

CITIGROUP GLOBAL MARKETS LIMITED

(Registered Number: 01763297)

ANNUAL REPORT AND FINANCIAL STATEMENTS

for the year ended 31 December 2018

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

The Directors present their strategic report on Citigroup Global Markets Limited (CGML or the Company) for the year ended 31 December 2018.

1. Introduction

CGML is a wholly owned, indirect subsidiary of Citigroup Inc. It is Citi's 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. CGML operates globally, generating the majority of its business from the Europe, Middle East and Africa (EMEA) region with the remainder coming from Asia and the Americas.

CGML is authorised by the Prudential Regulation Authority (PRA) and regulated by the PRA and Financial Conduct Authority (FCA). CGML is also a Commodity Futures Trading Commission (CFTC) registered swap dealer and is considered a Risk Taking/Operating Material Legal Entity in Citi's Global Resolution Plan. As at 31 December 2018, it had seven branch offices and five subsidiaries, listed below. The branch in Ireland was closed during 2018. Changes after the reporting period are discussed in the Strategic and Directors' Reports and in Note 34 'Events after the reporting period'.

EU Branches	Subsidiaries
Czech Republic	Citigroup Global Markets Luxembourg S.a.R.L. (Luxembourg) (in liquidation)
France	Citigroup Global Markets Funding Luxembourg SCA (Luxembourg)
Italy	Citigroup Global Markets Funding Luxembourg GP S.a.R.L. (Luxembourg)
Spain	Citi Global Wealth Management S.A.M. (Monaco)
Non-EU Branches	Citigroup Global Markets Europe AG (purchased in April 2018)
Israel	Citigroup South Africa Credit Products (Proprietary) Limited (South Africa) (dissolved in November 2017 and final distribution and closure in 2018)
Switzerland	
UAE	

CGML's business falls within the Institutional Clients Group (ICG) segment of Citi's operations and is almost entirely wholesale in nature, with a client base that encompasses corporates, institutions and governments. CGML's principal business activities are summarised below:

<i>Business</i>	<i>Activities</i>
G10 Rates	Makes markets and facilitates client activity across interest rate products in G10 markets, including sovereign and supranational bonds, inflation bonds, and interest rate, cross currency and inflation derivatives. It conducts much of its client facing activity on CGML with some market risk transferred to other Citi affiliates. It includes the Finance Desk, which acts as CGML's funding utility.
Global Credit and Securitised Markets	Provides clients with access to investment grade, high yield and distressed bond markets, as well as credit derivatives and structured credit products.
Equity Markets including the Multi Asset group	Equities undertakes market making in, and provides clients with exposure to, equities, convertible bonds, listed and OTC derivatives, structured products, securities financing, and electronic trading. The Multi Asset Group develops asset-side investment and hedging solutions for distributors and institutional investors, with a particular focus on insurance companies, asset managers (including hedge funds) and pension funds.
Prime, Futures & Securities Services (PFSS)	Comprises: <ul style="list-style-type: none"> • Prime Finance, provides globally co-ordinated prime brokerage services to clients, including securities lending, margin financing, reporting, clearing, custody and structured financing solutions. • Delta One, which provides access, financing and investment solutions to a broad spectrum of clients (institutional, corporates and hedge funds) via synthetic products such as swaps, exchange traded funds (ETFs) and access products. • Futures & OTC Clearing, which provides clients with access to global liquidity venues, global execution on all major futures exchanges, multi-asset clearing services on global central counterparties (CCPs) and delivery of collateral solutions.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

1. Introduction (continued)

<i>Business</i>	<i>Activities</i>
Commodities	Acts as a principal in commodity markets worldwide, providing risk management services to clients, acting as a liquidity provider and providing investor solutions and working capital facilities for commodity inventories.
Foreign Exchange and Local Markets (FXLM)	Facilitates local and international client demand for flow FX products, such as spot and forward contracts, short term interest rate products, and interest rate and currency derivatives. FX risk is largely warehoused on other affiliated Citi entities, with CGML acting in a client facing capacity. In particular, the business utilises CGML to access non-US primary market liquidity pools in non-deliverable forward contracts and FX options.
Banking, Capital Markets and Advisory	<p>Capital Markets Origination provides structuring and syndication of securities and financing transactions in the bond capital markets and delivers equity and equity-linked solutions in financing acquisitions, funding capital expenditures, managing liabilities, monetising assets and hedging exposures.</p> <p>Corporate and Investment Banking coordinates the overall relationship with clients across all business areas from Corporate Banking and coverage in regards to episodic products out of Investment Banking.</p>

A number of CGML's functional operations are carried out in locations outside London, including at Citi Service Centres (CSCs) in Belfast, Budapest and Warsaw. In addition, CGML makes use of a number of affiliated and third party outsourcing arrangements outside EMEA.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

2. CGML Governance and Principal Risks

CGML has an established management and governance framework incorporating all of its businesses and functions. Its Board of Directors (the Board) consists of executive and non-executive directors, including the EMEA Chief Executive Officer (CEO), the Citi Country Officer (CCO) for the UK, the EMEA Chief Administrative Officer (CAO) and the EMEA Head of Markets and Securities Services (MSS).

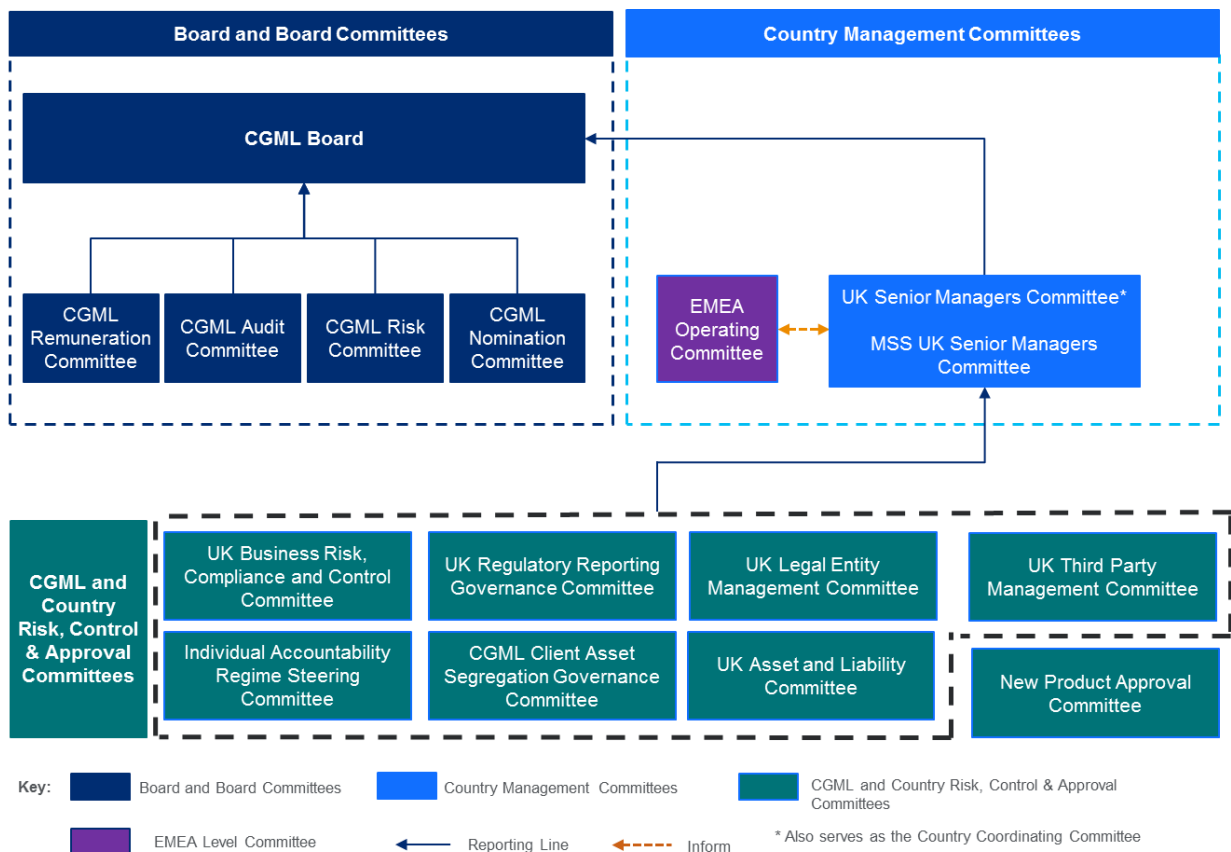
The Board is supported by UK Senior Managers and the relevant EMEA and UK business heads together with the regional and country heads of Risk, Finance, Operations & Technology, Legal, Compliance and Human Resources.

Senior Manager Certification Regime (SMCR)

The SMCR focuses on a small number of individuals (Senior Managers) who hold key roles or have overall responsibility for whole areas of relevant UK entities and branches. Senior Managers require regulatory pre-approval to perform a Senior Management Function (SMF). The SMCR requires Senior Managers to take reasonable steps to avoid a breach occurring or continuing. As part of the Individual Accountability Regime (of which the SMCR is a part), CGML maintains a Management Responsibilities Map which documents the firm's governance arrangements.

As at 31 December 2018 Citi had 34 approved Senior Managers, of whom 4 were CGML non-executive directors.

The chart below highlights the main components of CGML's governance structure, within Citi's regional and UK management and governance framework during 2018:



CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

2. CGML Governance and Principal Risks (continued)

Principal Risks

CGML's principal risks arise from the nature of the services provided to its clients and include both financial and non-financial elements. The principal risks identified by management and covered by CGML's risk management framework are noted as follows, and are described in more detail in Note 30 'Financial instruments and risk management':

- reputational and franchise risk;
- market risk;
- liquidity risk;
- credit risk;
- operational risk;
- country risk; and
- pension risk.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

3. Mission and Strategy

CGML's mission, in line with that of Citi, is to serve as a trusted partner to its clients by responsibly providing financial services that enable growth and economic progress. CGML's core activities are being a dealer, market maker and underwriter and providing advisory services. Whilst carrying out these activities, it ensures that actions are always in its clients' interests, create economic value and are systemically responsible.

The strategic priorities set out by CGML for 2018 were as follows:

- *Continuing to be the best for its clients by enhancing the depth and quality of its customer engagement and ensuring successful implementation of its plans for the UK's proposed departure from the European Union*

Citi maintained its strong client rankings across Fixed Income products and continued its improvement in Equities. It also consolidated its top 3 ranking across capital markets origination and mergers and acquisitions.

Following Board and Regulatory approvals in the UK and Germany, CGML purchased a German Citi affiliate, Citigroup Global Markets Europe (CGME), in April 2018 to create an EEA Investment Firm. This represented a key milestone in CGML's planning to continue to deliver high standards of service to European clients following the UK's decision to leave the European Union. 2019 will see further execution of this strategy with CGML's remaining European branches being closed and the business being moved to newly created CGME branches.

- *Attraction, development and retention of talent including promotion of diversity and furtherance of equal employment opportunities*

Commitment to Diversity and Inclusion is core to Citi's values. As part of its pledge to the Women in Finance Charter, Citi has set a goal to increase the number of senior management roles held by women. Citi is also focusing on ensuring a balanced gender intake to its graduate recruitment programmes. These developments are further supported by initiatives to identify and retain high performing employees.

- *Investment and growth in the Equities franchise*

The Company continued to grow and expand its activities with a focus on the Equities business, where revenue rose year-over-year driven by increased income on derivatives activity.

- *Maintaining robust capital and liquidity levels, improvement in key financial performance indicators and continuous enhancement of the internal control infrastructure*

Capital and liquidity levels are monitored on a daily basis and have been maintained at robust levels throughout 2018. Financial performance indicators have improved during 2018, reflecting revenue growth in target products and continued expense discipline as well as one-off gains in 2018.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

3. Mission and Strategy (continued)

Key Financial Performance Metrics

	2018	2017 ⁽¹⁾	Change on year
Operating Efficiency <i>(operating expense as a percentage of revenue)</i>	78.7%	85.16%	6.5%
Return on Assets (basis points) <i>(Net income as a proportion of total assets)</i>	18.8	13.7	5.1
Return on Tangible Common Equity <i>(Net income as a proportion of TCE)</i>	5.03%	3.64%	1.39%
Return on Tier 1 Capital <i>(Net income as a proportion of Tier 1 capital)</i>	4.37%	3.23%	1.14%

⁽¹⁾ The 2017 returns exclude Debt Valuation Adjustment (DVA) reported within Net Income. In accordance with IFRS 9, 2018 DVA is reported within Other Comprehensive Income (OCI).

4. Financial Highlights

The execution of CGML's strategy in 2018 enabled the Company to continue to improve its annual profitability.

4.1 Income Statement Summary

	2018	2017
	\$ Million	\$ Million
Commission income and fees	1,535	1,342
Net dealing income	2,414	1,953
Interest receivable	1,726	1,229
Interest payable	(2,203)	(1,600)
Gross profit	3,472	2,924
Operating expenses	(2,731)	(2,490)
Other income and expenses	19	17
Operating profit on ordinary activities before taxation	760	451

CGML's strategic priority to build on client engagement while maintaining a disciplined risk profile has been reflected in increased operating profit for the fifth consecutive year.

Gross Profit

Gross profit rose by \$548 million, a 19% increase on 2017.

Fee and commission income

Commission Fee and Income results from the Banking, Capital Markets and Advisory business, from Equity Cash activity and from inter-company fees which are calculated on an arm's length basis. The \$193 million increase was mainly due to fees received from Citi affiliates as part of CGML's restructuring of its long-term debt. The Advisory and Equities businesses consolidated market share gains made in 2017 and continued to grow revenues in 2018. Capital Markets fees were lower in 2018 compared to 2017 mainly due to a challenging environment in Equity Underwriting which saw a reduction in overall market activity compared to 2017.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

4. Financial Highlights (continued)

Net Dealing Income

The foremost contributors to net dealing income were the Fixed Income, Equities and PFSS businesses. Net dealing income rose by \$461 million mainly due to growth in the Equities and PFSS businesses. The growth was driven by increased revenues across Delta 1 and Equity Derivatives. This is an area which has been identified as a strategic priority by management and this increase reflects a return on the investments that have been made in recent years.

Interest Receivable and Payable

Interest receivable and payable mainly reflects income and expense from collateralised financing transactions. It also includes amounts paid relating to inter-company funding and subordinated debt. Interest receivable and payable increased due to the growth in collateralised financing transactions through 2018 and an increase in interest rates during the year.

Operating Expenses

Operating expenses were \$2,731 million with the largest costs being compensation, technology and transaction costs. The increases in 2018 were mainly due to higher compensation expenses driven by FX revaluation, as sterling strengthened against the US dollar, and by increased headcount. Transaction related expenses also rose during the year.

4.2 Balance Sheet

	2018	2017
	\$ Million	\$ Million
Total assets	404,907	377,942
Total liabilities	386,827	361,911
Shareholders' funds	18,080	16,031

CGML's assets consist primarily of collateralised financing transactions, derivatives and trading inventory. Collateralised financing transactions include reverse repos and stock borrows; derivatives encompass interest rate credit, equity and commodity derivatives; whilst bonds and equities form the largest categories of trading inventory. The Company's liabilities predominantly comprise collateralised financing transactions, derivatives and securities sold not yet purchased.

Asset and liability growth in 2018 was largely a result of client demand for collateralised financing transactions. Derivative balances also increased as euro yields fell during the year.

Shareholders' funds were \$18,080 million (31 December 2017: \$16,031 million) which represented an increase of \$2,049 million. In addition to the profit for the period, this included an injection of \$500 million of Additional Tier 1 (AT1) capital in the form of loan notes purchased by another Citi entity, Pipestone LLC, which took place on 19 June 2018. These replaced an equivalent amount of Tier 2 subordinated loans which were repaid, as part of an initiative to enhance the quality of CGML's regulatory capital. Further details are included in Note 27 'Subordinated Loans' and Note 28(b) 'Other Equity Instruments'. CGML also received a capital contribution of \$1 billion from its parent on 13 April 2018.

More detailed information about the composition of CGML's balance sheet, including analyses of its derivative and inventory holdings, can be found in the Balance Sheet and the Notes to the Accounts, in particular Note 15 'Financial Assets and Liabilities Accounting Classification and Fair Value', Note 14: 'Financial Assets at Fair Value through Profit or Loss', and Note 13 'Derivatives'.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

4. Financial Highlights (continued)

4.3 Regulatory Capital

CGML's regulatory capital position is summarised below.

	2018	2017
	\$ Million	\$ Million
Capital resources		
Tier 1 capital	17,405	16,031
Tier 2 capital	4,600	4,012
Deductions	(1,144)	(1,234)
Total	<u>20,861</u>	<u>18,809</u>
Capital requirements (Pillar 1)		
Market risk	2,623	3,044
Credit risk	5,696	5,279
Operational risk	1,500	1,500
Large Exposures risk	-	20
CVA risk	755	596
Total	<u>10,574</u>	<u>10,439</u>
Excess capital over Pillar 1	<u>10,287</u>	<u>8,370</u>

Tier 1 capital encompasses tangible shareholders' funds. Tier 2 capital comprises long term subordinated debt that is eligible for inclusion as capital. Deductions from capital include adjustments for the value of the defined benefit pension scheme, intangible assets, other valuation adjustments and certain securitisation positions.

Pillar 1 prescribes the minimum capital requirements for banks and investment firms under the Basel Capital Accord and the EU Capital Requirements Directive and Regulation (CRD IV package). In addition to Pillar 1 requirements, the PRA mandates a set of Pillar 2 regulatory capital standards which CGML is required to meet in its Individual Capital Guidance and certain additional capital buffers. Management maintains a sufficiently strong and stable capital balance, in excess of these minimum regulatory requirements, and monitors CGML's excess capital to ensure that a surplus is maintained at all times.

4.4 External Environment

CGML's 2018 financial results were achieved against a backdrop characterised by a number of key themes:

- continued political and economic uncertainty;
- stock indices falling from record highs in 2017, particularly in the final 3 months of 2018;
- increased volatility in financial markets.

The UK's expected departure from the EU and US-China tariffs have resulted in lower growth forecasts both in advanced and developing countries.

Asset values came off their 2017 high and the political uncertainty continued which contributed to an increase in volatility. This was beneficial to the secondary market businesses, particularly Equities, but had a negative impact on the Equity underwriting business which saw a significant reduction in wallet size.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

5. 2019 Future Outlook

CGML's core strategic themes and operational priorities are defined in accordance with Citi's overall strategy. These themes are summarised below:

- *Use innovation to improve the client experience and deepen relationships with target clients*
- *Increase the Company's proportion of available client business in areas where we have a differentiated ability to serve our target clients*
- *Ensure sustainability of financial performance through the economic cycle*
- *Ensure continuity to clients following the UK's departure from the EU*
- *Prepare for future regulatory changes*
- *Maintain a robust internal control environment.*

5.1 The UK's withdrawal from the EU

As a result of a 2016 UK referendum, Citi established a formal program with senior level sponsorship and governance to deliver a coordinated response to the UK's potential exit from the EU. Citi continues to plan for a "hard" exit scenario until negotiations have concluded and the form of the UK's withdrawal from the EU is finalised. Citi's Brexit strategy focuses on changing its business model in order to ensure continuity of services to its UK, EU and non-EU clients with minimal disruption. Citi's planning takes into consideration areas such as client outreach and facilitation, the Company's access to financial markets infrastructure, contractual continuity, staffing, taxation and outsourcing arrangements.

To support implementation of Citi's plans, Citi has reorganized certain UK and EU operations and has been migrating certain business activities to alternative legal entities and branches with appropriate regulatory permissions and establishing required capabilities regardless of the Brexit outcome.

One aspect of Citi's contingency plans has been to convert its existing banking entity in Germany, Citigroup Global Markets Europe AG ("CGME", previously Citigroup Global Markets Deutschland AG), into Citi's EU Investment firm to support broker-dealer activities with EU clients. CGME's ownership has changed to a wholly owned subsidiary of CGML, consolidating into CGML. In addition, the activities and staff in existing branches of CGML in key EU jurisdictions have been transferred to newly established CGME branches in these jurisdictions.

Under the current assumptions where activities with our impacted EU clients migrate from CGML to CGME, while the associated revenues will also transfer to CGME, currently no material impact is expected on the Company's profitability, trading assets and liabilities, capital, liquidity and funding. Additionally, staff transfers from CGML to CGME and its branches are expected to be minimal other than in the above mentioned branch transfers.

While assumptions have been made around client behaviour and changes in regulatory environment, it does not take into consideration potential long term macroeconomic conditions that may impact the Company.

Citi continues to work closely with clients, regulators and other relevant stakeholders in execution of its plans to prepare for the UK's potential exit from the EU. In addition, Citi continues to monitor short term macroeconomic scenarios and market events and has been undertaking stress testing to assess potential impacts on its businesses.

Whilst the Company is operationally ready to support its clients, having executed its Brexit contingency plans, there are certain challenges which remain for the industry as whole including but not limited to the preparedness and speed of client response and financial markets infrastructure.

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

5. 2018 Future Outlook (continued)

5.2 Market Outlook

Looking forward, the Company is likely to be impacted by a number of developments with specific significance for its operations and strategy:

- **The UK's withdrawal from the EU** and its associated economic, political, legal and regulatory ramifications will continue to be a source of uncertainty during 2019.
- **Uncertainties in respect to Global Growth** both in advanced and emerging-market economies may have an impact on confidence and financial activity.
- **Political uncertainty** is expected to continue through 2019.
- **Technological Developments** within the finance industry have the potential to significantly change the current technological and operational infrastructure across financial institutions.
- **MiFID II** will have an ongoing impact on the competitive environment, further electronification, margin compression and potentially business models.

Citi and CGML will continue to monitor and assess these developments in order to mitigate any impact to services offered to clients and to take advantage of any opportunities that they may create.

5.3 Regulatory Developments

As the external regulatory environment continues to evolve, the most significant developments expected to impact CGML stem from:

- Minimum Requirements for Own Funds and Eligible Liabilities (MREL);
- Transition from LIBOR;
- Proposed Revisions to the Capital Requirements Regulation (CRR)/CRD IV, including changes to the large exposures rules; and
- Fundamental Review of the Trading Book (FRTB).

While there is uncertainty around the UK exiting the EU, it is expected there would be no divergence in regulatory requirements at the time of exit and we will continue to work with Regulators and monitor developments in this area.

Minimum Requirements for Own Funds and Eligible Liabilities (MREL)

MREL is a requirement for firms to maintain a minimum amount of loss-absorbing resources. 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. MREL resources can take the form of regulatory capital (own funds) and certain types of debt liabilities (eligible liabilities) that the Bank would expect to write down and/or convert to equity if a firm fails. CGML's management monitors MREL closely from 1 January 2019 and the Company will meet its MREL requirements through a combination of Own Funds, Tier 2 Subordinated debt and long term unsecured debt.

Transition from LIBOR

LIBOR is a widely used risk-free rate which the FCA has announced will be discontinued after 2021. This will impact all financial instruments across the industry which are priced using the LIBOR benchmark. CGML is taking the necessary actions to prepare for the transition from LIBOR to appropriate risk-free rates

CITIGROUP GLOBAL MARKETS LIMITED

STRATEGIC REPORT

for the year ended 31 December 2018

5. 2018 Future Outlook (continued)

Proposed Revisions to CRR/CRD IV

This proposal, published in late 2016, builds on existing EU banking rules and aims to complete the post-crisis regulatory agenda. It makes sure that the regulatory framework addresses any outstanding challenges to financial stability, while ensuring that banks can continue to support the real economy. The proposals are now subject to the trilogue process during which the European Commission, Council and Parliament discuss the details of the rules. Elements of the package will come into force at different stages, the earliest being in 2019.

The rule changes within the proposal cover new risk-sensitive methods for calculating market risk and counterparty credit risk capital requirements (known as the Fundamental Review of the Trading Book and the Standardised Approach to Counterparty Credit Risk), a binding Leverage Ratio and a Net Stable Funding Ratio.

The proposal further includes changes to the large exposures framework. The capital that can be taken into account to calculate the large exposures limit is changing to include Tier 1 capital only and the standardised approach to counterparty credit risk is used to calculate exposures to derivatives.

The implementation date in Europe is expected to be two years after the entry into force of the revised CRR.

Fundamental Review of the Trading Book (FRTB)

The Fundamental Review of the Trading Book (FRTB) comprises a comprehensive revision of the market risk rules; both the standardised and the internal models approaches. It introduces risk sensitivity into the standardised approach and equips it to act as a credible alternative to internal models. The FRTB also reduces the scope for conflicting interpretations of regulatory requirements between trading book and banking book. The revised internal models approach requires a rigorous model approval process conducted at desk level and uses an expected shortfall measure of calculation rather than VaR. The rules require firms to capture and utilise a significantly increased amount of data and processing capability in order to calculate the capital requirements. 2022 has been set as the implementation date by the Basel Committee on Banking Supervision (BCBS).

While there are a number of regulatory changes anticipated over the coming years, Citi and CGML remain prepared for the implementation of new regulatory requirements, and continue to monitor developments in this area.

By order of the Board

J D K Bardrick
Director

10 April 2019

Incorporated in England and Wales
Registered office: Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB
Registered Number: 01763297

CITIGROUP GLOBAL MARKETS LIMITED

DIRECTORS' REPORT

for the year ended 31 December 2018

The Directors present their Report and the audited financial statements of CGML for the year ended 31 December 2018.

Going concern basis

The financial statements are prepared on a going concern basis taking into account CGML's existing capital and liquidity resources and the level of reliance placed on support from Citi, CGML's ultimate parent. The Directors acknowledge the risk that extreme circumstances might adversely impact CGML's ability to continue trading and are satisfied that CGML has the resources to continue in business for the foreseeable future. In making this assessment, the Directors have considered a wide range of information relating to present and future conditions. As CGML is part of the Citigroup, the risks that apply to the parent also apply to all subsidiaries within the group including CGML. The risk factors impacting Citigroup Inc. are described in its 2018 annual report on form 10-K, which can be found at <http://www.citigroup.com/citi/investor/sec.htm>.

Further information relevant to this assessment is provided in the following sections of these financial statements:

- the principal activities, strategic direction and challenges and uncertainties are described in the Strategic Report on pages 2 to 12;
- a financial summary, including the income statement and balance sheet, is provided in the financial results section on pages 18 to 21; and
- objectives, policies and processes for managing market, liquidity, credit and operational risk, and CGML's approach to capital management and allocation, are described in Note 30 'Financial instruments and risk management', starting on page 69.

Dividends

During the year CGML paid no dividends on its ordinary shares (2017: \$nil).

Information included in the Strategic Report

CGML has elected to include information on financial risk management as per Schedule 7.6(1)(a) & (b) of the "Large and Medium-sized Companies and Groups Regulations 2008" in the Strategic Report as the Directors consider financial risk management to be of strategic importance to CGML. Further details about financial risk management are provided in Note 30 'Financial instruments and risk management.'

The Strategic Report also incorporates a discussion of likely future business developments, while important events affecting the company since the end of the financial year are described in Note 34 'Events after the reporting period'. Details of the Company's overseas branches and subsidiaries can be found in the Introduction to the Strategic Report.

Statement of Directors' responsibilities

The Directors are responsible for preparing the Strategic Report and the Directors' Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law they have elected to prepare the financial statements in accordance with United Kingdom Accounting Standards and applicable law (United Kingdom Generally Accepted Accounting Practice), including FRS 101 *Reduced Disclosure Framework*.

Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of CGML and of the profit or loss of CGML for the relevant period.

In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether applicable United Kingdom Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- assess the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- prepare the financial statements on a going concern basis unless it is inappropriate to assume that CGML will continue in business.

CITIGROUP GLOBAL MARKETS LIMITED

DIRECTORS' REPORT

for the year ended 31 December 2018

Statement of Directors' responsibilities (continued)

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain CGML's transactions, disclose with reasonable accuracy at any time the financial position of CGML, and enable them to ensure that the financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of CGML and to prevent and detect fraud and other irregularities.

Directors

The Directors who held office during the year ended 31 December 2018 were:

Non-Executive

C Ardalan

M P Basing (appointed 5 July 2018)

S H Dean (resigned 27 September 2018)

R Goulding

D L Taylor

Executive

L Arduini

J D K Bardrick

J C Cowles

P McCarthy

Directors' indemnity

Throughout the year and at the date of this report CGML is party to a group-wide indemnity policy which benefits all the Directors and is a qualifying third party indemnity provision for the purpose of section 236 of the Companies Act 2006.

Employee involvement

CGML places great value on the contributions of its employees and seeks to promote their involvement in the business wherever possible. It has continued its previous practice of keeping employees informed by written communications and meetings on matters affecting them as employees and on the various factors affecting the performance of CGML and of Citi as a group. Employees are encouraged to present their suggestions and views to CGML through various channels including an employee representative body and the Voice of the Employee survey which allows employees to share feedback with management in addition to their normal reporting and communication lines within the business. Qualifying employees participate in performance-based incentive schemes as described in Note 9 'Share-based incentive plans'.

Employment of disabled people

CGML is committed to a policy of recruitment and promotion on the basis of aptitude and ability without discrimination of any kind. Applications for employment by disabled persons are fully and fairly considered having regard to the aptitudes and abilities of each applicant. Efforts are made to enable any employees who become disabled during employment to continue their careers within CGML. Training, career development and promotion of disabled persons are, as far as possible, identical to those applicable to other employees who are not disabled.

Diversity and Inclusion

Diversity and Inclusion are recognised as part of CGML's core values. CGML fosters a culture where the best people are recruited, where people are promoted on their merits, where respect for others is demanded and valued and where opportunities to develop are widely available to all. CGML maintains a workplace with different backgrounds, perspectives and ideas and provides employees with a wide range of experiences and skills to develop to their full potential. Citi's Code of Conduct prohibits discrimination and harassment.

CITIGROUP GLOBAL MARKETS LIMITED

DIRECTORS' REPORT

for the year ended 31 December 2018

Environment

CGML recognises the importance of its environmental responsibilities, monitors its impact on the environment, and designs and implements policies to reduce any damage that might be caused by its activities. Initiatives designed to minimise CGML's impact on the environment include safe disposal of waste, recycling and reducing energy consumption.

Political contributions

No political contributions were made during the year (2017: \$nil).

Events after the reporting period

On 14 February 2019 CGML made a capital contribution of \$650 million to its subsidiary, CGME.

On 1 March 2019 the staff and activities of CGML's branches in France, Italy and Spain were transferred to branches of CGME in those countries as part of the Company's ongoing preparations following the UK's decision to leave the EU. Further details are included in the Strategic Report.

Disclosure of information to auditors

In accordance with, and subject to all the provisions of, section 418 of the Companies Act 2006, it is stated by the Directors who held office at the date of approval of this Directors' Report that

- so far as each is aware, there is no relevant audit information of which CGML's Auditors are unaware; and
- each Director has taken all the steps that he / she ought to have taken as a director to make himself / herself aware of any relevant audit information and to establish that CGML's Auditors are aware of that information.

Auditors

Pursuant to Section 487 of the Companies Act 2006, the auditors will be deemed to be reappointed and KPMG LLP will therefore continue in office.

By order of the Board.

J Bardrick
Director

10 April 2019

Incorporated in England and Wales
Registered office: Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB
Registered Number: 01763297

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF CITIGROUP GLOBAL MARKETS LIMITED

Opinion

We have audited the financial statements of Citigroup Global Markets Limited ("the company") for the year ended 31 December 2018, which comprise the Income Statement, Statement of Comprehensive Income, Statement of Changes in Equity, Balance Sheet, and related notes, including the accounting policies in note 1, with the exception of those sections marked as unaudited.

In our opinion the financial statements:

- give a true and fair view of the state of the company's affairs as at 31 December 2018 and of its profit for the year then ended;
- have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework*; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the company in accordance with, UK ethical requirements including the FRC Ethical Standard. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

The impact of uncertainties due to the UK exiting the European Union on our audit

Uncertainties related to the effects of Brexit are relevant to understanding our audit of the financial statements. All audits assess and challenge the reasonableness of estimates made by the directors, such as valuation of trading assets and trading liabilities and related disclosures, and the appropriateness of the going concern basis of preparation of the financial statements. All of these depend on assessments of the future economic environment and the company's future prospects and performance.

Brexit is one of the most significant economic events for the UK, and at the date of this report its effects are subject to unprecedented levels of uncertainty of outcomes, with the full range of possible effects unknown. We applied a standardised firm-wide approach in response to that uncertainty when assessing the company's future prospects and performance. However, no audit should be expected to predict the unknowable factors or all possible future implications for a company and this is particularly the case in relation to Brexit.

Going concern

The directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the company or to cease its operations, and as they have concluded that the company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over its ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

We are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least a year from the date of approval of the financial statements. In our evaluation of the directors' conclusions, we considered the inherent risks to the company's business model, including the impact of Brexit, and analysed how those risks might affect the company's financial resources or ability to continue operations over the going concern period. We have nothing to report in these respects.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the company will continue in operation.

Strategic report and directors' report

The directors are responsible for the strategic report and the directors' report. Our opinion on the financial statements does not cover those reports and we do not express an audit opinion thereon.

Our responsibility is to read the strategic report and the directors' report and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work:

- we have not identified material misstatements in the strategic report and the directors' report;

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF CITIGROUP GLOBAL MARKETS LIMITED

- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

Matters on which we are required to report by exception

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

Directors' responsibilities

As explained more fully in their statement set out on pages 13 and 14, the directors are responsible for: the preparation of the financial statements and for being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Matthew Davies (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square
London E14 5GL
10 April 2019

CITIGROUP GLOBAL MARKETS LIMITED

INCOME STATEMENT

for the year ended 31 December 2018

		2018	2017
	Notes	\$ Million	\$ Million
Fee and commission income	4	1,535	1,342
Net dealing income	6	2,414	1,953
Interest receivable	5	1,726	1,229
Interest payable	5	<u>(2,203)</u>	<u>(1,600)</u>
Gross profit		3,472	2,924
Operating expenses	7	(2,731)	(2,490)
Net finance income on pension	8	12	12
Other income		<u>7</u>	<u>5</u>
Operating profit on ordinary activities before taxation		760	451
Tax on profits on ordinary activities	11	(272)	(67)
Profit after taxation for the financial year		<u><u>488</u></u>	<u><u>384</u></u>

The accompanying notes on pages 22 to 88 form an integral part of these financial statements.

CITIGROUP GLOBAL MARKETS LIMITED

STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2018

	Notes	2018 \$ Million	2017 \$ Million
Profit after taxation for the financial year		488	384
<u>Other Comprehensive Income (Expense)</u>			
Items that will not be reclassified subsequently to profit or loss:			
Gross gains/(losses) on remeasurement of defined benefit pension asset	8	12	(11)
Deferred tax (charge)/benefit associated with remeasurement of pension asset		(3)	3
Items that will be reclassified subsequently to profit or loss when specific conditions are met:			
Gains on debt valuation adjustment (DVA)		131	-
Deferred tax charge associated with gains on DVA		(33)	-
Financial assets available for sale:			
- unrealised gains	16	-	28
Other comprehensive income net of tax		107	20
Total comprehensive gain for the financial year		<u>595</u>	<u>404</u>

The net movement in the Statement of Comprehensive Income in respect of the pension scheme reflects changes in the actual and expected returns on scheme assets and liabilities and the related tax impact associated with the balance sheet valuation of the defined pension asset.

The accompanying notes on pages 22 to 88 form an integral part of these financial statements

CITIGROUP GLOBAL MARKETS LIMITED

STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2018

	Notes	Share Capital \$ Million	Other equity instruments \$ Million	Capital reserve \$ Million	Equity reserve \$ Million	Retained earnings \$ Million	Total \$ Million
At 1 January 2017		1,500	-	9,999	1,305	1,076	13,880
Profit after taxation for the year						384	384
Gross losses on remeasurement of defined benefit pension asset	8	-	-	-	-	(11)	(11)
Deferred tax benefit associated with remeasurement of pension asset		-	-	-	-	3	3
Financial assets available for sale:							
- unrealised gains	16	-	-	-	-	28	28
Share based payment transactions	9	-	-	-	(71)	-	(71)
Deferred tax benefit associated with share based payment transactions		-	-	-	18	-	18
Other equity instruments issued	28	-	1,800	-	-	-	1,800
At 31 December 2017		1,500	1,800	9,999	1,252	1,480	16,031
Transitional adjustments in respect of IFRS 9 and IFRS 15 net of tax	29	-	-	-	-	(6)	(6)
At 1 January 2018		1,500	1,800	9,999	1,252	1,474	16,025
Profit after taxation for the year						488	488
Gross gains on remeasurement of defined benefit pension asset	8	-	-	-	-	12	12
Deferred tax charge associated with remeasurement of pension asset		-	-	-	-	(3)	(3)
Gains on debt valuation adjustment (DVA)		-	-	-	-	131	131
Deferred tax charge associated with gains on DVA		-	-	-	-	(33)	(33)
Share based payment transactions	9	-	-	-	74	-	74
Deferred tax charge associated with share based payment transactions		-	-	-	(19)	-	(19)
Capital contribution		-	-	1,000	-	-	1,000
Other equity instruments issued	28	-	500	-	-	-	500
Dividend on other equity instruments		-	-	-	-	(130)	(130)
Tax benefit associated with dividend on other equity instruments		-	-	-	-	35	35
At 31 December 2018		1,500	2,300	10,999	1,307	1,974	18,080

The other equity instruments relate to Additional Tier 1 notes. Further information is included in Note 28 'Capital and reserves'.

The capital reserve includes capital contributions from the parent company, which are distributable.

The equity reserve includes the fair value movement of the share based incentives issued, and other fair value movements captured in equity.

The accompanying notes on pages 22 to 88 form an integral part of these financial statements.

CITIGROUP GLOBAL MARKETS LIMITED

BALANCE SHEET

as at 31 December 2018

		31 December 2018	31 December 2017
	Notes	\$ Million	\$ Million
Assets			
Financial assets at amortised cost			
- cash at bank and in hand	12	4,900	2,953
- collateralised financing transactions		82,920	70,939
Financial assets mandatorily at fair value through profit or loss			
- derivatives	13	156,991	149,409
- inventory	14	51,894	56,757
- equity securities held for investment	16	57	-
Financial assets designated at fair value through profit or loss			
Financial assets classed as available for sale	16	-	59
Pension asset	8	468	480
Other assets	18	33,558	32,829
Total Assets		404,907	377,942
Liabilities and Equity			
Financial liabilities at amortised cost			
- bank loans and overdrafts		4,997	16,461
- collateralised financing transactions		52,996	51,340
Financial liabilities mandatorily at fair value through profit or loss			
- derivatives	13	166,438	156,511
- securities sold but not yet purchased		52,031	42,779
Financial liabilities designated at fair value through profit or loss			
Other liabilities	23	33,766	33,808
Subordinated loans	27	9,600	4,012
Total Liabilities		386,827	361,911
Capital and reserves			
Called up share capital	28	1,500	1,500
Other equity instruments	28	2,300	1,800
Capital reserve	28	10,999	9,999
Retained earnings and other reserves		3,281	2,732
Shareholders' funds		18,080	16,031
Total Liabilities and Shareholders' Funds		404,907	377,942

The accompanying notes on pages 22 to 88 form an integral part of these financial statements.

The financial statements on pages 18 to 88 were approved by the Directors on 10 April 2019 and were signed on their behalf by:

J D K Bardrick
 Director
 Registered Number: 01763297

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies

(a) Basis of presentation

The financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101, 'Reduced Disclosure Framework' (FRS 101). In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards as adopted by the EU (Adopted IFRSs), which entails a historical basis of accounting with certain exceptions, such as financial assets and financial liabilities measured at fair value under adopted IFRS. The financial statements have been prepared on a going concern basis, in accordance with the Companies Act 2006 as applicable to CGML.

The Company makes amendments to its IFRS financial statements where necessary in order to comply with Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

The Company has taken advantage of the following disclosure exemptions available under FRS 101:

- (a) the requirements of paragraphs 45(b) and 46-52 of IFRS 2 share based payment, as the share based payment arrangement concerns the instruments of another group entity;
- (b) the requirement in paragraph 38 of IAS 1 '*Presentation of financial statements*' to present comparative information in respect of
 - (i) paragraph 79(a)(iv) of IAS 1 '*Presentation of financial statements*';
 - (ii) paragraph 73(e) of IAS 16 '*Property, plant and equipment*'; and
 - (iii) paragraph 118(e) of IAS 38 '*Intangible assets*'.
- (c) the requirements of paragraphs 10(d), 16, 38A, and 111 of IAS 1 '*Presentation of financial statements*';
- (d) the requirements of IAS 7 '*Statement of cash flows*';
- (e) the requirements in IAS 24 '*Related party disclosures*'. To disclose related party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member; and
- (f) the requirements of paragraphs 17 and 18A of IAS 24 that relate to transactions with key management personnel.

The financial statements have been prepared in US Dollars, which is the functional and presentational currency of the Company, and any reference to \$ in these financial statements refers to US Dollars. The Company has rounded figures to the nearest million \$, unless otherwise stated.

As permitted under section 401 of the Companies Act 2006, consolidated financial statements have not been prepared because the Company is a wholly owned subsidiary of the ultimate parent, Citigroup Inc., which prepares consolidated financial statements under US GAAP. The Company meets the criteria for exemption from the obligation to prepare and deliver group accounts that is available to a company included in non-EEA group accounts of a larger group. These financial statements therefore present information about the Company as an individual undertaking and not about its group. Citigroup Inc. makes its financial statements available to the public on a quarterly basis.

(b) Changes in accounting policy and disclosures

The accounting policies adopted are consistent within the accounts and with those of the previous financial year, except that the requirements of IFRS 9 and IFRS 15 were implemented as at 1 January 2018. The Company's accounting policies under IFRS 9 and IFRS 15 are set out below. There were no other material or amended standards or interpretations that resulted in a change in accounting policy for the year ended 31 December 2018.

Changes implemented in 2018

IFRS 9 – Financial Instruments

Introduction

IFRS 9 – Financial Instruments. The new standard includes a new model for classification and measurement of financial assets, a forward-looking 'expected loss' impairment model for debt instruments and a substantially reformed approach to hedge accounting (as the Company does not conduct hedge accounting, this change will have no impact on the Company). The standard replaced the existing guidance in IAS 39 – Financial Instruments: Recognition and Measurement. Additionally, the Company has adopted consequential amendments to IFRS 7 Financial Instruments: Disclosures that are applied to disclosures about 2018 but have not been generally applied to comparative information. IFRS 9 has been effective since 1 January 2018.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(b) Changes in accounting policy and disclosures (continued)

Classification and measurement

From a classification and measurement perspective, the new standard requires all financial assets, except equity instruments and derivatives, to be assessed based on a combination of the entity's business model for managing the assets and the instruments' contractual cash flow characteristics (whether the contractual cash flows are solely payments of principal and interest (SPPI)).

The IAS 39 measurement categories were replaced by: fair value through profit or loss (FVTPL), fair value through other comprehensive income (FVOCI), and amortised cost. IFRS 9 also allows entities to continue to irrevocably designate instruments that qualify for amortised cost or FVOCI instruments as FVTPL, if doing so eliminates or significantly reduces an accounting mismatch.

The accounting for financial liabilities is largely the same as the requirements of IAS 39, except for the treatment of gains or losses arising from an entity's own credit risk relating to liabilities designated at FVTPL. Such movements are now presented in OCI with no subsequent reclassification to the income statement, unless an accounting mismatch in profit or loss would arise.

The transition to IFRS 9 has not resulted in any significant changes to the measurement basis of the financial instruments of the Company because the majority of assets are already held at fair value through profit or loss. These continue to be accounted for as such under IFRS 9. The financial assets held at amortised cost meet the SPPI test and are held to collect contractual cash flows. These continue to be measured at amortised cost. There is an insignificant portion of assets which are classified as available for sale which have been classified to fair value through profit or loss under IFRS 9.

Because from 1 January 2018, gains or losses arising from an entity's own credit risk relating to liabilities designated at FVTPL are recognised through OCI, any cumulative amounts that were recorded in the income statement for liabilities outstanding as at 1 January 2018 were reclassified to accumulated OCI from retained earnings.

Impairment

IFRS 9 introduces an expected credit loss (ECL) impairment model that differs significantly from the incurred loss model under IAS 39 and is expected to result in the earlier recognition of credit losses going forward.

Scope

Under IFRS 9, the same impairment model is applied to all financial assets, except for (a) debt investments classified or designated as FVTPL, and (b) equity investments, which are not subject to impairment assessment. The scope of the IFRS 9 expected credit loss impairment model includes amortized cost financial assets, debt securities classified as FVOCI, and off-balance sheet loan commitments and financial guarantees which were previously provided for under IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*.

The recognition and measurement of impairment is intended to be more forward looking than under IAS 39. The estimation of an ECL is required to be unbiased and probability weighted, including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date. The estimate will also consider the time value of money.

IFRS 9 has three 'stages' for impairment recognition, whereby the measure of expected credit losses, and the interest income recognition, differs depending on the change in credit risk of the financial asset since initial recognition.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(b) Changes in accounting policy and disclosures (continued)

Because of the nature of business activities and the financial assets on the Company's balance sheet (high credit quality reverse repo asset loans and trade receivables), the recognition of incremental expected impairment allowances has a minimal impact.

Therefore, for the vast majority of its exposures the Company has taken advantage of practical expedients allowed by IFRS 9 in which either: (a) lifetime expected credit losses are recognised irrespective of changes in credit risk (applicable to receivables such as trade date or brokerage receivables), or (b) twelve-month expected credit losses are recognised where credit risk is low at the reporting date (applicable to reverse repos and securities borrowed).

On transition, the impact to the Company's allowances for credit losses, due to the adoption of IFRS 9, was an increase of \$2 million.

Transition

The impairment and classification and measurement requirements of IFRS 9 were applied retrospectively by adjusting CGML's Balance Sheet at 1 January 2018, the date of initial application of IFRS 9, with the difference between previous carrying amounts and carrying amounts at initial application recognised in retained earnings. IFRS 9 contains an exemption from the usual requirement to restate comparative information. CGML has taken advantage of this exemption and has not restated its comparative information for 2017.

IFRIC Interpretation 22 – Foreign Currency Transactions and Advance Consideration

IFRIC 22 was effective from 1 January 2018, and clarifies the accounting for transactions that include the receipt or payment of advance consideration in a foreign currency. It does not apply when the related asset, expense or income is initially recognised at fair value, nor does it apply to income taxes. IFRIC 22 requires that the exchange rate to use on initial recognition of the related asset, expense or income is the date on which the advance consideration is received or paid.

The adoption of IFRIC 22 has had no impact on the Company's financial statements.

Annual Improvements to IFRS Standards 2014–2016 Cycle

In December 2016, the IASB published Annual Improvements to IFRS Standards 2014–2016 Cycle, containing minor amendments to IFRS 1 *First-time Adoption of IFRS*, IFRS 12 *Disclosure of Interests in Other Entities*, and IAS 28 *Investments in Associates and Joint Ventures*. These amendments to IFRS 1 and IAS 28 are mandatory from 1 January 2018, and amendments to IFRS 12 have been effective since 1 January 2017.

The adoption of these requirements has had no impact on the Company's financial statements.

IFRS 15 – Revenue from Contracts with Customers

IFRS 15 – *Revenue from Contracts with Customers* was published by IASB on 28 May 2014. The core principle of the new Standard is to recognise revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The revenue is recognised when the control over the goods or services is transferred to the customer. IFRS 15 has been effective for annual reporting periods beginning on or after 1 January 2018.

Where CGML is acting in a principal capacity, in which it has primary responsibilities for fulfilling the contract with the customer, it will continue to record revenue when the performance obligation is fulfilled.

The Company has adopted IFRS 15 using the cumulative effect method, with the effect of initially applying this standard recognised at the date of initial application (i.e. 1 January 2018). Accordingly, the information presented for 2017 has not been restated (including grossing up of revenue and expenses) – i.e. it is presented, as previously reported, under IAS 18, IAS 11 and related interpretations.

The adoption of IFRS 15 in relation to the timing of revenue recognition had an impact of \$1 million on opening retained earnings as at 1 January 2018.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(b) Changes in accounting policy and disclosures (continued)

IFRS 2 – Classification and measurement of share based payment transactions

In June 2016, the IASB issued narrow-scope amendments to IFRS 2, “Share-based Payment” which are effective for annual periods beginning on or after 1 January 2018.

This standard has had no material impact on the Company. Further details may be found in the financial statements for the year ended 31 December 2017.

Standards and amendments issued but not yet effective

There are a number of accounting standards that have been issued by the International Accounting Standards Board (IASB), but which are not yet effective for the Company. These are set out below.

IFRS 16 – Leases

In January 2016, the IASB issued IFRS 16 *Leases*, which will replace IAS 17 *Leases*, effective from 1 January 2019.

This standard will have no impact on the Company because it does not enter into lease arrangements. Further details may be found in the financial statements for the year ended 31 December 2017.

IFRS 17 – Insurance contracts

In May 2017, the IASB issued IFRS 17 *Insurance Contracts*, a comprehensive new accounting standard for insurance contracts. The standard is effective from 1 January 2021; however the IASB has tentatively decided to extend the effective date to 1 January 2022.

This standard will have no impact on the Company because it does not issue insurance contracts. Further details may be found in the financial statements for the year ended 31 December 2017.

IFRIC Interpretation 23 – Uncertainty over Income tax treatment

IFRIC 23 clarifies the application of IAS 12 to accounting for income tax treatments that have yet to be accepted by tax authorities, in scenarios where it may be unclear how tax law applies to a particular transaction or circumstance, or whether a taxation authority will accept an entity’s tax treatment. The effective date is 1 January 2019.

The Company is currently assessing the impact of IFRIC 23.

Amendments to IAS 19: Plan Amendment, Curtailment or Settlement

These amendments specify how companies determine pension expenses when changes to a defined benefit pension plan occur. When a change to a plan—an amendment, curtailment or settlement—takes place, IAS 19 requires a company to remeasure its net defined benefit liability or asset.

The amendments require a company to use the updated assumptions from this remeasurement to determine current service cost and net interest for the remainder of the reporting period after the change to the plan. Until now, IAS 19 was not specific on this point.

The amendments are effective on or after 1 January 2019. The Company is currently assessing the impact of these amendments.

Prepayment Features with Negative Compensation (Amendments to IFRS 9)

In October 2017, IFRS 9 was amended to enable entities to measure at amortised cost some prepayable financial assets with so-called negative compensation.

The amendments are effective from 1 January 2019, with early application permitted. These amendments will not impact the Company.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(b) Changes in accounting policy and disclosures (continued)

Annual Improvements to IFRS Standards 2015–2017 Cycle

In December 2017, the IASB published Annual Improvements to IFRS Standards 2015–2017 Cycle, containing minor amendments to IFRS 3 *Business Combinations* and IFRS 11 *Joint Arrangements*, IAS 12 *Income Taxes*, and IAS 23 *Borrowing Costs*. These amendments are mandatory from 1 January 2019, and must be applied retrospectively from the earliest period presented in the financial statements. They are eligible for early application, but have not yet been endorsed by the EU.

The IAS 12 amendments clarify that all distributions of profit should be treated consistently for tax purposes, and the impact of any associated tax deductions should be recognised in profit or loss. These amendments may impact the treatment of tax deductions on Alternative Tier 1 Notes issued by the Company. The impact of these amendments is currently being assessed.

Otherwise, the Annual Improvements will not have a material impact on the Company.

(c) Financial instruments

From a classification and measurement perspective, IFRS 9 requires all financial assets to be assessed based on a combination of the entity's business model for managing the assets and the instruments' contractual cash flow characteristics (whether the contractual cash flows are solely payments of principal and interest (SPPI)). The accounting policies below reflect the application of these criteria.

Financial assets and liabilities held for trading

Financial instruments that have been acquired principally for the purpose of selling or repurchasing in the near term, or form part of a portfolio of financial instruments that are managed at fair value together and for which there is evidence of short term profit taking are classified as "held for trading". Financial assets classified as "held for trading" include collateralised financing transactions, government bonds, non-government bonds, equities and derivatives. Financial liabilities classified as "held for trading" include securities sold but not yet purchased and derivatives.

Trading assets and liabilities are initially recognised at fair value on settlement date and subsequently re-measured at fair value. Any changes in fair value between trade date and settlement date are reported in the income statement. Gains and losses realised on disposal or redemption and unrealised gains and losses from changes in fair value (including any foreign currency retranslation gains and losses) are reported in the income statement. Any initial gain or loss on financial instruments where valuation is dependent on valuation techniques using unobservable parameters are deferred over the life of the contract or until the instrument is redeemed, transferred or sold or the fair value becomes observable.

Derivatives and embedded derivatives

Derivative contracts used in trading activities are recognised at fair value on the date the derivative is entered into and are subsequently re-measured at fair value. All derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative. Gains and losses realised on disposal or redemption and unrealised gains and losses from changes in fair value are reported in the income statement. Where an embedded derivative exists within a financial liability host contract, the host contract and embedded derivative are measured as a package under the fair value option.

Repurchase and resale agreements and securities lending/borrowing

Repurchase and resale agreements are treated as collateralised financing transactions. Securities which have been sold with an agreement to repurchase continue to be shown on the balance sheet and the sale proceeds are recorded as a collateralised financing transaction within other liabilities. Securities acquired in purchase and resale transactions are not recognised on the balance sheet and the purchase is recorded as a collateralised financing transaction within other assets. The difference between the sale price and the repurchase price is recognised over the life of the transaction and is charged or credited to the income statement as interest payable or receivable.

Similarly, when securities are lent or borrowed in exchange for cash, this is also treated as collateralised financing. Securities lent are not derecognised from the balance sheet and the cash inflow is recognised as a collateralised borrowing. Securities borrowed are not recognised on the balance sheet and the cash inflow is recognised as a collateralised lending. The securities lending fees payable and receivable are charged or credited to the income

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(c) Financial instruments (continued)

statement as interest payable or receivable.

The Company measures a portion of its repurchase and resale agreements at fair value. Financial instruments are measured at fair value through profit or loss when they meet one or more of the criteria set out below:

- the assets or liabilities are managed, evaluated and reported internally on a fair value basis.
- the designation eliminates or significantly reduces an accounting mismatch that would otherwise arise.

That portion of the Company's repurchase and resale agreements which are hedged with instruments measured at fair value and managed as a combined business strategy have been designated as fair value through profit or loss.

Loans and receivables

Loans and receivables incorporate trade debtors, including settlement receivables, and are initially recognised at fair value including direct and incremental transaction costs and subsequently measured at amortised cost using the effective interest rate method, and subject to expected credit loss impairment under IFRS 9 as described above.

Available for Sale Assets (pre IFRS 9)

Prior to the adoption of IFRS 9 as described above, available for sale (AFS) investments were non-derivative financial assets that are designated as available for sale or are not classified within another category of financial assets. The vast majority of CGML's financial assets are classified in other categories described above. Strategic investments including investments in exchanges, clearing houses and settlement houses were included in AFS assets. Such investments are now measured at FVPL.

Other financial liabilities and subordinated loans

Financial liabilities and subordinated loans are measured at amortised cost using the effective interest rate, except those which are "held for trading", which are held at fair value through the profit or loss account.

Determination of fair value

Where the classification of a financial instrument requires it to be stated at fair value, this is determined by reference to the quoted market value in an active market wherever possible. Where no such active market exists for the particular instrument, the Company uses a valuation technique to arrive at the fair value, including the use of prices obtained in recent arms' length transactions, discounted cash flow analysis, option pricing models and other valuation techniques commonly used by market participants. In case the transaction price in the market in which these transactions are undertaken is different from the fair value in the Company's principal market for those instruments, the fair value of these transactions are also estimated by using valuation techniques. See Note 15 'Financial assets and liabilities accounting classifications and fair values' for further details.

Collateral

The Company receives collateral from customers as part of its business activities. Collateral can take the form of cash, securities or other assets. Where cash collateral is received this is recorded on the balance sheet and, where required by collateral agreements, is held in segregated client cash accounts. The Company does not recognise non-cash collateral received on its balance sheet.

Where cash collateral is posted to a third party the Company derecognises cash from its balance sheet. Non-cash collateral posted to a third party remains on the Company's balance sheet.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet only when there is currently a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legal right to set off the recognised amounts must be enforceable in both the normal course of business, in the event of default, insolvency or bankruptcy of both the Company and its counterparty. In all other situations they are presented gross.

All offsetting applied by the Company relates to derivatives and repurchase and reverse repurchase agreements. A significant portion of offsetting is applied to interest rate derivatives and related cash margin balances, which are cleared through central clearing parties such as the London Clearing House. The Company also offsets repurchase

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(c) Financial instruments (continued)

and reverse repurchase agreements for which the Company has the right to set off and has the intent to settle on a net basis or to realise an asset and settle a liability simultaneously.

Derecognition of financial assets and financial liabilities

Financial assets are derecognised when the right to receive cash flows from the assets has expired or when the Company has transferred its contractual right to receive the cash flows of the financial assets and either substantially all the risks and rewards of ownership have been transferred or substantially all the risks and rewards have neither been retained nor transferred but control is not retained.

If the Company enters into a transaction that results in it retaining significantly all of the risks and rewards of a financial asset it will continue to recognise that financial asset and will recognise a financial liability equal to the consideration received under the transaction.

Financial liabilities are derecognised when they are extinguished, that is when the obligation is substantially modified, exchanged, discharged, cancelled or expired.

(d) Commodities

Commodities are initially recognised at fair value on settlement date and subsequently re-measured at fair value. Realised gains and losses on sales of commodities inventory are included in net dealing income.

(e) Fee and commission income

The primary components of Fee and commission income are investment banking fees and brokerage commissions.

Fee and commission income is recognised when the right to consideration has been obtained in exchange for performance.

Investment banking fees are substantially composed of underwriting and advisory revenues. Such fees are recognised at the point in time when Citigroup's performance under the terms of a contractual arrangement is completed, which is typically at the closing of a transaction. Reimbursed expenses related to these transactions are recorded as revenue and are included within investment banking fees.

Brokerage commissions primarily include commissions and fees from the following: executing transactions for clients on exchanges and over-the-counter markets; sales of mutual funds and other annuity products; and assisting clients in clearing transactions, providing brokerage services and other such activities. Brokerage commissions are recognised at the point in time the associated service is fulfilled, generally on trade-execution date.

The services described above are generally provided by the Company in a principal capacity, whereby it has primary responsibility for fulfilling the contract with the customer.

(f) Interest receivable and payable and the effective interest method

Interest income and expense is recognised in the income statement for all financial assets classified as loans and receivables and non-trading financial liabilities, using the effective interest rate method. The effective interest rate is the rate that exactly discounts the estimated future cash payments and receipts through the expected life of the financial asset or financial liability to the carrying amount of the financial asset or financial liability. The calculation of the effective interest rate includes incremental and directly attributable transaction costs and fees paid or received that are an integral part of the effective interest rate.

Interest arising on financial assets or financial liabilities that are "held for trading" or "designated at fair value" is reported within interest income and expense respectively.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(g) Net dealing income

Net dealing income comprises gains and losses related to trading assets, trading liabilities and financial assets and liabilities designated at fair value and commodities, and includes all realised and unrealised fair value changes, dividends and foreign exchange differences. For derivatives that are not part of hedging programmes, both the interest element and the fair value movements are recognised as part of net dealing income.

(h) Tangible and Intangible assets

Tangible fixed assets are measured at cost, less accumulated depreciation. The cost of developed software includes directly attributable internal costs and the cost of external consultants. Depreciation is provided at rates calculated to write-off the cost, less the estimated residual value of each asset, on a straight-line basis over its expected economic useful life, as follows:

Premises improvements	-	lesser of the life of the lease or 10 years
Equipment	-	lesser of the life of the equipment or 10 years
Capitalised software	-	2 to 10 years

At each reporting date the Company assesses whether there is any indication that tangible or intangible fixed assets are impaired.

(i) Fixed asset investments

Investments in subsidiary undertakings are stated at cost, less any impairment.

(j) Taxation

Income tax payable on profits is recognised as an expense based on the applicable tax laws in each jurisdiction in the period in which profits arise.

Deferred tax assets and liabilities are recognised for taxable and deductible temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets are recognised to the extent that it is probable that there will be sufficient profits available against which these differences can be utilised.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the asset will be realised or the liability will be settled based on tax rates that are enacted or substantively enacted at the balance sheet date. Deferred tax balances are not discounted.

(k) Pension and other post retirement benefit costs

CGML operates both a defined benefit and a defined contribution pension scheme.

The cost of CGML's defined contribution pension scheme is expensed as the related service is provided and recognised within operating expenses in the income statement. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating to the term of the related pension liability. Remeasurement gains and losses are recognised immediately in the Statement of Other Comprehensive Income (OCI). The current service cost and any past service costs are included in the income statement within operating expenses. The interest income on pension scheme assets, net of the impact of the interest cost on the pension scheme liabilities, is included within Net finance income on pension.

A surplus is recognised on the balance sheet where an economic benefit is available as a reduction in future contributions or as a refund of monies to Citi.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(l) Foreign currencies

Transactions in foreign currencies are recorded using the rate of exchange at the date of transaction. Monetary assets and liabilities denominated in currencies other than US Dollars are translated into US Dollars using the year end spot exchange rates. Non-monetary assets and liabilities denominated in currencies other than US Dollar that are classified as “held for trading” or “designated at fair value” are translated into US Dollars using the year end spot rate. Non-monetary assets and liabilities denominated in currencies other than US Dollars that are not measured at fair value have been translated at the relevant historical exchange rates. Any gains or losses on exchange are taken to the income statement as incurred.

(m) Share-based incentive plans

The Company participates in a number of Citigroup Inc. (Citi) share-based incentive plans under which Citi grants shares to the Company’s employees. Pursuant to a separate Stock Plans Affiliate Participation Agreement (SPAPA) the Company makes a cash settlement to Citi for the fair value of the share-based incentive awards delivered to the Company’s employees under these plans.

The Company applies equity-settled accounting for its share based incentive plans, with separate accounting for its associated obligations to make payments to Citigroup Inc. The Company recognises the fair value of the awards at grant date as compensation expense over the vesting period with a credit to the intercompany payable to Citigroup Inc. All amounts paid to Citigroup Inc. and the associated obligations are recognised over the vesting period. Subsequent changes in the fair value of the recharges in respect of all unexercised awards are reviewed annually and any changes in value are recognised in the equity reserve, again over the vesting period. The SPAPA is also updated annually.

For Citi’s share based incentive plans that have a graded vested period each “tranche” of the award is treated as a separate award. Where a plan has a cliff vest, the award only has a single “tranche”. The expense is recognised as follows:

Vesting Period of Award	% of expense recognised in Income Statement						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
2 Years (vesting in 2 Tranches)	75%	25%					
3 Years (vesting in 3 Tranches)	61%	28%	11%				
4 Years (vesting in 4 Tranches)	52%	27%	15%	6%			
5 Years (vesting in 5 Tranches)	46%	26%	16%	9%	4%		
7 Years (vesting in 4 Tranches)	19%	19%	19%	19%	13%	8%	4%

Employees who meet certain age plus years of service requirements (retirement eligible employees) may terminate active employment and continue vesting of their awards provided they comply with specified non-compete provisions. The cost of share based incentive plans are recognised over the requisite service period. For awards granted to retirement eligible employees, the services are provided prior to grant date, and subsequently the costs are accrued in the year prior to the grant date.

EU Short Term awards are a form of Capital Accumulation Program (CAP) awarded to qualifying staff. The award is accounted for similarly to CAP awards but is delivered in the form of immediately vested restricted shares subject to a six month sale restriction.

(n) Provisions

Provisions are recognised for present obligations arising as consequences of past events where it is more likely than not that a transfer of economic benefit will be necessary to settle the obligation, which can be reliably estimated. Provisions are measured at the best estimate of the outflow of resources that will be required to settle the obligation.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1. Principal accounting policies (continued)

(o) Modification of financial liabilities

When a financial liability is modified, or there is an exchange of debt instruments between the same lender and borrower, the original financial liability is derecognised—and a new liability recognised—if the two debt instruments have ‘substantially different’ terms. This determination considers both a quantitative comparison of the debt’s cash flows before and after the modification, as well as consideration of qualitative factors such as risk profile, maturity, or existence of embedded derivatives.

Where terms are substantially different, the existing liability is derecognised, and any difference between the carrying value and the value of the replacement debt is recognized in profit or loss at the date of modification.

2. Use of assumptions, estimates and judgements

The results of the Company are sensitive to the accounting policies, assumptions and estimates that underlie the preparation of its financial statements. The accounting policies used in the preparation of the financial statements are described in detail above.

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected.

The following critical judgements have (or may have) the most significant effect on the amounts recognised in the financial statements.

Valuation of financial instruments

The Company’s accounting policy for valuation of financial instruments is described in Note 1(c). The fair values of financial instruments that are not quoted in active markets are determined by using valuation techniques. To the extent practicable, models use only observable data. Where this is not possible, management may be required to make estimates. Note 15 ‘Financial assets and liabilities accounting classifications and fair values’ discusses further the valuation of financial instruments.

Credit valuation adjustment

Credit valuation adjustments (CVA) and funding valuation adjustments (FVA) are applied to the relevant population of over-the-counter (OTC) derivative instruments where adjustments to reflect counterparty credit risk, own credit risk and term funding risk are required to estimate fair value. This principally includes derivatives with a base valuation (e.g., discounted using overnight indexed swap (OIS)) requiring adjustment for these effects, such as uncollateralized interest rate swaps. The CVA represents a portfolio-level adjustment to reflect the risk premium associated with the counterparty’s (assets) or Citi’s (liabilities) non-performance risk. FVA reflect a market funding risk premium inherent in the uncollateralized portion of a derivative portfolio and in certain collateralized derivative portfolios that do not include standard credit support annexes (CSAs), such as where the CSA does not permit the reuse of collateral received. Citi’s FVA methodology leverages the existing CVA methodology to estimate a funding exposure profile. The calculation of this exposure profile considers collateral agreements in which the terms do not permit the Company to reuse the collateral received, including where counterparties post collateral to third-party custodians.

Citi’s CVA and FVA methodology consists of two steps. First, the exposure profile for each counterparty is determined using the terms of all individual derivative positions and a Monte Carlo simulation or other quantitative analysis to generate a series of expected cash flows at future points in time. The calculation of this exposure profile considers the effect of credit risk mitigants and sources of funding, including pledged cash or other collateral and any legal right of offset that exists with a counterparty through arrangements such as netting agreements. Individual derivative contracts that are subject to an enforceable master netting agreement with a counterparty are aggregated as a netting set for this purpose, since it is those aggregate net cash flows that are subject to non-performance risk. This process identifies specific, point-in-time future cash flows that are subject to non-performance risk and unsecured funding, rather than using the current recognised net asset or liability as a basis to measure the CVA and FVA.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2. Use of assumptions, estimates and judgements (continued)

Second, for CVA, market-based views of default probabilities derived from observed credit spreads in the credit default swap (CDS) market are applied to the expected future cash flows determined in step one. Citi's own-credit CVA is determined using Citi-specific CDS spreads for the relevant tenor. Generally, counterparty CVA is determined using CDS spread indices for each credit rating and tenor. For certain identified netting sets where individual analysis is practicable (e.g., exposures to counterparties with liquid CDSs), counterparty-specific CDS spreads are used. For FVA, a term structure of future liquidity spreads is applied to the expected future funding requirement.

The CVA and FVA are designed to incorporate a market view of the credit and funding risk, respectively, inherent in the derivative portfolio. However, most unsecured derivative instruments are negotiated bilateral contracts and are not commonly transferred to third parties. Derivative instruments are normally settled contractually or, if terminated early, are terminated at a value negotiated bilaterally between the counterparties. Thus, the CVA and FVA may not be realised upon a settlement or termination in the normal course of business. In addition, all or a portion of these adjustments may be reversed or otherwise adjusted in future periods in the event of changes in the credit or funding risk associated with the derivative instruments.

Credit valuation adjustment (continued)

During 2018, the Company recorded net CVA gains of \$43 million (2017: \$11 million losses). There were additionally net FVA losses of \$5 million (2017: \$2 million losses). The total adjustment recorded in the balance sheet at the year-end was \$24 million (2017: \$5 million).

Pension

The Company's defined benefit schemes are measured on an actuarial basis, with the key assumptions being discount rate, inflation, mortality and investment returns. There is no separate assumption for expected return on assets. The net finance income is calculated using the discount rate.

Mortality assumptions are based upon the relevant standard industry and national mortality tables. Discount rates are set using the Aon Hewitt GBP Single Agency Curve, composed using an underlying swap curve and a credit spread curve fitted from prices on AA UK corporate bonds. Management judgement is required in estimating the rate of future salary growth and in assessing the implications of IFRIC 14 and the recoverability of any surplus. All assumptions are unbiased, mutually compatible and based upon market expectations at the reporting date.

Tax position

The main area of judgement that impacts the reported tax position is the recognition and measurement of deferred tax assets. Deferred tax assets have been recognised based on the expectation that they are more likely than not to be utilised. This judgement includes an estimate of business profits forecasts. Given the proportion of the deferred tax assets that relate to loss carry-forwards, rather than temporary differences, the company does not consider there to be a significant risk of a material adjustment to the carrying amount of deferred tax.

3. Turnover and results

As permitted by paragraph 4 of Schedule 1 to the Companies Act 2006 The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (SI 2008 No 410), the format of the income statement and the Balance sheet have been adapted to the circumstances of the Company. Instead of turnover, the Directors have reported fee and commission income, net dealing income and interest receivable less interest payable in determining the gross profit of the Company.

4. Fee and commission income

Fee and commission income is derived from underwriting activities, marketing securities owned by other group undertakings, trading services provided to other group undertakings and corporate finance fees associated with mergers and acquisitions and other corporate finance and broking advisory activities.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

5. Interest receivable and interest payable

	2018 \$ Million	2017 \$ Million
Interest receivable comprises:		
Interest on trading assets and collateralised financing transactions at fair value through profit or loss	888	517
Interest on collateralised financing transactions, debtors and cash assets not at fair value through profit or loss	838	712
	<u>1,726</u>	<u>1,229</u>
Interest payable comprises:		
Interest on collateralised financing transactions at fair value through profit or loss	911	405
Interest on collateralised financing transactions and borrowings not at fair value through profit or loss	1,174	1,123
Interest on subordinated debt	118	72
	<u>2,203</u>	<u>1,600</u>

Included within interest receivable is interest received on client money.

6. Gains and losses on financial assets and financial liabilities held at fair value through profit and loss

	2018 \$ Million	2017 \$ Million
Gains and losses on financial assets and financial liabilities mandatorily at fair value through profit and loss:		
Net dealing income	2,119	1,817
Interest receivable	270	103
Interest payable	(193)	(126)
	<u>2,196</u>	<u>1,794</u>
Gains and losses on financial assets and financial liabilities designated at fair value through profit or loss:		
Net dealing income	295	136
Interest receivable	618	414
Interest payable	(718)	(279)
	<u>195</u>	<u>271</u>

The financial liabilities designated at fair value through profit or loss are fully collateralised (see Note 30 'Financial instruments and risk management') such that there are no changes in the fair value of these liabilities attributable to changes in their credit risk.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

7. Operating expenses

	2018	2017
	\$ Million	\$ Million
Operating expenses include:		
Employee remuneration	1,021	952
Share-based incentive expense (Note 9)	200	185
Payroll taxes	155	159
Pension costs		
- defined benefit scheme (Note 8)	18	11
- defined contribution scheme	49	46
Depreciation (Note 19)	48	48
IFRS 9 reserve	3	-
Auditor's remuneration:		
Audit of these financial statements	1.49	1.73
Amounts receivable by the company's auditor and its associates in respect of:		
Audit related assurance services	0.88	0.85
Other assurance services	0.07	0.07

The Company employed an average of 3,596 (2017: 3,519) employees during the year.

The classification of last year's amounts receivable by the company's auditor has been realigned to better reflect the services provided.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

8. Pension

Defined contribution scheme

The Citigroup (UK) Pension Plan was established in September 2000 and provides defined contribution benefits to all new hires. The contributions that Citi is required to make are known, although the pension benefit will vary depending upon the investment returns achieved by investment choices made by the employee.

Defined benefit scheme

The Citigroup Global Markets Limited Pension and Life Assurance Scheme (“the Scheme”) is a funded pension scheme providing benefits on both a defined benefit and defined contribution basis. The defined benefit arrangements are generally non-contributory and based on accrual of 1/60th of final pensionable salary for each year of pensionable service in the Scheme. The defined contribution arrangement provides age-related employer contributions ranging from 6% to 13% of pensionable salary for those aged 20 and 55 respectively, increasing by 1% for each 5 year age band. Additionally, employee contributions are matched up to a maximum of 3% at a rate of £1:£1 for those over age 45 and 50p:£1 for those under age 45. The Scheme also provides lump sum death benefits to active members, based on a multiple of salary, which the members can select. The Scheme is now closed to new entrants. The Scheme operates under trust law and is managed and administered by CG Pension Trustees Limited (the Trustee) on behalf of the members in accordance with the terms of the Trust Deed and Rules and relevant legislation. The Plan’s assets are held by the trust. Employees are not required to contribute to the Scheme, which is contracted out of the State Earnings Related Pension Scheme.

The pension cost in respect of defined benefit obligations is assessed in accordance with the advice of a qualified external actuary using a Projected Unit method with a triennial review. The most recent full actuarial assessment of the liabilities of the scheme was at 5 April 2017.

The Scheme exposes Citi to a number of risks, the most significant being;

- Asset Volatility - the Scheme’s obligations are calculated using a discount rate set with reference to corporate bond yields; if assets underperform this yield, this will create a deficit.
- Bond Yields - a decrease in corporate bond yields will increase the value placed on the Scheme’s obligations for accounting purposes. Provided that government bond yields decrease by the same margin as corporate bond yields, this will largely be offset by an increase in the value of the Scheme’s assets.
- Inflation Risk - a significant proportion of the Scheme’s obligations are linked to inflation such that higher inflation will lead to higher liabilities (although in most cases, caps on the level of inflationary increases are in place to protect against extreme inflation).
- Life Expectancy - the majority of the Scheme’s obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the liabilities.

Expected regular employer contributions to be paid into the Scheme during 2019 are \$9 million (2018: \$10 million).

The Scheme duration is an indicator of the weighted-average time until benefit payments are made. For the Scheme as a whole, the duration is 21 years.

The mortality assumptions are based on standard mortality tables which allow for expected future mortality improvements. The assumptions are that a member currently aged 65 will live on average for a further 23.5 years for males and 25.0 years for females. Members currently aged 45 are expected to live a further 24.5 years and 26.3 years from age 65 for males and females respectively.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

8. Pension (continued)

Assumptions that are affected by economic conditions (financial assumptions) are based on market expectations at the balance sheet date, for the period over which the obligations are settled. In addition to the assumptions on which the Scheme obligation at the balance sheet date is based, it is also necessary to assume an expected rate of return on assets, for the purpose of reporting the interest income on pension scheme assets.

The financial assumptions used in calculating the defined benefit scheme liabilities as at 31 December 2018 are as follows:

	2018	2017
Discount rate for scheme liabilities	2.95%	2.50%
Interest income rate on scheme assets	2.95%	2.50%
Expected rate of return on assets	2.95%	2.50%
Inflation	3.40%	3.40%
Rate of general long-term increase in salaries	1.50%	1.50%
Rate of increase to pensions in payment		
- Pensions accrued from 1 May 2005	2.50%	2.50%
- Pensions accrued prior to 1 May 2005	3.20%	3.20%

The fair value of Scheme assets at the reporting date are set out as follows:

	Fair value	
	2018	2017
	\$ Million	\$ Million
Government bonds	1,057	1,241
Corporate bonds	676	703
Insured Pensions	1	1
Other	8	10
Total market value of assets	<u>1,742</u>	<u>1,955</u>

Analysis of amounts recognised in the income statement account:

	2018	2017
	\$ Million	\$ Million
Current service cost	7	11
Curtailement cost	11	-
Expense recognised in the profit and loss account	<u>18</u>	<u>11</u>

Analysis of other finance income:

	2018	2017
	\$ Million	\$ Million
Interest income on pension scheme assets	47	51
Interest expense on pension scheme liabilities	(35)	(39)
Net finance income on pension	<u>12</u>	<u>12</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

8. Pension (continued)

Analysis of amount recognised in Statement of Comprehensive Income:

	2018	2017
	\$ Million	\$ Million
Return on scheme assets (below)/in excess of that recognised in net interest income	(75)	32
Actuarial gains/(losses) due to changes in financial assumptions	126	(52)
Actuarial gains due to changes in demographic assumptions	7	33
Actuarial losses due to liability experience	(46)	(24)
Total remeasurement gains/(losses) recognised in Statement of Comprehensive Income	<u>12</u>	<u>(11)</u>
Deferred tax adjustment on pension in Statement of Comprehensive Income	(3)	3
Total gains/(losses) recognised in Statement of Comprehensive Income net of tax	<u>9</u>	<u>(8)</u>

Reconciliation to the balance sheet:

	2018	2017
	\$ Million	\$ Million
Total market value of assets	1,742	1,954
Present value of scheme liabilities	(1,274)	(1,474)
Gross pension asset	<u>468</u>	<u>480</u>
Related deferred tax liability	(117)	(120)
Net pension asset	<u>351</u>	<u>360</u>

	2018	2017
	\$ Million	\$ Million
Surplus in scheme at beginning of the year	480	437
Current service cost	(7)	(11)
Contributions	10	13
Past service cost	(11)	-
Other finance income	12	12
Remeasurement gains/(losses)	11	(11)
Foreign exchange adjustment	(27)	40
Surplus in scheme at end of year	<u>468</u>	<u>480</u>

CGML recognises a surplus in accordance with the requirements of IFRIC 14. The trustees of the Scheme do not have the unilateral right to commence wind-up of the Scheme. Thus CGML assumes that the Scheme will continue in existence until the last benefit payments are made to members, at which point any residual assets will be returned to the employer in line with the rules of the Scheme.

CGML does not believe the IASB's proposed amendments to IFRIC 14 will affect its ability to receive a refund of any surplus in this situation, but will review this again once the amendments are finalised.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

8. Pension (continued)

The changes to the present value of the defined obligation during the year are as follows:

	2018 \$ Million	2017 \$ Million
Opening defined benefit obligation	1,474	1,410
Current service cost	7	11
Past service cost	11	-
Interest expense	35	39
Remeasurement (gains)/losses on scheme liabilities	(87)	43
Net benefits paid out	(81)	(165)
Foreign exchange adjustment	(85)	136
	<u>1,274</u>	<u>1,474</u>

The changes to the fair value of scheme assets during the year are as follows:

	2018 \$ Million	2017 \$ Million
Opening fair value of scheme assets	1,954	1,847
Interest income on pension scheme assets	47	51
Remeasurement (losses)/gains on scheme assets	(75)	32
Contributions by the employer	10	13
Net benefits paid out	(81)	(165)
Foreign exchange adjustment	(114)	176
	<u>1,741</u>	<u>1,954</u>

The actual return on assets is as follows:

	2018 \$ Million	2017 \$ Million
Interest income on pension scheme assets	47	51
Remeasurement (losses)/gains on scheme assets	(75)	32
	<u>(28)</u>	<u>83</u>

The interest income on scheme assets is set using the discount rate assumption. In 2018, asset values decreased by \$75 million as bond yields increased during the year. In 2017, asset values increased slightly by \$32 million as bond yields fell during the year.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

8. Pension (continued)

The table below sets out the history of experience gains and losses:

	2018	2017	2016	2015	2014
	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million
(Losses)/gains on scheme assets due to experience	(75)	32	392	(94)	392
(Losses)/gains on scheme liabilities due to experience	(46)	(24)	17	27	9
Gains/(losses) on scheme liabilities due to assumptions	133	(19)	(357)	13	(135)
Remeasurements recognised in Statement of Comprehensive Income	12	(11)	52	(54)	266
Related deferred tax	(3)	3	(9)	(16)	(100)
Total gains/(losses) recognised in Statement of Comprehensive Income net of tax	9	(8)	43	(70)	166

The key assumptions used for IAS 19 are the discount rate, inflation and mortality. If different assumptions were used, this could have a material effect on the results disclosed. The sensitivity of the results to these assumptions is set out in the table below.

Sensitivity to key assumptions	2018 Change in defined benefit obligation increase/(decrease) \$ Million	2017 Change in defined benefit obligation increase/(decrease) \$ Million
Effect of increasing the discount rate assumption by 1%	(224)	(286)
Effect of decreasing the discount rate assumption by 1%	297	355
Effect of increasing the salary increase assumption by 1%	12	9
Effect of decreasing the salary increase assumption by 1%	(11)	(9)
Effect of increasing the life expectancy assumption by 1 year	56	65
Effect of increasing the pension increase assumption by 1%	194	204
Effect of decreasing the pension increase assumption by 1%	(154)	(204)
Effect of increasing the inflation assumption by 1%	157	236
Effect of decreasing the inflation assumption by 1%	(132)	(201)

In valuing the liabilities of the pension fund, mortality assumptions have been made as indicated above. If life expectancy had been changed to assume that all members of the fund lived for one year longer, the value of the reported liabilities would have increased by \$56 million (2017: increase of \$65 million).

The sensitivity information shown above is approximate and has been determined taking into account the duration of the liabilities and the overall profile of the Scheme membership. The methods and assumptions used in preparing the sensitivity analysis above have not changed from the prior year.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

9. Share-based incentive plans

As part of the Company's remuneration programme it participates in a number of Citigroup share-based incentive plans. These plans involve the granting of restricted or deferred share awards and share payments. Such awards are used to attract, retain and motivate officers and employees to provide incentives for their contributions to the long-term performance and growth of the Company, and to align their interests with those of the shareholders. The award programmes are administered by the Personnel and Compensation Committee of the Citigroup Inc. Board of Directors, which is composed entirely of non-employee directors.

In the share award program Citigroup issues common shares in the form of restricted share awards, deferred share awards and share payments. For all stock award programs during the applicable vesting period, the shares awarded are not issued to participants (in the case of a deferred stock award) or cannot be sold or transferred by the participants (in the case of a restricted stock award), until after the vesting conditions have been satisfied. Recipients of deferred share awards do not have any shareholder rights until shares are delivered to them, but they generally are entitled to receive dividend-equivalent payments during the vesting period. Recipients of restricted share awards are entitled to a limited voting right and to receive dividend or dividend-equivalent payments during the vesting period. Once a share award vests the shares become freely transferrable, but in the case of certain employees, may be subject to transfer restriction by their terms or share ownership commitment.

In prior years, certain stock-based awards were subject to discretionary clawback provisions and as such subject to variable accounting. Under variable accounting the associated value of the award liability moves in line with changes in Citigroup's common stock price until the date that the award vests. Any fluctuation from the grant date value of the award until the award is fully vested is recognised through the income statement.

In April 2017 Citigroup made amendments to its UK awards prospectus which enabled the adoption of fixed accounting for all remaining, previously awarded, variable accounting unvested awards using a modification price of \$59.39 (set at the end of April when the decision was confirmed). The difference between the grant price of all remaining, previously awarded, variable accounting unvested awards and the modification price was recognised through the income statement, any further fluctuations in share price from the modification price to the vesting date would be recognised in equity, in line with other non-variable accounting share based payment award types.

(i) Stock award programme

The Company participates in the Citigroup Capital Accumulation Program (CAP), under which shares of Citigroup common stock are awarded in the form of restricted or deferred stock to participating employees.

Generally CAP awards of restricted or deferred stock constitute a percentage of annual incentive compensation and vest over a three or four year period beginning on or about the first anniversary of the award date. Except in specific circumstances, continuous employment within Citigroup is required for CAP and other stock award programs to vest.

The program provides that employees who meet certain age plus years-of-service requirements (retirement-eligible employees) may terminate active employment and continue vesting in their awards provided they comply with specified non-compete provisions. Awards granted to retirement-eligible employees are accrued in the year prior to the grant date in the same manner as cash incentive compensation is accrued.

For all stock award programmes, during the applicable vesting period, the shares awarded cannot be sold or transferred by the participant, and the award is subject to cancellation if the participant's employment is terminated. After the award vests, the shares become freely transferable (subject to specific sale restrictions). From the date of award, the recipient of a restricted stock award can direct the vote of the shares and receive regular dividends to the extent dividends are paid on Citigroup common stock. Recipients of deferred stock awards receive dividend equivalents to the extent dividends are paid on Citigroup common stock, but cannot vote.

Stock awards granted generally vest 25% per year over four years or 33% per year over 3 years.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(i) Stock award programme (continued)

As part of remuneration since 2010, the Company entered into an arrangement referred to as an “EU Short Term” award. The award will be delivered in the form of immediately vested restricted shares subject to a six month sale restriction.

	2018	2017	2016	2015	2014
Shares awarded	2,921,491	2,714,862	4,874,781	3,380,169	3,744,987
Weighted average fair market value per share	\$72.78	\$59.34	\$37.51	\$50.54	\$49.64

(ii) Stock option programme

In prior years, the Company made discretionary grants of options to eligible employees pursuant to the broad-based Citigroup Employee Option Grant (CEOG) Program under the Citigroup Stock Incentive Plan. The last options granted under the plan were in 2011. There are no options outstanding. Full details on the history of CEOG can be found in the Company’s prior year financial statements.

(iii) Income statement impact

The table below details the income statement impact of the share based incentive plans.

	2018 \$ million	2017 \$ million
<u>Stock Awards</u>		
Granted in 2018	159	-
Granted in 2017	29	122
Granted in 2016	11	35
Granted in 2015	2	8
Granted in 2014	0	3
<u>Accrued Expenses</u>		
Total Expense (Note 7)	200	185
Fair value adjustment of intercompany recharges in equity reserve	74	(71)
Deferred tax impact of fair value adjustment in equity reserve	(19)	18
Net fair value adjustment of intercompany recharges in equity reserve	55	(53)
Total carrying amount of equity-settled transaction liability	307	439
Total carrying amount of cash-settled transaction liability	8	6

10. Directors’ remuneration

Directors’ remuneration in respect of services to the Company was as follows:

	2018 \$’000	2017 \$’000
Aggregate emoluments	7,552	8,207
Contributions to defined contribution pension scheme	88	96
	<u>7,640</u>	<u>8,303</u>

The contributions to the money purchase pension schemes are accruing to four of the Directors (2017: four). Four of the Directors (2017: four) of the Company participate in parent company share plans.

The remuneration of the highest paid Director was \$2,881,112 (2017: \$3,661,806) and accrued pension of \$9,105 (2017: \$16,063).

The above remuneration is based on the apportionment of time incurred by the Directors for services to the Company, both in their capacity as a Director and, where applicable, their normal employment.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

11. Tax on profit on ordinary activities

(a) Analysis of tax charge in the year

	2018	2017
	\$ Million	\$ Million
Current tax:		
UK corporation tax	212	116
Adjustment in respect of UK corporation tax for previous years	(5)	1
Double taxation relief	(82)	(50)
Overseas current tax	133	69
Adjustment in respect of overseas tax for previous years	(12)	15
Total current tax	<u>246</u>	<u>151</u>
Deferred tax:		
Origination and reversal of temporary differences		
- movement on Pension Asset	(6)	13
- movement on other temporary differences (Note 22)	25	(92)
- overseas	1	(1)
Rate change adjustment	-	-
Adjustment in respect of deferred tax for earlier years:	<u>6</u>	<u>(4)</u>
Total deferred tax	<u>26</u>	<u>(84)</u>
Tax charge on ordinary activities	<u><u>272</u></u>	<u><u>67</u></u>

(b) Factors affecting tax charge for the year

The table below illustrates how the tax chargeable on operating profit for the year is impacted by non-taxable items and available reliefs.

	2018	2017
	\$ Million	\$ Million
Profit/(loss) on ordinary activities before tax	<u>760</u>	<u>451</u>
Profit/(loss) on ordinary activities multiplied by the standard rate of corporation tax in the UK of 27% (2017: 27.25%)	205	123
Effects of:		
Expenses not deductible for tax purposes	26	24
Recognition of previously unrecognised deferred tax relating to prior years	-	(98)
Foreign withholding tax not creditable	44	-
Adjustments in relation to previous years	(11)	12
Impact of tax rates on overseas profits	7	17
Impact of differing rates on current and deferred tax	1	(11)
Total tax charge for year	<u><u>272</u></u>	<u><u>67</u></u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

11. Tax on profit on ordinary activities (continued)

(c) Aggregate current and deferred tax relating to items recognised directly in equity

	2018 \$ Million	2017 \$ Million
Deferred tax on remeasurement of pension in Statement of comprehensive income	3	(3)
Deferred tax associated with gains on DVA in Statement of comprehensive income	33	-
Deferred tax associated with Share based payment transactions in equity	19	(18)
Corporation tax benefit associated with dividend on other equity instruments	(35)	-
	<u>20</u>	<u>(21)</u>

(d) Factors that may affect future tax charges

The UK corporate tax rate applying to CGML in 2018 was 27%. This includes a surcharge of 8% on the profits of banking companies applicable from 1 January 2016. Overseas branches provided for taxation at the appropriate rates for the countries in which they operate.

The main rate of corporation tax (excluding surcharge) in the UK will reduce from 19% to 17% from 1 April 2020.

12. Cash at bank and in hand

The following amounts are included within cash at bank and in hand:

	2018 \$ Million	2017 \$ Million
Cash at bank held by third parties	3,360	2,076
Cash at bank held by other group undertakings	1,540	877
	<u>4,900</u>	<u>2,953</u>

Included within cash held by third parties is \$2,351 million (2017 \$1,841 million) that is held on behalf of clients in segregated accounts. Included within cash held by other group undertakings is \$173 million (2017: \$110 million) on behalf of clients in segregated accounts.

13. Derivatives

	2018		2017	
	Fair Value		Fair Value	
	Asset \$ Million	Liability \$ Million	Asset \$ Million	Liability \$ Million
Interest rate derivatives	92,173	93,279	83,544	82,696
Foreign exchange derivatives	28,695	28,075	26,731	26,199
Credit derivatives	11,636	11,234	16,559	17,004
Equity derivatives	11,904	18,019	9,031	14,949
Commodity derivatives	12,583	15,831	13,544	15,663
	<u>156,991</u>	<u>166,438</u>	<u>149,409</u>	<u>156,511</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

13. Derivatives (continued)

In the ordinary course of its business, CGML enters into various types of derivative transactions, which include:

- Swap contracts - commitments to settle in cash at a future date or dates ranging from a few days to a number of years, based on differentials between specified instruments or indices, as applied to a notional principal amount;
- Option contracts - the right but not the obligation to buy or sell within a specified time a financial asset at a fixed price over a specified time period; and
- Futures and forward contracts - commitments to buy or sell at a future date a financial asset at a fixed price.

Derivative transactions may be OTC agreements which are bilaterally negotiated with counterparties and either settled with those counterparties or novated and cleared through CCPs. Others are standardised contracts traded on an exchange with the CCP as the counterparty to the trade. Derivatives expose CGML to market, credit or liquidity risks which are described further in Note 30 'Financial instruments and risk management' and which may impact the amount, timing and certainty of future cash flows.

14. Financial assets at fair value through profit or loss

Financial assets measured at fair value through profit or loss form part of the trading portfolio of the Company and comprise marketable securities and other financial assets. The following amounts are included in financial assets held at fair value.

	2018	2017
	\$ Million	\$ Million
Financial assets mandatorily at fair value through profit and loss		
Derivatives (Note 13)	156,991	149,409
Inventory		
Government bonds	25,415	25,900
Non-government bonds	7,822	7,133
Equities	17,523	23,073
Commodities	889	572
Commercial Paper	245	79
	<u>51,894</u>	<u>56,757</u>
Equity securities held for investment (note 16)	57	-
Financial assets designated at fair value through profit or loss		
Collateralised financing transactions	74,119	64,516
	<u>283,061</u>	<u>270,682</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

The following table shows an analysis of financial assets and liabilities measured at fair value by level in the hierarchy:

31 December 2018	Level 1	Level 2	Level 3	Total
	\$ Million	\$ Million	\$ Million	\$ Million
Financial assets mandatorily at fair value				
Derivatives	83	155,205	1,703	156,991
Government bonds	22,543	2,857	15	25,415
Non-government bonds	843	6,572	407	7,822
Equities	16,744	759	20	17,523
Commodities	-	889	-	889
Commercial Paper	-	245	-	245
	<u>40,213</u>	<u>166,527</u>	<u>2,145</u>	<u>208,885</u>
Financial assets designated at fair value				
Collateralised financing transactions	29	73,991	99	74,119
Other financial assets at fair value through P&L				
Equity securities held for investment	-	24	33	57
	<u>40,242</u>	<u>240,542</u>	<u>2,277</u>	<u>283,061</u>
Financial liabilities mandatorily at fair value				
Derivatives	67	162,888	3,483	166,438
Securities sold but not yet purchased	46,597	5,192	242	52,031
	<u>46,664</u>	<u>168,080</u>	<u>3,725</u>	<u>218,469</u>
Financial liabilities designated at fair value				
Collateralised financing transactions	-	66,999	-	66,999
	<u>46,664</u>	<u>235,079</u>	<u>3,725</u>	<u>285,468</u>
31 December 2017				
	Level 1	Level 2	Level 3	Total
	\$ Million	\$ Million	\$ Million	\$ Million
Financial assets held for trading				
Derivatives	31	147,519	1,859	149,409
Government bonds	23,065	2,819	16	25,900
Non-government bonds	176	6,713	244	7,133
Equities	21,637	1,364	72	23,073
Commodities	-	572	-	572
Commercial Paper	-	79	-	79
	<u>44,909</u>	<u>159,066</u>	<u>2,191</u>	<u>206,166</u>
Financial assets designated at fair value				
Collateralised financing transactions	-	64,487	29	64,516
Other financial assets at fair value through P&L				
Equity securities held for investment	-	59	-	59
	<u>44,909</u>	<u>223,612</u>	<u>2,220</u>	<u>270,741</u>
Financial liabilities held for trading				
Derivatives	99	152,791	3,621	156,511
Securities sold but not yet purchased	39,262	3,283	234	42,779
	<u>39,361</u>	<u>156,074</u>	<u>3,855</u>	<u>199,290</u>
Financial liabilities designated at fair value				
Collateralised financing transactions	-	56,930	70	57,000
	<u>39,361</u>	<u>213,004</u>	<u>3,925</u>	<u>256,290</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

For the year ended 31 December 2018, there were four significant transfers between Level 1 and Level 2. Following a methodology change \$247 million was reclassified to Level 1 after a review of market liquidity and data availability for equity securities. \$163 million was reclassified to Level 1 due to better data availability for supranational bonds. \$449 million was reclassified to Level 1 and \$161 million to Level 2 after introducing a more granular product type categorisation for Securities Independent Price Verification.

The following table shows an analysis of financial assets and liabilities classified as held at amortised cost by level in the hierarchy:

31 December 2018	Level 1	Level 2	Level 3	Total
	\$ Million	\$ Million	\$ Million	\$ Million
Financial assets at amortised cost				
Cash	4,900	-	-	4,900
Collateralised financing transactions	-	82,920	-	82,920
Cash collateral pledged	-	20,758	-	20,758
Trade debtors	-	11,521	-	11,521
Other debtors	-	148	-	148
	<u>4,900</u>	<u>115,347</u>	<u>-</u>	<u>120,247</u>
Financial liabilities at amortised cost				
Bank loans and overdrafts	-	4,997	-	4,997
Collateralised financing transactions	-	52,996	-	52,996
Cash collateral held	-	18,749	-	18,749
Trade creditors	-	13,332	-	13,332
Other creditors	-	1,486	-	1,486
Subordinated loans	-	9,600	-	9,600
	<u>-</u>	<u>101,160</u>	<u>-</u>	<u>101,160</u>
31 December 2017				
	Level 1	Level 2	Level 3	Total
	\$ Million	\$ Million	\$ Million	\$ Million
Financial assets at amortised cost				
Cash	2,953	-	-	2,953
Collateralised financing transactions	-	70,939	-	70,939
Cash collateral pledged	-	22,071	-	22,071
Trade debtors	-	10,254	-	10,254
Other debtors	-	51	-	51
	<u>2,953</u>	<u>103,315</u>	<u>-</u>	<u>106,268</u>
Financial liabilities at amortised cost				
Bank loans and overdrafts	-	16,461	-	16,461
Collateralised financing transactions	-	51,340	-	51,340
Cash collateral held	-	20,549	-	20,549
Trade creditors	-	11,925	-	11,925
Other creditors	-	1,135	-	1,135
Subordinated loans	-	4,012	-	4,012
	<u>-</u>	<u>105,422</u>	<u>-</u>	<u>105,422</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Given the short term nature and characteristics of collateralised financing transactions, trade debtors, other debtors, trade creditors, other creditors and accruals the fair value has been assumed to approximate the carrying value. The fair value of subordinated loans has been calculated using the present value of future estimated cash flows, discounted using a discount rate of USD 3 month Overnight Indexed Swap (OIS) or 3 month Euro Overnight Index Average (EONIA) plus the Company's credit spread as at 31 December 2018.

Fair Value Measurement

IFRS 13 – *Fair Value Measurement* defines fair value, establishes a framework for measuring fair value and requires disclosures about fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Among other things, the standard requires the Company to maximise the use of observable inputs and minimise the use of unobservable inputs when measuring fair value.

Under IFRS 13, the probability of default of a counterparty is factored into the valuation of derivative positions and includes the impact of the Company's own credit risk on derivatives and other liabilities measured at fair value.

Fair Value Hierarchy

The calculation of fair value incorporates the Company's estimate of the fair value of financial assets and financial liabilities. Other entities may use different valuation methods and assumptions in determining fair values, so comparisons of fair values between entities may not necessarily be meaningful.

The Company measures fair values using the following fair value hierarchy that indicates whether the inputs to those valuation techniques are observable or unobservable. Observable inputs denote market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions.

The types of inputs have created the following fair value hierarchy:

- Level 1: Quoted prices for identical instruments in active markets.
- Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.
- Level 3: Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The Company considers relevant and observable market prices in its valuations where possible. The frequency of transactions and the size of the bid-ask spread when comparing similar transactions are factors that are driven by the liquidity of markets and determine the relevance of observed prices in those markets.

Financial instruments may move between levels in the fair value hierarchy when factors such as the observability of pricing information, or of market input parameters, change. The Company's policy with respect to transfers between levels of the fair value hierarchy is to recognise transfers into and out of each level as of the end of the reporting period.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Determination of Fair Value

As set out more fully in Note 1(c) of these financial statements, when available, the Company generally uses quoted market prices in an active market to calculate the fair value of a financial asset or liability and classifies such items as Level 1. In some specific cases where a market price is available, the Company will make use of alternative pricing techniques, such as matrix pricing, whereby a similar instrument is used as a proxy, to calculate more appropriate fair value for the instrument being valued, in which case the items are classified as Level 2.

If quoted market prices are not available, fair values are based upon internally developed valuation techniques that use, where possible, current market-based or independently sourced market input parameters such as interest rates, foreign exchange rates and option volatilities. Instruments valued using such internally generated valuation techniques are classified according to the significance of the inputs to the valuation. Thus an instrument may be classified in Level 3 even though there may be other significant inputs that are readily observable. Similarly, an instrument may be classified in Level 2, if the unobservable inputs are not deemed significant to the valuation.

Where available, the Company may also make use of quoted prices for recent trading activity in positions with the same or similar characteristics to that being valued. The frequency and size of transactions are among the factors considered in determining the relevance of prices observed from those markets. If relevant and observable prices are available for all significant pricing inputs, those instruments would be classified as Level 2. If relevant and observable market information is not available for significant pricing inputs, other valuation techniques would be used and the item would be classified as Level 3. Fair value estimates from internal valuation techniques are verified, where possible, to prices obtained from independent vendors or brokers. Vendors' and brokers' valuations may be based on a variety of inputs ranging from observed prices to proprietary valuation models, and the Company assesses the quality and relevance of this information in determining the fair value measurement and disclosure of each instrument if such information is used as part of that determination.

Set out below is a description of the procedures used by CGML to determine the fair value of financial assets and financial liabilities irrespective of whether they are measured at fair value mandatorily or have been designated as such. This description includes an indication of the level in the fair value hierarchy in which each financial instrument is generally classified. Where appropriate, it also includes details of the valuation models, the key inputs to those models and any significant assumptions.

Market valuation adjustments

Market valuation adjustments are applied to items in Level 2 and Level 3 of the fair value hierarchy to ensure that the fair value reflects an exit price. These valuation adjustments therefore take into account bid-ask and, where relevant to fair value, additional liquidity considerations.

Credit valuation adjustments

Counterparty credit-risk adjustments are applied to derivatives, such as over-the-counter uncollateralised derivatives, where the base valuation uses market parameters based on the relevant base interest rate curves. Not all counterparties have the same credit risk as that implied by the relevant base curve, so it is necessary to consider the market view of the credit risk of a counterparty in order to estimate the fair value of such an item.

Bilateral or "own" credit-risk adjustments are applied to reflect the Company's own credit risk when valuing derivative liabilities and other liabilities measured at fair value. Counterparty and own credit adjustments consider the expected future cash flows between the Company and its counterparties under the terms of the instrument and the effect of credit risk on the valuation of those cash flows, rather than a point-in-time assessment of the current recognised net asset or liability. Furthermore, the credit-risk adjustments take into account the effect of credit-risk

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

mitigants, such as pledged collateral and any legal right of offset (to the extent such offset exists) with a counterparty through arrangements such as netting agreements.

Derivatives

Exchange-traded derivatives in active markets are generally fair valued using quoted market prices (i.e. exchange prices) and are therefore classified as Level 1 of the fair value hierarchy.

The majority of derivatives entered into by the Company are executed over the counter and are valued using a combination of external prices and internal valuation techniques, including benchmarking to pricing vendor services. The valuation techniques and inputs vary according to the type of derivative and the nature of the underlying instrument. The principal methods used to value these instruments are those adopted industry wide and include discounted cash flows, modelling and numerical approaches.

The type of inputs may include interest rate yield curves, credit spreads, foreign exchange rates, volatilities and correlations.

The Company discounts future cash flows using appropriate interest rate curves. In the case of collateralised interest rate derivatives the Company follows the terms in the collateral agreement governing the transaction. The agreements generally provide that an OIS curve is used. The OIS curves reflect the interest rate paid on the collateral against the fair value of these derivatives. Citi uses the relevant benchmark curve for the currency of the derivative (e.g., the U.S. Dollar London Interbank Offered Rate (LIBOR) for U.S. dollar derivatives) as the discount rate for uncollateralized derivatives.

Government bonds, corporate bonds and equities

CGML uses quoted market prices to determine the fair value of government bonds and exchange traded equities; such items are typically classified as Level 1 of the fair value hierarchy.

For government bonds, corporate bonds and equities traded over the counter, for which a quoted price is not available, CGML generally determines fair value utilising internal valuation techniques. Fair value estimates from internal valuation techniques are verified, where possible, to prices obtained from independent vendors. Vendors compile prices from various sources and may apply alternative pricing techniques, such as matrix pricing, whereby a similar instrument is used as a proxy for similar bonds or loans where no price is observable. If available, the Company may also use quoted prices for recent trading activity of assets with similar characteristics to the bond being valued. Government bonds, corporate bonds and equities priced using such methods are generally classified as Level 2. However, when less liquidity exists for government bonds, corporate bonds or equities, a quoted price is stale or prices from independent sources vary, they are generally classified as Level 3.

Collateralised financing transactions

No quoted prices exist for such financial instruments and so fair value is determined using a discounted cash-flow technique. Cash flows are estimated based on the terms of the contract, taking into account any embedded derivative or other features. Expected cash flows are discounted using market rates appropriate to the maturity of the instrument as well as the nature and amount of collateral taken or received. Generally, when such instruments are held at fair value, they are classified within Level 2 of the fair value hierarchy as the inputs used in the valuation are readily observable.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Changes in Level 3 Fair Value Category

The following tables present the changes in the Level 3 fair value category for the years ended 31 December 2018 and 31 December 2017. Gains and losses presented below include changes in the fair value related to both observable and unobservable inputs. CGML often hedges positions with offsetting positions that are classified in a different level.

2018	Gain/(loss) recorded in the profit and loss statement									
	At 1 January \$ Million	Realised \$ Million	Unrealised \$ Million	Purchases \$ Million	Sales \$ Million	Issuances \$ Million	Settlements \$ Million	Transfers into Level 3 \$ Million	Transfers out of Level 3 \$ Million	At 31 December \$ Million
Financial assets mandatorily at fair value										
Derivatives	1,859	(245)	(71)	71	(8)	3	272	478	(656)	1,703
Government bonds	16	8	(10)	40	(31)	-	-	5	(13)	15
Non-government bonds	244	(14)	(8)	412	(243)	-	-	169	(153)	407
Equities	72	44	7	66	(150)	-	-	22	(41)	20
Commodities	-	-	-	-	-	-	-	-	-	-
Financial assets designated at fair value										
Collateralised financing transactions	29	541	(42)	94	-	-	(45)	50	(528)	99
Other assets at fair value through P&L										
Equity securities held for investment	-	-	30	-	-	-	-	3	-	33
	2,220	334	(94)	683	(432)	3	227	727	(1,391)	2,277

2017	(Gain)/loss recorded in the profit and loss statement									
	At 1 January \$ Million	Realised \$ Million	Unrealised \$ Million	Purchases \$ Million	Sales \$ Million	Issuances \$ Million	Settlements \$ Million	Transfers into Level 3 \$ Million	Transfers out of Level 3 \$ Million	At 31 December \$ Million
Financial liabilities held for trading										
Derivatives	3,621	410	(179)	-	48	7	1,249	1,354	(3,027)	3,483
Securities sold but not yet purchased	234	88	(17)	-	6	-	(71)	91	(89)	242
Financial liabilities designated at fair value										
Collateralised financing transactions	70	-	-	-	-	-	-	-	(70)	-
	3,925	498	(196)	-	54	7	1,178	1,445	(3,186)	3,725

2017	Gain/(loss) recorded in the profit and loss statement									
	At 1 January \$ Million	Realised \$ Million	Unrealised \$ Million	Purchases \$ Million	Sales \$ Million	Issuances \$ Million	Settlements \$ Million	Transfers into Level 3 \$ Million	Transfers out of Level 3 \$ Million	At 31 December \$ Million
Financial assets held for trading										
Derivatives	2,260	(15)	(125)	7	(7)	-	266	301	(828)	1,859
Government bonds	2	1	1	49	(43)	-	-	8	(2)	16
Non-government bonds	183	23	46	275	(243)	-	-	138	(178)	244
Equities	15	2	14	9	(17)	-	-	74	(25)	72
Commodities	18	(1)	(35)	20	(2)	-	-	-	-	-
Financial assets designated at fair value										
Collateralised financing transactions	-	-	-	-	-	-	-	29	-	29
Financial assets available for sale										
Equity securities held for investment	-	-	-	-	-	-	-	-	-	-
	2,478	10	(99)	360	(312)	-	266	550	(1,033)	2,220

2017	(Gain)/loss recorded in the profit and loss statement									
	At 1 January \$ Million	Realised \$ Million	Unrealised \$ Million	Purchases \$ Million	Sales \$ Million	Issuances \$ Million	Settlements \$ Million	Transfers into Level 3 \$ Million	Transfers out of Level 3 \$ Million	At 31 December \$ Million
Financial liabilities held for trading										
Derivatives	3,526	(656)	(212)	(4)	4	-	819	1,191	(1,047)	3,621
Securities sold but not yet purchased	110	(6)	(94)	-	20	-	(18)	221	1	234
Financial liabilities designated at fair value										
Collateralised financing transactions	-	-	-	70	-	-	-	-	-	70
	3,636	(662)	(306)	66	24	-	801	1,412	(1,046)	3,925

Included in the Level 3 balance at 31 December 2018 above are intercompany assets of \$1,025 million (2017: \$1,208 million) and liabilities of \$2,782 million (2017: \$2,314 million).

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

During 2018 there was no significant change in total L3 balances. The Level 3 financial instruments inventory decreased mainly due to transfers to Level 2, partially offset by settlements and by transfers into Level 3.

Settlements were partly driven by upfront fees on new structure note issuances. Transfers out of Level 3 were mainly due to improvements in the levelling process leading to additional analysis of the portfolio, coupled with improved availability of consensus data. Transfers out of Level 3 were driven by Equity Derivatives and Credit, including a \$528 million Commercial loan transfer to Level 2 related to funded collars. Transfers into Level 3 arose predominantly from Equity Derivatives and Commodity Derivatives. These were primarily on positions where consensus data was no longer available and on trades where the valuation uncertainty had increased to a material level.

Valuation process for Level 3 Fair Value Measurements

Price verification procedures and related internal control procedures are governed by the Citi Pricing and Price Verification Policy and Standards, which are jointly owned by Finance and Risk Management. Finance has implemented the Pricing and Price Verification Standards and Procedures to facilitate compliance with this policy.

For fair value measurements of substantially all assets and liabilities held by CGML, individual business units are responsible for valuing the trading account assets and liabilities, and Product Control within Finance performs independent price verification procedures to evaluate those fair value measurements. Product Control is independent of the individual business units and reports into the Global Head of Product Control, who ultimately reports to the Citi Chief Financial Officer. Fair value measurements of assets and liabilities are determined using various techniques including, but not limited to, discounted cash flows and internal models, such as option and correlation models.

Based on the observability of inputs used, Product Control classifies the inventory as Level 1, Level 2 or Level 3 within the fair value hierarchy. When a position involves one or more significant inputs that are not directly observable, additional price verification procedures are applied. These procedures may include reviewing relevant historical data, analysing profit and loss, valuing each component of a structured trade individually and benchmarking, amongst others.

Reports of Level 3 inventory of each business line of the Company are distributed to senior management in Finance, Risk and the individual business lines. Reports are also discussed in monthly meetings with Senior Management. Whenever a valuation adjustment is needed to bring the price of an asset or liability to its exit price, Product Control reports it to management along with other price verification results.

In addition, the pricing models used in measuring fair value are governed by an independent control framework. Although the models are developed and tested by the individual business units, they are independently validated by the Model Validation Group and reviewed by Finance with respect to their impact on the price verification procedures. The purpose of this independent control framework is to assess model risk arising from models' theoretical soundness, calibration techniques where needed, and the appropriateness of the model for a specific product in a defined market. To ensure their continued applicability, models are subject to independent annual model review.

Transfers from Level 2 to Level 3 arise when the availability of observable independent market data or pricing information for the significant valuation inputs of an instrument reduces. Transfers from Level 3 to Level 2 can occur when observability of the independent market data or pricing information for significant valuation inputs improves, or where the significance of the unobservable inputs reduces sufficiently.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Unobservable inputs

During the year, total changes in fair value, representing a loss of \$62 million (2017: \$879 million gain) were recognised in the income statement relating to items where fair value was estimated using a valuation technique that incorporated one or more significant inputs based on unobservable market data. As these valuation techniques were based upon assumptions, changing the assumptions would change the estimate of fair value. The potential impact of using reasonably possible alternative assumptions for the valuation techniques for both observable and unobservable market data has been quantified as approximately \$428 million downside and \$390 million upside (2017: \$319 million downside and \$276 million upside). The main contributors to this impact are Equity Markets, Credit Trading and Interest Rates Derivatives businesses.

Valuation uncertainty is computed on a quarterly basis. The methodology used to derive the impact across each product is determined by applying adjustments to the price or significant model input parameters used in the valuation.

The adjustments are typically computed with reference to proxy analysis using third party data. Examples of the approach used to derive sensitivity adjustments are outlined below:

- Equity Markets: Valuation uncertainty is computed from a combination of consensus market data and proxy analysis using third party data providers.
- Credit Trading and Securitised Markets: Valuation uncertainty is computed from a combination of consensus market data, broker data and proxy analysis using third party data providers.
- Commodity Markets: Valuation uncertainty is computed from a combination of consensus market data and proxy analysis using third party data providers.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Valuation Techniques and Inputs for Level 3 Fair Value Measurements

The following tables present the valuation techniques covering the majority of Level 3 inventory and the most significant unobservable inputs used in Level 3 fair value measurements as of 31 December 2018 and 31 December 2017. Note that these tables represent key drivers by disclosures line and may not agree back to the Changes in Level 3 Fair Value Category table.

2018	Fair Value \$ million	Methodology	Input	Range of Inputs		Unit		
				Min	Max			
Assets								
<u>Derivative assets</u> 1,703								
Interest Rate Derivatives		Model-based	Equity Volatility	3.0	78.4	%		
		Model-based	Price	-	1,022.6	\$		
Equity Derivatives		Model-based	Equity-Equity Correlation	- 81.4	100.0	%		
		Price-based	Price	-	1,022.6	\$		
		Model-based	Equity Volatility	3.0	78.4	%		
		Model-based	Forward Price	64.7	144.4	%		
Commodity Derivatives		Model-based	Equity-Equity Correlation	- 81.4	100.0	%		
		Model-based	Equity-FX Correlation	- 86.3	70.0	%		
		Model-based	Forward Price	15.3	585.1	%		
		Model-based	Commodity Volatility	8.9	59.9	%		
		Model-based	Commodity Correlation	- 51.9	92.1	%		
		<u>Inventory</u>						
		Government bonds	15	Price-based	Price	-	865.9	\$
Non-government bonds	407	Price-based	Price	-	1,022.6	\$		
		Model-based	Price	-	1,022.6	\$		
Equity	20	Price-based	Price	-	1,022.6	\$		
		Model-based	Price	-	865.9	\$		
		Price-based	Price	-	865.9	\$		
		Liabilities						
<u>Derivative liabilities</u> 3,483								
Commodity Derivatives		Model-based	Forward Price	15.3	585.1	%		
		Model-based	Commodity Volatility	8.9	59.9	%		
		Model-based	Commodity Correlation	- 51.9	92.1	%		
Equity Derivatives		Model-based	Equity Volatility	3.0	78.4	%		
		Model-based	Forward Price	15.3	585.1	%		
		Model-based	Forward Price	64.7	144.4	%		
		Model-based	Equity-IR Correlation	- 40.0	70.4	%		
		Model-based	Equity-Equity Correlation	- 81.4	100.0	%		
		Model-based	Commodity Correlation	- 51.9	92.1	%		
		Model-based	Equity-FX Correlation	- 86.3	70.0	%		
		Model-based	Equity Volatility	3.0	78.4	%		
Interest Rate Derivatives		Model-based	Price	-	1,022.6	\$		
		Model-based	Equity-Equity Correlation	- 81.4	100.0	%		
		Price-based	Price	-	1,022.6	\$		
<u>Securities sold but not yet purchased</u>	242	Model-based	Price	-	865.9	\$		
		Price-based	Price	-	865.9	\$		
		Price-based	Equity-FX Correlation	- 86.3	70.0	%		

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

2017	Fair Value \$ million	Methodology	Input	Range of Inputs		Unit
				Min	Max	
Assets						
<u>Derivative assets</u>						
Interest Rate Derivatives	1,859	Model-based	IR Normal Volatility	0.1	77.4	%
Credit Derivatives		Model-based	Credit Spread	-	717.3	bps
Credit Derivatives		Price-based	Upfront Points	-	143.0	%
Equity Derivatives		Model-based	Equity Volatility	1.5	51.4	%
Equity Derivatives		Model-based	Forward Price	69.7	154.2	%
Equity Derivatives		Model-based	Price	-	287.6	\$
Equity Derivatives		Price-based	Price	-	287.6	\$
<u>Inventory</u>						
Non-government bonds	244	Price-based	Price	-	50,000.0	\$
Equity Securities	72	Model-based	Price	-	287.6	\$
Equity Securities		Price-based	Price	-	287.6	\$
Liabilities						
<u>Derivative liabilities</u>						
Interest Rate Derivatives	3,621	Model-based	IR Normal Volatility	0.1	77.4	%
Credit Derivatives		Model-based	Credit Spread	-	717.3	bps
Credit Derivatives		Price-based	Upfront Points	0.0	143.0	%
Equity Derivatives		Model-based	Equity Volatility	0.3	51.4	%
Equity Derivatives		Model-based	Forward Price	69.7	154.2	%
Equity Derivatives		Model-based	Price	-	287.6	\$
Equity Derivatives		Price-based	Price	-	287.6	\$
<u>Securities sold but not yet purchased</u>						
Non-government bonds	234	Model-based	IR Normal Volatility	9.4	69.2	%
Equity Securities		Model-based	Price	-	287.6	\$

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Sensitivity to unobservable inputs and interrelationships between unobservable inputs

The impact of key unobservable inputs on the Level 3 fair value measurements may not be independent of one another. In addition, the amount and direction of the impact on a fair value measurement for a given change in an unobservable input depends on the nature of the instrument as well as whether the Company holds the instrument as an asset or a liability. For certain instruments, the pricing, hedging and risk management are sensitive to the correlation between various inputs rather than on the analysis and aggregation of the individual inputs.

The following section describes the sensitivities and interrelationships of the most significant unobservable inputs used by the Company in Level 3 fair value measurements.

Yield

Adjusted yield is generally used to discount the projected future principal and interest cash flows on instruments, such as loans. Adjusted yield is impacted by changes in the interest rate environment and relevant credit spreads.

In some circumstances, the yield of an instrument is not observable in the market and must be estimated from historical data or from yields of similar securities. This estimated yield may need to be adjusted to capture the characteristics of the security being valued. In other situations, the estimated yield may not represent sufficient market liquidity and must be adjusted as well. Whenever the amount of the adjustment is significant to the value of the security, the fair value measurement is classified as Level 3.

Recovery

Recovery is the proportion of the total outstanding balance of a bond or loan that is expected to be collected in a liquidation scenario. For many credit securities (such as asset-backed securities), there is no directly observable market input for recovery, but indications of recovery levels are available from pricing services. The assumed recovery of a security may differ from its actual recovery that will be observable in the future. The recovery rate impacts the valuation of credit securities. Generally, an increase in the recovery rate assumption increases the fair value of the security. An increase in loss severity, the inverse of the recovery rate, reduces the amount of principal available for distribution and, as a result, decreases the fair value of the security.

Credit Spread

Credit spread is a component of the security's yield representing its credit quality. Credit spread reflects the market perception of changes in prepayment, delinquency and recovery rates. Changes in credit spread affect the fair value of securities differently depending on the characteristics and maturity profile of the security. For example, credit spread is a more significant driver of the fair value measurement of a high yield bond as compared to an investment grade bond. Generally, the credit spread for an investment grade bond is also more observable and less volatile than its high yield counterpart.

Volatility

Volatility represents the speed and severity of market price changes and is a key factor in pricing options. Typically, instruments can become more expensive if volatility increases. For example, as an index becomes more volatile, the cost to Citi of maintaining a given level of exposure increases because more frequent rebalancing of the portfolio is required. Volatility generally depends on the tenor of the underlying instrument and the strike price or level defined in the contract. Volatilities for certain combinations of tenor and strike are not observable. The general relationship between changes in the value of a portfolio to changes in volatility also depends on changes in interest rates and the level of the underlying index. Generally, long option positions (assets) benefit from increases in volatility, whereas short option positions (liabilities) will suffer losses. Some instruments are more sensitive to changes in volatility than others. For example, an at-the-money option would experience a larger percentage change in its fair value than a deep-in-the-money option. In addition, the fair value of an option with more than one underlying security (for example, an option on a basket of bonds) depends on the volatility of the individual underlying securities as well as their correlations.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15. Financial assets and liabilities accounting classifications and fair values (continued)

Correlation

Correlation is a measure of the co-movement between two or more variables. A variety of correlation-related assumptions are required for a wide range of instruments, including equity baskets, foreign-exchange options and many other instruments. For almost all of these instruments, correlations are not observable in the market and must be estimated using historical information. Estimating correlation can be especially difficult where it may vary over time. Extracting correlation information from market data requires significant assumptions regarding the informational efficiency of the market (for example, swaption markets). Changes in correlation levels can have a major impact, favorable or unfavorable, on the value of an instrument, depending on its nature.

Qualitative discussion of the ranges of significant unobservable inputs

The following section describes the ranges of the most significant unobservable inputs used by the Company in Level 3 fair value measurements. The level of aggregation and the diversity of instruments held by the Company lead to a wide range of unobservable inputs that may not be evenly distributed across the Level 3 inventory.

Price

The price input is a significant unobservable input for certain fixed income instruments. For these instruments, the price input is expressed as a percentage of the notional amount, with a price of 100 meaning that the instrument is valued at par. For most of these instruments, the price varies between zero and slightly above 100. Relatively illiquid assets that have experienced significant losses since issuance, such as certain asset-backed securities, are at the lower end of the range, whereas most investment grade corporate bonds will fall in the middle to the higher end of the range. The price input is also a significant unobservable input for certain equity securities; however, the range of price inputs varies depending on the nature of the position, the number of shares outstanding and other factors.

Yield

Ranges for the yield inputs vary significantly depending upon the type of security. For example, securities that typically have lower yields, such as German or U.S. government bonds, will fall on the lower end of the range, while more illiquid securities or securities with lower credit quality, such as certain residual tranche asset-backed securities, will have much higher yield inputs.

Credit Spread

Credit spread is relevant primarily for fixed income and credit instruments; however, the ranges for the credit spread input can vary across instruments. For example, certain fixed income instruments, such as certificates of deposit, typically have lower credit spreads, whereas certain derivative instruments with high-risk counterparties are typically subject to higher credit spreads when they are uncollateralized or have a longer tenor. Other instruments, such as credit default swaps, also have credit spreads that vary with the attributes of the underlying obligor. Stronger companies have tighter credit spreads, and weaker companies have wider credit spreads.

Volatility

Similar to correlation, asset-specific volatility inputs vary widely by asset type. For example, ranges for foreign exchange volatility are generally lower and narrower than equity volatility. Equity volatilities are wider due to the nature of the equities market and the terms of certain exotic instruments. For most instruments, the interest rate volatility input is on the lower end of the range; however, for certain structured or exotic instruments (such as market-linked deposits or exotic interest rate derivatives), the range is much wider.

Correlation

There are many different types of correlation inputs, including credit correlation, cross-asset correlation (such as equity-interest rate correlation), and same-asset correlation (such as interest rate-interest rate correlation). Correlation inputs are generally used to value hybrid and exotic instruments. Generally, same-asset correlation inputs have a narrower range than cross-asset correlation inputs. However, due to the complex nature of many of these instruments, the ranges for correlation inputs can vary widely across portfolios.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

16. Equity securities held for investment

	Unlisted Investments 2018 \$ Million	Unlisted Investments 2017 \$ Million
Fair value		
At 1 January	59	31
Additions	-	-
Disposals	-	-
Losses recognised in income statement	(2)	-
Gains recognised in statement of comprehensive income	-	28
At 31 December	<u>57</u>	<u>59</u>

Prior to the adoption of IFRS 9, Equity securities held for investment were classified as Available for sale, as described in Note 1(c) 'Principal Accounting Policies'.

17. Involvement with unconsolidated structured entities

The table below describes the types of structured entities that are not controlled by CGML but in which it holds an interest.

Type of structured entity	Nature and purpose	2018		2017	
		Total VIE assets \$ millions	CGML exposure \$ millions	Total VIE assets \$ millions	CGML exposure \$ millions
Investment Funds	Fund/Limited Partnership Structure	689	1	612	-
Client Intermediation	Credit Derivative Repack Vehicle	188	171	18	9
		<u>877</u>	<u>172</u>	<u>630</u>	<u>9</u>

Investment funds

The objective of these funds is to seek income and capital gains from investing in US government securities. Funding is provided by investors in the fund, who are professional or institutional investors. CGML is the derivative swap counterparty to the fund which is the source of its exposure. The derivative transactions are FX options and swaps.

Client Intermediation

Client intermediation transactions represent a range of transactions designed to provide investors with specified returns based on the returns of an underlying security, referenced asset or index. The Company's involvement in these transactions includes being the counterparty to the entity's derivative instruments. The derivative transactions are FX options and swaps.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

18. Other Assets

The following amounts are included in Other Assets:

	2018	2017
	\$ Million	\$ Million
Cash collateral pledged	20,758	22,071
Trade debtors	11,521	10,254
Other debtors	148	51
Prepayments and accrued income	17	18
Corporation tax recoverable	-	19
Deferred tax asset (Note 22)	146	226
Intangible fixed assets (Note 19)	193	179
Tangible fixed assets - equipment (Note 19)	2	2
Tangible fixed assets - premises improvement (Note 19)	4	5
Investments in subsidiary undertakings (Note 20)	769	4
	<u>33,558</u>	<u>32,829</u>

Included within Trade Debtors are receivables from central clearing counterparties, securities trading receivables outside standard settlement, and other brokerage receivables.

Other Assets includes the following balances due from other Citi affiliates:

	2018	2017
	\$ Million	\$ Million
Trade debtors	1,453	1,886
Cash collateral pledged	506	1,678
Other debtors	50	5
Investments in subsidiary undertakings	769	4
	<u>2,778</u>	<u>3,573</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

19. Intangible and Tangible fixed assets

The movement in Intangible and Tangible fixed assets for the year was as follows:

	Intangible	Tangible Fixed Assets	
	Software	Equipment	Premises improvements
	\$ Million	\$ Million	\$ Million
Cost			
At 1 January 2018	510	11	13
Additions	59	-	-
Disposals	(16)	-	-
Exchange rate adjustments	3	-	-
At 31 December 2018	556	11	13
Accumulated amortisation/depreciation			
At 1 January 2018	331	9	8
Charge for the year (Note 7)	47	-	1
Additions	-	-	-
Disposals	(15)	-	-
At 31 December 2018	363	9	9
Net book value			
At 31 December 2018	193	2	4

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

20. Investments in subsidiary and related undertakings

The following amounts for subsidiary undertakings are included in Other assets:

	2018	2017
	\$'000	\$'000
Cost		
At 1 January	3,580	3,580
Additions	766,587	-
Disposals	(965)	-
At 31 December	<u>769,202</u>	<u>3,580</u>

Details of all related undertakings held at 31 December 2018 as required by CA2006 SI 2008 No 410 Sch 4 Para 1 are set out below. All undertakings have a year end of 31 December and all of the Company's holdings are of ordinary shares.

Citigroup Global Markets Europe AG was purchased from a Citi affiliate in April 2018 as part of Citi's strategy to continue serving its European clients following the UK's decision to leave the European Union.

Citigroup South Africa Credit Products (Proprietary) Limited was dissolved in November 2017. The final distribution was received in 2018 which resulted in CGML recognising a loss of \$406 thousand in its income statement.

Citigroup Global Markets Luxembourg S.a.R.L was placed into liquidation during 2018.

Directly held subsidiary undertakings (all 100% owned)

<u>Name</u>	<u>Registered address</u>
Citigroup Global Markets Europe AG	16 Reuterweg, Frankfurt am Main 30323, Germany
Citigroup Global Markets Luxembourg S.a.R.L.	31, Z.A. Bourmicht, L-8070 Bertrange, Luxembourg
Citigroup Global Markets Funding Luxembourg SCA	31, Z.A. Bourmicht, L-8070 Bertrange, Luxembourg
Citigroup Global Markets Funding Luxembourg GP S.a.R.L.	31, Z.A. Bourmicht, L-8070 Bertrange, Luxembourg
Citi Global Wealth Management S.A.M.	Monte Carlo Palace, 7-9 Boulevard des Moulins, MC98000 Monaco
Citigroup South Africa Credit Products (Proprietary) Limited (dissolved November 2017)	145 West Street, Sandown, Sandton 2196, South Africa

21. Pledged assets

Collateral accepted as security for assets

The fair value of financial assets including government bonds, non-government bonds, equities, and cash accepted that were permitted to be sold or re-pledged in the absence of default was \$299 billion (2017: \$275 billion). The fair value of the collateral accepted that had been re-pledged at 31 December 2018 was \$254 billion (2017: \$218 billion). The Company was obliged to return equivalent securities. Where the collateral was used in secured financing transactions, these transactions were conducted under terms that are usual and customary to standard lending and securities borrowing and lending activities. Where the collateral was used for derivative transactions, this was conducted under industry-standard ISDA (International Swaps and Derivatives Association) and CSA (Credit Support Annex) agreements.

Financial assets pledged to secure liabilities

The total value of purchased financial assets including government bonds, non-government bonds, equities and cash that were pledged as collateral for liabilities at 31 December 2018 was \$64 billion (2017: \$66 billion). These transactions were conducted under terms that are usual and customary to standard lending and securities borrowing and lending activities.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21. Pledged assets (continued)

The table below sets out an analysis of balance sheet encumbered (pledged) and unencumbered (not pledged) assets. This section is unaudited.

An asset shall be treated as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralise or credit enhance any transaction from which it cannot be freely withdrawn. Correspondingly an asset shall be deemed to be unencumbered where CGML is not subject to any legal, contractual, regulatory or other restriction preventing it from liquidating, selling, transferring, assigning or, generally, disposing of such asset via active outright sale or repurchase agreement.

2018	Encumbered	Non-encumbered	Total
	\$ Million	\$ Million	\$ Million
<u>Assets</u>			
Cash at bank and in hand	-	4,900	4,900
Equity instruments	13,354	4,169	17,523
Debt securities	32,345	2,026	34,371
Collateralised financing transactions	-	157,039	157,039
Other assets	18,274	172,800	191,074
Total	63,973	340,934	404,907

Collateral Received

Equity instruments	46,854	3,589	50,443
Debt securities	206,820	28,263	235,083
Other collateral received	3	13,275	13,278
Total	253,677	45,127	298,804

2017

Assets

Cash at bank and in hand	-	2,952	2,952
Equity instruments	17,831	5,242	23,073
Debt securities	30,704	2,980	33,684
Collateralised financing transactions	-	135,455	135,455
Other assets	18,016	164,763	182,779
Total	66,551	311,392	377,943

Collateral Received

Equity instruments	55,676	4,615	60,291
Debt securities	161,813	36,070	197,883
Other collateral received	1,203	15,145	16,348
Total	218,692	55,830	274,522

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

22. Deferred tax asset

The movement in deferred tax in the year is as follows:

	2018	2017
	\$ Million	\$ Million
At 1 January	226	111
Transitional adjustment	4	-
Income statement movement relating to deferred tax	(32)	97
Deferred tax movement in equity	(52)	18
At 31 December	<u>146</u>	<u>226</u>

Deferred tax is recognised on the company's temporary differences as it is considered probable that taxable profits will arise against which these can be utilised. The deferred tax asset is recognised at the tax rates at which the temporary differences are expected to reverse.

There is also a deferred tax liability of \$117 million on the pension asset which is reflected in Note 8 Pension.

The deferred tax asset in the balance sheet comprises:

	\$ Million	\$ Million
Accelerated tax depreciation	32	37
Deferred compensation	140	178
DVA in OCI	(29)	-
Provisions and other temporary differences	3	8
Losses carried forward	-	3
	<u>146</u>	<u>226</u>

The deferred tax movement in the income statement comprises:

	2018	2017
	\$ Million	\$ Million
Accelerated tax depreciation	5	4
Deferred compensation	19	(91)
Provisions and other temporary differences	5	(4)
Losses carried forward	3	(6)
	<u>32</u>	<u>(97)</u>

The deferred tax movement in equity comprises:

	2018	2017
	\$ Million	\$ Million
DVA in Statement of comprehensive income	33	-
Share based payment transactions in Equity reserve	19	(18)
	<u>52</u>	<u>(18)</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

23. Other Liabilities

The following amounts are included within Other Liabilities. Included within 'Other creditors and accruals' is the accrual in respect of the bank levy.

	2018	2017
	\$ Million	\$ Million
Cash collateral held	18,749	20,549
Trade creditors	13,332	11,925
Other creditors and accruals	1,486	1,135
Payroll taxes	29	43
Corporation tax payable	18	11
Deferred tax liability on pensions (Note 8)	117	120
Provisions for liabilities and charges (Note 24)	35	25
	<u>33,766</u>	<u>33,808</u>

Trade Creditors includes customer margin trading payables, securities trading payables outside standard settlement and other brokerage payables.

Included within Other Liabilities are the following balances due to other Citi affiliates:

	2018	2017
	\$ Million	\$ Million
Cash collateral held	1,376	432
Trade creditors	356	750
Other creditors and accruals	413	425
	<u>2,145</u>	<u>1,607</u>

24. Provisions for liabilities

	Restructuring provision \$ Million	Litigation provisions \$ Million	Other provisions \$ Million	Total \$ Million
At 1 January 2018	8	1	16	25
Charge to profits	18	11	1	30
Provisions utilised	(17)	(1)	(1)	(19)
Exchange adjustments	-	-	(1)	(1)
At 31 December 2018	<u>9</u>	<u>11</u>	<u>15</u>	<u>35</u>

No further information is disclosed in respect of the litigation provision due to its sensitive nature. Other provisions are held in respect of accounting reconciliation and control procedures as part of the balance sheet substantiation process.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

25. Derecognition of financial assets and financial liabilities

Transferred financial assets that are not derecognised in their entirety

There are certain instances where the Company continues to recognise financial assets that it has transferred.

CGML enters into collateralised financing transactions where it sells or lends debt or equity securities with a concurrent agreement to repurchase them. As significantly all of the risks and rewards of the underlying securities are retained, a collateralised financing liability is recognised and the securities remain on balance sheet. As at 31 December 2018 the Company recognised \$41 billion of assets (2017: \$42 billion), with an associated \$40 billion of collateralised financing liabilities (2017: \$41 billion).

CGML also enters into collateralised financing transactions where it sells debt or equity securities and simultaneously undertakes a swap transaction for the same underlying instrument. As significantly all of the risks and rewards of the underlying securities are retained, a collateralised financing liability is recognised and the securities remain on balance sheet. As at 31 December 2018 the Company recognised \$4,130 million of inventory (2017: \$3,281 million) with associated collateralised financing liabilities of \$4,151 million (2017: \$3,209 million) for transactions of this nature.

26. Trading financial assets and liabilities

Any initial gain or loss on financial instruments where valuation is dependent on techniques using unobservable parameters is deferred over the life of the contract or until the instrument is redeemed, transferred or sold or the fair value becomes observable. In case the transaction price in the market in which these transactions are undertaken is different from the fair value in the Company's principal market for those instruments, the fair value of these transactions are also estimated by using valuation techniques.

The table below sets out the aggregate difference yet to be recognised in profit or loss at the beginning and end of the year with a reconciliation of the changes of the balance during the year for those financial assets and liabilities classified as trading.

	2018	2017
	\$ Million	\$ Million
Unamortised balance at 1 January	35	52
Deferral on new transactions	29	-
Recognised in the income statement during the period:		
- amortisation	(18)	(17)
Unamortised balance at 31 December	<u>46</u>	<u>35</u>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

27. Subordinated loans

The subordinated loans form part of the Company's regulatory capital resources held to meet the capital adequacy requirements of the PRA and can only be repaid with their consent. The loans, on which interest is payable at market rates, are due to other group undertakings. The following amounts were included within subordinated loans:

Subordinated Loans	Currency	\$ Million	Average Interest Rate	Weighted Average Maturity (Years)
31 December 2018	USD	9,600	4.70%	8.78
31 December 2017	USD	2,150	3.05%	8.34
	EUR	<u>1,862</u>	0.73%	6.4
		<u>4,012</u>		

On 30 January 2018 CGML drew down \$650 million of subordinated loan borrowings from Citigroup Financial Products Inc. On 27 December 2018 CGML repaid EUR 1,550 million and \$2,800mm of subordinated loan borrowings to Citigroup Financial Products Inc.

On 21 December 2018 the Company exchanged \$5 billion of inter-company funding for \$5 billion of Total Loss Absorbing Capacity (TLAC) subordinated loan borrowings from Citicorp LLC. On 27 December 2018 CGML drew down \$4,600 million of Tier 2 subordinated loan borrowings from Citicorp LLC.

The TLAC loans rank as senior subordinated claims, which are subordinate to the claims of senior creditors, but rank ahead of Own Funds Instruments, which comprise Common Equity Tier 1 instruments, Additional Tier 1 instruments (see Note 28) and Tier 2 instruments.

The Tier 2 loans rank as subordinated claims, which are subordinated to senior creditors but rank ahead of Common Equity Tier 1 instruments and Additional Tier 1 instruments.

In the event that the Company's Own Funds Instruments have been written down, or if the Company or certain of its direct or indirect parent entities are subject to Resolution Proceedings in the UK or elsewhere, then all or a portion of the subordinated loans and/or interest on them shall be reduced or cancelled as instructed by the UK Resolution Authority (Bank of England).

There are no other circumstances under which early repayment may be demanded by the lender. There are no provisions whereby the loans may be converted into capital or any other form of liability.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

28. Capital and Reserves

(a) Called up share capital

CGML's share capital comprises:

	2018	2017
	\$ Million	\$ Million
Allotted, called-up and fully paid:		
1,499,626,620 ordinary shares of a par value of \$1 each	1,500	1,500
	<u>1,500</u>	<u>1,500</u>

The shares have attached to them full voting, dividend and capital distribution (including on winding up) rights. They do not confer any rights of redemption.

(b) Other equity instruments

On 19 June 2018 CGML issued \$500 million of Additional Tier 1 Notes to Pipestone LLC, another Citi entity

On 20 June 2017 CGML issued \$1,800 million of Additional Tier 1 Notes to Pipestone LLC, another Citi entity.

The notes are perpetual with no fixed redemption date, and are redeemable at the issuer's option subject to approval from the PRA. Interest is fixed every 5 years, interest payments are not cumulative and the issuer may cancel any interest payment at its sole discretion. The notes do not confer any voting rights.

In the event that CGML's Common Equity Tier 1 (CET1) ratio falls below 7.0%, the notes will be written down to zero. If a winding up occurs under these circumstances, no payment will be made to the noteholders. If a winding up takes place under any other circumstances, the noteholders will rank *pari passu* with the holders of the most senior class(es) of preference shares (if any) and ahead of all other classes of issued shares, but junior to the claims of senior creditors, for the amount of the principal and any accrued but unpaid interest on the notes.

(c) Capital reserve

On 13 April 2018 the Company received a capital contribution of \$1 billion from its parent, Citigroup Global Markets Holdings Bahamas Limited.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

29. IFRS 9 and IFRS 15 transition adjustments

The following adjustments have been applied in order to transition the Company's balance sheet in accordance with the requirements of IFRS 9 and IFRS 15 with effect from 1 January 2018 as described in Note 3 'Principal Accounting Policies'.

	As originally reported	Transition to IFRS 9	Transition to IFRS 15	Adjusted for IFRS 9 and 15
	31 December 2017	31 December 2017	31 December 2017	31 December 2017
	\$ Million	\$ Million	\$ Million	\$ Million
Assets				
Financial assets at amortised cost				
- cash at bank and in hand	2,953			2,953
- collateralised financing transactions	70,939	(1)		70,938
Financial assets at fair value through profit or loss				
- derivatives	149,409			149,409
- inventory	56,757			56,757
- financial assets designated at fair value through profit or loss	64,516			64,516
- equity securities held for investment		59		59
Financial assets classed as available for sale	59	(59)		-
Pension asset	480			480
Other assets	32,829	2		32,831
Total Assets	377,942	1	-	377,943
Liabilities and Equity				
Financial liabilities at amortised cost				
- bank loans and overdrafts	16,461			16,461
- collateralised financing transactions	51,340			51,340
Financial liabilities at fair value through profit or loss				
- derivatives	156,511			156,511
- securities sold but not yet purchased	42,779			42,779
- financial liabilities designated at fair value through profit or loss	57,000			57,000
Other liabilities	33,808	6	1	33,815
Subordinated loans	4,012			4,012
Total Liabilities	361,911	6	1	361,918
Capital and reserves				
Called up share capital	1,500			1,500
Other equity instruments	1,800			1,800
Capital reserve	9,999			9,999
Retained earnings and other reserves	2,732	(5)	(1)	2,726
Shareholders' funds	16,031	(5)	(1)	16,025
Total Liabilities and Shareholders' Funds	377,942	1	-	377,943

Under IFRS 9, Collateralised financing transactions at amortised cost decreased by \$1 million as a result of expected credit loss impairments. Other assets increased by \$2 million as the result of a rise in the deferred tax asset, partly offset by expected credit loss impairments. Other liabilities increased by \$6 million reflecting the impact on corporate tax payable. As a result of these adjustments, Retained earnings decreased by \$5 million.

Within Retained earnings and other reserves, pre-tax gains of \$32 million relating to prior revaluation of equity securities held for investment were transferred from Other reserves into Retained earnings, and pre-tax DVA losses of \$60 million were transferred from Retained earnings into Other reserves.

Under IFRS 15, \$1 million of revenue previously recognised in the income statement was transferred out of Retained earnings into Other liabilities, until the recognition criteria of IFRS 15 are met.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management

Risk Management Overview and Culture

Effective risk management is of primary importance to the Company and accordingly, the Company maintains a comprehensive risk management process. The Company utilises Citi's risk management model and organisation, with its multi-dimensional risk oversight and its people, processes and systems to ensure robust oversight of entity risks. In addition, the Company has entity specific risk management and controls, to ensure local challenge to risk-taking and to ensure that Citi's approach is appropriate for the Company.

Risk management must be built on a foundation of ethical culture. Under Citi's mission and value proposition, which was developed by Citi's senior leadership and distributed throughout the firm, Citi strives to serve as a trusted partner to its clients by responsibly providing financial services that enable growth and economic progress while earning and maintaining the public's trust by constantly adhering to the highest ethical standards. As such, Citi asks all employees to ensure that their decisions pass three tests: they are in clients' interests, create economic value and are always systemically responsible. Additionally, Citi evaluates employees' performance against behavioural expectations set out in Citi's leadership standards, which were designed in part to effectuate Citi's mission and value proposition. Other culture-related efforts in connection with conduct risk, ethics and leadership, escalation, and treating customers fairly help Citi to execute its mission and value proposition.

While the management of risk is the collective responsibility of all employees, Citi and the Company assign accountability into three lines of defence:

- first line of defence: the business owns all of its risks and is responsible for the management of those risks;
- second line of defence: the Company's control functions (e.g., risk, finance, compliance, etc.) establish standards for the management of risks and effectiveness of controls; and
- third line of defence: Citi's internal audit function independently provides assurance, based on a risk-based audit plan, that processes are reliable and governance and controls are effective.

The Company applies Citi's global risk management framework, tailored as appropriate for the Company, based on the following principles established by the Chief Risk Officer:

- a defined risk appetite, aligned with business strategy;
- accountability through a common framework to manage risks;
- risk decisions based on transparent, accurate and rigorous analytics;
- a common risk capital model to evaluate risks;
- expertise, stature, authority and independence of risk managers; and
- risk managers empowered to make decisions and escalate issues.

Reputational and Franchise Risk and New Products or Services

A Citi-wide (including an EMEA-based) Business Practices Committee (BPC) reviews practices involving reputational or franchise issues. These committees review whether Citi's business practices have been designed and implemented in a way that meets the highest standards of professionalism, integrity and ethical behaviour.

Additional committees ensure that product risks are identified, evaluated and determined to be appropriate for Citi and its customers, and safeguard the existence of necessary approvals, controls and accountabilities.

The New Product Approval Committee (NPAC) is designed to ensure that significant risks, including reputation and franchise risks, for all new ICG products, services or complex transactions, are identified and evaluated, determined to be appropriate, properly recorded for risk aggregation purposes, effectively controlled, and have accountabilities in place.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Reputational and Franchise Risk and New Products or Services (continued)

Investment Products Risk (IPR) manages the potential significant franchise, operational, regulatory and economic risks related to the manufacture and distribution of investment products purchased by Retail Investors, via global or regional Distribution Product Approval Committees (DPAC).

Risk Appetite Framework

The Company's risk appetite framework includes principle-based qualitative boundaries to guide behaviour and quantitative boundaries within which the Company will operate, focusing on ensuring it has sufficient capital resources for the risks to which the Company could be exposed. The Company's Board of Directors sets the Company's risk appetite, and incorporates management judgement regarding prudent risk taking and growth in light of the business environment within which the Company operates. The Company's Board of Directors, with input from senior Citi and Company management, sets overarching expectations and holds management accountable for ensuring the risk profile remains within this appetite.

CGML Risk Committee

The CGML Risk Committee assists the Board in fulfilling its responsibility for oversight of the risks the Company faces including market, liquidity, credit, operational and certain other risks; their alignment with the Company's strategy, capital adequacy and the macroeconomic environment; and the development of a strategy to manage these risks. The CGML Risk Committee meets not less than quarterly.

Managing Risk across Businesses, Regions and Products

Citi manages risk across three dimensions: businesses, regions and products. The Company's risk management framework aims to recognise the range of the Company's global business activities by combining corporate oversight with independent risk management functions within each business.

Each of the major business groups has a Business Chief Risk Officer who is the focal point for risk decisions (such as setting risk limits or approving transactions) in the business. The independent risk managers at the business level are responsible for establishing and implementing risk management policies and practices within their business, for overseeing the risk in their business, and for responding to the needs and issues of their business. This ensures the active management of the principal risks of the Company.

Regional Chief Risk Officers are accountable for the risks in their geographic area and are the primary risk contact for the regional business heads and local regulators. In addition, Product Chief Risk Officers are accountable for those areas of critical importance to Citi and are accountable for the risks within their specialities across businesses and regions, such as real estate and fundamental credit. The Product Risk Officers serve as a resource to the Chief Risk Officer, as well as enabling the Business and Regional Chief Risk Officers to focus on the day-to-day management of risks and respond in a timely manner to business needs. Risk management within the Company is overseen by the Regional Risk Manager along with the managers for the different risk types within the region, such as market risk, liquidity risk, credit risk and operational risk.

Finance & Risk Infrastructure (FRI) is a Citi global function that was established to implement common data and data standards, common processes and integrated technology platforms globally as well as to integrate infrastructure activities across both Finance and Risk. FRI works to drive straight through data processing and produce more effective and efficient processes and governance aimed at supporting both the Finance and Risk organisations.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Risk Aggregation and Stress Testing

The Citi Chief Risk Officer is responsible for monitoring and controlling major risk exposures and concentrations across the organisation. This means aggregating risks, within and across businesses, as well as subjecting those risks to alternative stress scenarios in order to assess the potential economic impact they may have on Citi. This aggregation is also performed at a Company level under the accountability of the Company's CRO.

Stress tests are undertaken across Citi and the Company and cover mark-to-market, available-for-sale, and amortised cost portfolios. These firm-wide stress reports seek to measure the potential impact to Citi, the Company and its component businesses, of stresses such as the risk of very large movements in a number of key risk factors (e.g. interest rates, credit spreads), as well as the potential impact of a range of historical and hypothetical forward-looking systemic stress scenarios.

Supplementing the stress testing described above, risk management works with input from the businesses and finance to provide periodic updates to senior management and the Company's Board of Directors on significant potential exposures across the Company arising from risk concentrations, financial market participants and other systemic issues. These risk assessments are forward-looking exercises, intended to inform senior management and the Board of Directors about the potential economic impacts to the Company that may occur, directly or indirectly, as a result of hypothetical scenarios, based on judgmental analysis from independent risk managers.

Market Risk

Market risk is the risk to earnings or capital from adverse changes in market factors. Price risk losses arise from fluctuations in the market value of trading and non-trading positions resulting from changes in interest rates, credit spreads, foreign exchange rates, equity and commodity prices, and in their implied volatilities. The Company's trading results are particularly exposed to movements in these market factors.

The Company's derivative transactions are principally in the equity, interest rate, credit, FX and commodity markets. Most of the counterparties to the Company's derivative transactions are banks and other financial institutions.

Market risk is measured through a complementary set of tools, including factor sensitivity limits, Value at Risk (VaR) and stress testing. In addition the Company has a defined risk appetite framework which is supplemented by regular stress testing and daily monitoring against the Company's VaR limit with monthly reporting to the CGML CRO and quarterly reporting to senior management and the Board of Directors.

Each business that uses the Company in client facing transactions is required to establish, with approval from the independent market risk management function, a market risk limit framework for identified risk factors. This framework must clearly define approved risk profiles, include permitted product lists, and must remain within the parameters of Citi's overall risk appetite. The established limits are monitored by market risk management.

In all cases, the businesses are ultimately responsible for the market risks taken and for remaining within their defined limits. Management of this process begins with the employees who work most closely with the Group's customers, products and markets and extends up to the senior executives who manage these businesses with a complementary aggregation up to the country level.

The Company's VaR reports are circulated daily for monitoring of: (i) the VaR usage against the overall VaR limit; (ii) the standalone VaR by market risk factor; (iii) the component Value at Risk (CVaR) contribution to total VaR; and (iv) the stressed VaR. As well as an overall VaR limit, the Company has factor sensitivity limits and trigger levels in place for each market risk factor that are monitored daily. Factor sensitivities are defined as the change in the value of a position for a defined change in a market risk factor (e.g. the change in the value of a Treasury bill for a one basis point change in interest rates). It is the responsibility of each business to seek to ensure that factor sensitivities are calculated and reported for all relevant risks taken within a trading portfolio.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Market Risk (continued)

Exposure that approaches or exceeds limit or trigger levels is escalated within market risk management and to the Company's Market Risk Manager and Legal Entity Risk Manager, with necessary actions taken.

Where the Equities business is concerned, an ex-ante stress loss based escalation framework covers all concentrated trades, including accelerated equity offerings, equity underwritings, rights offerings and special situation (event-driven) transactions. Transactions with estimated stress losses above defined levels require escalation to the EMEA Chief Risk Officer, the Company's Chief Executive Officer and to the Company's board.

VaR Methodology

VaR estimates the potential decline in the value of a position or a portfolio, under normal market conditions, over a specified holding period and confidence level. The VaR methodology developed and applied at Citi at a global level is also used at subsidiary level, including the Company. The Citi standard is a one-day holding period, at a 99 per cent confidence level. The VaR methodology incorporates the factor sensitivities of the trading portfolio and the volatilities and correlations of those factors. The Company's VaR is based on the volatilities of, and correlations between, a wide range of market risk factors, including factors that track the specific issuer risk in debt and equity securities. VaR statistics can be materially different across firms due to differences in portfolio composition, differences in VaR methodologies, and differences in model parameters. Citi believes that VaR statistics can be used more effectively as indicators of trends in risk taking within a firm, rather than as a basis for inferring differences in risk taking across firms.

Citi and the Company use Monte Carlo simulation, which they believe is conservatively calibrated to incorporate the greater of short-term (most recent month) and long-term (three years) market volatility. The Monte Carlo simulation involves approximately 300,000 market factors, making use of 180,000 time series, with market factors updated daily and model parameters updated weekly.

VaR Limitations

Although extensive back-testing of VaR hypothetical portfolios is performed, with varying concentrations by industry, risk rating and other factors, the VaR measure cannot necessarily provide an indication of the potential size of loss when it occurs. Hence a varied set of factor sensitivity limits and stress tests are used, in addition to VaR limits.

A VaR limit is in place for the Company, to ensure that any excesses are discussed and resolved between risk officers and the business and entity management. This limit is complemented by the factor sensitivity triggers defined above.

Although it provides a valuable guide to risk, VaR should also be viewed in the context of its limitations:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those of an extreme nature;
- the use of a one day holding period assumes that all positions can be liquidated or their risks offset in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a one day holding period may be insufficient to fully liquidate or hedge positions;
- the use of a 99% confidence level, by definition, does not take into account losses that might occur beyond this confidence level;
- VaR is calculated on the basis of exposures outstanding at close of business and therefore does not necessarily reflect intra-day exposures; and
- VaR is unlikely to reflect loss potential on exposures that only arise under significant market movements.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Market Risk (continued)

Stress testing is performed on portfolios on a weekly basis to estimate the impact of extreme market movements. Stress testing is performed on individual portfolios, as well as on aggregations of portfolios and businesses, as appropriate. It is the responsibility of independent market risk management, in conjunction with the businesses, to develop stress scenarios, review the output of periodic stress testing exercises, and use the information to make judgments concerning the on-going suitability of exposure levels and limits.

The following table summarises market risk by disclosing the Company's average Economic VaR during the reporting period on a month-end basis, together with the VaR as at 31 December, broken down into component Value at Risk (CVaR). CVaR represents the correlation or diversification adjusted standalone VaR contribution from a particular sub-portfolio, and to the overall 31 December VaR.

	2018					
	\$ Million					
	Equity risk	Interest rate risk	Foreign exchange risk	Commodity risk	Credit Risk	Overall VaR
Average	7.8	7.3	6.4	1.8	4.8	28.1
As at 31 December	6.7	5.1	5.9	4.6	3.3	25.6
Peak	16.7	14.7	12.7	6.9	8.0	37.8

	2017					
	\$ Million					
	Equity risk	Interest rate risk	Foreign exchange risk	Commodity risk	Credit Risk	Overall VaR
Average	4.5	5.3	6.8	3.2	6.5	26.3
As at 31 December	3.8	7.9	9.2	1.8	4.6	27.3
Peak	7.0	12.6	9.3	6.2	6.5	31.2

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Liquidity risk

The Company defines liquidity risk as the risk that it will not be able to meet efficiently both expected and unexpected current and future cash flow and collateral needs without adversely affecting either daily operations or its financial condition.

Citi operates as a centralised treasury model, where the overall balance sheet is managed by Treasury, through its Global Franchise and Regional Treasurers. The EMEA Regional Treasurer is supported by the UK Treasurer who is responsible for the Company's balance sheets and liquidity profile. The UK Treasurer oversees the UK Legal Entity Management team which includes a liquidity management team responsible for managing CGML's liquidity on a day to day basis. The liquidity management team is specifically responsible for the Company's daily funding, liquidity risk management, liquidity stress testing, and provision of oversight to the Fixed Income and Equity Finance desks (including setting and monitoring limits).

For liquidity and funding, CGML employs limits on funding from single counterparty and tenor diversification. In addition, CGML monitors liquid asset diversification against limits set for issuing sovereign, currency of denomination, and other non-sovereign issuer.

The Company adheres to the Citi Global Liquidity Risk Management Policy which requires it to define its liquidity risk appetite and operate limit and trigger structures to ensure compliance. The Company is also required to comply with the European Union CRD IV Delegated Act, which sets out certain regulatory qualitative and quantitative standards for managing liquidity. The Company's liquidity position is calculated and reported to senior management on a daily basis and reviewed formally by the UK ALCO committee and the Board of Directors.

Funding and Liquidity Objectives

Adequate liquidity and sources of funding are essential to Citi's businesses. Funding and liquidity risks arise from multiple factors, many of which are beyond Citi's direct control, such as disruptions in the financial markets, changes in key funding sources, credit spreads, alterations to Citi's credit ratings and political and economic conditions across the globe.

Citi's funding and liquidity objectives are to maintain adequate liquidity to:

- (i) fund its existing asset base;
- (ii) grow its core businesses;
- (iii) maintain sufficient excess liquidity, structured appropriately, to enable operation under a wide variety of market conditions, including both short and long term market disruptions; and
- (iv) satisfy regulatory requirements.

These Citi-wide primary liquidity objectives have been adopted by CGML and approved as part of its Liquidity Risk Management Policy.

CGML funds itself through a combination of equity, long-term subordinated debt, long-term and short-term unsecured intercompany borrowings, structured notes issued by Citigroup Global Markets Funding Luxembourg (CGMFL), a Luxembourg-domiciled structured notes issuance subsidiary of CGML, and secured financing. Long-term structural liquidity is provided through subordinated debt, stockholders equity, and intercompany loans with greater than 1 year to maturity. Day-to-day funding fluctuations are managed through short-term intercompany loans, typically from Citicorp LLC, Citi's Intermediate Holding Company (IHC).

Citigroup employs a single face to the market approach for long term benchmark unsecured borrowing. Structural liquidity is originated primarily through issuance of long term debt by the parent company, Citigroup Inc. and is passed down stream, via the IHC, to CGML and other broker dealer entities via explicit intercompany lending transactions or equity investment in subsidiaries.

In order to meet its internal liquidity-related stress testing requirements and ratios, the Company holds a pool of liquid assets including highly liquid government bonds. This asset pool is reviewed on a daily basis and adjusted as necessary to maintain CGML's key liquidity ratios and metrics within the Board approved risk appetite. Increases to the asset pool are typically funded through increased intercompany unsecured long term borrowing.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Liquidity risk (continued)

Liquidity Risk Management Framework

The Company's liquidity risk management framework is defined by Citi's Global Liquidity Risk Management Policy (the Policy), which is owned by the Citi Treasury Chief Risk Officer and is applicable to Citigroup Inc. and its consolidated subsidiaries. The Policy and any material amendments to it must be approved by the Citigroup Board of Directors.

As a part of the global framework, the Company is required to prepare a detailed plan of its liquidity position which also considers the forecast of future business activities. This plan is called the Funding and Liquidity Plan (FLP) and it addresses strategic liquidity issues and establishes the parameters for identifying, measuring, monitoring and limiting liquidity risk and sets forth key assumptions for liquidity risk management.

In summary, the FLP is a strategic implementation of the global framework and is divided into the following components:

- Contingency Funding Plan (CFP) tested annually;
- Intra-day liquidity risk management plan; and
- Balance Sheet Funding and Liquidity Plan.

The Company's FLP is prepared annually and the liquidity profile is monitored on an on-going basis and reported daily to key stakeholders including the UK Treasurer, Treasury CRO and UK ALCO members. Liquidity risk is monitored using various ratios and limits in accordance with the Liquidity Risk Management Policy for Citi. The FLP includes a forecast of CGML's balance sheet and liability metrics as well as an overview of the current secured financing market conditions as observed by the Finance desks. As part of the FLP, liquidity limits, liquidity ratios and assumptions for periodic stress tests are reviewed and approved by the UK ALCO, Citi Treasurer and Treasury CRO.

Citi maintains a series of contingency funding plans on a consolidated basis as well as for individual entities, including the Company. The Contingency Funding Plan (CFP) is a key component of the Global Framework and it incorporates the management plan of contingent actions in the event of a crisis. The Company's CFP includes the "playbook" for addressing liquidity and funding challenges in crisis situations, triggers, procedures, roles and responsibilities, a communication plan and a key contact list to manage a liquidity event. The CFP defines a crisis committee responsible for decision making and execution of contingency plans to address both short-term and longer term disruptions in funding sources.

Funding and Liquidity Risk Governance

The UK Asset and Liability Committee (ALCO) is the primary governance committee for CGML's balance sheet management. Among its key responsibilities are:

- Country oversight of market and liquidity risks, transfer pricing and balance sheet management across businesses;
- Evaluation of capital adequacy, and oversight of regulatory constraints;
- Oversight of balance sheet trends and mix;
- Oversight of liquidity levels, structure, metrics and policies, including Contingency Funding Plans;
- Review and approval of the summary Annual Funding and Liquidity Plan;
- Oversight of local regulatory requirements related to the balance sheet, including liquidity and market risk regulations;
- Monitoring and management of liquidity risk;
- Adherence to capital standards and determination of dividend repatriation; and
- Ensuring prudent balance sheet management for each legal entity.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Liquidity risk (continued)

Citi's UK management team and the UK ALCO monitor changes in the economic environment and any corresponding impact on the asset quality of Citi's local and consolidated balance sheets, including CGML. The UK ALCO also functions as a forum for senior management to ensure adherence to corporate wide policies and procedures, regulatory requirements and rating agency commitments.

The membership of the UK ALCO includes the UK Citi Country Officer (CCO) and CGML Chief Executive Officer (CEO) (chair), UK Country Finance Officer (CFO), UK Treasurer, UK Chief Risk Officer, Independent Liquidity Risk Manager, Finance Desk Heads and other key business and functional heads.

The UK ALCO meets on a monthly basis.

CGML's Board reviews the Liquidity Risk Management Policy and the Company's Internal Liquidity Adequacy Assessment Process (ILAAP) document and approves the Liquidity Risk Management Framework, the Funding and Liquidity Plan, the Contingency Funding Plan and any relevant CGML-specific liquidity policies.

Liquidity Stress Testing and Scenario Analysis Framework

The Company's use of stress testing and scenario analysis is intended to quantify the potential impact of a liquidity event on the Company's balance sheet and liquidity position, and to identify viable funding alternatives that can be utilised. These scenarios include:

- potential significant changes in key funding sources;
- market triggers (such as credit rating downgrades);
- changes to uses of funding; and
- political and economic conditions, including stressed market conditions as well as Company-specific events.

Some tests span liquidity events over a full year, while others may cover a more intense shock over a shorter period such as 30 days. These tests can identify potential mismatches between liquidity sources and uses over a variety of time horizons, and liquidity limits are set accordingly. The stress tests and potential mismatches may be calculated with varying frequencies, with several important tests performed daily. They are also performed for the material currencies that constitute CGML's balance sheet.

CGML's stress testing framework seeks to ensure that sufficient contingent liquidity is maintained (the liquidity pool of highly liquid assets mentioned above) after considering the impact of key liquidity risk.

Internal Liquidity Risk Management Metrics

From an internal perspective, the Company uses two stress tests to monitor its liquidity position. The first stress test covers a 12 month survival horizon in a highly stressed market disruption scenario, whilst the other covers 30 days in a severely stressed market disruption scenario with a loss of confidence in Citi.

Highly Stressed Market Disruption Scenario (Referred to as S2) – This scenario assumes market, credit and economic conditions are moderately to highly stressed with potential further deterioration covering a one year period.

Loss of Confidence/Severe Market Disruption Scenario (Referred to as RLAP) – This is a stressed cash flow scenario used to measure the short term (30 calendar days) survival horizon under a severe loss of confidence (idiosyncratic event) and severe market disruption.

These metrics are calculated and monitored on a universal currency basis and in the most material currencies that constitute CGML's balance sheet (EUR, GBP and USD).

Stress Test	RLAP	S2
Time Horizon	30 days	1 year
Calculation	Liquid assets to net cash outflows	Liquid assets to net cash outflows

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Liquidity risk (continued)

Maturity analysis of financial instruments

The following table assigns the Company's assets and liabilities to a combination of the relevant contractual and/or behavioural maturity groupings based on the remaining period from the balance sheet date. It should be noted that in managing liquidity risk, management uses certain assumptions based on a combination of contractual and behavioural maturity profiles, as shown below. The majority of the financial instruments disclosed below are presented on a contractual basis, with the exception of derivatives, inventory and securities sold but not yet purchased. Due to the nature of the business, behavioural maturity is considered the best reflection of the liquidity of these financial instruments.

	Total	On demand	3 months & less	3 - 12 months	1 - 5 years	More than 5 years
31 December 2018	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million
Cash	4,900	4,900	-	-	-	-
Collateralised financing transactions at amortised cost	82,920	44,206	29,488	9,226	-	-
Derivatives	156,991	156,991	-	-	-	-
Inventory	51,894	51,894	-	-	-	-
Collateralised financing transactions at fair value	74,119	13,025	50,702	6,280	3,710	402
Equity securities held for investment	57	-	-	-	-	57
Cash collateral pledged	20,758	-	20,758	-	-	-
Trade debtors	11,521	-	11,521	-	-	-
Other debtors	148	-	148	-	-	-
Total financial assets	403,308	271,016	112,617	15,506	3,710	459
	Total	On demand	3 months & less	3 - 12 months	1 - 5 years	More than 5 years
	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million
Bank loans and overdrafts	4,997	479	2,800	204	50	1,464
Collateralised financing transactions at amortised cost	52,996	21,838	15,263	14,962	933	-
Derivatives	166,438	166,438	-	-	-	-
Securities sold but not yet purchased	52,031	-	52,031	-	-	-
Collateralised financing transactions at fair value	66,999	17,488	42,972	3,484	3,055	-
Cash collateral held	18,749	-	18,749	-	-	-
Trade creditors	13,332	-	13,332	-	-	-
Other creditors and accruals	1,486	-	1,486	-	-	-
Subordinated loans	9,600	-	-	-	3,000	6,600
Total financial liabilities	386,628	206,243	146,633	18,650	7,038	8,064
Net liquidity gap	16,680	64,773	(34,016)	(3,144)	(3,328)	(7,605)
Cumulative liquidity gap		64,773	30,757	27,613	24,285	16,680

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Liquidity risk (continued)

31 December 2017	Total	On demand	3 months	3 - 12	1 - 5 years	More than
	\$ Million	\$ Million	& less	months	\$ Million	5 years
			\$ Million	\$ Million		\$ Million
Cash	2,953	2,953	0	-	-	-
Collateralised financing transactions at amortised cost	70,939	23,727	35,456	11,711	45	-
Derivatives	149,409	149,409	-	-	-	-
Inventory	56,757	56,757	-	-	-	-
Collateralised financing transactions at fair value	64,516	9,782	44,691	8,557	684	802
Financial assets classed as available for sale	59	-	-	-	-	59
Cash collateral pledged	22,071	-	22,071	-	-	-
Trade debtors	10,254	-	10,254	-	-	-
Other debtors	51	-	51	-	-	-
Total financial assets	377,009	242,628	112,523	20,268	729	861
	Total	On demand	3 months	3 - 12	1 - 5 years	More than
	\$ Million	\$ Million	& less	months	\$ Million	5 years
			\$ Million	\$ Million		\$ Million
Bank loans and overdrafts	16,461	661	4,970	338	8,180	2,312
Collateralised financing transactions at amortised cost	51,340	11,755	25,837	13,172	576	-
Derivatives	156,511	156,511	-	-	-	-
Securities sold but not yet purchased	42,779	-	42,779	-	-	-
Collateralised financing transactions at fair value	57,000	5,134	46,622	4,730	319	195
Cash collateral held	20,549	-	20,549	-	-	-
Trade creditors	11,925	-	11,925	-	-	-
Other creditors and accruals	1,135	-	1,135	-	-	-
Subordinated loans	4,012	-	-	-	-	4,012
Total financial liabilities	361,712	174,061	153,817	18,240	9,075	6,519
Net liquidity gap	15,297	68,567	(41,294)	2,028	(8,346)	(5,658)
Cumulative liquidity gap		68,567	27,273	29,301	20,955	15,297

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Liquidity risk (continued)

The table below assigns the Company's liabilities to relevant maturity groupings based on the remaining contractual future undiscounted cash flows up to maturity. The amounts disclosed in the table are the contractual undiscounted cash flows, whereas the Company manages liquidity risk based on a combination of contractual and behavioural maturity profiles. Derivatives are excluded from the table as these are held for trading purposes. As such, the intention is not to hold these positions to settlement over the period of contractual maturity. Cash collateral held, securities sold not yet purchased, trade creditors, and other creditors and accruals are excluded because they are deemed to be three months or less and are thus very short term.

	Contractual value	On demand	3 months & less	3 - 12 months	1 – 5 years	More than 5 years
	\$ Million	\$Million	\$ Million	\$ Million	\$ Million	\$ Million
31 December 2018						
Bank loans and overdrafts	5,419	478	2,826	243	252	1,620
Collateralised financing transactions at amortised cost	53,140	21,839	15,277	15,078	946	-
Collateralised financing transactions at fair value	67,080	17,488	42,982	3,499	3,111	-
Subordinated loans	13,747	-	113	338	4,711	8,585
Total financial liabilities	139,386	39,805	61,198	19,158	9,020	10,205
	Contractual value	On demand	3 months & less	3 - 12 months	1 – 5 years	More than 5 years
	\$ Million	\$Million	\$ Million	\$ Million	\$ Million	\$ Million
31 December 2017						
Bank loans and overdrafts	17,342	661	5,042	517	8,601	2,521
Collateralised financing transactions at amortised cost	51,454	11,755	25,890	13,230	579	-
Collateralised financing transactions at fair value	57,041	5,134	46,622	4,761	320	204
Subordinated loans	4,640	-	20	59	316	4,245
Total financial liabilities	130,477	17,550	77,574	18,567	9,816	6,970

Credit risk

Credit risk is the potential for financial loss resulting from the failure of a borrower or counterparty to honour its financial or contractual obligations.

Credit risk arises in many of the Company's business activities, including:

- sales and trading;
- derivatives;
- securities transactions;
- settlement;
- when Citi acts as an intermediary on behalf of its clients and other third parties; and
- when acting as underwriter or within a capital raising capacity.

Credit risk arises from the Company's activities in OTC derivatives markets and reverse repurchase agreements as well as securities lending transactions and margin lending. The Company's credit exposure on derivatives and foreign exchange contracts is primarily to professional counterparties in the global financial sector, including banks, investment banks, hedge funds, insurance companies and asset management companies.

The Company enters into derivative transactions principally to enable customers to transfer, modify or reduce their credit, equity, interest rate and other market risks. In addition, the Company uses derivatives, and other instruments, as an end user to manage the risks to which the Company is exposed.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Credit risk (continued)

Credit risk also arises from settlement and clearing activities, when the Company transfers an asset in advance of receiving its counter-value or advances funds to settle a transaction on behalf of a client. Concentration risk, within credit risk, is the risk associated with having credit exposure concentrated within a specific client, industry, region or other category.

Credit risk is one of the most significant risks the Company faces as an institution. As a result, Citi has a well-established framework in place for managing credit risk across all businesses. This includes a defined risk appetite, credit limits and credit policies, both at the business level as well as at the firm-wide level. Citi's credit risk management also includes processes and policies with respect to problem recognition, including "watch lists," portfolio review, updated risk ratings and classification triggers. The framework is supplemented by regular stress testing and monitoring of exposures, with monthly and quarterly reporting to the senior management and the Board of Directors respectively.

The Company monitors a concentration risk management framework which includes risk limits by relationship, country and industry.

The credit process is based on a series of fundamental policies, including:

- joint business and independent risk management responsibility for managing credit risks;
- a single centre of control for each credit relationship to coordinate credit activities with that client;
- a requirement for a minimum of two authorised credit officer signatures on extensions of credit, one of which must be from a sponsoring credit officer in the business and the other from a credit officer in independent credit risk management;
- consistent risk rating standards, applicable to every Citi obligor and facility; consistent standards for credit origination documentation and remedial management; and
- portfolio limits to ensure diversification and maintain risk/capital alignment.

Large exposure limit reports are circulated daily that show the Company's exposure to various counterparty groupings as a proportion of its own funds. Regulations require that the Company does not exceed specified limits for its non trading book exposures. Within a certain percentage below the maximum permitted level, the Regulatory Reporting group conducts initial analysis and provides a breakdown of exposures to credit risk management. At or above the maximum permitted level, the credit risk management team takes action and escalates to the front office in order to reduce exposure to that counterparty and thereby bring exposure back within permitted levels. Similar reporting is carried out against internal limits for the trading book exposures.

Wrong-way risk is an aggravated form of concentration risk and arises when there is a strong correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction. This is monitored at a Company level, and includes circulation of a monthly report that identifies CDS based, OTC or securities financing transactions (SFTs) that generate specific wrong-way risk. Wrong-way risk is mitigated through the use of enforceable netting agreements and margining.

The Company seeks to restrict its exposure to credit losses by entering into master netting arrangements with most counterparties with which it undertakes a significant volume of transactions. Master netting arrangements do not generally result in an offset of balance sheet assets and liabilities, as transactions are usually settled on a gross basis. However, the credit risk associated with favourable contracts is reduced by a master netting arrangement to the extent that if an event of default occurs, all amounts with the counterparty are terminated and settled on a net basis. Many of these arrangements also provide for the calling and posting of variation margin or collateral, further reducing the Company's exposures. The internal measurement of exposure on each credit facility takes into account legally enforceable netting and margining arrangements – both in terms of current exposure and in terms of the simulated calculation of potential future exposure.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Credit risk (continued)

The following table presents the maximum exposure to credit risk, before taking account of any collateral held or other credit enhancements (where such credit enhancements do not meet offsetting requirements). It also illustrates the impact on the balance sheet of offsetting, master netting agreements and cash and non cash collateral.

2018	Gross exposure	Amounts set off on the balance sheet	Net exposure	Impact of master netting agreements	Cash collateral	Securities collateral	Net exposure
<u>Assets</u>							
Derivatives	156,991	-	156,991	(134,969)	(18,749)	(3,273)	-
Collateralised financing transactions	181,038	(23,999)	157,039	(30,025)	-	(127,014)	-
	<u>338,029</u>	<u>(23,999)</u>	<u>314,030</u>	<u>(164,994)</u>	<u>(18,749)</u>	<u>(130,287)</u>	<u>-</u>
<u>Liabilities</u>							
Derivatives	166,438	-	166,438	(134,969)	(20,758)	(3,668)	7,043
Collateralised financing transactions	143,994	(23,999)	119,995	(30,025)	-	(89,970)	-
	<u>310,432</u>	<u>(23,999)</u>	<u>286,433</u>	<u>(164,994)</u>	<u>(20,758)</u>	<u>(93,638)</u>	<u>7,043</u>
2017	Gross exposure ⁽¹⁾	Amounts set off on the balance sheet ⁽¹⁾	Net exposure	Impact of master netting agreements	Cash collateral	Securities collateral	Net exposure
<u>Assets</u>							
Derivatives	149,409	-	149,409	(122,664)	(20,549)	(6,196)	-
Collateralised financing transactions	157,155	(21,700)	135,455	(23,043)	-	(112,412)	-
	<u>306,564</u>	<u>(21,700)</u>	<u>284,864</u>	<u>(145,707)</u>	<u>(20,549)</u>	<u>(118,608)</u>	<u>-</u>
<u>Liabilities</u>							
Derivatives	156,511	-	156,511	(122,664)	(22,071)	(4,826)	6,950
Collateralised financing transactions	130,040	(21,700)	108,340	(23,043)	-	(85,297)	-
	<u>286,551</u>	<u>(21,700)</u>	<u>264,851</u>	<u>(145,707)</u>	<u>(22,071)</u>	<u>(90,123)</u>	<u>6,950</u>

⁽¹⁾ Prior year comparative figures have been adjusted to aid comparison with 2018 presentation. This does not affect net exposure.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Credit risk (continued)

The offset amounts for the impact of master netting agreements for Derivatives in the above tables relate to exposures where the counterparty has an offsetting derivative exposure with the Company and a master netting agreement is in place. These amounts do not qualify for net presentation for accounting purposes as settlement may not actually be made on a net basis.

The collateralised financing transactions offset adjustment relates to balances arising from repurchase and reverse repurchase transactions. The offsets relate to balances where there is a legally enforceable right of offset in the event of counterparty default and consequently a net exposure for credit risk management purposes. However as there is no intention to settle individual transactions on a net basis under normal circumstances, they do not qualify for net presentation for accounting purposes. Credit risk exposure is monitored on an asset basis except for positions which are specifically collateralised, normally in the form of cash.

As at 31 December the Company's third party credit exposure (mark to market plus potential future exposure as determined by the Company's internal measure) in relation to collateralised financing transactions and derivatives was distributed as shown in the table below (these exposures do not include derivative and collateralised financing transactions with other group undertakings). The following table shows CGML's exposures categorised by industry.

Industry	2018	2017
	%	%
Commercial and universal banks	39.8	41.7
Insurance and fund management (pension funds and mutual funds)	29.0	28.1
Brokers and investment banks	3.0	3.4
Other (including Corporates, SPVs and Hedge Funds)	28.2	26.8
	100	100

The credit quality of the Company's financial assets is maintained by adherence to Citi policies on the provision of credit to counterparties. The Company monitors the credit ratings of its counterparties with the table below presenting an analysis of the Company's trading inventory and derivative transactions by rating agency designation based on Standard & Poor, Moody's and Fitch ratings as at 31 December:

	Government bonds		Non-government bonds		Derivatives	
	2018	2017	2018	2017	2018	2017
	%	%	%	%	%	%
AAA / AA / A	71.3	68.0	42.2	73.0	48.8	46.3
BBB	19.0	27.0	31.9	17.0	4.4	3.7
BB / B	8.8	5.0	19.8	8.0	1.2	1.4
CCC or below	0.3	-	0.8	1.0	-	-
Central counterparty (unrated)	-	-	-	-	18.6	20.0
Unrated	0.6	-	5.3	1.0	27.0	28.6
	100.0	100.0	100.0	100.0	100.0	100.0

As discussed above the maximum credit risk is mitigated through the use of collateral, netting arrangements and the application of credit limits.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Operational risk (unaudited)

Operational Risk is the risk of loss resulting from inadequate or failed internal processes, systems, human factors or from external events.

It includes reputation and franchise risks associated with Citi's business practices or market conduct. It also includes the risk of failing to comply with applicable laws, regulations, ethical standards or Citi policies.

The objective is to keep operational risk at appropriate levels relative to the characteristics of Citi's businesses, the markets in which it operates, its capital and liquidity, and the competitive, economic and regulatory environment.

Citi maintains an Operational Risk Management (ORM) framework with a Governance Structure to ensure effective management of Operational Risk across Citi. The Governance Structure presents the Three Lines of Defence as previously described in Risk Management Overview and Culture.

To anticipate, mitigate and control operational risk, Citi maintains a system of policies and has established a consistent framework for monitoring, assessing and communicating operational risks and the overall effectiveness of the internal control environment across Citi. As part of this framework, Citi has defined its operational risk appetite and has established a Manager's Control Assessment (MCA) programme which helps managers to self-assess key operational risks and controls and to identify and address weaknesses in the design and effectiveness of internal controls that mitigate significant operational risks.

The ORM Framework establishes a foundation on which the activities of Businesses, Regions and Functions, the resulting operational risks and the associated controls are identified, periodically assessed, subject to corrective action, appropriately documented and communicated. Specifically, the ORM Framework establishes minimum standards for consistent identification, measurement, monitoring, reporting, and management of operational risk across Citi.

The process established by the ORM Framework is expected to lead to effective anticipation and mitigation of operational risk and improved operational risk loss experience and includes the following steps:

- identify and assess Key Operational Risks (KORs);
- design controls to mitigate identified risks;
- establish Key Risk Indicators (KRIs);
- implement a process for early problem recognition and timely escalation;
- produce comprehensive operational risk reporting; and
- ensure that sufficient resources are available to actively improve the operational risk environment and mitigate emerging risks.

As new products and business activities are developed, processes are designed, modified or sourced through alternative means and operational risks are considered.

In addition, Operational Risk Management proactively assists the businesses, operations and technology and the other independent control groups in enhancing the effectiveness of controls and managing operational risks across products, business lines and regions, and facilitates the management of operational risk at a Citi and Company level.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Operational risk (unaudited) (continued)

Measurement

To support advanced capital modelling and management, each business is required to capture relevant operational risk event information. A localised version of the Citi risk capital model for operational risk has been developed and applied against CGML. The PRA has approved this model, including the associated capital allocation, for use within the Company as an “Advanced Measurement Approach”. It uses a combination of internal and external loss data to support statistical modelling of capital requirement estimates, which are then adjusted to incorporate qualitative aspects of the operational risk and control environment.

To enhance its operational risk management, CGML has implemented a forward looking scenario analysis programme to identify and quantify emerging operational risks, through a systematic process of obtaining opinions from business managers and risk management experts to derive reasoned assessments of the likelihood and loss impact of plausible, high severity operational risk losses. This development has been integrated into the operational risk capital assessment for CGML.

Key Operational Risks (KORs) are derived from an evaluation of operational risk exposure on a residual risk basis considering its current business strategy, substantial emerging risks and other relevant factors which include assessment of the four Basel operational risk data elements i.e. internal losses, external losses, scenario analysis, output from Internal Audit Assessments and from self-assessments results from the Manager’s Control Assessment (MCA). CGML’s KORs have been incorporated into the Citi-level global operational risk appetite framework in order to derive CGML’s Risk Appetite, and comprise the following risk types which are supported by related metrics and appropriately set thresholds:

- Fraud Risk
- Human Capital
- Conduct Risk (Market Integrity & Customer or Client)
- Money Laundering Risk
- Anti-Bribery Risk (Financial Crimes Risk)
- Sanctions Risk (Financial Crimes Risk)
- Damage to Physical Assets
- Model Risk
- Technology Risk including Cyber Risk
- Processing Risk
- Reporting Risk
- Third Party Risk
- Data Management

The Risk Appetite is regularly monitored and reported to CGML’s senior governance forums.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Country Risk

Country risk is the risk that an event in a country (precipitated by developments within or external to that country) will impair the value of Citi's franchise or will adversely affect the ability of obligors within that country to honour their obligations to Citi. Country risk events may include sovereign defaults, banking defaults or crises, currency crises and/or political events.

The country designation in Citi's risk management systems is based on the country to which the client relationship, taken as a whole, is most directly exposed with regard to economic, financial, socio-political or legal risks. This includes exposure to subsidiaries within the client relationship that are domiciled outside of the country.

Citi assesses the risk of loss associated with certain of the country exposures on a regular basis, with the country concentration limits reviewed as and when economic performance is viewed as deteriorating. These analyses take into consideration alternative scenarios that may unfold, as well as specific characteristics of the Company's portfolio, such as transaction structure and collateral and the Company's exposure in these countries may vary over time, based upon its franchise, client needs and transaction structures.

Pension Risk

The Company's defined benefit schemes are measured on an actuarial basis, with the key assumptions being inflation, discount rate, mortality, and investment returns. Return on assets is an average of expected returns weighted by asset class.

Mortality assumptions are based upon the relevant standard industry and national mortality tables. Discount rates are based on specific corporate bond indices which reflect the underlying yield curve of each scheme. Management judgement is required in estimating the rate of future salary growth. All assumptions are unbiased, mutually compatible and based upon market expectations at the reporting date.

Further information about the Company's Pension schemes is contained in Note 8 'Pension'.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

30. Financial instruments and risk management (continued)

Regulatory developments (unaudited)

Recast Markets in Financial Instruments Directive (MiFID II) and Regulation on Markets in Financial Instruments (MiFIR)

On 3 January 2018, MiFID II and MiFIR replaced the previous Markets in Financial Instruments Directive (**MiFID**), which came in to effect in 2007. Most provisions of MiFID II and MiFIR are now in force, and the related reforms have had a significant impact on a number of areas including:

- scope of exemptions;
- market structure;
- transparency requirements;
- transaction reporting;
- algorithmic trading;
- commodities;
- the third country regime;
- investment research; and
- supervision.

MiFIR has increased the transparency requirements for the equities market and introduced new transparency requirements for fixed income instruments and derivatives, with additional requirements including the publication of pre and post-trade transparency data to market via Approved Publication Arrangements. The scope of the original MiFID transaction reporting regime was extended by MiFIR, with a substantial amount of data to be reported to the National Competent Authorities via Approved Reporting Mechanisms across an extended range of asset classes. There are increased conduct of business requirements aimed at increasing investor protection to a broader range of clients, including expanded rules relating to inducements and the provision of investment research. Strengthened supervisory powers and administrative sanctions also apply.

As well as revising and enhancing some existing MiFID requirements, MiFID II and MiFIR have introduced new concepts and obligations including a new multilateral, discretionary trading venue for non-equity instruments, the Organised Trading Facility (OTF), and an extension of the Systematic Internaliser (SI) regime to non-equity instruments. There is a requirement for investment firms to trade shares admitted to trading on a Regulated Market or traded on a trading venue on a Regulated Market, Multilateral Trading Facility (MTF), SI or third country trading venue assessed as equivalent. There are new requirements for:

- commodity position limits and reporting;
- trading controls for algorithmic trading activities;
- an obligation to trade clearable derivatives on Regulated Markets, MTFs and OTFs; and
- the introduction of a harmonised EU regime for access to trading venues, CCPs and benchmarks.

European Commission proposed revisions to CRR/CRDIV, Banking Recovery and Resolution Directive (BRRD) and Single Resolution Mechanism Regulation (SRMR)

In November 2016, the European Commission issued proposed revisions to the CRR, CRDIV, BRRD and SRMR. These revisions build on existing EU banking rules and aim to complete the post-crisis regulatory agenda. They enable the regulatory framework to address any outstanding challenges to financial stability, while ensuring that banks can continue to support the real economy. The proposals are now under discussion between the European Commission, Council and Parliament and elements of the package will come into force at different stages; the earliest is estimated to be 2019.

The rule changes within the proposal include the European implementation of the TLAC rules, new risk-sensitive methods for calculating market risk and counterparty credit risk capital requirements (known as the Fundamental Review of the Trading Book and the Standardised Approach to Counterparty Credit risk), a binding Leverage Ratio, a Net Stable Funding Ratio and changes to the large exposures framework.

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

31. Capital management (unaudited)

As an EU regulated entity, CGML is required to hold sufficient regulatory capital to meet its Individual Capital Guidance, CRDIV buffers and any applicable buffers mandated by the PRA. The Company monitors its CET1, Tier 1, total capital ratios and overall capital adequacy daily. The externally mandated regulatory requirements also form part of the Company's internal capital management toolkit, with capital management constituting a key focus for a number of internal committees, in particular the UK ALCO. CGML's capital management framework encompasses a set of internal limits and escalations, defined using a red-amber-green structure. In accordance with these escalations, specified actions are taken and the responsible people are notified at each stage. In addition the UK ALCO and CGML Capital Committee are kept informed of any trigger breaches. CGML also has in place a risk appetite framework to manage the risks to which it is exposed through its business activities: these are both quantitative and qualitative. During 2018, CGML remained in compliance with all externally imposed capital requirements. Quantitative details of CGML's regulatory capital position are included in Section 4 of the Strategic Report.

The capital management of CGML is further explained in its Basel Pillar III disclosures document, which can be found at <http://www.citigroup.com/citi/investor/reg.htm>.

32. Registered charges

The Company has granted to various banks and other entities a number of fixed and floating charges over certain holdings in securities, properties, collateral and monies held by or on behalf of such banks or other entities.

33. Other commitments

a) Financial guarantees

As at 31 December 2018, the Company had \$29 million (2017: \$26 million) of unsecured letters of credit and financial guarantees outstanding from banks to satisfy various collateral requirements.

b) Capital commitments

As at 31 December 2018, the Company had no capital commitments (2017: \$nil).

34. Events after the reporting period

On 14 February 2019 CGML made a capital contribution of \$650 million to its subsidiary, CGME.

On 1 March 2019 the staff and activities of CGML's branches in France, Italy and Spain were transferred to branches of CGME in those countries as part of the Company's ongoing preparations following the UK's decision to leave the EU. Further details are included in the Strategic Report.

At the date on which these financial statements were approved, there were no other significant events affecting the Company since the year end.

35. Group structure

The Company's immediate parent undertaking is Citigroup Global Markets Holdings Bahamas Limited (CGMHBL), a company registered at Ocean Centre, Montagu Foreshore, East Bay Street, and P.O. Box N3247, Nassau, Bahamas. The Company's ultimate parent company and ultimate controlling party is Citigroup Inc., registered at 1209 Orange Street, Wilmington, DE 19801 United States of America.

The audited consolidated financial statements of Citigroup Inc. are made available to the public annually in accordance with Securities and Exchange Commission regulations and may be obtained from <http://www.citigroup.com/citi/investor/overview.html>

CITIGROUP GLOBAL MARKETS LIMITED

NOTES TO THE FINANCIAL STATEMENTS

36. Revenue analysis

As outlined in the Strategic Report, the Company is Citi's international broker dealer and management reviews its performance by geography in the same way as Citigroup Inc. reports its performance.

Citi is organised into four regions, Asia Pacific, EMEA, Latin America and North America.

	Asia Pacific	EMEA	Latin America	North America	Total Regional	Other / Corp	Total
Revenue by Region	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million	\$ Million
2018 Revenues	396	2,240	(12)	(24)	2,600	872	3,472
2017 Revenues	327	2,139	36	7	2,509	415	2,924
Increase (decrease) compared to prior year	69	101	(48)	(31)	91	457	548

37. Country by country reporting

The information relating to Country-by-Country reporting, required by Article 89 of Directive 2013/36/EU (Capital Requirements Directive), will be published at <https://www.citigroup.com/citi/investor/reg.htm>.

38. Modern Slavery Act

The information relating to the Modern Slavery Act, as required by the Modern Slavery Act 2015, is published at: https://www.citibank.co.uk/static/documents/Citi_FY2018_UK_MSA_Statement_Final.pdf