB program facilitates the recovery of critical elements to: (i) minimize the effects of business disruptions, (ii) ensure the continuity of service and support for its customers, and (iii) maintain its resilience and viability before, during, and after an adverse event (e.g., natural or manmade disaster, technological failure)".

The following scenarios are considered as part of the CoB planning process and must be documented in the Business Recovery plan ; Denial of Access (loss of premises), Denial of Service (loss of technology) and unavailability of staff (inclusive of external third parties).

As defined in the CoB Standards, additional analysis and assessment is performed for all in-scope locations through Threat and Vulnerability Analysis and Proximity Risk Assessments. External third parties' resilience and recovery capabilities must also be assessed.

7.2. Contingency and Business Continuity Planning

Testing

Business and technology testing must verify that processes can be recovered in line with the business's continuity objectives, as defined by the Business Impact Analysis (BIA) process. Testing scenarios through Denial of Access (DoA), Denial of Service (DoS) and the unavailability of services provided by external third-parties ensure recovery strategies are in place. Business recovery teams, crisis management teams, infrastructure teams and application teams must participate in CoB testing, as appropriate. Detailed requirements for testing are defined in the CoB Testing Standards.

Maintenance

CoB documentation, including policy, standards, as well as recovery and crisis management plans are reviewed and approved at least annually, and refreshed more frequently as needed. The specific maintenance triggers for the CoB documentation are listed in the Standards. In addition, call trees are refreshed at least semi-annually.

7.3. Recovery Planning

Business units and technology organisations must document and maintain plans for recovery of their processes in the event of a business interruption or technology service disruption.

Business Recovery Plans (BRPs) are prioritised based on their Criticality Ratings, which are determined by the Criticality Rating of the highest rated process listed in the BIA. BRPs must be executable within the Recovery Time Objective (RTO) defined in the BIA.

Each CoB Entity must create and maintain a BRP specific to that CoB Entity. The BRPs must document recovery strategies to mitigate the effects of disruptions including DoS, DoA, and unavailability of staff (inclusive of external third parties).

The CoB Standards prescribes that the BIA must “define risk thresholds... and reflect local regulatory requirements as well as liquidity issues”. The BIA must also “identify interdependencies between processes and the required resources to ensure acceptable levels of operation.”

7.4. Documentation and Training

Citi’s Business Continuity Planning tool – COB Trac – is the common repository used across the firm and by CGML for the documentation of CoB Plans and, by virtue of being an online application, CoB Trac is readily accessible by users in the case of a contingency.

- Citi’s CoB Testing Standards defines the minimum testing required for business, application and technology recovery strategies. The resulting CoB testing programme ensures plans are regularly tested.
- Citi Business Continuity Management makes available a set of core business continuity training activities and classes. All businesses must use the Corporate Training Program as a basis for providing CoB training for their staff.
- All Business Recovery Coordinators (BRCs) entitled in CoB Trac must complete a minimum of one pre-approved training activity per year.

8. Conflict of Interest Policy

Citi's Code of Conduct (the "Code") sets forth expectations with regards to avoiding actual or perceived Conflicts of Interest. The Code highlights some of the most common potential conflicts of interest and provides guidance on how to manage, mitigate and wherever possible, avoid the conflict.

Citi's Employment of Relatives Policy establishes minimum standards regarding the employment of immediate family members and other relatives of Citi employees throughout every phase of the employment relationship, such as recruiting, hiring, and internal transfers, unless those standards would conflict with applicable law in any country. This is in conjunction with the Anti-Bribery and Corruption (AB&C) Policy and the Global AB&C Hiring Procedures.

The Code sets expectations as to personal and related-party business dealings. There are additional responsibilities of Senior Leaders. Directors and senior executives of the Citigroup Inc. legal entity must follow all additional rules regarding pre-approvals of business transactions, as included in the Citi Policy on Related Party Transactions. Additionally, certain executives must adhere to disclosure requirements and limitations on lending relationships with Citi, as included in the Insider Lending Policy.

There are mandatory requirements through Citi's Gifts and Entertainment Standard, Citi Outside Directorships and Business Interests Policy, Personal Trading Policy for Citi Access Persons, the Employee Personal Trading and Investment Policy for Citi Brokerage and Advisory Persons, the Client Conflicts of Interest Management Policy, Citi Anti-Tying Policy, Bank Affiliate Transactions Policy and the Global Consumer Fairness Policy.

The firm has in place systems and controls concerning Information Barriers which are designed to shield potentially material non-public information received by workers engaged in lending, investment banking or merchant banking activities (private-side information) from those workers who trade or advise on trading in securities based on publicly available information or who engage in investment management activities (public-side activities). We also use information barriers to address potential and actual conflicts of interest among business activities. Citi has established various information barriers and deal-team procedures within businesses engaging in certain private-side activities to prevent confidential information from being shared with individuals who are not authorized to know such information.

8.1. Internal Alerts and Breach

Citi's Code sets forth expectations of professional behaviour and key regulatory requirements and policies, including the obligation of employees to raise concerns when they reasonably suspect or become aware of violations of law or regulation, or breaches of internal policies or the Code. In addition, Citi's Escalation Policy explains what to escalate, when to escalate and to whom to escalate. It includes roles and responsibilities for the identification, reporting, investigation and resolution of these concerns, and for oversight of escalation requirements and processes.

Employees are encouraged to raise concerns to their managers in the first instance, but employees may also raise concerns to any of the following:

- The appointed person under any applicable local disclosure procedure
- Human Resources, employee, or labour relations representative
- Internal legal counsel
- Compliance Officer
- The Citi Ethics Office

The Citi Ethics Office, based in New York, is responsible for administering Citi's global Ethics Hotline, which is comprised of five communication channels (telephone, email, web, fax, and mail) that employees across Citi can use to raise concerns. Reports to the Ethics Hotline can be made anonymously unless prohibited by applicable law or regulation. All contacts to the Citi Ethics Office and related investigations

are treated as confidentially as possible, consistent with the need to investigate the matter, and pursuant to local law and regulation.

Citi prohibits any form of retaliatory action against individuals who raise concerns or questions in good faith regarding ethics, discrimination, or harassment matters; report suspected violations of other applicable laws, regulations, or policies; or participate in a subsequent investigation of such concerns. Employees who engage in retaliation against a colleague because he or she has raised a concern or question in good faith or for participating in an investigation may be subject to disciplinary action, up to and including termination of employment.

Nothing in the Code or Escalation Policy prohibits or restricts members of staff from raising a concern to any government, regulatory, or self-regulatory agency at any stage.