



Basel 3 Pillar 3

RISK MANAGEMENT AND  
CAPITAL ADEQUACY

For the year ended 31st December 2018

**GIB**

## Risk management and capital adequacy report

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**Executive summary**

The Central Bank of Bahrain (CBB) Basel 3 guidelines prescribe the capital adequacy framework for banks incorporated in the Kingdom of Bahrain. GIB adopted Basel 3 from 1<sup>st</sup> January 2015 as required by the CBB.

This Risk Management and Capital Adequacy report encompasses the Pillar 3 disclosure requirements prescribed by the CBB based on the Basel Committee's Pillar 3 guidelines. The report contains a description of GIB's risk management and capital adequacy policies and practices, including detailed information on the capital adequacy process.

For regulatory purposes, GIB has adopted the standardised approach for credit risk. GIB uses the internal models approach for market risk and the standardised approach for determining the capital requirement for operational risk.

The disclosed tier 1 and total capital adequacy ratios comply with the minimum capital requirements under the CBB's Basel 3 framework.

GIB's total risk-weighted assets at 31<sup>st</sup> December 2018 amounted to US\$16,108.3 million. Credit risk accounted for 91.5 per cent, market risk 4.1 per cent and operational risk 4.4 per cent of the total risk-weighted assets. Tier 1 and total regulatory capital were US\$2,196.2 million and US\$2,341.4 million respectively.

At 31<sup>st</sup> December 2018, GIB's tier 1 and total capital adequacy ratios were 13.6 per cent and 14.5 per cent respectively. GIB aims to maintain a tier 1 capital adequacy ratio above 10.5 per cent and a total capital adequacy ratio in excess of 14.0 per cent.

GIB views the Pillar 3 disclosures as an important contribution to increased risk transparency within the banking industry, and particularly important during market conditions characterised by high uncertainty. In this regard, GIB has provided more disclosure in this report than is required in accordance with the CBB's Pillar 3 guidelines in order to provide the level of transparency that is believed to be appropriate and relevant to the Group's various stakeholders and market participants.

All figures presented in this report are as at 31<sup>st</sup> December 2018 unless otherwise stated.

## 1. The Basel 3 framework

The CBB's Basel 3 framework is based on three pillars, consistent with the Basel 3 framework developed by the Basel Committee, as follows:-

- Pillar 1: the calculation of the risk-weighted assets (RWAs) and capital requirement.
- Pillar 2: the supervisory review process, including the Internal Capital Adequacy Assessment Process (ICAAP).
- Pillar 3: the disclosure of risk management and capital adequacy information.

### 1.1 Pillar 1

Pillar 1 prescribes the basis for the calculation of the regulatory capital adequacy ratio. Pillar 1 sets out the definition and calculations of the RWAs, and the derivation of the regulatory capital base. The capital adequacy ratio is calculated by dividing the regulatory capital base by the total RWAs.

With the introduction of Pillar 2, the CBB will implement a minimum ratio threshold to be determined for each institution individually, as described in more detail in the Pillar 2 section of this report. As at 31<sup>st</sup> December 2018, and pending finalisation of the CBB's Pillar 2 guidelines, all banks incorporated in Bahrain are required to maintain a minimum capital adequacy ratio of 12.5 per cent and a tier 1 ratio of 10.5 per cent.

In the event that the capital adequacy ratio falls below 12.5 per cent, additional prudential reporting requirements apply and a formal action plan setting out the measures to be taken to restore the ratio above the target level is to be formulated and submitted to the CBB.

The table below summarises the approaches available for calculating RWAs for each risk type in accordance with the CBB's Basel 3 capital adequacy framework:-

Approaches for determining regulatory capital requirements		
Credit risk	Market risk	Operational risk
Standardised approach	Standardised approach	Basic indicator approach
	Internal models approach	Standardised approach

The approach applied by GIB for each risk type is as follows:-

#### a) Credit risk

For regulatory reporting purposes, GIB applies the standardised approach for credit risk.

The RWAs are determined by multiplying the credit exposure by a risk weight factor dependent on the type of counterparty and the counterparty's external rating, where available.

#### b) Market risk

For the regulatory market risk capital requirement, GIB applies the internal models approach based on a Value-at-Risk (VaR) model. The use of the internal models approach for the calculation of regulatory market risk capital has been approved by the CBB.

#### c) Operational risk

Under the CBB's Basel 3 capital adequacy framework, all banks incorporated in Bahrain are required to apply the basic indicator approach for operational risk unless approval is granted by the CBB to use the standardised approach. The CBB's Basel 3 guidelines do not permit the use of the advanced measurement approach (AMA) for operational risk. The standardised approach for the calculation of regulatory operational risk capital has been approved by the CBB.

Under the standardised approach, the regulatory capital requirement is calculated based on a range of beta coefficients, ranging from 12 to 18 per cent, applied to the average gross income for the preceding three financial years for each of eight predefined business lines.

## 1. The Basel 3 framework (continued)

### 1.2 Pillar 2

Pillar 2 defines the process of supervisory review of an institution's risk management framework and, ultimately, its capital adequacy.

Under the CBB's Pillar 2 guidelines, each bank is to be individually assessed by the CBB and an individual minimum capital adequacy ratio is to be determined for each bank. The CBB is yet to undertake the assessment exercises, which will allow their setting of higher minimum capital ratios based on the CBB's assessment of the financial strength and risk management practices of the institution. Currently, pending finalisation of the assessment process, all banks incorporated in Bahrain are required to maintain a 12.5 per cent minimum capital adequacy ratio and a tier 1 ratio of 10.5 per cent.

Pillar 2 comprises two processes:-

- an Internal Capital Adequacy Assessment Process (ICAAP), and
- a supervisory review and evaluation process.

The ICAAP incorporates a review and evaluation of risk management and capital relative to the risks to which the bank is exposed. GIB's capital assessment has been developed around its economic capital framework which is designed to ensure that the Group has sufficient capital resources available to meet regulatory and internal capital requirements, even during periods of economic or financial stress. The capital assessment addresses all components of GIB's risk management, from the daily management of more material risks to the strategic capital management of the Group.

The supervisory review and evaluation process represents the CBB's review of the Group's capital management and an assessment of internal controls and corporate governance. The supervisory review and evaluation process is designed to ensure that institutions identify their material risks and allocate adequate capital, and employ sufficient management processes to support such risks.

The supervisory review and evaluation process also encourages institutions to develop and apply enhanced risk management techniques for the measurement and monitoring of risks in addition to the credit, market and operational risks addressed in the core Pillar 1 framework. Other risk types which are not covered by the minimum capital requirements in Pillar 1 include:-

- liquidity risk
- interest rate risk in the banking book (IRRBB)
- concentration risk
- pension obligation risk
- reputational risk
- information technology risk
- macroeconomic risk
- legal risk
- strategic risk

These are covered either by capital, or risk management and mitigation processes under Pillar 2.

### 1.3 Pillar 3

In the CBB's Basel 3 framework, the third pillar prescribes how, when, and at what level information should be disclosed about an institution's risk management and capital adequacy practices.

The disclosures comprise detailed qualitative and quantitative information. The purpose of the Pillar 3 disclosure requirements is to complement the first two pillars and the associated supervisory review process. The disclosures are designed to enable stakeholders and market participants to assess an institution's risk appetite and risk exposures and to encourage all banks, via market pressures, to move toward more advanced forms of risk management.

Under the current regulations, partial disclosure consisting mainly of quantitative analysis is required during half year reporting, whereas fuller disclosure is required to coincide with the financial year end reporting.

In this report, GIB's disclosures are beyond the minimum regulatory requirements and provide disclosure of the risks to which it is exposed, both on- and off-balance sheet. The disclosures in this report are in addition to the disclosures set out in the consolidated financial statements presented in accordance with International Financial Reporting Standards (IFRS).

## 2. Group structure, overall risk and capital management

This section sets out the consolidation principles and the capital base of GIB as calculated in accordance with the Pillar 1 guidelines, and describes the principles and policies applied in the management and control of risk and capital.

### 2.1 Group structure

The Group's financial statements are prepared and published on a full consolidation basis, with all subsidiaries being consolidated in accordance with IFRS. For capital adequacy purposes, all subsidiaries are included within the Gulf International Bank B.S.C. Group structure. However, the CBB's capital adequacy methodology accommodates both normal and aggregation forms of consolidation.

Under the CBB capital adequacy framework, subsidiaries reporting under a Basel 3 framework in other regulatory jurisdictions may, at the bank's discretion, be consolidated based on that jurisdiction's Basel 3 framework, rather than based on the CBB's guidelines. Under this aggregation consolidation methodology, the risk-weighted assets of subsidiaries are consolidated with those of the rest of the Group based on the guidelines of their respective regulator to determine the Group's total risk-weighted assets.

GIB's principal subsidiary, Gulf International Bank (UK) Limited (GIBUK), is regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA) of the United Kingdom, and has calculated its risk-weighted assets in accordance with the PRA's guidelines.

The principal subsidiaries and basis of consolidation for capital adequacy purposes are as follows:-

Subsidiary	Domicile	Ownership	Consolidation basis
Gulf International Bank (UK) Limited	United Kingdom	100%	Aggregation
GIB Capital C.J.S.C.	Saudi Arabia	100%	Full Consolidation
GIB Markets Limited	Cayman Islands	100%	Full Consolidation

No investments in subsidiaries are treated as a deduction from the Group's regulatory capital.

### 2.2 Risk and capital management

GIB maintains a prudent and disciplined approach to risk taking by upholding a comprehensive set of risk management policies, processes and limits, employing professionally qualified people with the appropriate skills, investing in technology and training, and actively promoting a culture of sound risk management at all levels. A key tenet of this culture is the clear segregation of duties and reporting lines between personnel transacting business and personnel processing that business. The Group's risk management is underpinned by its ability to identify, measure, aggregate and manage the different types of risk it faces.

The Board of Directors has created from among its members a Board Risk Policy Committee to review the Group's risk taking activities and report to the Board in this regard. The Board has the ultimate responsibility for setting the overall risk parameters and tolerances within which the Group conducts its activities, including responsibility for setting the capital ratio targets. The Board reviews the Group's overall risk profile and significant risk exposures as well as the Group's major risk policies, processes and controls.

The Management Committee, chaired by the Chief Executive Officer (CEO), has the primary responsibility for sanctioning risk taking policies and activities within the tolerances defined by the Board. The Group Risk Committee assists the Management Committee in performing its risk related functions.

The Group Risk Committee, under the chairmanship of the Chief Risk Officer (CRO) and comprising the Group's most senior risk professionals, provides a forum for the review and approval of new products, risk measurement methodologies and risk control processes. The Group Risk Committee also reviews all risk policies and limits that require approval by the Management Committee. The Assets and Liabilities Committee (ALCO), chaired by the Chief Financial Officer (CFO), provides a forum for the review of asset and liability activities within GIB. It co-ordinates the asset and liability functions and serves as a link between the funding sources and usage in the different business areas.

## 2. Group structure, overall risk and capital management (continued)

### 2.2 Risk and capital management (continued)

From a control perspective, the process of risk management is facilitated through a set of independent functions, which report directly to senior management. These functions include Credit Risk, Market Risk, Operational Risk, Financial Control and Internal Audit. This multi-faceted approach aids the effective management of risk by identifying, measuring and monitoring risks from a variety of perspectives.

Internal Audit is responsible for carrying out a risk-based programme of work designed to provide assurance that assets are being safeguarded. This involves ensuring that controls are in place and working effectively in accordance with Group policies and procedures as well as with laws and regulations. The work carried out by Internal Audit includes providing assurance on the effectiveness of the risk management functions, as well as that of controls operated by the business units. The Board Audit Committee approves the annual audit plan and also receives regular reports of the results of audit work.

The Group's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future business development. The Group manages its capital structure and makes adjustments to the structure taking account of changes in economic conditions and strategic business plans. The capital structure may be adjusted through the dividend payout or the issue of new shares.

The CFO is responsible for the capital planning process. Capital planning includes capital adequacy reporting and the Internal Capital Adequacy Assessment Process (ICAAP). The CFO is also responsible for the balance sheet management framework.

The governance structure for risk and capital management is set out in the table below:-

Board of Directors		
Board Audit Committee		Board Risk Policy Committee
Chief Executive Officer		
Management Committee (Chairman: CEO)	Group Risk Committee (Chairman: CRO)	Assets and Liabilities Committee (Chairman: CFO)

The risk, liquidity and capital management responsibilities are set out in the table below:-

Chief Executive Officer	
Chief Financial Officer (CFO)	Chief Risk Officer (CRO)
Balance sheet management framework Capital management framework	Risk management framework and policies Group credit control Credit risk Market risk Operational risk Liquidity risk

### 2.3 Risk types

The major risks associated with the Group's business activities are credit, market, operational and liquidity risk. These risks together with a commentary on the way in which the risks are managed and controlled are set out in the following sections, based on the Basel 3 pillar in which the risks are addressed.

### 2.4 Risk in Pillar 1

Pillar 1, which forms the basis for the calculation of the regulatory capital requirement, addresses three specific risk types: credit, market and operational risk.

## 2. Group structure, overall risk and capital management (continued)

### 2.4 Risk in Pillar 1 (continued)

#### a) Credit risk

Credit risk is the risk that a customer, counterparty or an issuer of securities or other financial instruments fails to perform under its contractual payment obligations thus causing the Group to suffer a loss in terms of cash flow or market value. Credit risk is the predominant risk type faced by the Group in its banking, investment and treasury activities, both on- and off-balance sheet. Where appropriate, the Group seeks to minimise its credit exposure using a variety of techniques including, but not limited to, the following:-

- entering netting agreements with counterparties that permit the offsetting of receivables and payables
- obtaining collateral
- seeking third party guarantees of the counterparty's obligations
- imposing restrictions and covenants on borrowers

Credit risk is actively managed and rigorously monitored in accordance with well-defined credit policies and procedures. Prior to the approval of a credit proposal, a detailed credit risk assessment is undertaken which includes an analysis of the obligor's financial condition, market position, business environment and quality of management. The risk assessment generates an internal credit risk rating for each counterparty, which affects the credit approval decision and the terms and conditions of the transaction. For cross-border transactions, an analysis of country risk is also conducted. The credit decision for an individual counterparty is based on the aggregate Group exposure to that counterparty and all its related entities. Groupwide credit limit setting and approval authorisation requirements are conducted within Board approved guidelines, and the measurement, monitoring and control of credit exposures are done on a Groupwide basis in a consistent manner. Overall exposures are evaluated to ensure broad diversification of credit risk. Potential concentration risks by product, industry, single obligor, credit risk rating and geography are regularly assessed with a view to improving overall portfolio diversification. Established limits and actual levels of exposure are regularly reviewed by the Chief Risk Officer (CRO), Chief Credit Officer (CCO) and other members of senior management. All credit exposures are reviewed at least once a year. Credit policies and procedures are designed to identify, at an early stage, exposures which require more detailed monitoring and review. The credit risk associated with foreign exchange and derivative instruments is assessed in a manner similar to that associated with on-balance sheet activities. The Group principally utilises derivative transactions to facilitate customer transactions and for the management of interest and foreign exchange risks associated with the Group's longer-term lending, borrowing and investment activities. Unlike on-balance sheet products, where the principal amount and interest generally represent the maximum credit exposure, the notional amount relating to a foreign exchange or derivative transaction typically exceeds the credit exposure by a substantial margin. The measure of credit exposure for foreign exchange and derivative instruments is therefore more appropriately considered to be the replacement cost at current market rates plus an add-on amount commensurate with the position's size, volatility and remaining life. Derivative contracts may also carry legal risk; the Group seeks to minimise these risks by the use of standard contract agreements.

#### b) Market risk

Market risk is the risk of loss of value of a financial instrument or a portfolio of financial instruments as a result of adverse changes in market prices and rates, and market conditions such as liquidity. Market risk arises from the Group's trading, asset and liability management, and investment activities.

The categories of market risk to which the Group is exposed are as follows:-

**Interest rate risk** results from exposure to changes in the level, slope, curvature and volatility of interest rates and credit spreads. The credit spread risk is the risk that the interest yield for a security will increase, with a reduction in the security price, relative to benchmark yields as a result of the general market movements for that rating and class of security. Interest rate risk is the principal market risk faced by the Group and arises from the Group's investment activities in debt securities, asset and liability management, and the trading of debt and off-balance sheet derivative instruments.

**Foreign exchange risk** results from exposure to changes in the price and volatility of currency spot and forward rates. The principal foreign exchange risk arises from the Group's foreign exchange forward and derivative trading activities.

**Equity risk** arises from exposures to changes in the price and volatility of individual equities or equity indices.

The Group seeks to manage exposure to market risk through the diversification of exposures across dissimilar markets and the establishment of hedges in related securities or off-balance sheet derivative instruments. To manage the Group's exposures, in addition to the exercise of business judgement and management experience, the Group utilises limit structures including those relating to positions, portfolios, maturities and maximum allowable losses.



## 2. Group structure, overall risk and capital management (continued)

### 2.4 Risk in Pillar 1 (continued)

#### b) Market risk (continued)

A key element in the Group's market risk management framework is the estimation of potential future losses that may arise from adverse market movements. The Group utilises Value-at-Risk (VaR) to estimate such losses. The VaR is derived from quantitative models that use statistical and simulation methods that take account of all market rates and prices that may cause a change in a position's value. These include interest rates, foreign exchange rates and equity prices, their respective volatilities and the correlations between these variables. Effective September 2018, the Group's VaR is calculated using a historical based simulation. Previously, the Group's VaR was calculated on a Monte Carlo simulation basis using historical volatilities and correlations to generate a profit and loss distribution from several thousand scenarios.

The VaR takes account of potential diversification benefits of different positions both within and across different portfolios. Consistent with general market practice, VaR is computed for all financial instruments for which there are readily available daily prices or suitable proxies. VaR is viewed as an effective risk management tool and a valuable addition to the non-statistically based limit structure. It permits a consistent and uniform measurement of market risk across all applicable products and activities. Exposures are monitored against a range of limits both by risk category and portfolio and are regularly reported to and reviewed by senior management and the Board of Directors.

An inherent limitation of VaR is that past market movements may not provide an accurate prediction of future market losses. Historic analyses of market movements have shown that extreme market movements (i.e. beyond the 99 per cent confidence level) occur more frequently than VaR models predict. Stress tests are regularly conducted to estimate the potential economic losses in such abnormal markets. Stress testing combined with VaR provides a more comprehensive picture of market risk. The Group regularly performs stress tests that are constructed around changes in market rates and prices resulting from pre-defined market stress scenarios, including both historical and hypothetical market events. Historical scenarios include the 1998 Russian crisis, the events of 9/11 and the 2008 credit crisis. In addition, the Group performs stress testing based on internally developed hypothetical market stress scenarios. Stress testing is performed for all material market risk portfolios.

#### c) Operational risk

Operational risk is the risk of loss arising from inadequate or failed internal processes, people and systems or from external events, whether intentional, unintentional or natural. It is an inherent risk faced by all businesses and covers a large number of potential operational risk events including business interruption and systems failures, internal and external fraud, employment practices and workplace safety, customer and business practices, transaction execution and process management, and damage to physical assets.

Operational risk is a distinct risk category which the Group manages within acceptable levels through sound operational risk management practices that are part of the day-to-day responsibilities of management at all levels. Whilst operational risk cannot be eliminated in its entirety, the Group endeavours to minimise it by ensuring that a strong control infrastructure is in place throughout the organisation.

The objective in managing operational risk is to ensure control of the Group's resources by protecting the assets of the Group and minimising the potential for financial loss. The Group's risk management approach involves identifying, assessing, managing, mitigating, monitoring and measuring the risks associated with all areas of the Group. Control assessments are performed on all services of the Group with the participation of representatives from the relevant businesses, internal audit, legal and the risk and finance departments. Various policies, procedures and processes are used to manage operational risk and include effective staff training, appropriate controls to safeguard assets and records, regular reconciliation of accounts and transactions, appropriate budgeting, target setting and performance review, compliance to regulations, close monitoring of risk limits, segregation of duties, and financial management and reporting. In addition, policies have been put in place to manage other control mitigation strategies for business continuity planning, insurance and legal risk (which includes regular reporting to management on legal matters).

Qualitative and quantitative methodologies and tools are used to identify and assess operational risk and to provide management with information for determining appropriate mitigating factors. These tools include a database of operational risk events categorised according to business lines and operational risk event types; a record of key risk indicators, which can provide an early warning of possible risk; and a risk and control assessment process to analyse business activities and identify operational risks related to those activities. The management of operational risk has a key objective of minimising the impact of losses suffered in the normal course of business (expected losses) and to avoid or reduce the likelihood of suffering a large extreme (unexpected) loss. There is a dedicated Operational Risk function for the Group which reports into the Operational Risk Management Committee and Group Risk Committee. The Board meets on a quarterly basis and is updated on all relevant aspects of the business including operational risk management matters. High impact risks and issues of critical importance are reported to the Board.

## 2. Group structure, overall risk and capital management (continued)

### 2.5 Risk in Pillar 2

Other risk types are measured and assessed in Pillar 2. GIB measures and manages these risk types although they are not included in the calculation of the regulatory capital adequacy ratio. Most of the Pillar 2 risks are included in GIB's calculation of internal economic capital. Pillar 2 risk types include liquidity risk, interest rate risk in the banking book, business risk and concentration risk.

#### a) Liquidity risk

Liquidity risk is the risk that sufficient funds are not available to meet the Group's financial obligations on a punctual basis as they fall due. The risk arises from the timing differences between the maturity profiles of the Group's assets and liabilities. It includes the risk of losses arising from the following:-

- forced sale of assets at below normal market prices
- raising of deposits or borrowing funds at excessive rates
- the investment of surplus funds at below market rates

Liquidity management policies are designed to ensure that funds are available at all times to meet the funding requirements of the Group, even in adverse conditions. In normal conditions, the objective is to ensure that there are sufficient funds available not only to meet current financial commitments but also to facilitate business expansion. These objectives are met through the application of prudent liquidity controls. These controls provide access to funds without undue exposure to increased costs from the liquidation of assets or the aggressive bidding for deposits.

The Group's liquidity controls ensure that, over the short-term, the future profile of cash flows from maturing assets is adequately matched to the maturity of liabilities. Liquidity controls also provide for the maintenance of a stock of liquid and readily realisable assets and a diversified deposit base in terms of both maturities and range of depositors.

The management of liquidity and funding is primarily conducted in the Group's individual geographic entities within approved limits. The limits ensure that contractual net cash flows occurring over the following 30 day period do not exceed the eligible stock of available liquid resources.

It is the Group's general policy that each geographic entity should be self-sufficient in relation to funding its own operations.

The Group's liquidity management policies include the following:-

- the monitoring of (i) future contractual cash flows against approved limits, and (ii) the level of liquid resources available in a stress event
- the monitoring of balance sheet liquidity ratios
- the monitoring of the sources of funding in order to ensure that funding is derived from a diversified range of sources
- the monitoring of depositor concentrations in order to avoid undue reliance on individual depositors
- the maintenance of a satisfactory level of term financing
- the maintenance of appropriate standby funding arrangements; and
- the maintenance of liquidity and funding contingency plans. These plans identify early indicators of stress conditions and prescribe the actions to be taken in the event of a systemic or other crisis, while minimising adverse long-term implications for the Group's business activities.

#### b) Interest rate risk in the banking book

Structural interest rate risk arises in the Group's core balance sheet as a result of mismatches in the repricing of interest rate sensitive financial assets and liabilities. The associated interest rate risk is managed within VaR limits and through the use of models to evaluate the sensitivity of earnings to movements in interest rates.

#### c) Concentration risk

Concentration risk is the risk related to the degree of diversification in the credit portfolio, i.e. the risk inherent in doing business with large customers or not being equally exposed across industries and regions.

Concentration risk is captured in GIB's Pillar 2 capital framework through the use of a credit risk portfolio model which considers single-name concentrations and sector concentrations in the credit portfolio.

Potential concentration risks by product, single obligor, and geography are regularly assessed with a view to improving overall portfolio diversification. Established limits and actual levels of exposure are regularly reviewed by senior management and the Board of Directors.

## 2. Group structure, overall risk and capital management (continued)

### 2.5 Risk in Pillar 2 (continued)

#### d) Pension obligation risk

Pension obligation risk is the risk that there may be a shortfall with respect to pension benefits due to employees/former employees within the defined benefit scheme of the Group's wholly owned subsidiary, GIBUK.

As part of GIB's ICAAP framework, an adverse scenario is applied to the scheme's assets and liabilities on a level of severity expected no more than once in every 200 years, i.e. a 99.5 per cent one year confidence level.

#### e) Reputational risk

Reputational risk is the risk of losses resulting from adverse perceptions about the Group, its brand and franchise by its various stakeholders that is caused by a variety of internal and external factors. Preventive measures, including controls and processes have been deployed to manage reputational risk. These include a robust and comprehensive governance structure, which is based on set of well-defined policies and procedures.

#### f) Information Technology (IT) risk

Technology continues to play a critical role in the Bank's operations and in the fulfilment of its strategic objectives. The Group has in place a sound IT and Information Security governance framework that aligns its IT strategy and Information & Cyber Security Strategy with its overall business objectives.

#### g) Macroeconomic risk

Macroeconomic risk relates to the risk of increasing stress levels in the principal economies in which the Group operates. These risks can be triggered by political uncertainties, social unrests, high/low commodity prices, excessive leverage in the financial system or an uncompetitive business environment. Due to the systemic nature of these macroeconomic triggers there will be an adverse impact on the Group's profitability and capital positions and the extent of loss would depend on the severity of the stress event.

Macroeconomic risk is captured in GIB's ICAAP framework through the use of stressed macroeconomic forecast to gauge the impact of potential losses that the Group could incur.

#### h) Legal risk

In the ordinary course of its business, as a participant in the financial services industry, the Group may pursue litigation claims against third parties and may also have litigation claims and/or regulatory proceedings filed against it. The Bank has an in-house legal department comprising of qualified legal professionals. The department has put in place adequate policies & procedures and uses assistance of professional legal firms on need basis, to ensure effective and efficient management of legal risk.

### 2.6 Monitoring and reporting

The monitoring and reporting of risk is conducted on a daily basis for market and liquidity risk, and on a monthly or quarterly basis for credit and operational risk.

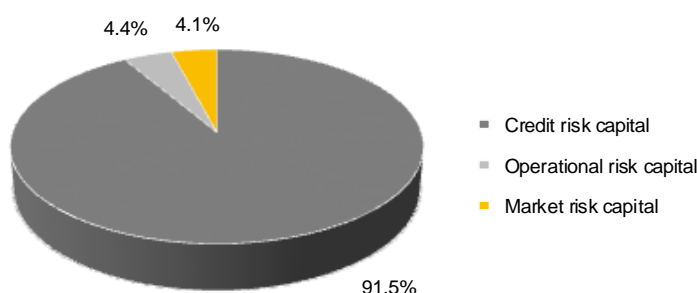
Risk reporting is regularly made to senior management and the Board of Directors. The Board of Directors receives internal risk reports covering market, credit, operational and liquidity risks.

Capital management, including regulatory and internal economic capital ratios, is reported to senior management and the Board of Directors on a monthly basis.

### 3. Regulatory capital requirements and the capital base

This section describes the Group's regulatory capital requirements and capital base.

The composition of the total regulatory capital requirement was as follows:-



#### 3.1 Capital requirements for credit risk

For regulatory reporting purposes, GIB calculates the capital requirements for credit risk based on the standardised approach. Under the standardised approach, on- and off-balance sheet credit exposures are assigned to exposure categories based on the type of counterparty or underlying exposure. The exposure categories are referred to in the CBB's Basel 3 capital adequacy framework as standard portfolios. The primary standard portfolios are claims on sovereigns, claims on banks and claims on corporates. Following the assignment of exposures to the relevant standard portfolios, the RWAs are derived based on prescribed risk-weightings. Under the standardised approach, the risk-weightings are provided by the CBB and are determined based on the counterparty's external credit rating. The external credit ratings are derived from eligible external rating agencies approved by the CBB. GIB uses ratings assigned by Standard & Poor's, Moody's and Fitch.

An overview of the exposures, RWAs and capital requirements for credit risk analysed by standard portfolio is presented in the table below:-

	Rated exposure US\$ millions	Unrated exposure US\$ millions	Total exposure US\$ millions	Average risk weight %	RWA US\$ millions	Capital requirement US\$ millions
Sovereigns	10,392.3	-	10,392.3	1%	75.6	9.4
PSEs	198.4	-	198.4	-	-	-
Banks	7,560.9	-	7,560.9	23%	1,714.9	214.4
Corporates	3,243.0	9,741.9	12,984.9	91%	11,830.1	1,478.8
Equities	-	227.5	227.5	120%	273.4	34.2
Past due loans	-	741.3	741.3	33%	244.8	30.6
Other assets	43.4	539.5	582.9	105%	609.9	76.2
	<b>21,438.0</b>	<b>11,250.2</b>	<b>32,688.2</b>	<b>45%</b>	<b>14,748.7</b>	<b>1,843.6</b>

Exposures are stated after taking account of credit risk mitigants where applicable. The treatment of credit risk mitigation is explained in more detail in section 4.4(g) of this report.

The definitions of each standard portfolio and the related RWA requirements are set out in section 4 of this report.

#### 3.2 Capital requirements for market risk

GIB uses a Value-at-Risk (VaR) model to calculate the regulatory capital requirements relating to general market risk.

The VaR calculated by the internal model is subject to a multiplication factor determined by the CBB. GIB's multiplication factor has been set at the regulatory minimum of 3.0 by the CBB.

Prescribed additions in respect of specific risk are made to general market risk. The resultant measure of market risk is multiplied by 12.5, to give market risk-weighted exposure on a basis consistent with credit risk-weighted exposure.

**3. Regulatory capital requirements and the capital base** (continued)**3.2 Capital requirements for market risk** (continued)

The RWAs and capital requirements for market risk are presented in the table below:-

	<b>RWA</b>	<b>Capital</b>
	<b>US\$ millions</b>	<b>requirement</b>
		<b>US\$ millions</b>
Interest rate risk	101.0	12.6
Equities	461.6	57.7
Foreign exchange risk	12.7	1.6
Total general market risk	575.3	71.9
Total specific market risk	78.8	9.9
	<b>654.1</b>	<b>81.8</b>

The general market risk calculation includes the addition of stressed VaR in accordance with CBB guidelines.

**3.3 Capital requirements for operational risk**

For regulatory reporting purposes, the capital requirement for operational risk is calculated in accordance with the standardised approach. Under this approach, the Group's average gross income over the preceding three financial years is multiplied by a range of beta coefficients. The beta coefficients are determined based on the business line generating the gross income and are prescribed in the CBB's Basel 3 capital adequacy framework and range from 12 to 18 per cent.

The capital requirement for operational risk at 31<sup>st</sup> December 2018 amounted to US\$88.2 million.

### 3. Regulatory capital requirements and the capital base (continued)

#### 3.4 Capital base

The regulatory capital base is set out in the table below:-

	CET 1 & Tier 1	Tier 2	Total
	US\$ millions	US\$ millions	US\$ millions
Share capital	2,500.0	-	2,500.0
Share premium	7.6	-	7.6
Compulsory reserve	225.8	-	225.8
Voluntary reserve	163.3	-	163.3
Retained earnings	(665.2)	-	(665.2)
Unrealised losses from fair valuing equity investments	(33.4)	-	(33.4)
Cash flow hedge reserve	(1.9)	-	(1.9)
Collective impairment provisions	-	145.2	145.2
<b>Tier 1 and tier 2 capital base</b>	<b>2,196.2</b>	<b>145.2</b>	<b>2,341.4</b>

Common equity tier 1 (CET 1) and tier 1 capital is defined as capital of the same or close to the character of paid up capital and comprises share capital, share premium, retained earnings and eligible reserves. Eligible reserves exclude revaluation gains and losses arising on the remeasurement to fair value of derivative cash flow hedging transactions, although include unrealised gains and losses arising on the remeasurement to fair value of equity investment securities classified as fair value through other comprehensive income (FVTOCI). Regulatory capital deductions are applied to tier 1 and tier 2 capital with respect to investment exposures for entities where the Group does not own more than 10 per cent of the issued share capital of the entity, and to tier 1 capital to exclude any outstanding cash flow hedge reserves.

Tier 2 capital comprises collective impairment provisions.

The CBB applies various limits to elements of the regulatory capital base. The amount of innovative tier 1 securities cannot exceed 15 per cent of total tier 1 capital; qualifying tier 2 capital cannot exceed tier 1 capital; and qualifying subordinated term finance cannot exceed 50 per cent of tier 1 capital. There are also restrictions on the amount of collective impairment provisions that may be included as part of tier 2 capital.

There are no impediments on the transfer of funds or regulatory capital within the Group other than restrictions over transfers of statutory deposits with central banks and safeguards to ensure minimum regulatory capital requirements are met for subsidiary companies.

#### 4. Credit risk – Pillar 3 disclosures

This section describes the Group's exposure to credit risk and provides detailed disclosures on credit risk in accordance with the CBB's Basel 3 framework in relation to Pillar 3 disclosure requirements.

##### 4.1 Definition of exposure classes

GIB has a diversified on- and off-balance sheet credit portfolio, the exposures of which are divided into the counterparty exposure classes defined by the CBB's Basel 3 capital adequacy framework for the standardised approach for credit risk. A high-level description of the counterparty exposure classes, referred to as standard portfolios in the CBB's Basel 3 capital adequacy framework, and the generic treatments, i.e. the risk weights to be used to derive the RWAs, are as follows:-

##### **Sovereigns portfolio**

The sovereigns portfolio comprises exposures to governments and their respective central banks. The risk weights are 0 per cent for exposures in the relevant domestic currency, or in any currency for exposures to GCC governments. Foreign currency claims on other sovereigns are risk-weighted based on their external credit ratings.

Certain multilateral development banks as determined by the CBB may be included in the sovereigns portfolio and treated as exposures with a 0 per cent risk-weighting.

##### **PSE portfolio**

Public sector entities (PSEs) are risk-weighted according to their external ratings with the exception of Bahrain PSEs, and domestic currency claims on other PSEs which are assigned a 0 per cent risk weight by their respective country regulator.

##### **Banks portfolio**

Claims on banks are risk-weighted based on their external credit ratings. A preferential risk weight treatment is available for qualifying short-term exposures. Short-term exposures are defined as exposures with an original tenor of three months or less.

The Banks portfolio also includes claims on investment firms, which are risk-weighted based on their external credit ratings although without any option for preferential treatment for short-term exposures. A regulatory deduction is applied to investment exposures for entities where the Group does not own more than 10 per cent of the issued share capital of the bank.

##### **Corporates portfolio**

Claims on corporates are risk-weighted based on their external credit ratings. A 100 per cent risk weight is assigned to unrated corporate exposures. A preferential risk weight treatment is available for certain corporates owned by the Government of Bahrain, as determined by the CBB, which are assigned a 0 per cent risk weight.

##### **Equities portfolio**

The equities portfolio comprises equity investments in the banking book, i.e. in the investment securities portfolio and non-qualifying equities and funds in the trading portfolio. The credit (specific) risk for qualifying equities in the trading book is included in market risk RWAs for regulatory capital adequacy calculation purposes. A regulatory deduction is applied to investment exposures for entities where the Group does not own more than 10 per cent of the issued share capital of the entity.

A 100 per cent risk weight is assigned to listed equities and funds. Unlisted equities and funds are risk-weighted at 150 per cent. Investments in rated funds are risk-weighted according to their external credit rating.

In addition to the standard portfolios, other exposures are assigned to the following exposure classes:-

##### **Past due exposures**

All past due loan exposures, irrespective of the categorisation of the exposure if it were performing, are classified separately under the past due exposures asset class. A risk-weighting of either 100 per cent or 150 per cent is applied depending on the level of provision maintained against the loan.

##### **Other assets and holdings of securitisation tranches**

Cash balances are risk-weighted at 0 per cent, other assets are risk-weighted at 100 per cent. A credit valuation adjustment (CVA) is applied to applicable derivative exposures.

Securitisation tranches are risk-weighted based on their external credit ratings and tenor. Risk-weightings range from 20 per cent to 1250 per cent.

##### 4.2 External rating agencies

GIB uses ratings issued by Standard & Poor's, Moody's and Fitch to derive the risk-weightings under the CBB's Basel 3 capital adequacy framework. Where ratings vary between rating agencies, the highest rating from the lowest two ratings is used to derive the risk-weightings for regulatory capital adequacy purposes.

#### 4. Credit risk – Pillar 3 disclosures (continued)

##### 4.3 Credit risk presentation under Basel 3

The credit risk exposures presented in this report may differ from the credit risk exposures reported in the consolidated financial statements. Differences arise due to the application of different methodologies, as illustrated below:-

- Under the CBB's Basel 3 framework, off-balance sheet exposures are converted into credit exposure equivalents by applying a credit conversion factor (CCF). The off-balance sheet exposure is multiplied by the relevant CCF applicable to the off-balance sheet exposure category. Subsequently, the exposure is treated in accordance with the standard portfolios referred to in section 4.1 of this report in the same manner as on-balance sheet exposures.
- Credit risk exposure reporting under Pillar 3 is frequently reported by standard portfolios based on the type of counterparty. The financial statement presentation is based on asset class rather than the relevant counterparty. For example, a loan to a bank would be classified in the Banks standard portfolio under the capital adequacy framework although is classified in loans and advances in the consolidated financial statements.
- Certain eligible collateral is applied to reduce exposure under the Basel 3 capital adequacy framework, whereas no such collateral netting is applicable in the consolidated financial statements.
- Based on the CBB's Basel 3 guidelines, certain exposures are either included in, or deducted from, regulatory capital rather than treated as an asset as in the consolidated financial statements.
- Under the CBB's Basel 3 capital adequacy framework, external rating agency ratings are based on the highest rating from the lowest two ratings, while for internal credit risk management purposes the Group uses the lowest rating.

##### 4.4 Credit exposure

###### a) Gross credit exposure

The gross and average gross exposure to credit risk before applying collateral, guarantees, and other credit enhancements was as follows:-

	Gross credit exposure US\$ millions	Average gross credit exposure US\$ millions
<b>Balance sheet items:</b>		
Cash and other liquid assets (including cash balances)	5,114.2	6,416.4
Securities purchased under agreements to resell	1,015.9	937.7
Placements	6,770.8	5,592.9
Trading securities	177.7	192.3
Investment securities	3,897.2	3,948.0
Loans and advances	9,817.8	10,262.0
Accrued interest and fees receivable	265.8	226.8
<b>Total on-balance sheet credit exposure</b>	<b>27,059.4</b>	<b>27,576.1</b>
<b>Off-balance sheet items:</b>		
Credit-related contingent items	4,536.4	4,847.6
Derivative and foreign exchange instruments	623.6	494.5
<b>Total off-balance sheet credit exposure</b>	<b>5,160.0</b>	<b>5,342.1</b>
<b>Total gross credit exposure</b>	<b>32,219.4</b>	<b>32,918.2</b>

The average gross credit exposure is based on monthly averages during the year ended 31<sup>st</sup> December 2018.

The gross credit exposure for derivative and foreign exchange instruments is the replacement cost (current exposure) representing the cost of replacing the contracts at current market rates should the counterparty default prior to the settlement date. The gross credit exposure reported in the table above does not include potential future exposure. Further details on the counterparty credit risk relating to off-balance sheet exposures are set out in section 7.3(a) of this report.



## 4. Credit risk – Pillar 3 disclosures (continued)

## 4.4 Credit exposure (continued)

## b) Credit exposure by geography

The classification of credit exposure by geography, based on the location of the counterparty, was as follows:-

	Placements, reverse repos & other liquid assets	Securities	Loans and interest- advances	Accrued interest-fees receivable	Off-balance sheet items	Total
	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions
GCC	4,301.2	2,778.0	9,603.6	133.4	4,258.8	21,075.0
Europe	7,028.5	385.4	137.7	116.4	466.6	8,134.6
North America	1,238.7	430.6	28.3	11.0	397.9	2,106.5
Asia	332.5	465.2	46.2	5.0	35.4	884.3
Latin America	-	12.2	-	-	-	12.2
MENA (excluding GCC)	-	3.5	2.0	-	1.3	6.8
	<b>12,900.9</b>	<b>4,074.9</b>	<b>9,817.8</b>	<b>265.8</b>	<b>5,160.0</b>	<b>32,219.4</b>

The MENA region comprises the Middle East and North Africa.

## c) Credit exposure by industrial sector

The classification of credit exposure by industrial sector was as follows:-

	Placements, reverse repos & other liquid assets	Securities	Loans and interest- advances	Accrued interest-fees receivable	Off-balance sheet items	Total
	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions
Government	7,707.9	2,218.0	120.0	27.6	24.6	10,098.1
Financial services	5,193.0	630.4	1,595.4	176.7	1,090.8	8,686.3
Energy, oil and petrochemical	-	387.9	1,811.7	14.7	842.1	3,056.4
Trading and services	-	-	1,814.2	9.3	544.4	2,367.9
Construction	-	10.7	550.8	2.7	1,528.4	2,092.6
Transportation	-	101.7	1,486.3	7.2	275.8	1,871.0
Manufacturing	-	265.7	1,168.3	10.0	364.0	1,808.0
Real estate	-	91.1	697.6	7.5	60.2	856.4
Agriculture and mining	-	-	171.0	1.0	291.8	463.8
Communication	-	-	205.3	1.2	13.8	220.3
Equity investments	-	333.2	-	0.1	-	333.3
Other	-	36.2	197.2	7.8	124.1	365.3
	<b>12,900.9</b>	<b>4,074.9</b>	<b>9,817.8</b>	<b>265.8</b>	<b>5,160.0</b>	<b>32,219.4</b>

## 4. Credit risk – Pillar 3 disclosures (continued)

## 4.4 Credit exposure (continued)

## d) Credit exposure by internal rating

The credit risk profile based on internal credit ratings and presented based on the International Financial Reporting Standards (IFRS) 9 – Financial Instruments classification was as follows:-

	Placements, reverse repos & other liquid assets	Securities	Loans and advances	Accrued interest-fees receivable	Off-balance sheet items	Total
	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions
<b>Stage 1</b>						
Rating grades 1 to 4-	12,636.6	3,494.4	6,165.4	229.7	3,228.6	25,754.7
Rating grades 5+ to 5-	252.0	247.3	2,809.8	32.4	721.7	4,063.2
Rating grades 6+ to 6-	12.3	-	84.2	0.5	38.8	135.8
<b>Carrying amount (net)</b>	<b>12,900.9</b>	<b>3,741.7</b>	<b>9,059.4</b>	<b>262.6</b>	<b>3,989.1</b>	<b>29,953.7</b>
<b>Stage 2</b>						
Rating grades 1 to 4-	-	-	24.3	0.3	0.3	24.9
Rating grades 5+ to 5-	-	-	262.2	1.4	46.2	309.8
Rating grades 6+ to 6-	-	-	342.5	0.8	113.5	456.8
Rating grade 7	-	-	103.3	0.6	0.5	104.4
<b>Carrying amount (net)</b>	<b>-</b>	<b>-</b>	<b>732.3</b>	<b>3.1</b>	<b>160.5</b>	<b>895.9</b>
<b>Stage 3</b>						
Rating grade 6-	-	-	12.8	-	-	12.8
Rating grade 8	-	-	-	-	64.0	64.0
Rating grade 9	-	-	13.3	-	31.8	45.1
Rating grade 10	-	-	-	-	20.6	20.6
<b>Carrying amount (net)</b>	<b>-</b>	<b>-</b>	<b>26.1</b>	<b>-</b>	<b>116.4</b>	<b>142.5</b>
<b>Other credit risk exposures</b>						
Equity investments	-	333.2	-	0.1	-	333.3
Performance bonds	-	-	-	-	894.0	894.0
<b>Carrying amount</b>	<b>-</b>	<b>333.2</b>	<b>-</b>	<b>0.1</b>	<b>894.0</b>	<b>1,227.3</b>
	<b>12,900.9</b>	<b>4,074.9</b>	<b>9,817.8</b>	<b>265.8</b>	<b>5,160.0</b>	<b>32,219.4</b>

The above analysis is reported net of the following provisions for impairment:-

Stage 1	-	(4.5)	(30.5)	-	-	(35.0)
Stage 2	-	-	(110.1)	-	-	(110.1)
Stage 3	-	-	(623.3)	-	-	(623.3)
	<b>-</b>	<b>(4.5)</b>	<b>(763.9)</b>	<b>-</b>	<b>-</b>	<b>(768.4)</b>

Following the adoption of IFRS 9 – Financial Instruments, the Group has classified credit exposures in the following prescribed stages:-

- Stage 1: for financial instruments where there has not been a significant increase in credit risk since initial recognition and that are not credit-impaired on origination, the Group recognises an allowance based on 12-month expected credit losses.
- Stage 2: for financial instruments where there has been a significant increase in credit risk since initial recognition but they are not credit-impaired, the Group recognises an allowance for the lifetime expected credit losses.
- Stage 3: for credit-impaired financial instruments, the Group recognises the lifetime expected credit losses.

The analysis is presented prior to the application of credit risk mitigation techniques.

The Group's internal credit rating system is commented on in more detail in section 4.7 of this report.

**4. Credit risk – Pillar 3 disclosures** (continued)**4.4 Credit exposure** (continued)**e) Credit exposure by maturity**

The maturity profile of funded credit exposures based on contractual maturity dates was as follows:-

	<b>Placements, reverse repos &amp; other liquid assets</b>	<b>Securities</b>	<b>Loans and advances</b>	<b>Accrued interest-fees receivable</b>	<b>Total</b>
	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>
Within 3 months	11,240.6	149.5	4,056.0	221.8	15,667.9
4 months to 1 year	1,660.3	380.0	1,902.9	44.0	3,987.2
Years 2 to 5	-	1,156.6	2,816.8	-	3,973.4
Years 6 to 10	-	1,789.1	853.8	-	2,642.9
Years 11 to 20	-	271.0	84.3	-	355.3
Over 20 years and other	-	328.7	104.0	-	432.7
	<b>12,900.9</b>	<b>4,074.9</b>	<b>9,817.8</b>	<b>265.8</b>	<b>27,059.4</b>

An analysis of off-balance sheet exposure is set out in section 7 of this report.

Securities exposure over 20 years comprises equity investments and the securities non-specific provision.

**f) Equities held in the banking book**

Equity investments included in investment securities in the consolidated balance sheet are included in the equities standard portfolio in the Pillar 1 credit risk capital adequacy framework. Such equity investment securities principally comprise listed equities received in settlement of a past due loan, investments of a private equity nature, and investments in funds managed by specialist managers.

At 31<sup>st</sup> December 2018, equity investment securities held in the banking book amounted to US\$168.5 million, of which US\$123.6 million comprised listed equities received in settlement of a secured past due loan and US\$11.0 million comprised managed funds.

During the year ended 31<sup>st</sup> December 2018, US\$1.2 million of gains were realised on equity investments. At 31<sup>st</sup> December 2018, net unrealised losses on equity investment securities amounted to US\$33.4 million and are included as a deduction from tier 1 capital.

**g) Credit risk mitigation**

The credit exposure information presented in section 4 of this report represents gross exposures prior to the application of any credit risk mitigants. Collateral items and guarantees which can be used for credit risk mitigation under the capital adequacy framework are referred to as eligible collateral. Only certain types of collateral and some issuers of guarantees are eligible for preferential risk weights for regulatory capital adequacy purposes. Furthermore, the collateral management process and the terms in the collateral agreements have to fulfil the CBB's prescribed minimum requirements (such as procedures for the monitoring of market values, insurance and legal certainty) set out in their capital adequacy regulations.

The reduction of the capital requirement attributable to credit risk mitigation is calculated in different ways, depending on the type of credit risk mitigation, as follows:-

- Adjusted exposure amount: GIB uses the comprehensive method for financial collateral such as cash, bonds and shares. The exposure amount is adjusted with regard to the financial collateral. The size of the adjustment depends on the volatility of the collateral and the exposure. GIB uses volatility adjustments specified by the CBB, known as supervisory haircuts, to reduce the benefit of collateral and to increase the magnitude of the exposure.
- Substitution of counterparty: The substitution method is used for guarantees, whereby the rating of the counterparty is substituted with the rating of the guarantor. This means that the credit risk in respect of the counterparty is substituted by the credit risk of the guarantor and the capital requirement is thereby reduced. Hence, a fully guaranteed exposure will be assigned the same capital treatment as if the exposure was to the guarantor rather than to the counterparty.

**4. Credit risk – Pillar 3 disclosures** (continued)**4.4 Credit exposure** (continued)**g) Credit risk mitigation** (continued)**Description of the main types of credit risk mitigation**

GIB uses a variety of credit risk mitigation techniques in several different markets which contribute to risk diversification and credit protection. The different credit risk mitigation techniques such as collateral, guarantees, credit derivatives, netting agreements and covenants are used to reduce credit risk. All credit risk mitigation activities are not necessarily recognised for capital adequacy purposes as they are not defined as eligible under the CBB's Basel 3 capital adequacy framework, e.g. covenants and non-eligible tangible collateral such as unquoted equities. The recognised credit risk mitigation activities are undertaken with various counterparties to ensure no additional credit or market risk concentrations occur.

Exposures secured by eligible financial collateral, guarantees and credit derivatives, presented by standard portfolio were as follows:-

	Exposure before credit risk mitigation	Of which secured by:	
		Eligible collateral	Eligible guarantees or credit derivatives
	US\$ millions	US\$ millions	US\$ millions
Sovereigns	112.1	-	112.1
Banks	2,654.2	2,058.6	327.1
Corporates	603.4	144.7	-

**Guarantees and credit derivatives**

Only eligible providers of guarantees and credit derivatives may be recognised in the standardised approach for credit risk. Guarantees issued by corporate entities may only be taken into account if their rating corresponds to A- or higher. The guaranteed exposures receive the risk weight of the guarantor.

GIB uses credit derivatives as credit risk protection only to a limited extent as the credit portfolio is considered to be well diversified.

**Collateral and valuation principles**

The amount and type of collateral is dependent upon the assessment of the credit risk of the counterparty. The market/ fair value of the collateral is actively monitored on a regular basis and requests are made for additional collateral in accordance with the terms of the facility agreements. In general, lending is based on the customer's repayment capacity rather than the collateral value. However, collateral is considered the secondary alternative if the repayment capacity proves inadequate. Collateral is not usually held against securities or placements.

**Types of eligible collateral commonly accepted**

The Group holds collateral against loans and advances in the form of physical assets, cash deposits, securities and guarantees.

#### 4. Credit risk – Pillar 3 disclosures (continued)

##### 4.5 Impaired credit facilities and provisions for impairment

Individually impaired financial assets represent assets for which there is objective evidence that the Group will not collect all amounts due, including both principal and interest, in accordance with the contractual terms of the obligation. Objective evidence that a financial asset is impaired may include: a breach of contract, such as default or delinquency in interest or principal payments, the granting of a concession that, for economic or legal reasons relating to the borrower's financial difficulties, would not otherwise be considered, indications that it is probable that the borrower will enter bankruptcy or other financial re-organisation, the disappearance of an active market, or other observable data relating to a group of assets such as adverse changes in the payment status of borrowers or issuers in the group, or economic conditions that correlate with defaults in the group.

Provisions for impairment are determined based on the difference between the net carrying amount and the recoverable amount of a financial asset. The recoverable amount is measured as the present value of expected future cash flows, including amounts recoverable from guarantees and collateral.

Provisions for impairment are also measured and recognised on a collective basis in respect of expected credit losses and are classified as either stage 1 or stage 2, in accordance with IFRS 9.

The stage 1 and stage 2 provisions reflect the probability-weighted estimate of expected credit losses. The provisions comprise both quantitative and qualitative information and analysis, based on the Group's historical experience and taking into consideration both internal and external indicators and includes forward-looking information.

Provisions for impairment are recognised in the consolidated statement of income and are reflected in an allowance account against loans and advances, investment securities and placements.

##### a) Impaired loan facilities and related provisions for impairment

Impaired loan facilities and the related provisions for impairment were as follows:-

	<b>Gross exposure</b>	<b>Impairment provisions</b>	<b>Net exposure</b>
	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>
Corporates	627.0	611.2	15.8
Financial sector	22.2	12.1	10.1
	<b>649.2</b>	<b>623.3</b>	<b>25.9</b>

The impaired loan facilities were principally to counterparties in the GCC.

## 4. Credit risk – Pillar 3 disclosures (continued)

## 4.5 Impaired credit facilities and provisions for impairment (continued)

## b) Provisions for impairment – loans and advances

The movements in the provisions for the impairment of loans and advances were as follows:-

	Specific provisions	Collective provisions		Total
	Stage 3	Stage 1	Stage 2	
	US\$ millions	US\$ millions	US\$ millions	US\$ millions
<b>At 1<sup>st</sup> January</b>	261.0	46.3	106.3	<b>413.6</b>
Transfer to stage 1	-	0.5	(0.5)	-
Transfer to stage 2	-	(7.4)	7.4	-
Transfer to stage 3	25.9	-	(25.9)	-
Amounts utilised	(2.2)	-	-	<b>(2.2)</b>
Exchange rate movements	(0.6)	-	-	<b>(0.6)</b>
Net remeasurement of loss allowance	339.2	(8.9)	22.8	<b>353.1</b>
<b>At 31<sup>st</sup> December 2018</b>	<b>623.3</b>	<b>30.5</b>	<b>110.1</b>	<b>763.9</b>

## c) Impaired investment securities and related provisions for impairment

There were no impaired debt investment securities at 31<sup>st</sup> December 2018.

## d) Provisions for impairment – investment securities

The movements in the provisions for the impairment of investment securities were as follows:-

	Specific provisions	Collective provisions		Total
	Stage 3	Stage 1	Stage 2	
	US\$ millions	US\$ millions	US\$ millions	US\$ millions
<b>At 1<sup>st</sup> January and 31<sup>st</sup> December 2018</b>	-	4.5	-	<b>4.5</b>

At 31<sup>st</sup> December 2018, the provisions for the impairment of investment securities entirely comprised non-specific provisions for debt investment securities determined on a collective basis.

#### 4. Credit risk – Pillar 3 disclosures (continued)

##### 4.6 Past due facilities

In accordance with guidelines issued by the CBB, credit facilities are placed on non-accrual status and interest income suspended when either principal or interest is overdue by 90 days whereupon unpaid and accrued interest is reversed from income. Interest on non-accrual facilities is included in income only when received. Credit facilities classified as past due are assessed for impairment in accordance with the IFRS guidelines as set out in section 4.5 of this report. A specific provision is established only where there is objective evidence that a credit facility is impaired.

##### a) Loans

The gross and carrying amount of loans for which either principal or interest was over 90 days past due were as follows:-

	Gross US\$ millions	Carrying amount US\$ millions
Corporates	719.1	107.9
Financial sector	22.2	10.1
	<b>741.3</b>	<b>118.0</b>

The past due loan facilities were principally to counterparties in the GCC.

The overdue status of gross past due loans based on original contractual maturities were as follows:-

	Less than 1 year US\$ millions	Years 2 and 3 US\$ millions	Over 3 years US\$ millions	Total US\$ millions
Corporates	267.5	297.5	154.1	719.1
Financial sector	-	15.8	6.4	22.2
	<b>267.5</b>	<b>313.3</b>	<b>160.5</b>	<b>741.3</b>

##### b) Investment securities

There were no debt investment securities for which either principal or interest was over 90 days past due.

##### 4.7 Internal ratings

The Group monitors, manages and controls credit risk exposures based on an internal credit rating system that rates individual obligors based on a rating scale from 1 to 10, subject to positive (+) and negative (-) modifiers for rating grades 2 to 6. The internal credit rating is a measure of the credit-worthiness of a single obligor, based on an assessment of the credit risk relating to senior unsecured, medium-term, foreign currency credit exposure. The primary objectives of the internal credit rating system are the maintenance of a single uniform standard for credit quality measurement, and to serve as the primary basis for Board-approved risk parameters and delegated credit authority limits.

The internal credit rating system is used throughout the organisation and is inherent in all business decisions relating to the extension of credit. A rating is an estimate that exclusively reflects the quantification of the repayment capacity of the customer, i.e. the risk of customer default. The internal credit rating system also serves as a key input into the Group's Risk-Adjusted Return on Capital (RAROC) performance measurement system. Ratings reflect a medium-term time horizon, thereby rating through an economic cycle.

**4. Credit risk – Pillar 3 disclosures** (continued)**4.7 Internal ratings** (continued)

The internal ratings map directly to the rating grades used by the international credit rating agencies as illustrated below:-

<b>Internal rating grade</b>	<b>Internal classification</b>	<b>Fitch and Standard &amp; Poor's</b>	<b>Moody's</b>
<b>Investment grade</b>			
Rating grade 1	Standard	AAA	Aaa
Rating grade 2	Standard	AA	Aa
Rating grade 3	Standard	A	A
Rating grade 4	Standard	BBB	Baa
<b>Sub-investment grade</b>			
Rating grade 5	Standard	BB	Ba
Rating grade 6	Standard	B	B
Rating grade 7	Standard	CCC	Caa
<b>Classified</b>			
Rating grade 8	Substandard	CC	Ca
Rating grade 9	Doubtful	C	C
Rating grade 10	Loss	D	-

The rating mapping does not intend to reflect that there is a fixed relationship between GIB's internal rating grades and those of the external agencies as the rating approaches differ.



## 5. Market risk – Pillar 3 disclosures

### 5.1 Market risk

Market risk is the risk of loss due to adverse changes in interest rates, foreign exchange rates, commodity prices, equity prices and market conditions, such as liquidity. The principal market risks to which the Group is exposed are interest rate risk and foreign exchange risk associated with its trading, investment and asset and liability management activities. The portfolio effects of holding a diversified range of instruments across a variety of businesses and geographic areas contribute to a reduction in the potential negative impact on earnings from market risk factors.

The Group's trading and foreign exchange activities principally comprise trading in debt securities, foreign exchange and derivative financial instruments. Derivative financial instruments include futures, forwards, swaps and options in the interest rate and foreign exchange markets. The Group manages and controls the market risk within its trading portfolios through limit structures of both a VaR and non-VaR nature. Non-VaR based constraints relate, inter alia, to positions, volumes, concentrations, allowable losses and maturities.

### 5.2 VaR model

A key element in the Group's market risk management framework is the estimation of potential future losses that may arise from adverse market movements. Exposure to general market risk is calculated utilising a VaR model. The use of the internal model approach for the calculation of the capital requirement for general market risk has been approved by the CBB. The multiplication factor to be applied to the VaR calculated by the internal model has been set at the regulatory minimum of 3.0 by the CBB.

From April 2012, the CBB has required that the VaR used for regulatory capital adequacy purposes incorporate a stressed VaR measure. This measure is intended to replicate the VaR for the Group's market risk exposures during periods of stress. The stressed VaR is increased by the multiplication factor and then added to the actual VaR to determine the regulatory capital requirement for market risk.

A key objective of asset and liability management is the maximisation of net interest income through the proactive management of the asset and liability repricing profile based on anticipated movements in interest rates. VaR-based limits are utilised to manage the risk associated with fluctuations in interest earnings resulting from changes in interest rates. The asset and liability repricing profile of the various asset and liability categories is set out in section 8.1(c) of this report.

For internal risk management purposes, the Group measures losses that are anticipated to occur within a 95 per cent confidence level. Internally, the Group measures VaR utilising a one-month assumed holding period for both trading and banking book positions. For regulatory capital adequacy purposes, the figures are calculated using the regulatory VaR basis at a 99 per cent confidence level (2.33 standard deviations) and a ten-day holding period using one-year unweighted historical daily movements in market rates and prices. Correlations across broad risk categories are excluded for regulatory capital adequacy purposes.

The VaR for the Group's trading positions as calculated in accordance with the regulatory parameters set out above, was as follows:-

	<b>31.12.18</b>	<b>Average</b>	<b>High</b>	<b>Low</b>
	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>
Total VaR	3.5	2.4	3.7	1.8
Total undiversified stressed VaR	9.8	7.2	10.5	5.1

5. Market risk – Pillar 3 disclosure (continued)

5.2 VaR model (continued)

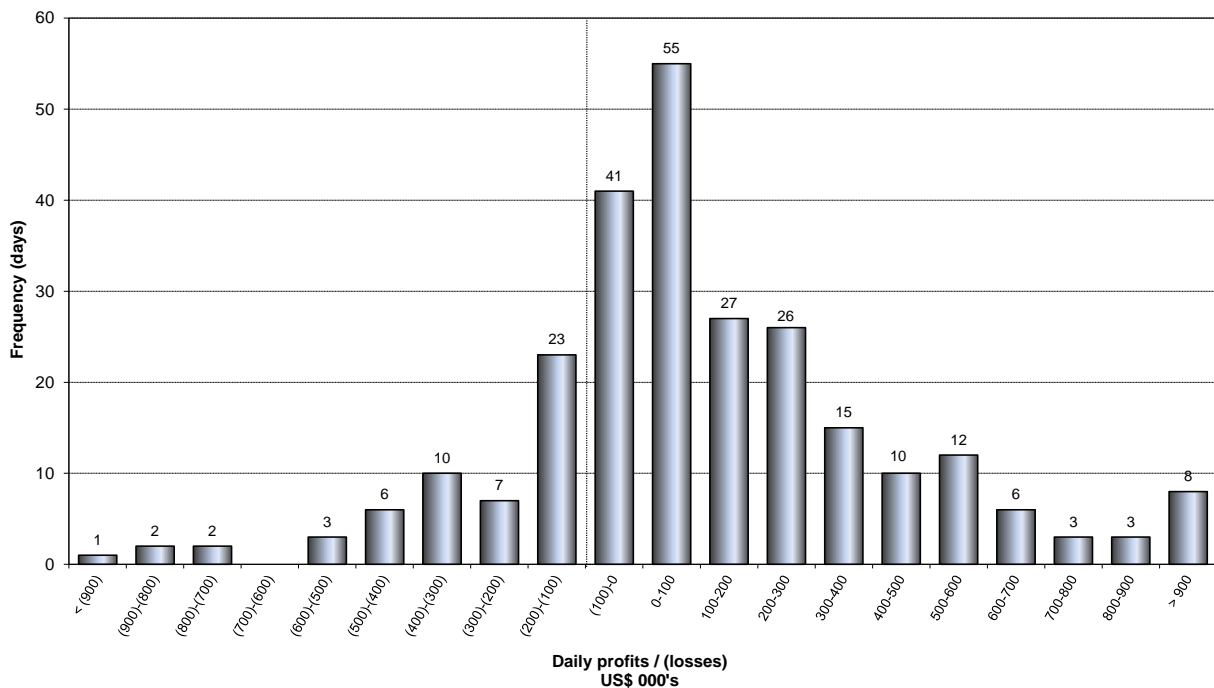
The graph below sets out the total VaR for all the Group’s trading activities at the close of each business day throughout the year ended 31<sup>st</sup> December 2018:-

Trading Value-at-Risk daily development



The daily trading profits and losses during the year ended 31<sup>st</sup> December 2018 are summarised as follows:-

Histogram of daily trading profits & losses



**5. Market risk – Pillar 3 disclosure** (continued)**5.2 VaR model** (continued)

The Group conducts daily VaR back testing both for regulatory compliance purposes and for the internal evaluation of VaR against actual trading profits and losses. During the year ended 31<sup>st</sup> December 2018, there were no instances of a daily trading loss exceeding the trading VaR at the close of business on the previous business day.

The five largest daily trading losses during the year ended 31<sup>st</sup> December 2018 compared to the 1-day VaR at the close of business on the previous business day were as follows:-

	<b>Daily trading losses</b>	<b>1-day VaR</b>
	<b>US\$ thousands</b>	<b>US\$ thousands</b>
11 <sup>th</sup> October	1,389	897
12 <sup>th</sup> October	879	1,108
5 <sup>th</sup> September	871	615
13 <sup>th</sup> August	750	609
14 <sup>th</sup> September	711	630

**5.3 Sensitivity analysis**

The sensitivity of the interest rate risk in the banking book to changes in interest rates is set out in section 8.1(c) of this report.

The Group's investment debt securities are measured at amortised cost. However, the Group nevertheless monitors the impact of changes in credit spreads on the fair value of the debt securities.

**6. Operational risk – Pillar 3 disclosures****6.1 Operational risk**

Whilst operational risk cannot be eliminated in its entirety, the Group endeavours to minimise it by ensuring that a strong control infrastructure is in place throughout the organisation. The various procedures and processes used to manage operational risk include effective staff training, appropriate controls to safeguard assets and records, regular reconciliation of accounts and transactions, close monitoring of risk limits, segregation of duties, and financial management and reporting. In addition, other control strategies, including business continuity planning and insurance, are in place to complement the procedures, as applicable.

As part of the Group's Operational Risk Management Framework (ORMF), comprehensive risk self-assessments are conducted, which identify the operational risks inherent in the Group's activities, processes and systems. The controls in place to mitigate these risks are also reviewed, and enhanced as necessary. A database of measurable operational risk events is maintained, together with a record of key risk indicators, which can provide an early warning of possible operational risk.

The Group has an independent operational risk function. As part of the Group's Operational Risk Management Framework (ORMF), comprehensive risk assessments are conducted, which identify operational risks inherent in the Group's activities, processes and systems. The controls in place to mitigate these risks are also reviewed, and enhanced if necessary.

The capital requirement for operational risk is calculated for regulatory purposes according to the standardised approach, in which the regulatory capital requirement is calculated based on a range of beta coefficients, ranging from 12 to 18 per cent, applied to the average gross income for the preceding three financial years for each of eight predefined business lines. Consequently, the operational risk capital requirement is updated only on an annual basis.

## 7. Off-balance sheet exposure and securitisations

Off-balance sheet exposures are divided into two exposure types in accordance with the calculation of credit risk RWAs in the CBB's Basel 3 capital adequacy framework:-

- Credit-related contingent items: Credit-related contingent items comprise guarantees, credit commitments and unutilised approved credit facilities
- Derivative and foreign exchange instruments: Derivative and foreign exchange instruments are contracts, the value of which is derived from one or more underlying financial instruments or indices, and include futures, forwards, swaps and options in the interest rate, foreign exchange, equity and credit markets

In addition to counterparty credit risk measured within the Basel 3 credit risk framework, derivatives also incorporate exposure to market risk and carry a potential market risk capital requirement, as commented on in more detail in section 5 of this report. A credit valuation adjustment (CVA) is applied to the relevant derivative exposure RWA's.

For the two off-balance exposure types, there are different possible values for the calculation base of the regulatory capital requirement, as commented on below:-

### 7.1 Credit-related contingent items

For credit-related contingent items, the notional principal amount is converted to an exposure at default (EAD) through the application of a credit conversion factor (CCF). The CCF factors range from 20 per cent to 100 per cent depending on the type of contingent item, and is intended to convert off-balance sheet notional amounts into equivalent on-balance sheet exposures.

Credit commitments and unutilised approved credit facilities represent commitments that have not been drawdown or utilised. The notional amount provides the calculation base to which a CCF is applied for calculating the EAD. The CCF ranges between 0 per cent and 100 per cent depending on the approach, product type and whether the unutilised amounts are unconditionally cancellable or irrevocable.

The table below summarises the notional principal amounts, RWAs and capital requirements for each credit-related contingent category:-

	<b>Notional principal amount</b>	<b>RWA</b>	<b>Capital requirement</b>
	<b>US\$ millions</b>	<b>US\$ millions</b>	<b>US\$ millions</b>
Direct credit substitutes	780.8	765.1	95.6
Transaction-related contingent items	1,959.7	772.4	96.6
Short-term self-liquidating trade-related contingent items	290.6	46.1	5.8
Commitments	1,505.3	691.5	86.4
	<b>4,536.4</b>	<b>2,275.1</b>	<b>284.4</b>

Commitments include undrawn loan commitments and underwriting commitments under note issuance and revolving facilities, and may be drawdown on demand.

The notional principal amounts reported above are stated gross before applying credit risk mitigants, such as cash collateral, guarantees and counter-indemnities. At 31<sup>st</sup> December 2018, the Group held cash collateral, guarantees, counter-indemnities or other high quality collateral in relation to credit-related contingent items amounting to US\$342.4 million.

### 7.2 Derivative and foreign exchange instruments

The Group utilises derivative and foreign exchange instruments to meet the needs of its customers, to generate trading revenues and as part of its asset and liability management activity to hedge its own exposure to market risk. Derivative and foreign exchange instruments are subject to the same types of credit and market risk as other financial instruments. The Group has appropriate and comprehensive Board-approved policies and procedures for the control of exposure to both credit and market risk from its derivative and foreign exchange activities.

In the case of derivative transactions, the notional principal typically does not change hands. It is simply a quantity which is used to calculate payments. While notional principal is a volume measure used in the derivative and foreign exchange markets, it is neither a measure of market nor credit risk. The Group's measure of credit exposure is the cost of replacing contracts at current market rates should the counterparty default prior to the settlement date. Credit risk amounts represent the gross unrealised gains on non-margined transactions before taking account of any collateral held or any master netting agreements in place.

**7. Off-balance sheet exposure and securitisations** (continued)**7.2 Derivative and foreign exchange instruments** (continued)

The Group participates in both exchange traded and over-the-counter (OTC) derivative markets. Exchange traded instruments are executed through a recognised exchange as standardised contracts and primarily comprise futures and options. OTC contracts are executed between two counterparties who negotiate specific agreement terms, including the underlying instrument, notional amount, maturity and, where appropriate, exercise price. In general, the terms and conditions of these transactions are tailored to the requirements of the Group's customers although conform to normal market practice. Industry standard documentation is used, most commonly in the form of a master agreement. The existence of a master netting agreement is intended to provide protection to the Group in the event of a counterparty default.

The Group's derivative and foreign exchange activities are predominantly short-term in nature. Transactions with maturities over one year principally represent either fully offset trading transactions or transactions that are designated, and qualify, as fair value or cash flow hedges.

The aggregate notional amounts for derivative and foreign exchange instruments at 31<sup>st</sup> December 2018 were as follows:-

	Trading US\$ millions	Hedging US\$ millions	Total US\$ millions
Foreign exchange contracts:-			
Unmatured spot, forward and futures contracts	14,025.6	-	14,025.6
Options purchased	67.6	-	67.6
Options written	67.6	-	67.6
	14,160.8	-	14,160.8
Interest rate contracts:-			
Interest rate swaps	5,570.3	13,618.9	19,189.2
Cross currency swaps	424.3	-	424.3
Options, caps and floors purchased	1,573.2	-	1,573.2
Options, caps and floors written	1,573.2	-	1,573.2
	9,141.0	13,618.9	22,759.9
Equity and commodity contracts:-			
Options and swaps purchased	72.8	-	72.8
Options and swaps written	72.8	-	72.8
	145.6	-	145.6
	<b>23,447.4</b>	<b>13,618.9</b>	<b>37,066.3</b>

**7.3 Counterparty credit risk**

Counterparty credit risk is the risk that a counterparty to a contract in the interest rate, foreign exchange, commodity, equity or credit markets defaults prior to the maturity of the contract. The counterparty credit risk for derivative and foreign exchange instruments is subject to credit limits on the same basis as other credit exposures. Counterparty credit risk arises in both the trading book and the banking book.

**a) Counterparty credit risk calculation**

For regulatory capital adequacy purposes, GIB uses the current exposure method to calculate the exposure for counterparty credit risk for derivative and foreign exchange instruments in accordance with the credit risk framework in the CBB's Basel 3 capital adequacy framework. A capital charge to cover the risk of mark-to-market losses on expected counterparty risk (CVA) is applied to over-the-counter derivatives. Credit exposure comprises the sum of current exposure (replacement cost), and potential future exposure. The potential future exposure is an estimate, which reflects possible changes in the market value of the individual contract during the remaining life of the contract, and is measured as the notional principal amount multiplied by a risk weight. The risk weight depends on the risk categorisation of the contract and the contract's remaining life. Netting of potential future exposures on contracts within the same legally enforceable netting agreement is done as a function of the gross potential future exposure.

**7. Off-balance sheet exposure and securitisations** (continued)**7.3 Counterparty credit risk** (continued)**a) Counterparty credit risk calculation** (continued)

The EAD, CVA, RWAs and capital requirements for the counterparty credit risk of derivative and foreign exchange instruments analysed by standard portfolio, is presented in the table below:-

	Exposure at Default (EAD)			CVA	RWA	Capital requirement
	Current exposure	Future exposure	Total exposure			
	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions
Banks	408.8	89.2	498.0	120.2	165.1	20.6
Corporates	209.8	70.8	280.6	20.2	228.6	28.6
Governments	4.9	2.8	7.7	0.1	0.4	0.1
	<b>623.5</b>	<b>162.8</b>	<b>786.3</b>	<b>140.5</b>	<b>394.1</b>	<b>49.3</b>

**b) Mitigation of counterparty credit risk exposure**

Risk mitigation techniques are widely used to reduce exposure to single counterparties. The most common risk mitigation technique for derivative and foreign exchange-related exposure is the use of master netting agreements, which allow the Group to net positive and negative replacement values of contracts under the agreement in the event of default of the counterparty.

The reduction of counterparty credit risk exposure for derivative and foreign exchange instruments through the use of risk mitigation techniques is demonstrated as follows:-

	Current exposure	Effect of netting agreements	Netted current exposure
	US\$ millions	US\$ millions	US\$ millions
Counterparty credit risk exposure	623.5	(278.4)	345.1

**7.4 Securitisations**

Securitisations are defined as structures where the cash flow from an underlying pool of exposures is used to secure at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures.

At 31<sup>st</sup> December 2018, the Group had no exposure to securitisation tranches.

The Group provides collateral management services to three collateralised debt obligations (CDOs) issued between 2002 and 2006. The CDOs are intended to extract relative value from a wide range of asset classes across a broad spectrum of credit ratings. The underlying collateral of the CDOs includes leveraged loans, residential and commercial real estate, consumer finance, lending to small and medium sized enterprises, and other receivables. Each CDO holds up to 30 individual investments.

At 31<sup>st</sup> December 2018 the underlying investments in the CDOs for which the Group acted as collateral manager amounted to US\$0.2 billion. At 31<sup>st</sup> December 2018, GIB did not hold any exposure to CDOs managed by the Group.

## 8. Pillar 2 risks

GIB manages and measures other risk types that are not included under Pillar 1 in the CBB's Basel 3 framework through Internal Capital Adequacy Assessment Process (ICAAP). For this purpose, the Group has adopted a "Pillar 1 plus" approach. Pillar 1 capital calculations (for credit, market and operational risk) constitute the minimum capital required by the Group's home regulator, the Central Bank of Bahrain (CBB). In addition to the capital assessment for Pillar 1 risks, the Pillar 2 capital assessment considers risks that are not covered adequately under Pillar 1 risks to ensure sufficient capital coverage for all the underlying risks of the Group's business. This includes an analysis of the Group's liquidity risk, concentration risk, interest rate risk in the banking book (IRRBB), pension obligation risk, reputation risk, information technology risk and macroeconomic risk.

This section describes GIB's Pillar 2 risks that are not addressed in Pillar 1 of the CBB's Basel 3 framework.

### 8.1 Other risk types

#### a) Liquidity risk

The Group has established approved limits which restrict the volume of liabilities maturing in the short-term. An independent risk management function monitors the future cash flow maturity profile against approved limits on a daily basis. The cash flows are monitored against limits applying to both daily and cumulative cash flows occurring over a 30 day period. The liquidity limits ensure that the net cash outflows over a 30 day period do not exceed the eligible stock of available liquid resources. The cash flow analysis is also monitored on a weekly basis by the Assets and Liabilities Committee (ALCO).

Customer deposits form a significant part of the Group's funding. The Group places considerable importance on maintaining the stability of both its customer and interbank deposits. The stability of deposits depends on maintaining confidence in the Group's financial strength and financial transparency.

The funding base is enhanced through term financing, amounting to US\$3,338.0 million at 31<sup>st</sup> December 2018. Access to available but uncommitted short-term funding from the Group's established GCC and international relationships provides additional comfort. In addition to the stable funding base, the Group maintains a stock of liquid and marketable securities that can be readily sold or repoed.

At 31<sup>st</sup> December 2018, 72.6 per cent of total assets were contracted to mature within one year. With regard to deposits, retention records demonstrate that there is considerable divergence between their contractual and effective maturities.

US\$13,574.0 million or 65.6 per cent of the Group's deposits at 31<sup>st</sup> December 2018 were from GCC countries. Historical experience has shown that GIB's deposits from counterparties in the GCC region are more stable than deposits derived from the international interbank market. At 31<sup>st</sup> December 2018, placements and other liquid assets with counterparties in non-GCC countries were greater than the deposits received, demonstrating that the Group is a net lender of funds in the international interbank market.

#### b) Concentration risk

Concentration risk is the credit risk stemming from not having a well diversified credit portfolio, i.e. the risk inherent in doing business with large customers or being overexposed in particular industries or geographic regions. Concentration risk is captured in GIB's Pillar 2 capital framework through the use of a credit risk portfolio model which considers single-name concentrations and sector concentrations in the credit portfolio

Under the CBB's single obligor regulations, banks incorporated in Bahrain are required to obtain the CBB's approval for any planned exposure to a single counterparty, or group of connected counterparties, exceeding 15 per cent of the regulatory capital base. At 31<sup>st</sup> December 2018, the following single obligor exposure exceeded 15 per cent of the Group's regulatory capital base (i.e. exceeding US\$351.2 million).

	On-balance sheet exposure US\$ millions	Off-balance sheet exposure US\$ millions	Total exposure US\$ millions
Counterparty A	725.7	-	725.7
Counterparty B	131.9	290.0	421.9
Counterparty C	354.4	-	354.4

**8. Internal capital including other risk types** (continued)**8.1 Other risk types** (continued)**c) Interest rate risk in the banking book**

Structural interest rate risk arises in the Group's core balance sheet as a result of mismatches in the repricing of interest rate sensitive financial assets and liabilities. The associated interest rate risk is managed within VaR limits and through the use of models to evaluate the sensitivity of earnings to movements in interest rates.

The repricing profile of the Group's assets and liabilities, including the trading book, are set out in the table below:-

	Within 3 months	Months 4 to 6	Months 7 to 12	Over 1 year	Non-interest bearing items	Total
	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions	US\$ millions
Cash and other liquid assets	5,001.4	96.6	-	-	16.2	5,114.2
Securities purchased under agreements to resell	595.9	320.0	100.0	-	-	1,015.9
Placements	5,627.1	589.3	554.4	-	-	6,770.8
Trading securities	13.0	-	-	-	164.7	177.7
Investment securities:						
- Fixed rate	75.0	50.1	143.1	573.0	-	841.2
- Floating rate	2,861.3	30.7	-	-	(4.5)	2,887.5
- Equities	-	-	-	-	168.5	168.5
Loans and advances	8,762.5	1,177.4	18.5	-	(140.6)	9,817.8
Other assets	-	-	-	-	752.5	752.5
<b>Total assets</b>	<b>22,936.2</b>	<b>2,264.1</b>	<b>816.0</b>	<b>573.0</b>	<b>956.8</b>	<b>27,546.1</b>
Deposits	18,159.7	2,013.3	401.8	119.8	-	20,694.6
Securities sold under agreements to repurchase	735.4	-	-	-	-	735.4
Other liabilities	-	-	-	-	581.9	581.9
Term financing	3,338.0	-	-	-	-	3,338.0
Equity	-	-	-	-	2,196.2	2,196.2
<b>Total liabilities &amp; equity</b>	<b>22,233.1</b>	<b>2,013.3</b>	<b>401.8</b>	<b>119.8</b>	<b>2,778.1</b>	<b>27,546.1</b>
<b>Interest rate sensitivity gap</b>	<b>703.1</b>	<b>250.8</b>	<b>414.2</b>	<b>453.2</b>	<b>(1,821.3)</b>	<b>-</b>
<b>Cumulative interest rate sensitivity gap</b>	<b>703.1</b>	<b>953.9</b>	<b>1,368.1</b>	<b>1,821.3</b>	<b>-</b>	<b>-</b>

The repricing profile is based on the remaining period to the next interest repricing date. Derivative financial instruments that have been used for asset and liability management purposes to hedge exposure to interest rate risk are incorporated in the repricing profiles of the related hedged assets and liabilities. The non-specific investment security and loan provisions are classified in non-interest bearing items.

The substantial majority of assets and liabilities reprice within one year.

Interest rate asset exposure beyond one year amounted to US\$573.0 million or 2.1 per cent of total assets. This exposure principally represented the investment of the net free capital funds in fixed rate government securities. At 31<sup>st</sup> December 2018, the modified duration of these fixed rate government securities was 3.25. Modified duration represents the approximate percentage change in the portfolio value resulting from a 100 basis point change in yield. More precisely in dollar terms, the price value of a basis point of the fixed rate securities was US\$258,292.



**8. Internal capital including other risk types** (continued)**8.1 Other risk types** (continued)**c) Interest rate risk in the banking book** (continued)

Based on the repricing profile at 31<sup>st</sup> December 2018, and assuming that the financial assets and liabilities were to remain until maturity or settlement with no action taken by the Group to alter the interest rate risk exposure, an immediate and sustained one per cent (100 basis points) increase in interest rates across all maturities would result in an increase in net income before tax for the following year and the Group's equity of approximately US\$18.5 million and US\$17.6 million respectively. The impact on the Group's equity represents the cumulative effect of the increase in interest rates over the entire duration of the mismatches in the repricing profile of the interest rate sensitive financial assets and liabilities.

**i) Pension obligation risk**

Pension obligation risk is the risk that there may be a shortfall with respect to pension benefits due to employees/former employees within the defined benefit scheme of the Group's wholly owned subsidiary, GIBUK. The scheme was closed to new members during 2002. As a result the Group is exposed to the risk that it will need to make further unexpected future contributions to the scheme. The risk can arise from a number of factors including:

- Increased life expectancy increasing the value of future liabilities;
- Falling interest rates increasing the value of the future liabilities;
- Falling equity prices reducing the value of scheme assets;
- Increased salaries for staff still in employment.

As part of GIB's ICAAP framework, an adverse scenario is applied to the scheme's assets and liabilities on a level of severity expected no more than once in every 200 years, i.e. a 99.5 per cent one year confidence level.

**j) Reputational risk**

Reputational risk is the risk of losses resulting from adverse perceptions about the Group, its brand and franchise by its various stakeholders that is caused by a variety of internal and external factors. Preventive measures, including controls and processes have been deployed to manage reputational risk. These include a robust and comprehensive governance structure, which is based on set of well-defined policies and procedures.

The Group has established a reputational risk reporting framework, providing relevant stakeholders with periodic overview on key reputational risks, loss event incidents, status of key risk indicators, and required management action. Training sessions on reputational risks are organised for employees to create awareness among them on reputational risk, encourage them to identify and understand emerging internal and external reputational risks, and guide them on the process to take action in order manage or mitigate their impact.

The Group's operating model has been designed to cater transparency and appropriate disclosures. The Corporate Communications function of the Group has the responsibility to ensure effective communications internally with the employees and externally with the media, shareholders, customers and authorities. It is charged with the responsibility of enhancing the image and reputation of the GIB brand through the various activities such as advertising, public relations, sponsorships, and donations.

**k) Information Technology (IT) risk**

Technology continues to play a critical role in the Bank's operations and in the fulfilment of its strategic objectives. The Group has in place a sound IT and Information Security governance framework that aligns its IT strategy and Information & Cyber Security Strategy with its overall business objectives.

The Group has an IT Audit team with the mandate to examine and evaluate the Group's IT infrastructure, policies and procedures and compliance to those policies. The audits determine whether IT controls protect corporate assets, ensure data integrity and are aligned with the business overall objectives. This culminates in an audit plan which is reviewed and approved by the Board Audit committee. Based on the audit findings, exception reports and recommendations are prepared and sent to the relevant unit for prompt response and/or implementation. Follow up meetings are also made to ensure that issues identified are properly resolved and the recommendations made are being implemented.

In addition, the Group has newly created two teams, Information Security Governance and Information Security Compliance, who have the mandate to perform detailed Information & Cyber Security Risk Assessments and Information Security Compliance reviews.

**8. Internal capital including other risk types** (continued)**8.2 Other risk types** (continued)**l) Macroeconomic risk**

Macroeconomic risk relates to the risk of increasing stress levels in the principal economies in which the Group operates. These risks can be triggered by political uncertainties, social unrests, high/low commodity prices, excessive leverage in the financial system or an uncompetitive business environment. Due to the systemic nature of these macroeconomic triggers there will be an adverse impact on the Group's profitability and capital positions and the extent of loss would depend on the severity of the stress event.

Macroeconomic risk is captured in GIB's ICAAP framework through the use of stressed macroeconomic forecast to gauge the impact of potential losses that the Group could incur.

**m) Legal risk**

In the ordinary course of its business, as a participant in the financial services industry, the Group may pursue litigation claims against third parties and may also have litigation claims and/or regulatory proceedings filed against it. The Bank has an in-house legal department comprising of qualified legal professionals. The department has put in place adequate policies & procedures and uses assistance of professional legal firms on need basis, to ensure effective and efficient management of legal risk.

## 9. Capital adequacy ratios and other issues

### 9.1 Capital adequacy ratios

The Group's policy is to maintain a strong capital base so as to preserve investor, creditor and market confidence and to sustain the future development of the business. The impact of the level of capital on shareholders' return is also recognised as well as the need to maintain a balance between the higher returns that might be possible with greater gearing and the advantages and security afforded by a sound capital position. The Group manages its capital structure and makes adjustments to the structure taking account of changes in economic conditions and strategic business plans. The capital structure may be adjusted through the dividend payout or the issue of new shares.

The capital adequacy ratios of GIB's principal subsidiary, GIBUK, and the Group were as follows:-

	GIBUK	Group
Total RWAs (US\$ millions)	1,288.5	16,108.3
Capital base (US\$ millions)	365.5	2,341.4
Tier 1 capital (US\$ millions)	365.5	2,196.2
<b>Tier 1 ratio (per cent)</b>	<b>28.4</b>	<b>13.6</b>
<b>Total ratio (per cent)</b>	<b>28.4</b>	<b>14.5</b>

GIB aims to maintain a minimum tier 1 ratio in excess of 10.5 per cent and a total capital adequacy ratio in excess of 14.0 per cent.

#### Strategies and methods for maintaining a strong capital adequacy ratio

GIB prepares multi-year strategic projections on a rolling annual basis which include an evaluation of short-term capital requirements and a forecast of longer-term capital resources.

The evaluation of the strategic planning projections have historically given rise to capital injections. The capital planning process triggered the raising of additional tier 2 capital through a US\$400 million subordinated debt issue in 2005 to enhance the total regulatory capital adequacy ratio, and a US\$500 million capital increase in March 2007 to provide additional tier 1 capital to support planned medium-term asset growth. A further US\$1.0 billion capital increase took place in December 2007 to enhance capital resources and compensate for the impact of likely provisions relating to exposures impacted by the global credit crisis.

### 9.2 ICAAP considerations

Pillar 2 in the Basel 3 framework covers two main processes: the ICAAP and the supervisory review and evaluation process. The ICAAP involves an evaluation of the identification, measurement, management and control of material risks in order to assess the adequacy of internal capital resources and to determine an internal capital requirement reflecting the risk appetite of the institution. The purpose of the supervisory review and evaluation process is to ensure that institutions have adequate capital to support the risks to which they are exposed and to encourage institutions to develop and apply enhanced risk management techniques in the monitoring and measurement of risk.

GIB's regulatory capital base exceeded the CBB's minimum requirement of 12.5 per cent throughout the year ended 31<sup>st</sup> December 2018. Based on the results of capital adequacy stress testing and capital forecasting, GIB considers that the buffers held for regulatory capital adequacy purposes are sufficient and that GIB's internal minimum capital targets of 10.5 per cent for tier 1 capital and 14.0 per cent for total capital are adequate given its current risk profile and capital position. The Group's regulatory capital adequacy ratios set out in section 9.1 of this report significantly exceeded the minimum capital targets and are high by international comparison.

**10. Glossary of abbreviations**

ALCO	Assets and Liabilities Committee
AMA	Advanced Measurement Approach
Basel Committee	Basel Committee for Banking Supervision
CBB	Central Bank of Bahrain
CCF	Credit Conversion Factor
CDO	Collateralised Debt Obligation
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CCO	Chief Credit Officer
CRO	Chief Risk Officer
CVA	Credit Valuation Adjustment
EAD	Exposure at Default
FCA	Financial Conduct Authority (of the United Kingdom)
FVTOCI	Fair Value through Other Comprehensive Income
GCC	Gulf Cooperation Council
GIB	Gulf International Bank B.S.C.
GIBUK	Gulf International Bank (UK) Limited
Group	Gulf International Bank B.S.C. and subsidiaries
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IRRBB	Interest Rate Risk in the Banking Book
LGD	Loss Given Default
MENA	Middle East and North Africa
ORMF	Operational Risk Management Framework
OTC	Over-The-Counter
PD	Probability of Default
PRA	Prudential Regulation Authority (of the United Kingdom)
PSE	Public Sector Entity
RAROC	Risk-adjusted Return on Capital
RWA	Risk-weighted Assets
VaR	Value-at-Risk