



Goldman Sachs Group UK Limited

Pillar 3
Disclosures

For the period ended May 31, 2019

TABLE OF CONTENTS

	Page No.
Introduction	3
Capital Framework	7
Regulatory Capital	8
Risk-Weighted Assets.....	9
Credit Risk	11
Market Risk.....	21
Interest Rate Sensitivity.....	27
Operational Risk	28
Leverage Ratio	30
Capital Adequacy.....	33
Liquidity Risk Management	34
Cautionary Note on Forward-Looking Statements	34
Glossary.....	35
Appendix I: Credit Risk Tables	37
Appendix II: Counterparty Credit Risk Tables	47
Appendix III: Past Due Exposures, Impaired Exposures and Impairment Provisions Tables	52
Appendix IV: Index of Tables to EBA Templates	54

INDEX OF TABLES

	Page No.
Table 1: Minimum Regulatory Capital Ratios	7
Table 2: Regulatory Capital Ratios	8
Table 3: Regulatory Capital Resources	8
Table 4: Overview of RWAs	9
Table 5: Analysis of CCR Exposure by Approach	14
Table 6: Exposures to CCPs	15
Table 7: CVA VaR Capital Charge	15
Table 8: RWA Flow Statements of CCR Exposures under the IMM	15
Table 9: RWA Flow Statements of Credit Risk Exposures under the IRB Approach	16
Table 10: CRM Techniques	17
Table 11: IRB Approach - Effect on the RWAs of Credit Derivatives Used as CRM Techniques	18
Table 12: Credit Derivatives Exposures	18
Table 13: IMA Values for Trading Portfolios	23
Table 14: Market Risk under the IMA	23
Table 15: RWA Flow Statements of Market Risk Exposures under the IMA	24
Table 16: Comparison of VaR estimates with gains/losses	25
Table 17: Market Risk under the Standardised Approach	26
Table 18: Operational Risk Capital Requirement	29
Table 19: Leverage Ratio	30
Table 20: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures	30
Table 21: On-Balance Sheet Exposures	30
Table 22: Leverage Ratio Common Disclosure	31
Table 23: Credit Quality of Exposures by Exposure Class and Instrument	37
Table 24: Credit Quality of Exposures by Industry or Counterparty Types	39
Table 25: Credit Quality of Exposures by Geography	40
Table 26: IRB (Equity Exposures Subject to the Simple Risk - Weighted Approach) ¹	41
Table 27: IRB Approach - Credit Risk Exposures by Exposure Class and PD Range	42
Table 28: Standardised Approach - Credit Risk Exposure and CRM Effects	45
Table 29: Standardised Approach	46
Table 30: IRB Approach - CCR Exposures by Portfolio and PD Scale	47
Table 31: Impact of Netting and Collateral Held on Exposure Values ¹	50
Table 32: Composition of Collateral for Exposures to CCR	51
Table 33: Aging of Past-due Exposures	52
Table 34: Non-performing and Forborne Exposures	52
Table 35: Changes in the Stock of General and Specific Credit Risk Adjustments ¹	53
Table 36: Changes in the Stock of Defaulted and Impaired Loans and Debt Securities ¹	53

Introduction

Overview

The Goldman Sachs Group, Inc. (Group Inc. or parent company), a Delaware corporation, together with its consolidated subsidiaries (collectively, the firm), is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. Goldman Sachs Group UK Limited (GSGUKL) is a wholly owned subsidiary of Group Inc.. When we use the terms “Goldman Sachs” and “the firm”, we mean Group Inc. and its consolidated subsidiaries and when we use the terms “GSGUK”, “we”, “us” and “our”, we mean GSGUKL and its consolidated subsidiaries.

The Board of Governors of the Federal Reserve System (FRB) is the primary regulator of Group Inc., a bank holding company (BHC) under the Bank Holding Company Act of 1956 and a financial holding company under amendments to this Act. As a BHC, the firm is subject to consolidated regulatory capital requirements which are calculated in accordance with the regulations of the FRB (Capital Framework).

GSGUK is supervised on a consolidated basis by the Prudential Regulation Authority (PRA) and as such is subject to minimum capital adequacy standards. Certain subsidiaries of GSGUK are regulated by the Financial Conduct Authority (FCA) and the PRA and are subject to minimum capital adequacy standards also on a standalone basis.

The capital requirements are expressed as risk-based capital and leverage ratios that compare measures of regulatory capital to risk-weighted assets (RWAs), average assets and off-balance-sheet exposures. Failure to comply with these capital requirements could result in restrictions being imposed by our regulators and could limit our ability to distribute capital, including share repurchases and dividend payments, and to make certain discretionary compensation payments. GSGUK’s capital levels are also subject to qualitative judgements by our regulators about components of capital, risk weightings and other factors.

For information on Group Inc.’s financial statements and regulatory capital ratios, please refer to the firm’s most recent Quarterly Pillar 3 Disclosures and Quarterly Report on Form 10-Q. References to the “Quarterly Report on Form 10-Q” are to the firm’s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2019.

<https://www.goldmansachs.com/investor-relations/financials/current/other-information/2q-pillar3-2019.pdf>

<https://www.goldmansachs.com/investor-relations/financials/current/10q/second-quarter-2019-10-q.pdf>

The GSGUK consolidated regulatory capital requirement has been calculated in accordance with the E.U. Capital Requirements Directive (CRD) and the E.U. Capital Requirements Regulation (CRR), collectively known as CRD IV, which came into effect on January 1, 2014. These regulations are largely based on the Basel Committee’s final capital framework for strengthening international capital standards (Basel III), which is structured around three pillars: Pillar 1 “minimum capital requirements”, Pillar 2 “supervisory review process” and Pillar 3 “market discipline”. Certain provisions of CRD IV are directly applicable in the UK and certain provisions have been implemented in the PRA and FCA Rulebooks.

In 2018, GSGUK changed its accounting reference date from December 31 to November 30. As such, its second quarter for 2019 is for the three months ended May 31, 2019 and its half year for 2019 is for the six months ended May 31, 2019. All references to May 2019 refer to the period ended, or the date, as the context requires, May 31, 2019.

These quarterly Pillar 3 disclosures set out the qualitative and quantitative elements of Part 8 of the CRR, as supplemented by the PRA and FCA Rulebooks, for which we have determined that more frequent disclosure is appropriate in accordance with the European Banking Authority (EBA) Guidelines under Articles 431(1), 432(2) and 433 of CRR. From March 2018, these quarterly Pillar 3 disclosures have also been prepared in accordance with the EBA Guidelines on disclosure requirements under Part 8 of the CRR published in December 2016.

GSGUK also publishes annual Pillar 3 disclosures. The latest available published annual Pillar 3 disclosures can be accessed via the following link:

<https://www.goldmansachs.com/disclosures/>

The latest annual consolidated financial information for GSGUK can be accessed via the following link:

<https://www.goldmansachs.com/disclosures/gsgukl-consolidated-financials-2018.pdf>

Pillar 3 Disclosures

Measures of exposures and other metrics disclosed in this report may not be based on U.K. Generally Accepted Accounting Practices (U.K. GAAP), may not be directly comparable to measures reported in financial statements, and may not be comparable to similar measures used by other companies. These disclosures are not required to be, and have not been, audited by our independent auditors.

Basis of Consolidation

GSGUKL is the holding company for a group that provides a wide range of financial services to clients located worldwide. The company's functional currency is US dollars and these disclosures are prepared in that currency.

The following UK-regulated subsidiaries are included in the regulatory consolidation:

- Goldman Sachs International (GSI)
- Goldman Sachs International Bank (GSIB)
- Goldman Sachs Asset Management International (GSAMI)
- Goldman Sachs Asset Management Global Services Limited (GSAMGSL)
- Goldman Sachs MB Services Limited (GSMBSL)

The scope of consolidation for regulatory capital purposes is consistent with the U.K. GAAP consolidation.

CRD IV requires significant subsidiaries to make certain capital disclosures on an individual or subconsolidated basis. The significant subsidiaries of GSGUK are GSI and GSIB. GSI is the firm's broker dealer in the Europe, Middle East and Africa (EMEA) region and its risk profile is materially the same as GSGUK. GSIB is GSGUK's deposit-taking subsidiary. Risk management policies and procedures are applied consistently to GSI, GSIB and to GSGUK as a whole. The remaining entities have minimal balance sheet activity and have not been determined material subsidiaries for the purposes of these disclosures.

Restrictions on the Transfer of Funds or Regulatory Capital within the Firm

Group Inc. is a holding company and, therefore, utilises dividends, distributions and other payments from its subsidiaries to fund dividend payments and other payments on its obligations, including debt obligations. Regulatory capital requirements, as well as other provisions of applicable law and regulations restrict Group Inc.'s ability to withdraw capital from its regulated subsidiaries. Within GSGUK, capital is provided by GSGUKL to subsidiary entities.

Capital is considered transferable to other entities within the GSGUK Group without any significant restriction except to the extent it is required for regulatory purposes.

For information about restrictions on the transfer of funds within Group Inc. and its subsidiaries, see "Note 20. Regulation and Capital Adequacy" in Part I, Item 1 "Financial Statements" and "Risk Management - Liquidity Risk Management" and "Equity Capital Management and Regulatory Capital" in Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the firm's Quarterly Report on Form 10-Q.

Definition of Risk-Weighted Assets

The risk weights used in the calculation of RWAs reflect an assessment of the riskiness of our assets and exposures. These risk weights are based on either predetermined levels set by regulators or on internal models which are subject to various qualitative and quantitative parameters that are subject to approval by our regulators. The relationship between available capital and capital requirements can be expressed in the form of a ratio, and capital requirements are arrived at by dividing RWAs by 12.5. In this document, minimum capital ratios set out in Table 1 are expressed including the impact of additional buffers.

Fair Value

The inventory included in our consolidated statements of financial condition as "financial instruments owned" and "financial instruments sold, but not yet purchased" as well as certain other financial assets and financial liabilities, are accounted for at fair value (i.e., marked-to-market), with related gains or losses generally recognised in our consolidated statement of earnings and, therefore, in capital. The fair value of a financial instrument is the amount 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. The use of fair value to measure financial instruments is fundamental to risk management practices and is our most critical accounting policy. The daily discipline of marking substantially all of our inventory to current market levels is an effective tool for assessing and managing risk and provides transparent and realistic insight into our financial exposures. The use of fair value is an important aspect to consider when evaluating our capital base and our capital ratios as changes in the fair value of our positions are reflected in the current period's shareholders' equity, and accordingly, regulatory capital; it is also a factor used to determine the classification of positions into the banking book and trading book.

Pillar 3 Disclosures

For additional information regarding the determination of fair value under accounting principles generally accepted in the United States (U.S. GAAP) and controls over valuation of inventory, see “Note 3. Significant Accounting Policies” in Part I, Item 1 “Financial Statements”, and “Critical Accounting Policies – Fair Value” in Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the firm’s Quarterly Report on Form 10-Q.

The firm has documented policies and maintains systems and controls for the calculation of Prudent Valuation Adjustment (“PVA”) as required by the Commission Delegated Regulation (EU) No. 2016/101. PVA represents the excess of valuation adjustments required to achieve prudent value, over any adjustment applied in the firm’s fair value that addresses the same source of valuation uncertainty. For a valuation input where the range of plausible values is created from mid prices, Prudent Value represents the point within the range where the firm is 90% confident that the mid value which could be achieved in exiting the valuation exposure would be at that price or better. The Firm’s methodology addresses fair value uncertainties arising from a number of sources; market price uncertainty, close-out costs, model risk, unearned credit spreads, investing and funding cost, concentrated positions, future administrative costs, early termination, operational risk. Methodologies utilised by our independent control functions to calculate PVA are aligned with, and use the same external data sources as, those used when carrying out price verification of fair value.

Banking Book / Trading Book Classification

The firm has a comprehensive framework of policies, controls and reporting to meet the requirements of the CRR for inclusion of positions in the banking book and trading book. In order to determine the appropriate regulatory capital treatment for our exposures, positions must first be classified into either “banking book” or “trading book”. Positions are classified as banking book unless they qualify to be classified as trading book.

Trading book positions generally meet the following criteria: they are assets or liabilities that are accounted for at fair value; they are risk managed using a Value-at-Risk (VaR) internal model; they are held as part of our market-making and underwriting businesses and are intended to be resold in the short term, or positions intended to benefit from actual or expected short-term price differences between buying and selling prices or from other price or interest rate variations¹.

¹ As defined in point (85) of Article 4(1) in CRD IV.

Trading book positions are subject to market risk regulatory capital requirements, as are foreign exchange and commodity positions, whether or not they meet the other criteria for classification as trading book positions. Market risk is the risk of loss in value of these positions due to changes in market conditions. Some trading book positions, such as derivatives, are also subject to counterparty credit risk regulatory capital requirements.

Banking book positions may be accounted for at amortised cost, fair value or in accordance with the equity method. Banking book positions are subject to credit risk regulatory capital requirements. Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an Over-The-Counter (OTC) derivatives counterparty or a borrower) or an issuer of securities or other instruments we hold.

Regulatory Developments

The company’s businesses are subject to significant and evolving regulation. Reforms have been adopted or are being considered by regulators and policy-makers worldwide. The expectation is that the principal areas of impact from regulatory reform for the company will be increased regulatory capital requirements and increased regulation and restriction on certain activities. However, given that many of the new and proposed rules are highly complex, the full impact of regulatory reform will not be known until the rules are implemented and market practices develop under the final E.U. and/or U.K. regulations. The firm will adapt accordingly to ensure full compliance.

Risk-Based Capital Ratios. In December 2017, the Basel Committee published standards that it described as the finalisation of the Basel III post-crisis regulatory reforms. These standards set a floor on internally developed capital requirements at a percentage of the capital requirements under the standardised approach. It also revised the standardised and model-based approaches for credit risk, provided a new standardised approach for operational risk capital and revised the framework for credit valuation adjustment risk. The Basel Committee requires national regulators implement the standards beginning January 1, 2022, and that the floor be phased in through January 1, 2027.

In January 2019, the Basel Committee finalised revisions to the framework for calculating capital requirements for market risk (known as the “Fundamental Review of the Trading Book” or “FRTB”), which is expected to increase market risk capital requirements for most banking organisations. The revised framework, among other things, revises the

Pillar 3 Disclosures

standardised approach and internal models to calculate market risk requirements and clarifies the scope of positions subject to market risk capital requirements. The Basel Committee has proposed that national regulators implement the revised framework beginning January 1, 2022.

In June 2019, amendments to the CRR and CRD were published in the Official Journal of the European Union. The amendments include the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, and reporting and disclosure requirements. Most of the amendments to the CRR shall apply from June 28, 2021. The requirements for own funds and eligible liabilities will apply immediately. The implementation timing of the market risk revisions is dependent on regulatory technical standards which have yet to be finalised. We expect that the rules will not apply before 2023. The amendments to the CRD include provisions on financial holding companies, remuneration, interest rate risk management, supervisory powers and macro-prudential capital requirements. EU Member States are required to adopt and publish legislation necessary to comply with the Directive. The provisions in the Directive will be phased in over time with most changes applicable from June 28, 2021, some macro prudential measures applicable from January 1, 2022 and the requirement to have an intermediate EU parent holding company applicable from December 30, 2023. As a result of the U.K.'s notification to the European Council of its decision to leave the E.U., there is uncertainty on the direct application and impact of these amendments to the

company's U.K. subsidiaries. The U.K. has yet to publish a statutory instrument that would implement the rules in U.K. legislation.

The Basel Committee's internationally agreed standards are not effective until rules implementing those standards have been implemented by the relevant authority in each jurisdiction. Therefore, the impact of the latest regulatory capital developments on the company (including its RWAs and regulatory capital ratios) is subject to uncertainty until corresponding legislation is implemented.

Minimum Requirements for Own Funds and Eligible Liabilities. In June 2018, the Bank of England published a statement of policy on internal minimum requirement for own funds and eligible liabilities (MREL), which requires a material U.K. subsidiary of an overseas banking group, such as GSGUK and GSI, to meet a minimum internal MREL requirement to facilitate the transfer of losses to its resolution entity, which for GSGUK and GSI is Group Inc. The transitional minimum internal MREL requirement began to phase in from January 1, 2019, and will become fully effective on January 1, 2022.

The amendments to the CRR published in June 2019 require material subsidiaries of an overseas banking group at the consolidated E.U. level, such as GSGUK, to meet a minimum internal MREL requirement. These rules began to phase in from June 27, 2019, and will become fully effective on January 1, 2022. GSGUK is required to comply with the higher of the Bank of England and CRR requirements.

Capital Framework

Capital Structure

For CRD IV regulatory capital purposes, a company's total available capital has the following components:

- Common Equity Tier 1 capital (CET1), which is comprised of common shareholders' equity, after giving effect to deductions for disallowed items and other adjustments;
- Tier 1 capital which is comprised of CET1 capital and other qualifying capital instruments; and
- Tier 2 capital which is comprised of long term qualifying subordinated debt and preference shares.

Certain components of our regulatory capital are subject to regulatory limits and restrictions under CRD IV. In general, to qualify as Tier 1 or Tier 2 capital, an instrument must be fully paid and unsecured. A qualifying Tier 1 or Tier 2 capital instrument must also be subordinated to all senior indebtedness of the organisation.

Under CRD IV, the minimum CET1, Tier 1 capital and Total capital ratios (collectively the Pillar 1 capital requirements) are supplemented by:

- A capital conservation buffer of 2.5%, consisting entirely of capital that qualifies as CET1, phased in ratably in annual increments of 0.625% from January 1, 2016, and became fully effective on January 1, 2019.
- A countercyclical capital buffer of up to 2.5% (consisting entirely of CET1) in order to counteract excessive credit growth. The buffer only applies to GSGUK's exposures to certain types of counterparties and exposures based in jurisdictions which have announced and implemented a countercyclical buffer. As of May 2019, these are the following jurisdictions: Norway, Sweden, Hong Kong, Czech Republic, Denmark, Iceland, Slovakia, and United Kingdom. The buffer currently increases the minimum CET1 ratio by 0.25%.
- Individual capital requirement under Pillar 2A (an additional amount to cover risks not adequately captured in Pillar 1). The PRA performs a periodic supervisory review of GSI's and GSIB's Internal Capital Adequacy Assessment Process (ICAAP), which leads to a final determination by the PRA of individual capital requirement under Pillar 2A. This is a point in time

assessment of the minimum amount of capital the PRA considers that a firm should hold.

Minimum Regulatory Capital Ratios

The risk-based capital requirements are expressed as capital ratios that compare measures of regulatory capital to RWAs. The CET1 ratio is calculated as CET1 divided by RWAs. The Tier 1 capital ratio is defined as Tier 1 capital divided by RWAs. The Total capital ratio is defined as Total capital divided by RWAs.

The following table presents GSGUK's minimum required ratios as of May 2019.

Table 1: Minimum Regulatory Capital Ratios

	May 2019		
	Minimum ratio ^{1,2}		
	GSGUK	GSI	GSIB
CET1 ratio	8.7%	8.7%	8.9%
Tier 1 capital ratio	10.7%	10.7%	10.9%
Total capital ratio	13.3%	13.3%	13.6%

1. Includes the fully phased in capital conservation buffer and countercyclical capital buffer described above.
2. These minimum ratios also incorporate the Pillar 2A capital requirement received from the PRA (2.55% for GSGUK, 2.56% for GSI, and 2.85% for GSIB for Total Capital at May 31, 2019) and could change in the future.

In addition to the Pillar 2A capital requirement, the PRA also defines forward looking capital requirement which represents the PRA's view of the capital that GSGUK would require to absorb losses in stressed market conditions. This is known as Pillar 2B or the "PRA buffer" and is not reflected in the minimum ratios shown in Table 1 above.

Compliance with Capital Requirements

As of May 31, 2019, all of GSGUK's regulated subsidiaries had capital levels in excess of their minimum regulatory capital requirements.

Pillar 3 Disclosures**Regulatory Capital****Overview**

The following table presents a breakdown of GSGUK's capital ratios under CRD IV as of May 31, 2019, including those for our significant subsidiaries GSI and GSIB.

Table 2: Regulatory Capital Ratios

\$ in millions	As of May 2019		
	GSGUK	GSI	GSIB
CET1 Capital	\$ 29,367	\$ 24,613	\$ 3,016
Tier 1 Capital	37,667	32,913	3,016
Tier 2 Capital	6,503	5,377	826
Total Capital	\$ 44,170	\$ 38,290	\$ 3,842
RWAs	\$ 224,519	\$ 205,284	\$ 16,124
CET1 Ratio	13.1%	12.0%	18.7%
Tier 1 Capital Ratio	16.8%	16.0%	18.7%
Total Capital Ratio	19.7%	18.7%	23.8%

In the table above, the CET1, Tier 1 and Total capital ratio include approximately 148 basis points attributable to GSGUK's unrecognised profit, net of foreseeable charges, for the period ended May 2019 and 31 basis points and 20 basis points attributable to GSI and GSIB respectively.

Transitional Impact of IFRS 9

IFRS9 addresses the classification, measurement and recognition of financial assets and financial liabilities. It replaces the guidance in IAS 39 – Financial Instruments: Recognition and Measurement that relates to the classification and measurement of financial instruments. Based on materiality no further disclosures for the transitional impact of IFRS9 are made in this document.

Capital Structure

Certain CRD IV rules are subject to final technical standards and clarifications, which will be issued by the EBA and adopted by the European Commission. All capital, RWAs and estimated ratios are based on current interpretation, expectations and understanding of CRD IV and may evolve as its interpretation and application is discussed with our regulators.

Assets that are deducted from capital in computing the numerator of the capital ratios are excluded from the computation of RWAs in the denominator of the ratios. The following tables contain information on the components of our regulatory capital structure. The capital resources of GSGUK are based on unaudited, consolidated non-statutory

financial information and those of GSI and GSIB are based on unaudited statutory financial statements.

Table 3: Regulatory Capital Resources

\$ in millions	As of May 2019		
	GSGUK	GSI	GSIB
Ordinary Share Capital	\$ 2,135	\$ 590	\$ 63
Share Premium Account Including Reserves	650	5,254	2,098
Retained Earnings ¹	29,040	20,985	992
CET1 Capital Before Deductions	\$ 31,825	\$ 26,829	\$ 3,153
Net Pension Assets	(429)	(429)	-
CVA and DVA	(107)	(103)	(3)
Prudent Valuation Adjustments	(415)	(310)	(1)
Expected Loss Deduction and Loan Loss Provision	(818)	(736)	(82)
Other Adjustments ²	(335)	(284)	(51)
Intangibles	(354)	(354)	-
CET1 Capital After Deductions	\$ 29,367	\$ 24,613	\$ 3,016
Additional Tier 1 capital	8,300	8,300	-
Tier 1 Capital After Deductions	\$ 37,667	\$ 32,913	\$ 3,016
Tier 2 Capital Before Deductions ³	6,503	5,377	826
Other Adjustments	-	-	-
Tier 2 Capital After Deductions	\$ 6,503	\$ 5,377	\$ 826
Total Capital Resources	\$ 44,170	\$ 38,290	\$ 3,842

1. Includes unrecognised profits as of May 2019.
2. Other Adjustments represent regulatory adjustments for foreseeable charges and deferred tax assets.
3. Tier 2 Capital represents subordinated debt with an original term to maturity of five years or greater, and preference shares.

Pillar 3 Disclosures

Risk-Weighted Assets

RWAs are calculated based on measures of credit risk, market risk and operational risk. The tables below represent a summary of the RWAs and capital requirements for GSGUK, GSI and GSIB by type as at May 31, 2019 and February 28, 2019.

Table 4: Overview of RWAs

GSGUK

\$ in millions

	RWAs		Minimum capital requirements
	May 2019	February 2019	
1 Credit risk (excluding CCR)	\$ 31,587	\$ 27,838	\$ 2,527
2 Of which the standardised approach	6,430	5,654	515
4 Of which the advanced IRB (AIRB) approach	23,693	20,590	1,895
5 Of which equity IRB under the simple risk-weighted approach or the IMA	1,464	1,594	117
6 CCR	\$ 87,834	\$ 81,891	\$ 7,027
7 Of which mark to market	5,453	4,257	436
9 Of which the standardised approach	-	20	-
10 Of which internal model method (IMM)	66,679	62,769	5,334
11 Of which risk exposure amount for contributions to the default fund of a CCP	596	729	48
12 Of which CVA VaR	15,106	14,116	1,209
13 Settlement risk	\$ 2,219	\$ 1,261	\$ 177
14 Securitisation exposures in the banking book (after the cap)	\$ 700	\$ 672	\$ 56
15 Of which IRB approach	378	419	30
18 Of which standardised approach	322	253	26
19 Market risk	\$ 86,463	\$ 88,449	\$ 6,917
20 Of which the standardised approach	38,437	39,149	3,075
21 Of which IMA	48,026	49,300	3,842
22 Large exposures	-	-	-
23 Operational risk	\$ 15,716	\$ 15,716	\$ 1,257
24 Of which basic indicator approach	-	-	-
25 Of which standardised approach	15,716	15,716	1,257
29 Total	\$ 224,519	\$ 215,827	\$ 17,961

GSI

\$ in millions

	RWAs		Minimum capital requirements
	May 2019	February 2019	
1 Credit risk (excluding CCR)	\$ 14,798	\$ 14,730	\$ 1,184
2 Of which the standardised approach	1,311	1,288	105
4 Of which the advanced IRB (AIRB) approach	12,023	11,848	962
5 Of which equity IRB under the simple risk-weighted approach or the IMA	1,464	1,594	117
6 CCR	\$ 87,152	\$ 81,396	\$ 6,972
7 Of which mark to market	5,154	4,136	412
9 Of which the standardised approach	-	-	-
10 Of which internal model method (IMM)	66,305	62,426	5,304
11 Of which risk exposure amount for contributions to the default fund of a CCP	596	729	48
12 Of which CVA VaR	15,097	14,105	1,208
13 Settlement risk	\$ 2,219	\$ 1,261	\$ 177
14 Securitisation exposures in the banking book (after the cap)	-	-	-
15 Of which IRB approach	-	-	-
18 Of which standardised approach	-	-	-
19 Market risk	\$ 85,707	\$ 87,581	\$ 6,857
20 Of which the standardised approach	37,697	38,416	3,016
21 Of which IMA	48,010	49,165	3,841
22 Large exposures	-	-	-
23 Operational risk	\$ 15,408	\$ 14,104	\$ 1,233
24 Of which basic indicator approach	-	-	-
25 Of which standardised approach	15,408	14,104	1,233
29 Total	\$ 205,284	\$ 199,072	\$ 16,423

Pillar 3 Disclosures**GSIB**

\$ in millions

		RWAs		Minimum capital requirements
		May 2019	February 2019	
1	Credit risk (excluding CCR)	\$ 13,974	\$ 8,783	\$ 1,118
2	Of which the standardised approach	152	41	12
4	Of which the advanced IRB (AIRB) approach	13,822	8,742	1,106
5	Of which equity IRB under the simple risk-weighted approach or the IMA	-	-	-
6	CCR	\$ 621	\$ 476	\$ 50
7	Of which mark to market	238	122	19
9	Of which the standardised approach	-	-	-
10	Of which internal model method (IMM)	374	343	30
11	Of which risk exposure amount for contributions to the default fund of a CCP	-	-	-
12	Of which CVA VaR	9	11	1
13	Settlement risk	-	-	-
14	Securitisation exposures in the banking book (after the cap)	\$ 700	\$ 672	\$ 56
15	Of which IRB approach	378	419	30
18	Of which standardised approach	322	253	26
19	Market risk	\$ 328	\$ 371	\$ 26
20	Of which the standardised approach	312	236	25
21	Of which IMA	16	135	1
22	Large exposures	-	-	-
23	Operational risk	\$ 501	\$ 464	\$ 40
24	Of which basic indicator approach	-	464	-
25	Of which standardised approach	501	-	40
29	Total	\$ 16,124	\$ 10,766	\$ 1,290

GSGUK total capital ratio decreased from 20.2% in February 2019 to 19.7% in May 2019 primarily due to the following movements:

- GSGUK Credit RWAs as of May 2019 increased by \$10.7 billion compared with February 2019, primarily reflecting higher counterparty credit risk and increased exposures.
- GSGUK Market RWAs as of May 2019 decreased by \$2 billion compared with February 2019, primarily reflecting a decrease in modelled market risk as a result of changes in risk exposures.

Pillar 3 Disclosures**Credit Risk****Overview**

Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g. an OTC derivatives counterparty or a borrower) or an issuer of securities or other instruments we hold. Our exposure to credit risk comes mostly from client transactions in OTC derivatives and loans and lending commitments. Credit risk also comes from cash placed with banks, securities financing transactions (i.e., resale and repurchase agreements and securities borrowing and lending activities) and customer and other receivables.

Credit Risk, which is independent of the revenue-producing units and reports to the firm's chief risk officer, has primary responsibility for assessing, monitoring and managing credit risk through firmwide oversight across the firm's global businesses. The Risk Governance Committee reviews and approves credit policies and parameters. In addition, we hold other positions that give rise to credit risk (e.g., bonds held in our inventory and secondary bank loans). These credit risks are captured as a component of market risk measures, which are monitored and managed by Market Risk, consistent with other inventory positions. We also enter into derivatives to manage market risk exposures. Such derivatives also give rise to credit risk which is monitored and managed by Credit Risk.

Credit Risk Management Process

The firm's process for managing credit risk includes:

- Collecting complete, accurate and timely information;
- Approving transactions and setting and communicating credit exposure limits;
- Monitoring compliance with established credit risk limits and reporting our exposure;
- Establishing or approving underwriting standards;
- Assessing the likelihood that a counterparty will default on its payment obligations;
- Measuring our current and potential credit exposure and losses resulting from a counterparty default;
- Using credit risk mitigants, including collateral and hedging;
- Maximizing recovery through active workout and restructuring of claims; and

- Proactive communication between our revenue-producing units and our independent risk oversight and control functions.

As part of the risk assessment process, Credit Risk performs credit reviews, which include initial and ongoing analyses of the firm's counterparties. For substantially all credit exposures, the core of the process is an annual counterparty credit review. A credit review is an independent analysis of the capacity and willingness of a counterparty to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the counterparty's industry, and the economic environment. Senior personnel, with expertise in specific industries, inspect and approve credit reviews and internal credit ratings.

The firm's risk assessment process may also include, where applicable, reviewing certain key metrics, including, but not limited to, delinquency status, collateral values, credit scores and other risk factors.

The firm's global credit risk management systems capture credit exposure to individual counterparties and on an aggregate basis to counterparties and their subsidiaries. These systems also provide management with comprehensive information on the firm's aggregate credit risk by product, internal credit rating, industry, country and region.

Credit Risk Measures and Limits

The firm measures credit risk based on the potential loss in the event of non-payment by a counterparty using current and potential exposure. For derivatives and securities financing transactions, current exposure represents the amount presently owed after taking into account applicable netting and collateral arrangements, while potential exposure represents the firm's estimate of the future exposure that could arise over the life of a transaction based on market movements within a specified confidence level. Potential exposure also takes into account netting and collateral arrangements. For loans and lending commitments, the primary measure of credit risk is a function of the notional amount of the position.

Pillar 3 Disclosures

Credit limits are used at various levels, as well as underwriting standards, to manage the size and nature of the company's credit exposures. For GS Group, the Risk Committee of the Board and the Risk Governance Committee approve credit risk limits at GS Group, business and product levels, consistent with the risk appetite statement. The GSI and GSIB Risk Committees approve the framework that governs the setting of credit risk limits at the entity level, and delegate responsibility for the ongoing execution and monitoring to the GSI and GSIB chief credit officers respectively. Credit Risk (through delegated authority from the Risk Governance Committee) sets credit limits for individual counterparties, economic groups, industries and countries. Limits for counterparties and economic groups are reviewed regularly and revised to reflect changing risk appetites for a given counterparty or group of counterparties. Limits for industries and countries are based on our risk appetite and are designed to allow for regular monitoring, review, escalation and management of credit risk concentrations. For information on the limit approval process, see "Overview and Structure of Risk Management" in Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the firm's Quarterly Report on Form 10-Q.

Policies authorised by GS Group's Enterprise Risk Committee and the Risk Governance Committee prescribe the level of formal approval required for GS Group to assume credit exposure to a counterparty across all product areas, taking into account any applicable netting provisions, collateral or other credit risk mitigants.

Credit Risk is responsible for monitoring these limits, and identifying and escalating to senior management and/or the appropriate risk committee, on a timely basis, instances where limits have been exceeded.

Credit Exposures

For information on the firm's credit exposures, including the gross fair value, netting benefits and current exposure of the firm's derivative exposures and the firm's securities financing transactions, see "Note 7. Derivatives and Hedging Activities" and "Note 10. Collateralized Agreements and Financings" in Part I, Item 1 "Financial Statements" and "Credit Risk Management" in Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the firm's Quarterly Report on Form 10-Q.

Credit Risk and Counterparty Credit Risk RWAs

Credit RWAs are calculated based upon measures of credit exposure, which are then risk weighted. Below is a description of the methodology used to calculate RWAs for Wholesale exposures, which generally include credit exposures to corporates, institutions, sovereigns or government entities (other than securitisation, retail or equity exposures). GSGUK has regulatory permission from the PRA to compute risk weights for most exposures in accordance with the Advanced Internal Ratings Based (AIRB) approach which utilises internal assessments of each counterparty's creditworthiness. The internal credit rating is assigned to each exposure class based on a credit-worthiness review methodology determined by the Credit Risk department.

As such, the Credit Risk exposure that does not qualify for the AIRB approach but is instead calculated under the standardised approach, for which nominated external credit assessment institutions (ECAI) ratings are potentially eligible to be used, is immaterial. Exposure classes under the standardised approach include corporates, retail and private equity for which external ratings are generally unavailable, unrated or private corporates. These exposures represent less than 5% of the total Credit Risk exposures.

Exposure at Default (EAD). For on-balance-sheet assets, such as receivables and cash, the EAD is generally based on the carrying value. For the calculation of EAD for off-balance-sheet exposures, including commitments and guarantees, a credit equivalent exposure amount is calculated based on the notional amount of each transaction multiplied by a credit conversion factor in accordance with Article 166 of CRD IV.

For the measurement of substantially all counterparty credit exposure on OTC, cleared and listed derivative and securities financing transactions, GSGUK has regulatory permission from the PRA to use the Internal Model Method (IMM). GSGUK uses IMM for substantially all of the counterparty credit risk arising from OTC derivatives, exchange-traded derivatives and securities financing transactions. The models estimate Expected Exposures (EE) at various points in the future using risk factor simulations. The model parameters are derived from historical and implied market data using the most recent three-year period as well as a stressed three-year period. The models also estimate the Effective Expected Positive Exposure (EEPE) over the first year of the portfolio, which is the time-weighted average of non-declining positive credit exposure over the EE simulation. EAD is calculated by multiplying the EEPE by a standard regulatory alpha factor of 1.4.

Pillar 3 Disclosures

The EAD detailed in the following tables represents the exposures used in computing capital requirements and is not a directly comparable metric to balance sheet amounts presented in the consolidated financial information of GSGUK for the year ended May 31, 2019 due to differences in measurement methodology, counterparty netting and collateral offsets used.

As GSGUK calculates the majority of its counterparty credit exposure under the IMM, the impacts of netting and collateral are integral to the calculation of the exposure. The exposures disclosed below are presented on a net and collateralised basis where there is a legally enforceable netting and collateral opinion. They do not include the effect of any credit protection purchased on counterparties.

Advanced IRB Approach. RWAs are calculated by multiplying EAD by the counterparty's risk-weight. In accordance with the AIRB approach, risk-weights are a function of the counterparty's Probability of Default (PD), Loss Given Default (LGD) and the maturity of the trade or portfolio of trades. We also use internal ratings for risk management purposes.

- PD is an estimate of the probability that an obligor will default over a one-year horizon. For the majority of Wholesale exposures, the PD is assigned using an approach where quantitative factors are combined with a qualitative assessment to determine internal credit rating grades. For each internal credit rating grade, over 5 years of historical empirical data is used to calculate a long run average annual PD which is assigned to each counterparty with that credit rating grade.

Internal credit rating grades each have external public rating agency equivalents. The scale that is employed for internal credit ratings corresponds to that used by the major rating agencies and the internal credit ratings, while arrived at independently of public ratings, are assigned using definitions of each internal credit rating grade that are consistent with the definitions used by the major rating agencies for their equivalent credit rating grades. As a result, default data published by the major rating agencies for obligors with public ratings can be mapped to counterparties with equivalent internal credit ratings for quantification and validation of risk parameters.

- LGD is an estimate of the economic loss rate if a default occurs during economic downturn conditions. For Wholesale exposures, LGDs are estimated using data from a recognised vendor model, from a downturn period, and are mapped to obligors based on attributes identified as being statistically significant to the ultimate recovery. LGD estimates for low default portfolios are calibrated using the same data, i.e. from corporate portfolios, which is deemed to be a conservative approach.
- The definition of maturity depends on the nature of the exposure. For OTC, cleared and listed derivatives, maturity is an average time measure weighted by credit exposure (based on EE and EEPE) as required by applicable capital regulation. For securities financing transactions, maturity represents the notional weighted average number of days to maturity. Maturity is floored at one year and capped at five years except where the rules allow a maturity of less than one year to be used as long as certain criteria are met.

Governance and Validation of Risk Parameters

Approaches and methodologies for quantifying PD, LGD, and EAD are monitored and managed by Credit Risk. Models used for regulatory capital are independently reviewed, validated and approved by Model Risk.

To assess the performance of the PD parameters used, on an annual basis the firm performs a benchmarking exercise which includes comparisons of realised annual default rates to the expected annual default rates for each credit rating band and comparisons of the internal realised long-term average default rates to the empirical long-term average default rates assigned to each credit rating band. For 2018, as well as in previous annual periods, the PDs used for regulatory capital calculations were higher (i.e., more conservative) than the firm's actual internal realised default rate.

During the six-month period ended May 2019, the total number of counterparty defaults remained low, representing less than 0.5% of all counterparties, and such defaults primarily occurred within loans and lending commitments. Estimated losses associated with counterparty defaults were not material.

Pillar 3 Disclosures

To assess the performance of LGD parameters used, on an annual basis the firm compares recovery rates following counterparty defaults to the recovery rates based on LGD parameters assigned to the corresponding exposures prior to default. While the actual realised recovery on each defaulted exposure varies due to transaction and other situation-specific factors, on average, recovery rates remain higher than those implied by the LGD parameters used in regulatory capital calculations.

The performance of each IMM model used to quantify EAD is assessed quarterly via backtesting procedures, performed by comparing the predicted and realised exposure of a set of representative trades and portfolios at certain horizons. The firm's models are monitored and enhanced in response to backtesting.

The following three tables present the methods used to calculate Counterparty Credit Risk RWAs and main parameters used within each method for GSGUK, GSI and GSIB as of May 31, 2019.

Table 5: Analysis of CCR Exposure by Approach**GSGUK**

\$ in millions

		As of May 2019					
	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	\$ 2,640	\$ 10,079			\$ 8,594	\$ 5,440
3	Standardised approach	-				-	-
4	IMM (for derivatives and SFTs)			78,793	1.40	110,310	66,398
5	<i>Of which securities financing transactions</i>			23,946	1.40	33,525	11,012
6	<i>Of which derivatives and long settlement transactions</i>			54,846	1.40	76,785	55,386
11	Total						\$ 71,838

GSI

\$ in millions

		As of May 2019					
	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	\$ 2,507	\$ 10,022			\$ 8,404	\$ 5,141
3	Standardised approach	-				-	-
4	IMM (for derivatives and SFTs)			78,491	1.40	109,888	66,024
5	<i>Of which securities financing transactions</i>			23,804	1.40	33,326	10,872
6	<i>Of which derivatives and long settlement transactions</i>			54,687	1.40	76,562	55,152
11	Total						\$ 71,165

GSIB

\$ in millions

		As of May 2019					
	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	\$ 89	\$ 40			\$ 129	\$ 238
3	Standardised approach	-				-	-
4	IMM (for derivatives and SFTs)			301	1.40	422	374
5	<i>Of which securities financing transactions</i>			142	1.40	199	140
6	<i>Of which derivatives and long settlement transactions</i>			159	1.40	223	234
11	Total						\$ 612

Pillar 3 Disclosures

The following table presents GSGUK, GSI and GSIB's EAD after credit risk mitigation and RWAs on exposures to CCPs as of May 31, 2019.

Table 6: Exposures to CCPs

		EAD post CRM			RWAs		
		GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
1 Exposures to QCCPs (total)					\$ 890	\$ 890	-
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	3,530	3,530	-	71	71	-
3	(i) OTC derivatives	899	899	-	18	18	-
4	(ii) Exchange-traded derivatives	2,505	2,505	-	50	50	-
5	(iii) SFTs	126	126	-	3	3	-
6	(iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-
7	Segregated initial margin	-	-	-	-	-	-
8	Non-segregated initial margin	11,208	11,208	-	223	223	-
9	Prefunded default fund contributions	596	596	-	596	596	-
10	Alternative calculation of own funds requirements for exposures	-	-	-	-	-	-
11 Exposures to non-QCCPs (total)					-	-	-
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-	-	-	-	-
13	(i) OTC derivatives	-	-	-	-	-	-
14	(ii) Exchange-traded derivatives	-	-	-	-	-	-
15	(iii) SFTs	-	-	-	-	-	-
16	(iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-
17	Segregated initial margin	-	-	-	-	-	-
18	Non-segregated initial margin	-	-	-	-	-	-
19	Prefunded default fund contributions	-	-	-	-	-	-
20	Unfunded default fund contributions	-	-	-	-	-	-

The following table presents GSGUK, GSI and GSIB's exposures subject to CVA capital charges and corresponding RWAs as of May 31, 2019.

Table 7: CVA VaR Capital Charge

		Exposure value			RWAs		
		GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
1	Total portfolios subject to the advanced method	\$ 38,833	\$ 38,756	\$ 77	\$ 15,106	\$ 15,097	\$ 9
2	(i) VaR component (including the 3x multiplier)				4,052	4,050	2
3	(ii) SVaR component (including the 3x multiplier)				11,054	11,047	7
5	Total subject to the CVA capital charge	\$ 38,833	\$ 38,756	\$ 77	\$ 15,106	\$ 15,097	\$ 9

The following table presents a quarterly flow statement of the RWAs and Capital requirements under the IMM for GSGUK, GSI and GSIB as of May 31, 2019.

Table 8: RWA Flow Statements of CCR Exposures under the IMM

		RWA amounts			Capital requirements		
		GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
1 RWAs as at the end of the previous reporting period		\$ 62,769	\$ 62,426	\$ 343	\$ 5,022	\$ 4,995	\$ 27
2	Asset size	4,453	4,413	40	356	352	4
3	Credit quality of counterparties	138	135	3	11	11	0
7	Foreign exchange movements	(857)	(856)	(1)	(69)	(69)	(0)
8	Other	176	187	(11)	14	15	(1)
9 RWAs as at the end of the current reporting period		\$ 66,679	\$ 66,305	\$ 374	\$ 5,334	\$ 5,304	\$ 30

Pillar 3 Disclosures

The following table presents a quarterly flow statement of the RWAs and Capital requirements under the IRB approach for GSGUK, GSI and GSIB as of May 31, 2019.

Table 9: RWA Flow Statements of Credit Risk Exposures under the IRB Approach

\$ in millions

As of May 2019

	RWA amounts			Capital requirements		
	GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
1 RWAs as at the end of the previous reporting period	\$ 20,590	\$ 11,848	\$ 8,742	\$ 1,647	\$ 948	\$ 699
2 Asset size	2,921	(38)	5,111	233	(3)	409
3 Asset quality	96	117	(21)	8	9	(1)
7 Foreign exchange movements	(64)	(29)	(35)	(5)	(2)	(3)
8 Other	150	125	25	12	10	2
9 RWAs as at the end of the current reporting period	\$ 23,693	\$ 12,023	\$ 13,822	\$ 1,895	\$ 962	\$ 1,106

Credit Risk Mitigation

To reduce credit exposures on derivatives and securities financing transactions, we may enter into master netting agreements or similar arrangements (collectively, netting agreements) with counterparties that permit the firm to offset receivables and payables with such counterparties. A netting agreement is a contract with a counterparty that permits net settlement of multiple transactions with that counterparty, including upon the exercise of termination rights by a non-defaulting party. Upon exercise of such termination rights, all transactions governed by the netting agreement are terminated and a net settlement amount is calculated.

We may also reduce credit risk with counterparties by entering into agreements that enable us to receive and post cash and securities collateral with respect to our derivatives and securities financing transactions, subject to the terms of the related credit support agreements or similar arrangements (collectively, credit support agreements). An enforceable credit support agreement grants the non-defaulting party exercising termination provisions the right to liquidate collateral and apply the proceeds to any amounts owed. In order to assess enforceability of our right to setoff under netting and credit support agreements, we evaluate various factors, including applicable bankruptcy laws, local statutes and regulatory provisions in the jurisdiction of the parties to the agreement. The collateral we hold consists primarily of cash and securities of high quality government bonds (mainly US and EU), subject to haircuts as deemed appropriate by the Credit Risk function. The function performs ongoing collateral monitoring, to ensure the firm maintains an appropriate level of diversification of collateral, and distribution of collateral quality.

Our collateral is managed by certain functions within the firm which review exposure calculations, make margin calls with relevant counterparties, and ensure subsequent settlement of collateral movements. We monitor the fair value of the collateral on a daily basis to ensure our credit exposures are appropriately collateralised.

As of May 2019, the aggregate amounts of additional collateral or termination payments related to our net derivative liabilities under bilateral agreements that could have been called by our counterparties in the event of a one-notch and two-notch downgrade of our credit ratings are \$146 million and \$455 million respectively for GSI, and immaterial for GSIB.

For additional information about the firm's derivatives (including collateral and the impact of the amount of collateral required in the event of a ratings downgrade), see "Note 7. Derivatives and Hedging Activities" in Part I, Item 1 "Financial Statements" in the firm's Quarterly Report on Form 10-Q. See "Note 10. Collateralized Agreements and Financings" in Part I, Item 1 "Financial Statements" in the firm's Quarterly Report on Form 10-Q for further information about collateralised agreements and financings.

For loans and lending commitments, depending on the credit quality of the borrower and other characteristics of the transaction, we employ a variety of potential risk mitigants. Risk mitigants include: collateral provisions, guarantees, covenants, structural seniority of the bank loan claims and, for certain lending commitments, provisions in the legal documentation that allow us to adjust loan amounts, pricing, structure and other terms as market conditions change. The type and structure of risk mitigants employed can significantly influence the degree of credit risk involved in a loan or lending commitment.

When we do not have sufficient visibility into a counterparty's financial strength or when we believe a counterparty requires support from its parent, we may obtain third-party guarantees of the counterparty's obligations. Main types of guarantors are sovereigns, certain supranational and multilateral development banks, banks and other financial institutions. We may also mitigate our credit risk using credit derivatives or participation agreements.

Pillar 3 Disclosures

The following three tables presents GSGUK, GSI and GSIB net carrying values of credit risk exposures secured by different CRM techniques as of May 31, 2019.

Table 10: CRM Techniques**GSGUK***\$ in millions*

As of May 2019

	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1 Total loans	\$ 11,316	\$ 2,772	\$ 1,949	\$ 8	\$ 815
2 Total debt securities	2,144	-	-	-	-
3 Total exposures	\$ 13,477	\$ 2,772	\$ 1,949	\$ 8	\$ 815
4 Of which defaulted	131	-	-	-	-

GSI*\$ in millions*

As of May 2019

	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1 Total loans	\$ 693	-	-	-	-
2 Total debt securities	988	-	-	-	-
3 Total exposures	\$ 1,681	-	-	-	-
4 Of which defaulted	131	-	-	-	-

GSIB*\$ in millions*

As of May 2019

	Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1 Total loans	\$ 10,588	\$ 2,772	\$ 1,949	\$ 8	\$ 815
2 Total debt securities	578	-	-	-	-
3 Total exposures	\$ 11,166	\$ 2,772	\$ 1,949	\$ 8	\$ 815
4 Of which defaulted	-	-	-	-	-

Pillar 3 Disclosures

The following table presents the impact of credit derivatives on the RWAs under the IRB approach for GSGUK, GSI and GSIB based on exposure class.

Table 11: IRB Approach - Effect on the RWAs of Credit Derivatives Used as CRM Techniques

\$ in millions As of May 2019

	Pre-Credit Derivatives RWAs			Actual RWAs		
	GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
1 Exposures under AIRB						
2 Central governments and central banks	\$ 545	\$ 376	\$ 169	\$ 545	\$ 376	\$ 169
3 Institutions	5,929	5,659	270	5,954	5,659	295
6 Corporates – Other	19,345	5,941	15,556	17,142	5,941	13,353
12 Equity IRB	1,464	1,464	-	1,464	1,464	-
13 Other Non-Credit obligation assets	52	47	5	52	47	5
14 Total	\$ 27,335	\$ 13,487	\$ 16,000	\$ 25,157	\$ 13,487	\$ 13,822

Credit Derivatives

We enter into credit derivative transactions primarily to facilitate client activity and to manage the credit risk associated with market-making, including to hedge counterparty exposures arising from OTC derivatives (intermediation activities).

We also use credit derivatives to hedge counterparty exposure associated with investing and lending activities and to a lesser extent derivative exposure. Some of these hedges qualify as credit risk mitigants for regulatory capital purposes using the PD and LGD substitution approach (and subject to the regulatory haircuts for maturity and currency mismatch where applicable).

Where the aggregate notional of credit derivatives hedging exposure to a loan obligor is less than the notional loan exposure, the substitution approach is only employed for the percentage of loan exposure covered by eligible credit derivatives.

For further information regarding the firm's credit derivative transactions, see "Note 7. Derivatives and Hedging Activities" in Part I, Item 1 "Financial Statements" in the firm's Quarterly Report on Form 10-Q.

For information regarding credit risk concentrations, see "Note 26. Credit Concentrations" in Part I, Item 1 "Financial Statements" in the firm's Quarterly Report on Form 10-Q.

The following table presents GSGUK, GSI and GSIB exposure to credit derivatives based on notional and fair values as of May 31, 2019.

Table 12: Credit Derivatives Exposures

\$ in millions As of May 2019

	Credit derivative hedges								
	Protection bought			Protection sold			Other credit derivatives		
	GSGUK	GSI	GSIB	GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
Notionals									
Index Credit Default Swaps	\$ 325,022	\$ 324,178	\$ 844	\$ 314,271	\$ 313,792	\$ 479	-	-	-
Total Return swaps	3,778	3,778	-	144	144	-	-	-	-
Other Credit Default Swaps	327,276	326,037	1,239	313,615	312,789	826	-	-	-
Other Credit Derivatives	-	-	-	-	-	-	290,302	290,057	245
Total notionals	\$ 656,076	\$ 653,993	\$ 2,083	\$ 628,030	\$ 626,725	\$ 1,305	\$ 290,302	\$ 290,057	\$ 245
Fair values									
<i>Positive fair value (asset)</i>	\$ 9,819	\$ 9,801	\$ 18	\$ 13,359	\$ 13,342	\$ 17	\$ 6,357	\$ 6,350	\$ 7
<i>Negative fair value (liability)</i>	\$ 14,506	\$ 14,464	\$ 43	\$ 8,451	\$ 8,372	\$ 79	\$ 5,093	\$ 5,028	\$ 66

Pillar 3 Disclosures**Wrong-way Risk**

We seek to minimise risk where there is a significant positive correlation between the probability of default of a counterparty and our exposure to that counterparty (net of the market value of any collateral we receive), which is known as “wrong-way risk”. Wrong-way risk is commonly categorised into two types: specific wrong-way risk and general wrong-way risk. We categorise exposure as specific wrong-way risk when our counterparty and the issuer of the reference asset of the transaction are the same entity or are affiliates, or if the collateral supporting a transaction is issued by the counterparty or its affiliates. General wrong-way risk arises when there is a significant positive correlation between the probability of default of a counterparty and general market risk factors affecting the exposure to that counterparty. We have procedures in place to actively identify, monitor and control specific and general wrong-way risk, beginning at the inception of a transaction and continuing through its life, including assessing the level of risk through stress tests. We ensure that material wrong-way risk is mitigated using collateral agreements or increases to initial margin, where appropriate.

Credit Valuation Adjustment Risk-Weighted Assets

RWAs for CVA address the risk of losses related to changes in counterparty credit risk arising from OTC derivatives. We calculate RWAs for CVA primarily using the Advanced CVA approach set out in CRD IV, which permits the use of regulator approved VaR models. Consistent with our Regulatory VaR calculation (see “Market Risk” for further details), the CVA RWAs are calculated at a 99% confidence level over a 10-day time horizon.

The CVA RWAs also include a stressed CVA component, which is also calculated at a 99% confidence level over a 10-day horizon using both a stressed VaR period and stressed EEs. The CVA VaR model estimates the impact on our credit valuation adjustments from simulated changes to our counterparties’ credit spreads. It reflects eligible CVA hedges (as defined in CRD IV), but it excludes those hedges that, although used for risk-management purposes, are ineligible for inclusion in the regulatory CVA VaR model. Examples of such hedges are interest rate hedges, or those that do not reference the specific exposures they are intended to mitigate, but are nevertheless highly correlated to the underlying credit risk.

Other Credit Risk-Weighted Assets

Credit RWAs also include the following components:

Cleared Transactions

RWAs for cleared transactions and default fund contributions (defined as payments made by clearing members to central clearing agencies pursuant to mutualised loss arrangements) are calculated based on specific rules within CRD IV. A majority of our exposures on centrally cleared transactions are to counterparties that are considered to be Qualifying Central Counterparties (QCCPs) in accordance with the European Market Infrastructure Regulation (EMIR). CRD IV includes a transitional rule which allows all CCPs applying for authorisation or recognition under EMIR to be treated as QCCPs. The European Commission has adopted an implementing act that extended the transitional phase to June 15, 2019. Such exposures arise from OTC derivatives, exchange-traded derivatives, and securities financing transactions and are required to be risk weighted at either 2% or 4% based on the specified criteria.

Retail Exposures

As of May 31, 2019, we have immaterial retail exposures (defined as residential mortgage exposures, qualifying revolving exposures, or other retail exposures that are managed as part of a segment of exposures with homogeneous risk characteristics, not on an individual exposure basis) subject to standardised risk weights.

Other Assets

Other assets primarily include property, leasehold improvements and equipment, deferred tax assets, and assets for which there is no defined capital methodology or that are not material. RWAs for other assets are generally based on the carrying value and are typically risk weighted at 100%.

Pillar 3 Disclosures**Equity Exposures in the Banking Book**

The firm makes direct investments in public and private equity securities; it also makes investments, through funds that it manages (some of which are consolidated), in debt securities and loans, public and private equity securities and real estate entities. These investments are typically longer-term in nature and are primarily held for capital appreciation purposes; they are therefore classified for regulatory capital purposes as banking book equity investments. The firm also makes commitments to invest, primarily in private equity, real estate and other assets. Such commitments are made both directly and indirectly through funds that the firm raises and manages. Equity exposures held in GSGUK's banking book are included in the Credit RWAs within row 5 of Table 4 and were not material as of May 31, 2019.

Past due exposures, impaired exposures and impairment provisions

Payments aged more than a threshold of 90 days on any material credit obligation to the company, 180 days on residential mortgage obligations or 120 days on other retail obligations are considered past due.

An exposure is considered impaired when it is probable that the borrower will be unable to pay all amounts due according to the contractual terms of the loan agreement. The firm's definition of unlikeliness to pay includes the distressed restructuring of an obligation, including bank loan obligations, that results in deferred or reduced payment

to GS, whether or not counterparty is in bankruptcy, insolvency or local jurisdictional equivalent.

There are no instances for GSGUK, GSI or GSIB where past-due exposures are not considered to be impaired.

The allowance for impairment is determined using various risk factors, including industry default and loss data, current macroeconomic indicators, borrower's capacity to meet its financial obligations, borrower's country of risk, loan seniority and collateral type. In addition, for loans backed by real estate, risk factors include loan to value ratio, debt service ratio and home price index. The firm also records an allowance for losses on lending commitments that are held for investment and accounted for on an accrual basis. Such allowance is determined using the same methodology as the allowance for impairment, while also taking into consideration the probability of drawdowns or funding, and is included in other liabilities and accrued expenses. Additionally, loans are charged off against the impairment provision when deemed to be uncollectible.

Allowance for Losses on Loans and Lending Commitments

For information on the firm's impaired loans, past due loans, loans on non-accrual status, and allowance for losses on loans and lending commitments, see "Note 9. Loans Receivable" in Part I, Item 1 "Financial Statements" in the firm's Quarterly Report on Form 10-Q.

Market Risk

Overview

Market risk is the risk of loss in the value of inventory, as well as certain other financial assets and financial liabilities, due to changes in market conditions. Categories of market risk include the following:

- Interest rate risk: results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, prepayment speeds and credit spreads;
- Equity price risk: results from exposures to changes in prices and volatilities of individual equities, baskets of equities and equity indices;
- Currency rate risk: results from exposures to changes in spot prices, forward prices and volatilities of currency rates; and
- Commodity price risk: results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, electricity, and precious and base metals.

Market Risk, which is independent of the revenue-producing units and reports to the firm's chief risk officer, has primary responsibility for assessing, monitoring and managing market risk through firmwide oversight across global businesses.

Managers in revenue-producing units and Market Risk discuss market information, positions and estimated loss scenarios on an ongoing basis. Managers in revenue-producing units are accountable for managing risk within prescribed limits. These managers have in-depth knowledge of their positions, markets and the instruments available to hedge their exposures.

Market Risk Management Process

The firm's process for managing market risk includes:

- Collecting complete, accurate and timely information;
- Utilising a dynamic limit-setting framework;
- Monitoring compliance with established market risk limits and reporting our exposures;
- Diversifying exposures;
- Controlling position sizes;
- Evaluating mitigants, such as economic hedges in related securities or derivatives; and

- Ensuring proactive communication between our revenue-producing units and our independent risk oversight and control functions.

Market Risk produces risk measures and monitors them against established market risk limits. These measures reflect an extensive range of scenarios and the results are aggregated at product, business and firmwide levels. For additional information regarding the firm's market risk measures and risk limits, see "Risk Management – Market Risk Management" in Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the firm's Quarterly Report on Form 10-Q.

Market Risk-Weighted Assets

Trading book positions are subject to market risk capital requirements which are designed to cover the risk of loss in value of these positions due to changes in market conditions. These capital requirements are determined either by applying prescribed risk weighting factors, or they are based on internal models which are subject to various qualitative and quantitative parameters. The CRD IV market risk capital rules require that a firm obtains prior written permission from its regulators before using any internal model to calculate its risk-based capital requirement. As our permission applies to GSI and GSIB individually, we calculate model-based requirements for each of those entities separately and sum those to calculate GSGUK's requirements.

RWAs for market risk are calculated using the following internal models: Value-at-Risk (VaR), Stressed VaR (SVaR), Incremental Risk Charge (IRC), and Comprehensive Risk Measure (CRM), which for PRA purposes is called the All Price Risk Measure (APRM) and is subject to a floor. In addition, Standardised Rules, in accordance with Title IV of Part Three of CRD IV, are used to calculate RWAs for market risk for certain securitised and non-securitised positions by applying risk-weighting factors predetermined by regulators, to positions after applicable netting is performed. RWAs for market risk are the sum of each of these measures multiplied by 12.5.

Pillar 3 Disclosures**Regulatory VaR**

VaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, due to adverse market movements over a defined time horizon with a specified confidence level. For both risk management purposes (positions subject to VaR limits) and regulatory capital calculations, we use a single VaR model, which captures risks including interest rates, equity prices, currency rates and commodity prices. As such, VaR facilitates comparison across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the firmwide level.

VaR used for regulatory capital requirements (Regulatory VaR) differs from risk management VaR due to different time horizons and confidence levels (10-day and 99% for Regulatory VaR vs. one-day and 95% for risk management VaR), as well as differences in the scope of positions on which VaR is calculated. The 10-day VaR is based on scaling the 1-day VaR by the square root of 10.

VaR is calculated daily using historical simulations with full valuation of market factors, capturing both general and specific market risk. VaR is calculated at a positional level based on simultaneously shocking the relevant market risk factors for that position, using a mix of absolute and relative returns. We sample from five years of historical data to generate the scenarios for our VaR calculation. The historical data is weighted so that the relative importance of data reduces over time. This gives greater importance to more recent observations and reflects current asset volatilities.

In accordance with the CRD IV market risk regulatory capital requirements, we evaluate the accuracy of our VaR model through daily backtesting. The results of the backtesting determine the size of the VaR multiplier used to compute RWAs.

Table 17 presents our period end, maximum, minimum and average daily GSGUK, GSI and GSIB 99% 10-day Regulatory VaR over the six-month period ended May 2019.

Stressed VaR

SVaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, during a period of significant market stress. SVaR is based on a full valuation at a 99% confidence level over a 10-day time horizon using market data inputs from a continuous 12-month period of stress. The 10-day SVaR is calculated as the 1-day SVaR scaled by the square root of 10. We identify the stressed period by comparing VaR using market data inputs from different historical periods.

Table 17 presents our period end, maximum, minimum and average weekly GSGUK, GSI and GSIB 99% 10-day SVaR over the six-month period ended May 2019.

Incremental Risk

Incremental risk is the potential loss in value of non-securitised inventory positions due to the default or credit migration of issuers of financial instruments over a one-year time horizon. As required by the CRD IV market risk regulatory capital rules, this measure is calculated at a 99.9% confidence level over a one-year time horizon. It uses a multi-factor model assuming a constant level of risk. When assessing the risk, we take into account market and issuer-specific concentration, credit quality, liquidity horizons and correlation of default and migration risk. The liquidity horizon is calculated based upon the size of exposures and the speed at which we can reduce risk by hedging or unwinding positions, given our experience during a historical stress period, and is subject to the prescribed regulatory minimum. Our average liquidity horizon as of May 31, 2019 was 3.2 months.

Table 17 presents our period end, maximum, minimum and average of the weekly GSGUK, GSI and GSIB Incremental Risk measure over the six-month period ended May 2019.

Comprehensive Risk

Comprehensive risk is the potential loss in value, due to price risk and defaults, within credit correlation positions. A credit correlation position is defined as a securitisation position for which all or substantially all of the value of the underlying exposures is based on the credit quality of a single company for which a two-way market exists, or indices based on such exposures for which a two-way market exists, or hedges of these positions (which are typically not securitisation positions).

Pillar 3 Disclosures

As required under the CRD IV market risk capital rules, the Comprehensive Risk Measure comprises a model-based measure, which is subject to a floor based on the minimum capital requirement of 8% of RWA calculated under the standard rules for the portfolio. The model-based measure is calculated at a 99.9% confidence level over a one-year time horizon applying a constant level of risk. The model comprehensively covers price risks including nonlinear price effects and takes into account contractual structure of cash flows, the effect of multiple defaults, credit spread risk, volatility of implied correlation, recovery rate volatility and basis risk. The liquidity horizon is based upon our experience during a historical stress period, subject to the prescribed regulatory minimum.

As of May 2019, we had credit correlation positions, subject to the Comprehensive Risk Measure, with a fair value under US GAAP of \$24 million in net assets and \$277 million in net liabilities, and under UK GAAP of \$381 million in net assets and \$471 million in net liabilities.

Table 17 presents the period end, maximum, minimum and average of the GSGUK, GSI and GSIB Comprehensive Risk Measure for the over the six-month period ended May 2019.

Table 13: IMA Values for Trading Portfolios

		\$ in millions		
		As of May 2019		
		GSGUK	GSI	GSIB
VaR (10 day 99%)				
1	Maximum value	284	284	4
2	Average value	154	154	0
3	Minimum value	106	106	0
4	Period end	148	148	0
SVaR (10 day 99%)				
5	Maximum value	897	895	2
6	Average value	581	581	0
7	Minimum value	437	436	0
8	Period end	465	465	0
IRC (99.9%)				
9	Maximum value	1,140	1,140	18
10	Average value	966	963	3
11	Minimum value	772	756	0
12	Period end	1,006	1,006	0
Comprehensive risk capital charge (99.9%)				
13	Maximum value	109	109	0
14	Average value	75	75	0
15	Minimum value	46	46	0
16	Period end	94	94	0

Table 14: Market Risk under the IMA

The table below presents the capital requirements and RWA under the IMA for Market Risk as of May 31, 2019.

		\$ in millions					
		RWAs			Capital requirements		
		GSGUK	GSI	GSIB	GSGUK	GSI	GSIB
1	VaR (higher of values a and b)	\$ 5,696	\$ 5,693	\$ 3	\$ 456	\$ 456	\$ 0
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))				148	148	0
(b)	Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR				456	456	0
2	SVaR (higher of values a and b)	\$ 20,938	\$ 20,925	\$ 13	\$ 1,675	\$ 1,674	\$ 1
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))				465	465	0
(b)	Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)				1,675	1,674	1
3	IRC (higher of values a and b)	\$ 12,575	\$ 12,575	\$ 0	\$ 1,006	\$ 1,006	\$ 0
(a)	Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)				1,006	1,006	-
(b)	Average of the IRC number over the preceding 12 weeks				981	981	0
4	Comprehensive risk measure (higher of values a, b and c)	\$ 1,175	\$ 1,175	\$ 0	\$ 94	\$ 94	0
(a)	Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)				94	94	-
(b)	Average of the risk number for the correlation trading portfolio over the preceding 12 weeks				77	77	-
(c)	8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio (Article 338(4) of the CRR)				63	63	-
5	Other	\$ 7,642	\$ 7,642	\$ 0	\$ 611	\$ 611	0
6	Total	\$ 48,026	\$ 48,010	\$ 16	\$ 3,842	\$ 3,841	\$ 1

Pillar 3 Disclosures

Table 15: RWA Flow Statements of Market Risk Exposures under the IMA

GSGUK

\$ in millions

As of May 2019

	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total capital requirements
1 RWAs at previous quarter end	\$ 5,904	\$ 22,628	\$ 12,327	\$ 897	\$ 7,544	\$ 49,300	\$ 3,944
1a Regulatory adjustment	(4,096)	(15,703)	(75)	(322)	(5,369)	(25,565)	(2,045)
1b RWAs at the previous quarter-end	\$ 1,808	\$ 6,925	\$ 12,252	\$ 575	\$ 2,175	\$ 23,735	\$ 1,899
2 Movement in risk levels	37	(1,129)	323	599	4,898	4,728	353
3 Model updates/changes	7	19	-	-	(1,347)	(1,321)	(106)
8a RWAs at the end of the reporting period	\$ 1,852	\$ 5,815	\$ 12,575	\$ 1,174	\$ 5,726	\$ 27,142	\$ 2,146
8b Regulatory adjustment	3,844	15,123	-	1	1,916	20,884	1,696
8 RWAs at the end of the reporting period	\$ 5,696	\$ 20,938	\$ 12,575	\$ 1,175	\$ 7,642	\$ 48,026	\$ 3,842

GSI

\$ in millions

As of May 2019

	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total capital requirements
1 RWAs at previous quarter end	\$ 5,894	\$ 22,578	\$ 12,252	\$ 897	\$ 7,544	\$ 49,165	\$ 3,933
1a Regulatory adjustment	(4,087)	(15,653)	-	(322)	(5,369)	(25,431)	(2,034)
1b RWAs at the previous quarter-end	\$ 1,807	\$ 6,925	\$ 12,252	\$ 575	\$ 2,175	\$ 23,734	\$ 1,899
2 Movement in risk levels	38	(1,132)	323	599	4,898	4,726	353
3 Model updates/changes	7	19	-	-	(1,347)	(1,321)	(106)
8a RWAs at the end of the reporting period	\$ 1,852	\$ 5,812	\$ 12,575	\$ 1,174	\$ 5,726	\$ 27,139	\$ 2,146
8b Regulatory adjustment	3,841	15,113	-	1	1,916	20,871	1,695
8 RWAs at the end of the reporting period	\$ 5,693	\$ 20,925	\$ 12,575	\$ 1,175	\$ 7,642	\$ 48,010	\$ 3,841

GSIB

\$ in millions

As of May 2019

	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total capital requirements
1 RWAs at previous quarter end	\$ 10	\$ 50	\$ 75	-	-	\$ 135	\$ 11
1a Regulatory adjustment	(9)	(50)	(75)	-	-	(134)	(11)
1b RWAs at the previous quarter-end	\$ 1	-	-	-	-	\$ 1	-
2 Movement in risk levels	(1)	3	-	-	-	2	-
3 Model updates/changes	-	-	-	-	-	-	-
8a RWAs at the end of the reporting period	-	\$ 3	-	-	-	\$ 3	-
8b Regulatory adjustment	3	10	-	-	-	13	1
8 RWAs at the end of the reporting period	\$ 3	\$ 13	-	-	-	\$ 16	\$ 1

Pillar 3 Disclosures

Model Review and Validation

The models discussed above, which are used to determine Regulatory VaR, SVaR, Incremental risk and Comprehensive risk, are independently reviewed, validated and approved by Model Risk.

These models are regularly reviewed and enhanced in order to incorporate changes in the composition of positions included in market risk measures, as well as variations in market conditions. Prior to implementing significant changes to our assumptions and/or models, Model Risk performs model validations. Significant changes to models are reviewed with the firm’s chief risk officer and chief financial officer, and approved by the Risk Governance Committee.

Regulatory VaR Backtesting Results

As required by the CRD IV market risk capital rules, we validate the accuracy of our Regulatory VaR models by backtesting the output of such models against daily loss results. The number of exceptions (that is, the number of overshootings based on comparing the higher of positional or actual losses to the corresponding 99% one-day Regulatory VaR) over the most recent 250 business days is used to determine the size of the VaR multiplier, which could increase from a minimum of three to a maximum of four, depending on the number of exceptions.

As defined in the CRD IV market risk capital rules, hypothetical net revenues for any given day represent the impact of that day’s price variation on the value of positions held at the close of business the previous day. As a consequence, these results exclude certain revenues associated with market-making businesses, such as bid/offer net revenues, which are more likely than not to be positive by their nature. In addition, hypothetical net revenues used in our Regulatory VaR backtesting relate only to positions which are included in Regulatory VaR and, as noted above, differ from positions included in our risk management VaR. This measure of hypothetical net revenues is used to evaluate the performance of the Regulatory VaR model and is not comparable to our actual daily net revenues. See “Risk Management – Market Risk Management” in Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the firm’s Quarterly Report on Form 10-Q.

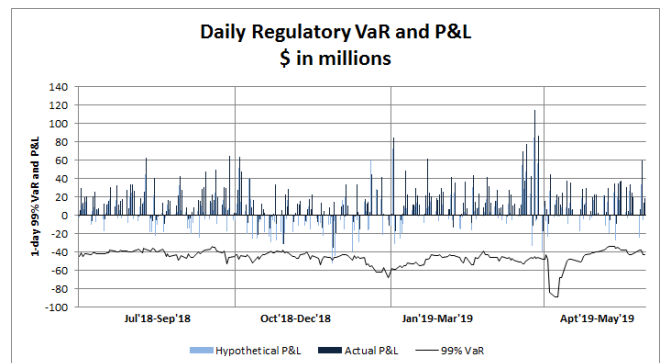
GSI hypothetical losses observed on a single day exceeded our 99% one-day Regulatory VaR once during the four quarters preceding May 2019, driven by large moves in US equity markets. GSI actual losses observed on a single day

did not exceed our 99% one-day Regulatory VaR during the four quarters preceding May 2019. GSIB hypothetical losses observed on a single day exceeded our GSIB 99% one-day Regulatory VaR ten times during the four quarters preceding May 2019, driven by large moves in rates and FX. GSIB actual losses observed on a single day exceeded our GSIB 99% one-day Regulatory VaR twelve times during the four quarters preceding May 2019, driven by large moves in rates and FX, along with New Business P&L. Note that, although a one-day time horizon is used for backtesting purposes, a 10-day time horizon is used, as described earlier, to determine RWAs associated with Regulatory VaR.

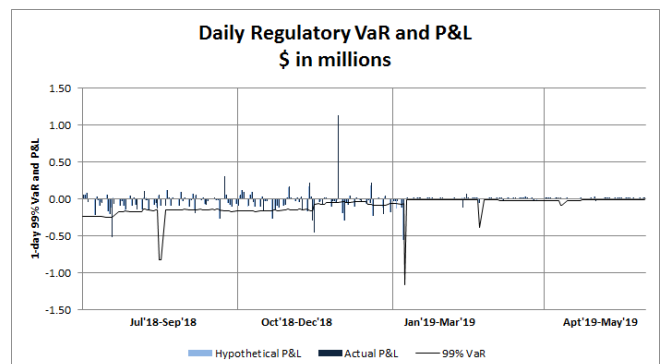
The tables below present our 99% one-day Regulatory VaR and hypothetical and actual PnL during the previous 11 months.

Table 16: Comparison of VaR estimates with gains/losses

- GSI



- GSIB



The table below summarizes the number of reported excesses for GSI and GSIB for the previous 11 months.

	Multiplier	Number of reported excesses	
		Hypothetical	Actual
Backtesting			
GSI	3.00	1	0
GSIB	4.00	10	12

Pillar 3 Disclosures**Stress Testing**

Stress testing is a method of determining the effect of various hypothetical stress scenarios on the firm and GSI and GSIB individually. Stress testing is used to examine risks of specific portfolios as well as the potential impact of significant risk exposures across GSI and GSIB. A variety of stress testing techniques is used to calculate the potential loss from a wide range of market moves on portfolios, including firmwide stress tests, sensitivity analysis and scenario analysis.

For a detailed description of the firm's stress testing practices, see "Risk Management – Market Risk Management – Risk Measures – Stress Testing" in Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the firm's Quarterly Report Form 10-Q.

The table below presents the components of own funds requirements under the standardised approach as of May 31, 2019.

Table 17: Market Risk under the Standardised Approach

\$ in millions

As of May 2019

	RWAs			Capital Requirements			
	GSGUK	GSI	GSIB	GSGUK	GSI	GSIB	
Outright products							
1	Interest rate risk (general and specific)	\$ 19,808	\$ 19,679	0	\$ 1,585	\$ 1,575	\$10
2	Equity risk (general and specific)	3,676	3,588	88	294	287	7
3	Foreign exchange risk	5,544	5,304	95	444	424	8
4	Commodity risk	970	687	0	77	55	0
4a	Collective investment undertakings	3,887	3,887	0	311	311	0
Options							
5	Simplified approach	575	575	0	46	46	0
8	Securitisation (specific risk)	3,977	3,977	0	318	318	0
9	Total	\$ 38,437	\$ 37,697	\$ 312	\$ 3,075	\$ 3,016	\$ 25

Interest Rate Sensitivity

Interest Rate Risk in the Trading Book

Our exposure to interest rate risk in our trading book arises mostly from inventory held to support client market-making activities. This inventory is accounted for at fair value and its interest rate risk is monitored as a component of Market risk. For additional information regarding interest rate risk, see “Risk Management – Market Risk Management” in Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the firm’s Quarterly Report on Form 10-Q.

Interest Rate Risk in the Banking Book

Our exposure to interest rate risk in the banking book (IRRBB) arises from differences in interest earned or paid as interest rates change, due to the reset characteristics of our assets and liabilities. In September 2018, the introduction of Instant Access Savings deposits via our Marcus by Goldman Sachs brand results in an increase of IRRBB risk for GSIB. IRRBB risk may increase further as GSIB continues to focus on the expansion of its lending and deposit taking activities. However, our banking book activities’ exposure to movements in interest rates remains immaterial for GSGUK as a whole as at May 31, 2019.

For further information regarding asset-liability management, see “Risk Management – Liquidity Risk Management” in Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the firm’s Quarterly Report on Form 10-Q.

Operational Risk

Overview

Operational risk is the risk of an adverse outcome resulting from inadequate or failed internal processes, people, systems or from external events. The firm's exposure to operational risk arises from routine processing errors, as well as extraordinary incidents, such as major systems failures or legal and regulatory matters.

Potential types of loss events related to internal and external operational risk include:

- Clients, products and business practices;
- Execution, delivery and process management;
- Business disruption and system failures;
- Employment practices and workplace safety;
- Damage to physical assets;
- Internal fraud; and
- External fraud.

The firm maintains a comprehensive control framework designed to provide a well-controlled environment to minimise operational risks. The EMEA Operational Risk Committee provides oversight of the ongoing development and implementation of operational risk policies, framework and methodologies, with oversight from the directors of the firm, and monitors the effectiveness of operational risk management.

Operational Risk, which is independent of the firm's revenue-producing units and reports to the firm's chief risk officer, has primary responsibility for developing and implementing a formalised framework for assessing, monitoring and managing operational risk with the goal of maintaining the firm's exposure to operational risk at levels that are within its risk appetite.

Operational Risk Management Process

The firm's process for managing operational risk includes:

- Collecting complete, accurate and timely information;
- Training, supervision and development of people;
- Active participation of senior management in identifying and mitigating key operational risks;
- Independent risk oversight and control functions that monitor operational risk, and implementation of policies, procedures, and controls designed to prevent the occurrence of operational risk events; and
- Ensuring proactive communication between revenue-producing units and independent risk oversight and control functions.

The firm combines top-down and bottom-up approaches to manage and measure operational risk. From a top-down perspective, senior management assesses firmwide and business-level operational risk profiles. From a bottom-up perspective, the first and second lines of defence are responsible for risk identification and risk management on a day-to-day basis, including escalating operational risks to senior management.

The firm's operational risk management framework is in part designed to comply with the operational risk measurement rules under the Capital Framework and has evolved based on the changing needs of its businesses and regulatory guidance.

The operational risk management framework consists of risk identification and assessment, risk measurement and risk monitoring and reporting.

Pillar 3 Disclosures**Risk Identification and Assessment**

The core of the firm's operational risk management framework is risk identification and assessment. The firm has a comprehensive data collection process, including firmwide policies and procedures, for operational risk events.

The firm has established policies that require all employees to report and escalate operational risk events. When operational risk events are identified, the policies require that the events be documented and analysed to determine whether changes are required in the systems and/or processes to further mitigate the risk of future events.

The firm uses operational risk applications to capture and organise operational risk event data and key metrics. One of the key risk identification and assessment tools is an operational risk and control self-assessment process, which is performed by managers across the firm. This process consists of the identification and rating of operational risks, on a forward-looking basis, and the related controls. The results from this process are analysed to evaluate operational risk exposures and identify businesses, activities or products with heightened levels of operational risk.

Risk Measurement

The firm measures operational risk exposure using both statistical modelling and scenario analyses, which involves qualitative and quantitative assessments of internal and external operational risk event data and internal control factors for each of our businesses. Operational risk measurement also incorporates an assessment of business environment factors including, but not limited to:

- Evaluations of the complexity of business activities;
- The degree of automation in our processes;
- New activity information;
- The legal and regulatory environment; and
- Changes in the markets for our products and services, including the diversity and sophistication of our customers and counterparties.

The results from these scenario analyses are used to monitor

changes in operational risk and to determine business lines that may have heightened exposure to operational risk. These analyses are used in the determination of the appropriate level of operational risk capital to hold.

Risk Monitoring and Reporting

The firm evaluates changes in its operational risk profile and its businesses, including changes in business mix or jurisdictions in which the firm operates, by monitoring the factors noted above at a firmwide level. The firm has both preventive and detective internal controls, which are designed to reduce the frequency and severity of operational risk losses and the probability of operational risk events. The firm monitors the results of assessments and independent internal audits of these internal controls.

Periodic operational risk reports are provided to senior management, the GSI and GSIB Risk Committees and our Boards of Directors. In addition, we have established thresholds to monitor the impact of an operational risk event, including single loss events and cumulative losses over a twelve-month period, as well as escalation protocols. If incidents breach escalation thresholds, respective operational risk reports are provided to senior management and the GSI and GSIB Board Risk Committees.

Model Review and Validation

The statistical models used to measure operational risk exposure are independently reviewed, validated and approved by Model Risk.

Capital Requirements

The consolidated operational risk capital requirements for GSGUK, GSI and GSIB are calculated under the Standardised Approach in accordance with CRD IV. GSIB transitioned from the Basic Indicator Approach to the Standardised Approach in March 2019.

Table 18: Operational Risk Capital Requirement

<i>\$ in millions</i>	As of May 2019		
	GSGUK	GSI	GSIB
Standardised Approach	\$ 1,257	\$ 1,233	\$ 40

Pillar 3 Disclosures

Leverage Ratio

GSGUK is required to monitor and disclose its leverage ratio using the CRR's definition of exposure as amended by the European Commission Leverage Ratio Delegated Act. In June 2019, the European Commission published updates to the CRR to implement a 3% minimum leverage ratio requirement for certain E.U. financial institutions, including GSGUK. This leverage ratio compares CRR's definition of Tier 1 capital to a measure of leverage exposure, defined as the sum of certain assets plus certain off-balance-sheet exposures (which include a measure of derivatives, securities financing transactions, commitments and guarantees), less Tier 1 capital deductions. The required minimum leverage ratio will become effective for GSGUK on 27 June 2021. This leverage ratio is based on our current interpretation and understanding of this rule and may evolve

as the interpretation and application of this rule is discussed with our regulators.

Table 19: Leverage Ratio

	As of May 2019		
	GSGUK	GSI	GSIB
Tier 1 Capital	\$ 37,667	\$ 32,913	\$ 3,016
Leverage Ratio Exposure	\$ 769,712	\$ 747,007	\$ 24,070
Leverage Ratio	4.9%	4.4%	12.5%

The following tables present further information on the leverage ratio. Table 24 reconciles the exposure measure to the balance sheets of GSGUK, GSI and GSIB. Table 25 breaks down the exposures from on-balance sheet assets by trading and banking book. Table 26 gives further details on the adjustments and drivers of the leverage ratio.

Table 20: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures

	As of May 2019		
	GSGUK	GSI	GSIB
Total assets as per balance sheet	\$ 978,562	\$ 957,750	\$ 40,115
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-	-	-
Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR"	-	-	-
Adjustments for derivative financial instruments ¹	(240,322)	(237,377)	77
Adjustments for securities financing transactions ¹	22,443	22,839	1,093
Adjustment for off-balance sheet items ¹	11,118	5,633	5,484
Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013 ¹	-	(217)	(20,932)
Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013	-	-	-
Other adjustments	(2,089)	(1,621)	(1,767)
Total leverage ratio exposure	\$ 769,712	\$ 747,007	\$ 24,070

1. Differences between the accounting values recognised as assets on the balance sheet and the leverage ratio exposure values. A further breakdown of these amounts can be found in Table 26.

Table 21: On-Balance Sheet Exposures

	As of May 2019		
	GSGUK	GSI	GSIB
Total on-balance sheet exposures¹ (excluding derivatives, SFTs, and exempted exposures), of which:	\$ 162,873	\$ 147,444	\$ 15,968
Trading book exposures	\$ 123,727	\$ 123,498	\$ 5,221
Banking book exposures, of which:	\$ 39,146	\$ 23,946	\$ 10,747
Covered bonds	-	-	-
Exposures treated as sovereigns	11,005	6,762	4,243
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	-	-	-
Institutions	12,242	10,676	624
Secured by mortgages of immovable properties	-	-	-
Retail exposures	-	-	-
Corporate	12,392	5,780	5,174
Exposures in default	147	147	-
Other exposures	3,360	581	706

Pillar 3 Disclosures

Table 22: Leverage Ratio Common Disclosure

\$ in millions	As of May 2019		
	GSGUK	GSI	GSIB
On-balance sheet exposures (excluding derivatives and SFTs)			
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	\$ 195,185	\$ 179,756	\$ 17,824
Asset amounts deducted in determining Tier 1 capital	(2,089)	(1,812)	(136)
Total on-balance sheet exposures¹ (excluding derivatives, SFTs and fiduciary assets)	\$ 193,096	\$ 177,944	\$ 17,688
Derivative exposures			
Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	36,827	36,718	262
Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	312,993	316,272	695
Exposure determined under Original Exposure Method	-	-	-
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-	-
Deductions of receivables assets for cash variation margin provided in derivatives transactions	(31,045)	(30,828)	(204)
Exempted CCP leg of client-cleared trade exposures	(4,224)	(4,224)	-
Adjusted effective notional amount of written credit derivatives	730,860	730,860	-
Adjusted effective notional offsets and add-on deductions for written credit derivatives	(683,780)	(683,780)	-
Total derivative exposures	\$ 361,631	\$ 365,018	\$ 753
Securities financing transaction exposures			
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	248,654	246,532	21,953
Netted amounts of cash payables and cash receivables of gross SFT assets	(67,230)	(66,892)	(338)
Counterparty credit risk exposure for SFT assets	22,443	22,839	1,093
Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	-	-	-
Agent transaction exposures	-	-	-
Exempted CCP leg of client-cleared SFT exposure	-	-	-
Total securities financing transaction exposures	\$ 203,867	\$ 202,479	\$ 22,708
Other off-balance sheet exposures			
Off-balance sheet exposures at gross notional amount	69,981	55,554	14,427
Adjustments for conversion to credit equivalent amounts	(58,863)	(49,920)	(8,943)
Other off-balance sheet exposures	\$ 11,118	\$ 5,634	\$ 5,484
Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)			
Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet)	-	(4,068)	(22,563)
Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet)	-	-	-
Capital and total exposures			
Tier 1 capital	\$ 37,667	\$ 32,913	\$ 3,016
Total leverage ratio exposures	\$ 769,712	\$ 747,007	\$ 24,070
Leverage ratio			
Leverage ratio	4.9%	4.4%	12.5%
Choice on transitional arrangements and amount of derecognised fiduciary items			
Choice on transitional arrangements for the definition of the capital measure	-	-	-
Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	-	-	-

¹ The On Balance Sheet Exposures in Table 22 include cash collateral posted on derivative which is excluded from Table 21 in accordance with the European Commission Implementing Regulation (EU) 2016/200

Pillar 3 Disclosures**Factors impacting the Leverage Ratio**

The leverage ratio has increased from 4.7% as of November 2018 to 4.9% as of May 2019. This was primarily due to decrease in on balance sheet leverage exposures and an increase in the company's Tier 1 capital.

Risk of Excessive Leverage

The risk of excessive leverage is the risk resulting from a vulnerability due to leverage or contingent leverage that may require unintended corrective measures to our business plan, including distressed selling of assets which might result in losses or in valuation adjustments to our remaining assets.

The GSI and GSIB Asset and Liability Committees (GSI and GSIB ALCOs) are the primary governance committees for the management of the UK material subsidiaries' balance sheets. The GSI and GSIB ALCOs are delegated specific responsibility by the GSI and GSIB Risk Committees for maintaining leverage ratios in accordance with the levels expressed in each entity's risk appetite statement.

We monitor the leverage ratio as calculated above and have processes in place to dynamically manage our assets and liabilities. These processes include:

- Monthly leverage ratio monitoring is conducted for GSI and GSIB. Leverage ratio monitoring thresholds have been established for GSI and GSIB and reported to the respective ALCOs, CROs, CFOs, CEOs, Risk Committees and Boards depending on size of movement.
- Quarterly leverage ratio planning which combines our projected leverage ratio assets (on- and off-balance sheet) and Tier 1 capital of GSGUK, GSI and GSIB.
- Potential new transactions which could have a material impact on GSGUK's capital and/or leverage position are escalated to and approved by Corporate Treasury, and by Controllers and other managers from independent control and support functions.

Capital Adequacy

Overview

Capital adequacy is of critical importance to us. We have in place a comprehensive capital management policy that provides a framework, defines objectives and establishes guidelines to assist us in maintaining the appropriate level and composition of capital in both business-as-usual and stressed conditions.

We determine the appropriate level and composition of capital by considering multiple factors including current and future regulatory capital requirements, results of capital planning and stress testing processes, resolution capital models and other factors such as rating agency guidelines, subsidiary capital requirements, the business environment and conditions in the financial markets.

In addition, as part of the company's comprehensive capital management policy, a contingency capital plan is maintained that provides a framework for analysing and responding to a perceived or actual capital deficiency, including but not limited to, identification of drivers of a capital deficiency, as well as mitigants and potential actions. It outlines the appropriate communication procedures to follow during a crisis period, including internal dissemination of information as well as timely communication with external stakeholders.

Internal Capital Adequacy Assessment Process

We perform an ICAAP with the objective of ensuring that GSGUK is appropriately capitalised relative to the risks in our business. The ICAAP is a comprehensive assessment of the risks to which we are or may be exposed and covers both the risks for which we consider capital to be an appropriate mitigant, and those for which we consider mitigants other than capital to be appropriate.

As part of our ICAAP, we perform an internal risk-based capital assessment. We evaluate capital adequacy based on the result of our internal risk-based capital assessment, which includes the results of stress tests, and our regulatory capital ratios. Stress testing is an integral component of our ICAAP. It is designed to measure our estimated performance under various stressed market conditions and assists us in analysing whether GSGUK holds an appropriate amount of capital relative to the risks of our businesses. Our goal is to hold sufficient capital to ensure we remain adequately capitalised after experiencing a severe stress event. Our assessment of capital adequacy is viewed in tandem with our assessment of liquidity adequacy and is integrated into our overall risk management structure, governance and policy framework.

Liquidity Risk Management

Disclosure of the information required under article 435 of the CRR, including those detailed in the EBA Guidelines on liquidity risk management, has been made under separate disclosure on June 30, 2019.

The liquidity risk management disclosure for GSGUK, published on the firm's website adjacent to this document, can be accessed via the following link:

<http://www.goldmansachs.com/disclosures/index.html>

Cautionary Note on Forward-Looking Statements

We have included or incorporated by reference in these disclosures, and from time to time our management may make, statements that may constitute "forward-looking statements." Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control. These statements include statements other than historical information or statements of current conditions.

It is possible that our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Important factors that could cause our actual results and financial condition to differ from those indicated in the forward-looking statements include, among others, those discussed under "Risk Factors" in Part I, Item 1A in the firm's 2018 Form 10-K.

Glossary

- **Advanced Internal Ratings-Based (AIRB).** The AIRB approach of CRD IV provides a methodology for banks, subject to supervisory approval, to use various risk parameters to determine the EAD and risk-weights for regulatory capital calculations. Other risk parameters used in the determination of risk weights are each counterparty's Probability of Default (PD), Loss Given Default (LGD) and the effective maturity of the trade or portfolio of trades.
- **Central Counterparty (CCP).** A counterparty, such as a clearing house, that facilitates trades between counterparties.
- **Comprehensive Risk.** The potential loss in value, due to price risk and defaults, for credit correlation positions. Comprehensive risk consists of a modelled measure which is calculated at a 99.9% confidence level over a one-year time horizon, subject to a floor which is 8% of the standardised specific risk add-on.
- **Credit Correlation Position.** A securitisation position for which all or substantially all of the value of the underlying exposures is based on the credit quality of a single company for which a two-way market exists, or indices based on such exposures for which a two-way market exists, or hedges of these positions (which are typically not securitisation positions).
- **Credit Risk.** The potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an OTC derivatives counterparty or a borrower) or an issuer of securities or other instruments we hold.
- **Credit Valuation Adjustment (CVA).** An adjustment applied to uncollateralised OTC derivatives to cover the risk of mark-to-market losses of bilateral credit risk (i.e. counterparty and own) in uncollateralised derivatives.
- **Debt Valuation Adjustment (DVA).** An adjustment applied to debt held at fair value representing the mark-to-market of unilateral own credit risk in unsecured debt held at fair value.
- **Default.** A default is considered to have occurred when either or both of the two following events have taken place: (i) we consider that the obligor is unlikely to pay its credit obligations to us in full; or (ii) the obligor has defaulted on a payment and/or is past due more than 90 days on any material Wholesale credit obligation, 180 days on residential mortgage obligations or 120 days on other retail obligations.
- **Default Risk.** The risk of loss on a position that could result from failure of an obligor to make timely payments of principal or interest on its debt obligation, and the risk of loss that could result from bankruptcy, insolvency, or similar proceedings.
- **Effective Expected Positive Exposure (EEPE).** The time-weighted average of non-declining positive credit exposure over the EE simulation. EEPE is used in accordance with the IMM as the exposure measure that is then risk weighted to determine counterparty risk capital requirements.
- **Event Risk.** The risk of loss on equity or hybrid equity positions as a result of a financial event, such as the announcement or occurrence of a company merger, acquisition, spin-off, or dissolution.
- **Expected Exposure (EE).** The expected value of the probability distribution of non-negative credit risk exposures to a counterparty at any specified future date before the maturity date of the longest term transaction in a netting set.
- **Exposure at Default (EAD).** The exposure amount that is risk weighted for regulatory capital calculations. For on-balance-sheet assets, such as receivables and cash, EAD is generally based on the balance sheet value. For the calculation of EAD for off-balance-sheet exposures, including commitments and guarantees, an equivalent exposure amount is calculated based on the notional amount of each transaction multiplied by a credit conversion factor designed to estimate the net additions to funded exposures that would be likely to occur over a one-year horizon, assuming the obligor were to default. For substantially all of the counterparty credit risk arising from OTC derivatives, exchange-traded derivatives and securities financing transactions, internal models calculate the distribution of exposure upon which the EAD calculation is based.
- **Idiosyncratic Risk.** The risk of loss in the value of a position that arises from changes in risk factors unique to that position.
- **Incremental Risk.** The potential loss in value of non-securitised inventory positions due to the default or credit migration of issuers of financial instruments over a one-year time horizon. This measure is calculated at a 99.9% confidence level over a one-year time horizon using a multi-factor model.

Pillar 3 Disclosures

- **Internal Models Methodology (IMM).** The IMM under CRD IV rules establishes a methodology for entities to use their internal models to estimate exposures arising from OTC derivatives, securities financing transactions and cleared transactions, subject to qualitative and quantitative requirements and supervisory approval.
- **Loss Given Default (LGD).** An estimate of the economic loss rate if a default occurs during economic downturn conditions.
- **Market Risk.** The risk of loss in the value of our inventory, as well as certain other financial assets and financial liabilities, due to changes in market conditions.
- **Operational Risk.** The risk of loss resulting from inadequate or failed internal processes, people, systems or from external events.
- **Other Systemically Important Institutions.** Institutions identified by national regulators as those whose failure or malfunction could potentially lead to serious negative consequences for the domestic financial systems and real economy.
- **Prudent Valuation Adjustment (PVA).** A deduction from CET1 capital where the prudent value of trading assets or other financial assets measured at fair value is materially lower than the fair value recognised in the consolidated financial information.
- **Probability of Default (PD).** Estimate of the probability that an obligor will default over a one-year horizon.
- **Ratings Based Approach.** Under the ratings based method, the risk weighted exposure amount of a rated securitisation position or resecuritisation position are calculated by applying to the exposure value the risk weight associated with the credit quality step as prescribed in CRD IV multiplied by 1.06.
- **Regulatory Value-at-Risk (VaR).** The potential loss in value of trading positions due to adverse market movements over a 10-day time horizon with a 99% confidence level.
- **Regulatory VaR Backtesting.** Comparison of daily positional loss results to the Regulatory VaR measure calculated as of the end of the prior business day.
- **Resecuritisation Position.** Represents an on or off-balance-sheet transaction in which the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a securitisation position.
- **Securitisation Position.** Represents a transaction or scheme in which the credit risk associated with an exposure or pool of exposures is tranching and both payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures and the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.
- **Specific Risk.** The risk of loss on a position that could result from factors other than broad market movements and includes event risk, default risk and idiosyncratic risk. The specific risk add-on is applicable for both securitisation positions and for certain non-securitised debt and equity positions, to supplement the model-based measures.
- **Stress Testing.** Stress testing is a method of determining the effect of various hypothetical stress scenarios.
- **Stressed VaR (SVaR).** The potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, during a period of significant market stress. SVaR is calculated at a 99% confidence level over a 10-day horizon using market data inputs from a continuous 12-month period of stress.
- **Synthetic Securitisation.** Defined as a securitisation transaction in which the tranching is achieved by the use of credit derivatives or guarantees, and the pool of exposures is not removed from the balance sheet of the originator.
- **Traditional Securitisation.** Defined as a securitisation transaction which involves the economic transfer of the exposures being securitised to a securitisation special purpose entity which issues securities; and so that this must be accomplished by the transfer of ownership of the securitised exposures from the originator or through sub-participation; and the securities issued do not represent payment obligations of the originator.
- **Value-at-Risk (VaR).** The potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, due to adverse market movements over a defined time horizon with a specified confidence level. Risk management VaR is calculated at a 95% confidence level over a one-day horizon.
- **Wholesale Exposure.** A term used to refer collectively to credit exposures to companies, sovereigns or government entities (other than Securitisation, Retail or Equity exposures).

Pillar 3 Disclosures

Appendix I: Credit Risk Tables

Table 23: Credit Quality of Exposures by Exposure Class and Instrument

GSGUK

\$ in millions

As of May 2019

		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures ¹	Non-defaulted exposures					
1	Central governments or central banks	-	\$ 11,005	-	-	-	-	\$ 11,005
2	Institutions	-	11,488	-	-	-	-	11,488
3	Corporates	-	15,525	36	-	-	10	15,489
3a	Non-credit obligation assets	-	52	-	-	-	-	52
7a	Securitisations	-	529	2	-	-	2	527
14	Equity	16	428	-	-	-	-	444
15	Total IRB approach	\$ 16	\$ 39,027	\$ 38	-	-	\$ 12	\$ 39,005
16	Central governments or central banks	-	-	-	-	-	-	-
21	Institutions	-	943	-	-	-	-	943
22	Corporates	-	2,093	-	-	-	-	2,093
24	Retail	-	236	-	-	-	-	236
26	Secured by mortgages on immovable property	-	1,281	-	-	-	-	1,281
26a	Securitisations	-	650	-	-	-	-	650
28	Exposures in default	131	-	-	-	-	-	131
29	Items associated with particularly high risk	-	1,623	-	-	-	-	1,623
33	Equity exposures	-	195	-	-	-	-	195
34	Other exposures	-	444	-	-	-	-	444
35	Total standardised approach	\$ 131	\$ 7,465	-	-	-	-	\$ 7,596
36	Total	\$ 147	\$ 46,492	\$ 38	-	-	\$ 12	\$ 46,601
37	Of which: Loans	-	4,502	28	-	-	8	4,474
38	Of which: Debt securities	131	2,013	-	-	-	-	2,144
39	Of which: Off- balance-sheet exposures	-	9,590	10	-	-	4	9,580

GSI

\$ in millions

As of May 2019

		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
		Defaulted exposures ¹	Non-defaulted exposures					
1	Central governments or central banks	-	\$ 6,762	-	-	-	-	\$ 6,762
2	Institutions	-	10,676	-	-	-	-	10,676
3	Corporates	-	2,721	-	-	-	-	2,721
3a	Non-credit obligation assets	-	47	-	-	-	-	47
7a	Securitisations	-	-	-	-	-	-	-
14	Equity	16	428	-	-	-	-	444
15	Total IRB approach	\$ 16	\$ 20,634	-	-	-	-	\$ 20,650
16	Central governments or central banks	-	-	-	-	-	-	-
21	Institutions	-	-	-	-	-	-	-
22	Corporates	-	758	-	-	-	-	758
24	Retail	-	-	-	-	-	-	-
26	Secured by mortgages on immovable property	-	-	-	-	-	-	-
26a	Securitisations	-	-	-	-	-	-	-
28	Exposures in default	131	-	-	-	-	-	131
29	Items associated with particularly high risk	-	-	-	-	-	-	-
33	Equity exposures	-	-	-	-	-	-	-
34	Other exposures	-	188	-	-	-	-	188
35	Total standardised approach	\$ 131	\$ 946	-	-	-	-	\$ 1,077
36	Total	\$ 147	\$ 21,580	-	-	-	-	\$ 21,727
37	Of which: Loans	-	693	-	-	-	-	693
38	Of which: Debt securities	131	857	-	-	-	-	988
39	Of which: Off- balance-sheet exposures	-	-	-	-	-	-	-

Pillar 3 Disclosures

GSIB

\$ in millions

As of May 2019

	Gross carrying values of					Credit risk adjustment charges of the period	Net values
	Defaulted exposures ¹	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1 Central governments or central banks	-	\$ 4,243	-	-	-	-	\$ 4,243
2 Institutions	-	812	-	-	-	-	812
3 Corporates	-	13,622	36	-	-	10	13,586
3a Non-credit obligation assets	-	5	-	-	-	-	5
7a Securitisations	-	529	2	-	-	2	527
14 Equity	-	-	-	-	-	-	-
15 Total IRB approach	-	\$ 19,211	\$ 38	-	-	\$ 12	\$ 19,173
16 Central governments or central banks	-	-	-	-	-	-	-
21 Institutions	-	-	-	-	-	-	-
22 Corporates	-	20	-	-	-	-	20
24 Retail	-	236	-	-	-	-	236
26 Secured by mortgages on immovable property	-	463	-	-	-	-	463
26a Securitisations	-	650	-	-	-	-	650
28 Exposures in default	-	-	-	-	-	-	-
29 Items associated with particularly high risk	-	-	-	-	-	-	-
33 Equity exposures	-	-	-	-	-	-	-
34 Other exposures	-	-	-	-	-	-	-
35 Total standardised approach	-	\$ 1,369	-	-	-	-	\$ 1,369
36 Total	-	\$ 20,580	\$ 38	-	-	\$ 12	\$ 20,542
37 Of which: Loans	-	3,771	28	-	-	8	3,743
38 Of which: Debt securities	-	578	-	-	-	-	578
39 Of which: Off- balance-sheet exposures	-	9,590	10	-	-	4	9,580

¹The defaulted exposures quantified in the tables above include positions where the obligor defaulted prior to our purchase of the position.

Pillar 3 Disclosures

Table 24: Credit Quality of Exposures by Industry or Counterparty Types

GSGUK

\$ in millions

As of May 2019

		Gross carrying values of					Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1	Central governments or central banks	-	\$ 11,005	-	-	-	-	\$ 11,005
2	Services and other Industries	9	6,499	10	-	-	5	6,498
3	Banks	118	8,874	-	-	-	-	8,992
4	Other Financials	10	15,822	18	-	-	6	15,814
5	CCPs and Exchanges	-	247	-	-	-	-	247
6	Manufacturing	4	1,335	3	-	-	-	1,336
7	Transport, Utilities & Storage	6	1,574	4	-	-	3	1,576
8	Retail / Wholesale trade	-	386	3	-	-	(2)	383
9	Real Estate	-	750	-	-	-	-	750
10	Total	\$ 147	\$ 46,492	\$ 38	-	-	\$ 12	\$ 46,601

GSI

\$ in millions

As of May 2019

		Gross carrying values of					Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1	Central governments or central banks	-	\$ 6,762	-	-	-	-	\$ 6,762
2	Services and other Industries	9	2,570	-	-	-	-	2,579
3	Banks	118	7,635	-	-	-	-	7,753
4	Other Financials	10	4,173	-	-	-	-	4,183
5	CCPs and Exchanges	-	244	-	-	-	-	244
6	Manufacturing	4	56	-	-	-	-	60
7	Transport, Utilities & Storage	6	129	-	-	-	-	135
8	Retail / Wholesale trade	-	-	-	-	-	-	-
9	Real Estate	-	11	-	-	-	-	11
10	Total	\$ 147	\$ 21,580	-	-	-	-	\$ 21,727

GSIB

\$ in millions

As of May 2019

		Gross carrying values of					Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1	Central governments or central banks	-	\$ 4,243	-	-	-	-	\$ 4,243
2	Services and other Industries	-	3,190	10	-	-	5	3,180
3	Banks	-	292	-	-	-	-	292
4	Other Financials	-	9,282	18	-	-	6	9,264
5	CCPs and Exchanges	-	3	-	-	-	-	3
6	Manufacturing	-	1,186	3	-	-	-	1,183
7	Transport, Utilities & Storage	-	1,335	4	-	-	3	1,331
8	Retail / Wholesale trade	-	320	3	-	-	(2)	317
9	Real Estate	-	729	-	-	-	-	729
10	Total	-	\$ 20,580	\$ 38	-	-	\$ 12	\$ 20,542

Pillar 3 Disclosures

Table 25: Credit Quality of Exposures by Geography

GSGUK

\$ in millions

As of May 2019

		Gross carrying values of				Credit risk adjustment charges of the period	Net values	
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1	EMEA	\$ 123	\$ 35,008	\$ 34	-	-	\$ 8	\$ 35,097
2	Germany	-	10,185	1	-	-	-	10,184
3	United Kingdom	-	10,112	6	-	-	(1)	10,106
4	Other Countries	123	14,711	27	-	-	9	14,807
5	Asia	14	3,159	-	-	-	-	3,173
8	Americas	10	8,325	4	-	-	4	8,331
9	United States	-	7,691	-	-	-	-	7,691
10	Other Countries	10	634	4	-	-	4	640
12	Total	\$ 147	\$ 46,492	\$ 38	-	-	\$ 12	\$ 46,601

GSI

\$ in millions

As of May 2019

		Gross carrying values of				Credit risk adjustment charges of the period	Net values	
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1	EMEA	\$ 123	\$ 14,291	-	-	-	-	\$ 14,414
2	Germany	-	5,255	-	-	-	-	5,255
3	United Kingdom	-	4,761	-	-	-	-	4,761
4	Other Countries	123	4,275	-	-	-	-	4,398
5	Asia	14	3,038	-	-	-	-	3,052
8	Americas	10	4,251	-	-	-	-	4,261
9	United States	-	3,923	-	-	-	-	3,923
10	Other Countries	10	328	-	-	-	-	338
12	Total	\$ 147	\$ 21,580	-	-	-	-	\$ 21,727

GSIB

\$ in millions

As of May 2019

		Gross carrying values of				Credit risk adjustment charges of the period	Net values	
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
1	EMEA	-	\$ 17,352	\$ 34	-	-	\$ 8	\$ 17,318
2	Germany	-	4,891	1	-	-	-	4,890
3	United Kingdom	-	3,202	6	-	-	(1)	3,196
4	Other Countries	-	9,259	27	-	-	9	9,232
5	Asia	-	58	-	-	-	-	58
8	Americas	-	3,170	4	-	-	4	3,166
9	United States	-	2,902	-	-	-	-	2,902
10	Other Countries	-	268	4	-	-	4	264
12	Total	-	\$ 20,580	\$ 38	-	-	\$ 12	\$ 20,542

Table 26: IRB (Equity Exposures Subject to the Simple Risk - Weighted Approach)¹

GSGUK

\$ in millions As of May 2019

Equities under the simple risk-weighted approach						
Categories	On BS amount	Off BS amount	Risk Weight	Exposure Amount	RWAs	Capital Requirements
Exchange-traded equity exposures	\$ 222	-	290%	\$ 222	\$ 645	\$ 52
Other Equity Exposures	\$ 221	-	370%	\$ 221	\$ 819	\$ 65
Total	\$ 443	-		\$ 443	\$ 1,464	\$ 117

GSI

\$ in millions As of May 2019

Equities under the simple risk-weighted approach						
Categories	On BS amount	Off BS amount	Risk Weight	Exposure Amount	RWAs	Capital Requirements
Exchange-traded equity exposures	\$ 222	-	290%	\$ 222	\$ 645	\$ 52
Other Equity Exposures	\$ 221	-	370%	\$ 221	\$ 819	\$ 65
Total	\$ 443	-		\$ 443	\$ 1,464	\$ 117

1. GSGUK and its subsidiaries do not have private equity exposures which are risk-weighted at 190%.

Pillar 3 Disclosures

Table 27: IRB Approach - Credit Risk Exposures by Exposure Class and PD Range

GSGUK

\$ in millions

As of May 2019

PD Scale	Original on - BS gross exposures	Off-BS exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of Obligors	Average LGD	Average Maturity	RWAs	RWA density	EL	Value Adjustments and provisions
Central governments or central banks												
0.00 to <0.15	\$ 10,985	-	-	\$ 10,985	0.00013	7	0.5000	0.3863	\$ 490	4%	-	
0.15 to <0.25	-	-	-	-	-	-	-	-	-	0%	-	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	0%	-	
0.50 to <0.75	-	-	-	-	-	1	-	-	-	0%	-	
0.75 to <2.50	-	-	-	-	-	-	-	-	-	0%	-	
2.50 to <10.00	-	-	-	-	-	1	-	-	-	0%	-	
10.00 to <100.00	20	-	-	20	0.23780	3	0.5000	1.0000	57	285%	2	
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	
Subtotal	\$ 11,005	-	-	\$ 11,005	0.00058	12	0.5000	0.3874	\$ 547	5%	\$ 2	-
Institutions												
0.00 to <0.15	\$ 8,729	\$ 10	100%	\$ 8,811	0.00055	487	0.5989	0.1952	\$ 1,896	22%	\$ 3	
0.15 to <0.25	1,294	9	100%	1,419	0.00176	98	0.6599	0.9928	804	57%	2	
0.25 to <0.50	179	-	-	179	0.00260	14	0.6543	0.9381	113	63%	-	
0.50 to <0.75	210	-	-	210	0.00605	32	0.6693	0.5828	227	108%	1	
0.75 to <2.50	29	-	-	29	0.01780	8	0.6527	0.7375	44	152%	-	
2.50 to <10.00	168	-	-	168	0.09187	12	0.6205	1.5798	462	275%	10	
10.00 to <100.00	691	-	-	692	0.23780	25	0.4955	4.6717	2,408	348%	81	
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	
Subtotal	\$ 11,300	\$ 19	100%	\$ 11,508	0.01646	676	0.6028	0.6027	\$ 5,954	52%	\$ 97	-
Corporates												
0.00 to <0.15	\$ 673	\$ 3,819	75.00%	\$ 2,996	0.00055	153	0.5757	2.5013	\$ 1,043	35%	\$ 1	
0.15 to <0.25	3,384	1,797	75.00%	4,590	0.00178	132	0.6232	2.1824	2,880	63%	5	
0.25 to <0.50	78	381	75.00%	364	0.00260	15	0.6543	4.3971	444	122%	1	
0.50 to <0.75	646	656	75.00%	1,136	0.00654	38	0.7045	2.9555	1,689	149%	5	
0.75 to <2.50	596	570	75.00%	975	0.01838	57	0.6582	3.6280	2,068	212%	12	
2.50 to <10.00	1,101	1,472	75.00%	2,368	0.07511	111	0.6543	3.0318	7,316	309%	116	
10.00 to <100.00	423	38	75.00%	451	0.23780	186	0.6467	1.7152	1,702	377%	70	
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	
Subtotal	\$ 6,901	\$ 8,733	75.00%	\$ 12,880	0.02495	692	0.6294	2.6364	\$ 17,142	133%	\$ 210	\$ 36
Total (all portfolios)	\$ 29,206	\$ 8,752	75.00%	\$ 35,393	0.01248	1,380	0.5704	1.0021	\$ 23,643	67%	\$ 309	\$ 36

Pillar 3 Disclosures

GSI

\$ in millions

As of May 2019

PD Scale	Original on - BS gross exposures	Off-BS exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of Obligors	Average LGD	Average Maturity	RWAs	RWA density	EL	Value Adjustments and provisions
Central governments or central banks												
0.00 to <0.15	\$ 6,742	-	-	\$ 6,742	0.00014	3	0.5000	-	\$ 321	5%	-	-
0.15 to <0.25	-	-	-	-	-	-	-	-	-	0%	-	-
0.25 to <0.50	-	-	-	-	-	-	-	-	-	0%	-	-
0.50 to <0.75	-	-	-	-	-	-	-	-	-	0%	-	-
0.75 to <2.50	-	-	-	-	-	-	-	-	-	0%	-	-
2.50 to <10.00	-	-	-	-	-	-	-	-	-	0%	-	-
10.00 to <100.00	20	-	-	20	0.23780	2	0.5000	1.0000	56	280%	2	-
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	-
Subtotal	\$ 6,762	-	-	\$ 6,762	0.00086	5	0.5000	0.0030	\$ 377	6%	\$ 2	-
Institutions												
0.00 to <0.15	\$ 8,111	-	-	\$ 8,111	0.00055	427	0.6013	0.1109	\$ 1,734	21%	\$ 3	-
0.15 to <0.25	1,290	-	-	1,290	0.00177	75	0.6601	0.7741	680	53%	2	-
0.25 to <0.50	179	-	-	179	0.00260	12	0.6543	0.9381	113	63%	-	-
0.50 to <0.75	209	-	-	209	0.00605	29	0.6693	0.5808	226	108%	1	-
0.75 to <2.50	29	-	-	29	0.01780	6	0.6527	0.7375	44	152%	-	-
2.50 to <10.00	168	-	-	168	0.09187	12	0.6205	1.5798	462	275%	10	-
10.00 to <100.00	690	-	-	690	0.23780	13	0.4950	4.6753	2,400	348%	81	-
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	-
Subtotal	\$ 10,676	-	-	\$ 10,676	0.01765	574	0.6042	0.5338	\$ 5,659	53%	\$ 97	-
Corporates												
0.00 to <0.15	\$ 362	-	-	\$ 362	0.00042	46	0.6031	0.8744	\$ 60	17%	-	-
0.15 to <0.25	1,436	-	-	1,436	0.00178	54	0.6402	1.0000	761	53%	2	-
0.25 to <0.50	3	-	-	3	0.00260	5	0.6531	1.0000	2	67%	-	-
0.50 to <0.75	223	-	-	326	0.00660	6	0.8516	1.5008	433	133%	2	-
0.75 to <2.50	87	-	-	102	0.01852	5	0.6606	3.8605	212	208%	1	-
2.50 to <10.00	326	-	-	1,096	0.08935	24	0.6489	1.8588	3,390	309%	64	-
10.00 to <100.00	284	-	-	284	0.23780	89	0.6600	1.0000	1,083	381%	45	-
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	-
Subtotal	\$ 2,721	-	-	\$ 3,609	0.04775	229	0.6604	1.3741	\$ 5,941	165%	\$ 114	-
Total (all portfolios)	\$ 20,159	-	-	\$ 21,047	0.01742	808	0.5804	0.5074	\$ 11,977	57%	\$ 213	-

Pillar 3 Disclosures

GSIB

\$ in millions

As of May 2019

PD Scale	Original on - BS gross exposures	Off-BS exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of Obligors	Average LGD	Average Maturity	RWAs	RWA density	EL	Value Adjustments and provisions
Central governments or central banks												
0.00 to <0.15	\$ 4,243	-	-	\$ 4,243	0.00011	4	0.50000	1.00000	\$ 169	4%	-	
0.15 to <0.25	-	-	-	-	-	-	-	-	-	0%	-	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	0%	-	
0.50 to <0.75	-	-	-	-	0.00600	1	0.50000	1.00000	-	68%	-	
0.75 to <2.50	-	-	-	-	-	-	-	-	-	0%	-	
2.50 to <10.00	-	-	-	-	0.05800	1	0.50000	1.00000	-	165%	-	
10.00 to <100.00	-	-	-	-	0.23780	1	0.50000	1.00000	1	272%	-	
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	
Subtotal	\$ 4,243	-	-	\$ 4,243	0.00012	7	0.50000	1.00000	\$ 170	4%	-	
Institutions												
0.00 to <0.15	\$ 618	\$ 10	100%	\$ 700	0.00056	60	0.57116	1.17131	\$ 162	23%	-	
0.15 to <0.25	4	9	100%	129	0.00171	23	0.65873	3.17926	124	96%	-	
0.25 to <0.50	-	-	-	-	0.00260	2	0.65611	1.00000	-	55%	-	
0.50 to <0.75	1	-	-	1	0.00600	3	0.66180	1.00000	1	115%	-	
0.75 to <2.50	-	-	-	-	0.01560	2	0.64747	1.00000	-	135%	-	
2.50 to <10.00	-	-	-	-	-	-	-	-	-	0%	-	
10.00 to <100.00	1	-	-	2	0.23780	12	0.66171	3.41802	8	446%	-	
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	
Subtotal	\$ 624	\$ 19	100%	\$ 832	0.00126	102	0.58501	1.48737	\$ 295	35%	-	
Corporates												
0.00 to <0.15	\$ 311	\$ 3,819	75.00%	\$ 2,634	0.00057	107	0.57195	2.72486	\$ 983	37%	\$ 1	
0.15 to <0.25	1,948	1,797	75.00%	3,154	0.00178	78	0.61539	2.72069	2,119	67%	3	
0.25 to <0.50	75	381	75.00%	361	0.00260	10	0.65428	4.42532	442	122%	1	
0.50 to <0.75	423	656	75.00%	810	0.00651	32	0.64534	3.54097	1,256	155%	3	
0.75 to <2.50	509	570	75.00%	873	0.01836	52	0.65789	3.60081	1,856	213%	11	
2.50 to <10.00	1,587	1,472	75.00%	2,084	0.06096	89	0.59703	4.41555	6,078	292%	76	
10.00 to <100.00	139	38	75.00%	167	0.23780	97	0.62403	2.93151	619	370%	25	
100.00 (Default)	-	-	-	-	-	-	-	-	-	0%	-	
Subtotal	\$ 4,992	\$ 8,733	75.00%	\$ 10,083	0.01946	465	0.60787	3.27861	\$ 13,353	132%	\$ 120	\$ 36
Total (all portfolios)	\$ 9,859	\$ 8,752	75.00%	\$ 15,158	0.01305	574	0.57642	2.54252	\$ 13,818	91%	\$ 120	\$ 36

Pillar 3 Disclosures

Table 28: Standardised Approach - Credit Risk Exposure and CRM Effects

GSGUK

\$ in millions

As of May 2019

Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1 Central governments or central banks	-	-	-	-	-	0%
6 Institutions	943	-	943	-	189	20%
7 Corporates	2,093	-	2,093	-	2,093	100%
8 Retail	-	\$ 210	-	\$ 42	\$ 31	74%
9 Secured by mortgages on immovable property	902	442	902	88	679	69%
10 Exposures in default	131	-	131	-	197	150%
11 Higher-risk categories	1,623	-	1,623	-	2,434	150%
15 Equity	195	-	195	-	195	100%
16 Other items	444	-	444	-	612	138%
17 Total	\$ 6,331	\$ 652	\$ 6,331	\$ 130	\$ 6,430	102%

GSI

\$ in millions

As of May 2019

Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1 Central governments or central banks	-	-	-	-	-	0%
6 Institutions	-	-	-	-	-	0%
7 Corporates	758	-	758	-	758	100%
8 Retail	-	-	-	-	-	0%
9 Secured by mortgages on immovable property	-	-	-	-	-	0%
10 Exposures in default	131	-	131	-	197	150%
11 Higher-risk categories	-	-	-	-	-	0%
15 Equity	-	-	-	-	-	0%
16 Other items	188	-	188	-	356	189%
17 Total	\$ 1,077	-	\$ 1,077	-	\$ 1,311	122%

GSIB

\$ in millions

As of May 2019

Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1 Central governments or central banks	-	-	-	-	-	0%
6 Institutions	-	-	-	-	-	0%
7 Corporates	20	-	20	-	20	100%
8 Retail	-	\$ 210	-	\$ 42	\$ 31	74%
9 Secured by mortgages on immovable property	90	442	90	88	101	57%
10 Exposures in default	-	-	-	-	-	0%
11 Higher-risk categories	-	-	-	-	-	0%
15 Equity	-	-	-	-	-	0%
16 Other items	-	-	-	-	-	0%
17 Total	\$ 110	\$ 652	\$ 110	\$ 130	\$ 152	63%

Pillar 3 Disclosures

Table 29: Standardised Approach

GSGUK

\$ in millions As of May 2019

Exposure classes	Risk weight								Total	Of which unrated
	0%	20%	35%	50%	75%	100%	150%	250%		
1 Central governments or central banks	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	943	-	-	-	-	-	-	943	77
7 Corporates	-	-	-	-	-	2,093	-	-	2,093	2,093
8 Retail	-	-	-	-	42	-	-	-	42	42
9 Secured by mortgages on immovable property	-	-	479	-	-	511	-	-	990	990
10 Exposures in default	-	-	-	-	-	-	131	-	131	-
11 Higher-risk categories	-	-	-	-	-	-	1,623	-	1,623	1,623
15 Equity	-	-	-	-	-	195	-	-	195	195
16 Other items	-	-	-	-	-	332	-	112	444	444
17 Total	-	\$ 943	\$ 479	-	\$ 42	\$ 3,131	\$ 1,754	\$ 112	\$ 6,461	\$ 5,464

GSI

\$ in millions As of May 2019

Exposure classes	Risk weight								Total	Of which unrated
	0%	20%	35%	50%	75%	100%	150%	250%		
1 Central governments or central banks	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	-	-	-	-	-	-	-	-	-
7 Corporates	-	-	-	-	-	758	-	-	758	758
8 Retail	-	-	-	-	-	-	-	-	-	-
9 Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-
10 Exposures in default	-	-	-	-	-	-	131	-	131	-
11 Higher-risk categories	-	-	-	-	-	-	-	-	-	-
15 Equity	-	-	-	-	-	-	-	-	-	-
16 Other items	-	-	-	-	-	76	-	112	188	188
17 Total	-	-	-	-	-	\$ 834	\$ 131	\$ 112	\$ 1,077	\$ 946

GSIB

\$ in millions As of May 2019

Exposure classes	Risk weight								Total	Of which unrated
	0%	20%	35%	50%	75%	100%	150%	250%		
1 Central governments or central banks	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	-	-	-	-	-	-	-	-	-
7 Corporates	-	-	-	-	-	20	-	-	20	20
8 Retail	-	-	-	-	42	-	-	-	42	42
9 Secured by mortgages on immovable property	-	-	119	-	-	59	-	-	178	178
10 Exposures in default	-	-	-	-	-	-	-	-	-	-
11 Higher-risk categories	-	-	-	-	-	-	-	-	-	-
15 Equity	-	-	-	-	-	-	-	-	-	-
16 Other items	-	-	-	-	-	-	-	-	-	-
17 Total	-	-	\$ 119	-	\$ 42	\$ 79	-	-	\$ 240	\$ 240

Pillar 3 Disclosures

Appendix II: Counterparty Credit Risk Tables

Table 30: IRB Approach - CCR Exposures by Portfolio and PD Scale

GSGUK

\$ in millions

As of May 2019

	PD Scale	EAD post CRM	Average PD	Number of Obligators	Average LGD	Average Maturity	RWAs	RWA density
Sovereign								
	0.00 to <0.15	\$ 10,863	0.00018	159	0.5005	2.37	\$ 1,076	10%
	0.15 to <0.25	4,691	0.00179	14	0.5000	2.71	2,388	51%
	0.25 to <0.50	204	0.00260	15	0.5000	0.07	63	31%
	0.50 to <0.75	55	0.00608	10	0.5000	0.61	35	64%
	0.75 to <2.50	-	-	1	-	-	-	0%
	2.50 to <10.00	516	0.05880	16	0.5000	1.97	924	179%
	10.00 to <100.00	-	-	-	-	-	-	0%
	100.00 (Default)	-	-	-	-	-	-	0%
	Subtotal	\$ 16,329	0.00255	215	0.5003	2.39	\$ 4,486	27%
Institutions								
	0.00 to <0.15	\$ 38,016	0.00054	5,700	0.6215	1.61	\$ 11,317	30%
	0.15 to <0.25	13,444	0.00178	2,058	0.6584	2.12	8,974	67%
	0.25 to <0.50	2,364	0.00260	1,070	0.6641	1.16	1,812	77%
	0.50 to <0.75	3,398	0.00642	1,092	0.6514	1.45	4,269	126%
	0.75 to <2.50	2,645	0.01872	2,795	0.6680	2.50	5,218	197%
	2.50 to <10.00	1,007	0.07930	185	0.6538	1.24	2,521	250%
	10.00 to <100.00	65	0.23780	342	0.6459	1.25	249	383%
	100.00 (Default)	4	0.99900	3	0.6561	2.01	-	0%
	Subtotal	\$ 60,943	0.00363	13,245	0.6355	1.73	\$ 34,360	56%
Corporates								
	0.00 to <0.15	\$ 23,677	0.00047	3,053	0.6214	1.99	\$ 6,925	29%
	0.15 to <0.25	7,706	0.00175	1,505	0.6462	2.69	5,989	78%
	0.25 to <0.50	1,862	0.00260	621	0.6198	1.53	1,323	71%
	0.50 to <0.75	2,482	0.00643	877	0.7203	1.75	3,444	139%
	0.75 to <2.50	3,188	0.01699	2,454	0.7305	1.74	6,246	196%
	2.50 to <10.00	1,442	0.08429	958	0.6781	2.32	4,351	302%
	10.00 to <100.00	1,180	0.23780	1,285	0.6557	1.13	4,653	394%
	100.00 (Default)	32	0.99900	3	0.6428	2.21	-	0%
	Subtotal	\$ 41,569	0.00856	10,756	0.6346	2.03	\$ 32,931	79%
	Total (all portfolios)	\$ 118,841	0.00670	24,216	0.6196	1.93	\$ 71,777	60%

Pillar 3 Disclosures

GSI

\$ in millions

As of May 2019

	PD Scale	EAD post CRM	Average PD	Number of Obligors	Average LGD	Average Maturity	RWAs	RWA density
Sovereign								
	0.00 to <0.15	\$ 10,863	0.00018	159	0.5005	2.37	\$ 1,076	10%
	0.15 to <0.25	4,691	0.00179	14	0.5000	2.71	2,388	51%
	0.25 to <0.50	204	0.00260	15	0.5000	0.07	63	31%
	0.50 to <0.75	55	0.00608	10	0.5000	0.61	35	64%
	0.75 to <2.50	-	-	1	-	-	-	0%
	2.50 to <10.00	516	0.05880	16	0.5000	1.97	924	179%
	10.00 to <100.00	-	-	-	-	-	-	0%
	100.00 (Default)	-	-	-	-	-	-	0%
	Subtotal	\$ 16,329	0.00255	215	0.5003	2.39	\$ 4,486	27%
Institutions								
	0.00 to <0.15	\$ 37,924	0.00054	5,691	0.6216	1.61	\$ 11,293	30%
	0.15 to <0.25	13,393	0.00178	2,054	0.6583	2.12	8,938	67%
	0.25 to <0.50	2,364	0.00260	1,070	0.6641	1.16	1,812	77%
	0.50 to <0.75	3,391	0.00642	1,086	0.6514	1.45	4,261	126%
	0.75 to <2.50	2,645	0.01872	2,794	0.6680	2.50	5,218	197%
	2.50 to <10.00	1,007	0.07930	185	0.6538	1.24	2,521	250%
	10.00 to <100.00	64	0.23780	341	0.6458	1.25	246	384%
	100.00 (Default)	4	0.99900	3	0.6561	2.01	-	0%
	Subtotal	\$ 60,792	0.00364	13,224	0.6356	1.73	\$ 34,289	56%
Corporates								
	0.00 to <0.15	\$ 23,655	0.00047	3,049	0.6214	1.99	\$ 6,911	29%
	0.15 to <0.25	7,428	0.00175	916	0.6396	2.70	5,723	77%
	0.25 to <0.50	1,861	0.00260	614	0.6196	1.53	1,322	71%
	0.50 to <0.75	2,458	0.00642	858	0.7208	1.76	3,416	139%
	0.75 to <2.50	3,179	0.01697	2,443	0.7307	1.75	6,232	196%
	2.50 to <10.00	1,405	0.08498	945	0.6790	2.30	4,245	302%
	10.00 to <100.00	1,153	0.23780	1,276	0.6553	1.13	4,541	394%
	100.00 (Default)	32	0.99900	3	0.6428	2.21	-	0%
	Subtotal	\$ 41,171	0.01272	10,104	0.6419	2.05	\$ 32,390	79%
	Total (all portfolios)	\$ 118,292	0.00665	23,543	0.6191	1.93	\$ 71,165	60%

GSIB

\$ in millions

As of May 2019

	PD Scale	EAD post CRM	Average PD	Number of Obligors	Average LGD	Average Maturity	RWAs	RWA density
Sovereign								
	0.00 to <0.15	-	-	-	-	-	-	0%
	0.15 to <0.25	-	-	-	-	-	-	0%
	0.25 to <0.50	-	-	-	-	-	-	0%
	0.50 to <0.75	-	-	-	-	-	-	0%
	0.75 to <2.50	-	-	-	-	-	-	0%
	2.50 to <10.00	-	-	-	-	-	-	0%
	10.00 to <100.00	-	-	-	-	-	-	0%
	100.00 (Default)	-	-	-	-	-	-	0%
	Subtotal	-	-	-	-	-	-	0%
Institutions								
	0.00 to <0.15	\$ 92	0.00060	9	0.5524	1.30	\$ 24	26%
	0.15 to <0.25	51	0.00180	4	0.6615	1.57	36	69%
	0.25 to <0.50	-	-	-	-	-	-	0%
	0.50 to <0.75	7	0.00669	6	0.6591	1.00	8	121%
	0.75 to <2.50	-	0.01560	1	0.6561	1.00	-	135%
	2.50 to <10.00	-	-	-	-	-	-	0%
	10.00 to <100.00	1	0.23780	1	0.6561	1.00	3	357%
	100.00 (Default)	-	-	-	-	-	-	0%
	Subtotal	\$ 151	0.00245	21	0.5948	1.38	\$ 71	47%
Corporates								
	0.00 to <0.15	\$ 22	0.00049	4	0.6204	4.92	\$ 14	65%
	0.15 to <0.25	278	0.00179	589	0.8243	2.43	266	96%
	0.25 to <0.50	1	0.00260	7	1.0000	1.00	1	85%
	0.50 to <0.75	24	0.00657	19	0.6710	1.00	28	116%
	0.75 to <2.50	9	0.02370	11	0.6641	1.00	14	159%
	2.50 to <10.00	37	0.05800	13	0.6455	2.85	106	285%
	10.00 to <100.00	27	0.23780	9	0.6707	1.00	112	407%
	100.00 (Default)	-	-	-	-	-	-	0%
	Subtotal	\$ 398	0.02382	652	0.7736	2.39	\$ 541	123%
	Total (all portfolios)	\$ 549	0.01794	673	0.7244	2.11	\$ 612	111%

Table 31: Impact of Netting and Collateral Held on Exposure Values¹

GSGUK

\$ in millions

As of May 2019

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure ²
1 Derivatives	\$ 602,864	\$ 531,994	\$ 70,870	\$ 136,066	\$ 37,784
2 SFTs	347,780	135,409	212,371	367,188	15,946
4 Total	\$ 950,644	\$ 667,403	\$ 283,241	\$ 503,254	\$ 53,730

GSI

\$ in millions

As of May 2019

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure ²
1 Derivatives	\$ 602,424	\$ 531,731	\$ 70,693	\$ 134,493	\$ 37,632
2 SFTs	315,387	135,747	179,640	365,479	16,734
4 Total	\$ 917,811	\$ 667,478	\$ 250,333	\$ 499,972	\$ 54,366

GSIB

\$ in millions

As of May 2019

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure ²
1 Derivatives	\$ 440	\$ 263	\$ 177	\$ 1,573	\$ 368
2 SFTs	21,953	338	21,615	23,718	26
4 Total	\$ 22,393	\$ 601	\$ 21,792	\$ 25,291	\$ 394

¹ GSGUK and its subsidiaries do not have cross-product netting where both derivatives and SFTs are netted at a counterparty level.

² Net credit exposure for derivatives and SFTs represents the current exposure component of the modelled EAD, and takes into account legally enforceable collateral received.

Table 32: Composition of Collateral for Exposures to CCR

GSGUK

\$ in millions

As of May 2019

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Sovereign	\$ 15,769	\$ 16,734	\$ 6,648	\$ 13,887	\$ 241,326	\$ 164,320
Equities	5,063	-	242	-	105,117	103,700
Corporate Bonds	287	1,482	67	433	13,448	9,865
Cash	38,408	57,472	2,169	52,764	-	-
Other	784	67	-	95	7,297	11,753
Total	\$ 60,311	\$ 75,755	\$ 9,126	\$ 67,179	\$ 367,188	\$ 289,638

GSI

\$ in millions

As of May 2019

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Sovereign	\$ 15,641	\$ 16,734	\$ 6,643	\$ 13,888	\$ 242,496	\$ 177,110
Equities	3,796	-	242	-	104,613	106,585
Corporate Bonds	278	1,482	67	433	11,073	13,808
Cash	38,394	57,316	2,169	52,191	-	-
Other	785	67	-	95	7,297	12,960
Total	\$ 58,894	\$ 75,599	\$ 9,121	\$ 66,607	\$ 365,479	\$ 310,463

GSIB

\$ in millions

As of May 2019

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Sovereign	\$ 127	-	\$ 5	-	\$ 12,803	\$ 1,184
Equities	1,267	-	-	-	3,389	-
Corporate Bonds	9	-	-	-	6,318	-
Cash	13	157	-	619	-	-
Other	-	-	-	-	1,208	-
Total	\$ 1,416	\$ 157	\$ 5	\$ 619	\$ 23,718	\$ 1,184

Pillar 3 Disclosures

Appendix III: Past Due Exposures, Impaired Exposures and Impairment Provisions Tables

Table 33: Aging of Past-due Exposures

\$ in millions As of May 2019

	Gross carrying values					
	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
1 Loans	-	-	-	-	-	\$ 1
2 Debt securities	848	-	-	-	-	121
3 GSGUK Total exposures	\$ 848	-	-	-	-	\$ 122
1 Loans	-	-	-	-	-	1
2 Debt securities	848	-	-	-	-	121
3 GSI Total exposures	\$ 848	-	-	-	-	\$ 122
1 Loans	-	-	-	-	-	-
2 Debt securities	-	-	-	-	-	-
3 GSIB Total exposures	-	-	-	-	-	-

Table 34: Non-performing and Forborne Exposures

\$ in millions As of May 2019

	Gross carrying amount of performing and non-performing exposures						Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
	Of which performing but past due > 30 days and ≤ 90 days	Of which performing forborne	Of which non-performing			On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures	
			Of which defaulted	Of which impaired	Of which forborne	Of which forborne	Of which forborne					
GSGUK												
010 Debt securities	\$ 2,144	-	\$ 131	\$ 131	-	-	-	-	-	-	-	
020 Loans and advances	\$ 4,502	-	\$ 18	-	\$ 18	\$ 25	-	\$ 3	-	-	-	
030 Off-balance-sheet exposures	\$ 9,590	-	-	-	-	\$ 10	-	-	-	-	-	
GSI												
010 Debt securities	988	-	131	131	-	-	-	-	-	-	-	
020 Loans and advances	693	-	-	-	-	-	-	-	-	-	-	
030 Off-balance-sheet exposures	-	-	-	-	-	-	-	-	-	-	-	
GSIB												
010 Debt securities	578	-	-	-	-	-	-	-	-	-	-	
020 Loans and advances	3,771	-	18	-	18	25	-	3	-	-	-	
030 Off-balance-sheet exposures	9,590	-	-	-	-	10	-	-	-	-	-	

Pillar 3 Disclosures**Table 35: Changes in the Stock of General and Specific Credit Risk Adjustments¹**

\$ in millions

	As of May 2019			
	Accumulated specific credit risk adjustment		Accumulated general credit risk adjustment	
	GSGUK	GSIB	GSGUK	GSIB
1 Opening balance as of 30th November 2018	\$ 31	\$ 31	-	-
2 Increases due to amounts set aside for estimated loan losses during the period	2	2	-	-
3 Decreases due to amounts reversed for estimated loan losses during the period	-	-	-	-
6 Impact of exchange rate differences	-	-	-	-
8a Position and valuation changes	12	12	-	-
9 Closing balance as of 31st May 2019	\$ 45	\$ 45	-	-

¹ Changes in specific credit risk adjustment are due to position and valuation changes rather than changes in amounts set aside for estimated loan losses, transfers between credit risk adjustments, exchange rate differences or business combinations (such as acquisitions and disposals of subsidiaries).

Table 36: Changes in the Stock of Defaulted and Impaired Loans and Debt Securities¹

\$ in millions

	As of May 2019		
	Gross carrying value defaulted exposures		
	GSGUK	GSI	GSIB
1 Opening balance as of 30th November 2018	\$ 191	\$ 191	-
2 Loans and debt securities that have defaulted or impaired since the last reporting period	18	-	18
3 Returned to non-defaulted status	(33)	(33)	-
5 Other changes	(27)	(27)	-
6 Closing balance as of 31st May 2019	\$ 149	\$ 131	\$ 18

¹ There were no defaulted or impaired loans and debt securities written off during the period.

Pillar 3 Disclosures

Appendix IV: Index of Tables to EBA Templates

Table	EBA Template	Full name	Page
N/A	Template 1 ¹	EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	N/A
N/A	Template 2 ¹	EU L12 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements	N/A
N/A	Template 3 ¹	EU L13 - Outline of the differences in the scopes of consolidation (entity by entity)	N/A
4	Template 4	EU OV1 - Overview of RWAs	9-10
26	Template 5 ²	EU CR10 - IRB (specialised lending and equities)	41
N/A	Template 6 ³	EU INS1 - Non-deducted participations in insurance undertakings	N/A
N/A	Template 7 ¹	EU CRB-B - Total and average net amount of exposures	N/A
N/A	Template 8 ¹	EU CRB-C - Geographical breakdown of exposures	N/A
N/A	Template 9 ¹	EU CRB-D - Concentration of exposures by industry or counterparty types	N/A
N/A	Template 10 ¹	EU CRB-E - Maturity of exposures	N/A
23	Template 11	EU CR1-A - Credit quality of exposures by exposure class and instrument	37-38
24	Template 12	EU CR1-B - Credit quality of exposures by industry or counterparty types	39
25	Template 13	EU CR1-C - Credit quality of exposures by geography	40
33	Template 14	EU CR1-D - Ageing of past-due exposures	52
34	Template 15	EU CR1-E - Non-performing and forborne exposures	52
35	Template 16	EU CR2-A - Changes in the stock of general and specific credit risk adjustments	53
36	Template 17	EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities	53
10	Template 18	EU CR3 - CRM techniques - Overview	17
28	Template 19	EU CR4 - Standardised approach - Credit risk exposure and CRM effects	45
29	Template 20	EU CR5 - Standardised approach	46
27	Template 21	EU CR6 - IRB approach - Credit risk exposures by exposure class and PD range	42-44
11	Template 22	EU CR7 - IRB approach - Effect on the RWAs of credit derivatives used as CRM techniques	18
9	Template 23	EU CR8 - RWA flow statements of credit risk exposures under the IRB approach	16
N/A	Template 24 ¹	EU CR9 - IRB approach – Backtesting of PD per exposure class	N/A
5	Template 25	EU CCR1 - Analysis of CCR exposure by approach	14
7	Template 26	EU CCR2 - CVA VaR capital charge	15
6	Template 27	EU CCR8 - Exposures to CCPs	15
N/A	Template 28 ⁴	EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk	N/A
30	Template 29	EU CCR4 - IRB approach - CCR exposures by portfolio and PD scale	47-49
8	Template 30	EU CCR7 - RWA flow statements of CCR exposures under the IMM	15
31	Template 31	EU CCR5-A - Impact of netting and collateral held on exposure values	50
32	Template 32	EU CCR5-B - Composition of collateral for exposures to CCR	51
12	Template 33	EU CCR6 - Credit derivatives exposures	18
17	Template 34	EU MR1 - Market risk under the standardised approach	26
14	Template 35	EU MR2-A - Market Risk under the IMA	23
15	Template 36	EU MR2-B- RWA flow statements of market risk exposures under the IMA	24
13	Template 37	EU MR3 - IMA values for trading portfolios	23
16	Template 38	EU MR4 - Comparison of VaR estimates with gains/losses	25

1. Template 1, 2 3, 7, 8, 9, 10 and 24 have not been disclosed as they are required annually. Please refer to the Q4 2018 disclosures.
2. The specialised lending section of Template 5 (IRB (specialised lending and equities)) has not been disclosed as GSGUK and its subsidiaries does not have specialised lending exposure.
3. Template 6 (Non-deducted participation in insurance undertakings) has not been disclosed as GSGUK and its subsidiaries do not have material holdings of own funds instruments of an insurance undertaking, re-insurance undertaking or an insurance holding company.
4. Template 28 (Standardised approach – CCR exposures by regulatory portfolio and risk) has not been disclosed as the material entities within GSGUK have regulatory permission from the PRA to compute risk weights in accordance with the AIRB approach. As a result, CCR exposures outside of these entities that are subject to the Standardised approach are deemed to be immaterial. The CCR exposure class, institutions, represents less than 5% of the total CCR exposure.