GCR GLOBAL CREDIT RATING CO.
Local Expertise • Global Presence

Rating Methodology

Financial Institutions

Global Master Criteria for Rating Banks and Other Financial Institutions

Updated March 2017

Related Methodologies

Global Criteria for Rating Finance and Leasing Companies, updated March 2017

Global Criteria for Rating Microfinance Institutions, updated March 2017

Introduction

Incorporating both quantitative and qualitative factors, GCR's credit ratings reflect an evaluation of a financial institution's current financial position, as well as how the financial position may change in the future. In its quantitative analysis, GCR focuses on fundamentals, analysing an institution's historical and current financial performance. This is used as a foundation for developing expectations regarding an institution's future financial performance and risk profile, under both normal and stressed operating scenarios. Emphasis is also placed on assessing the operating environment (including economic and industry risks), strategy, competitive position, diversification, depth of management, support framework, as well as risk management policies and procedures.

While GCR's methodology for rating banks and other financial institutions focuses largely on rating a financial institution's ability to honour its general obligations (ie, deposits, borrowings and other liabilities) in a timely manner, it is also relevant to specific debt issues. GCR's methodology for rating banks and other financial institutions is relevant in the analysis of various types of entities, including, but not limited to, commercial and merchant banks, building societies, microfinance institutions, finance and leasing companies, and other similar financial institutions. Moreover, this methodology is intended to be applied globally, and covers institutions with solely domestic or regional operations in a single market, as well as those with a broad franchise operating in multiple countries.

This criteria report (the "Criteria") is an update to the version published in March 2016. There are no significant amendments to the Criteria. However, for the reader's ease of reference: Factor 3 was renamed 'Competitive position' (formerly 'Market position') to emphasise consideration of relative and absolute measures of competitive strength; b) Factor 4 (Asset quality) was amended to include the possibility that loan collateralisation be considered in the assessment, and the 'Specific provision coverage' ratio replaced the 'Net non-performing loan' ratio; Factor 5 (Funding and liquidity) was amended to include 'Net advances/deposits' and 'Net advances/total funding' and exclude 'Cash and liquid assets/deposits' to reflect those ratios considered to be of most analytical relevance. The update of this Criteria will not have an impact on any existing ratings. Going forward, this Criteria will be applied to all ratings of banks and other financial institutions.

GLOBAL CREDIT RATING CO.

Rating methodology

The following guidelines provide a general overview of the quantitative and qualitative factors that GCR considers when analysing a financial institution. For the sake of simplicity, this Criteria refers primarily to banks, although this term may, in most cases, be used interchangeably with building societies, microfinance institutions, finance and leasing companies and other financial institutions.

GCR's opinions are based on a clear understanding of the fundamentals of the rated organisation and the industry in which it operates. These guidelines are intentionally broad in scope, recognising that the process of assigning credit ratings is a dynamic one, and that each specific entity possesses unique characteristics and assumes varying levels of risk.

GCR's analytical process focuses on the following nine fundamental factors:

1. Economic risk
2. Industry risk (including regulatory considerations)
3. Competitive position
4. Asset quality
5. Funding and liquidity
6. Capital adequacy
7. Management quality (including systems capability)
8. Risk management
9. Financial performance and ratio analysis

GCR also considers the likelihood of support from potential providers, typically shareholders, or (in the case of regulated banks), relevant national government authorities.

Qualitative and quantitative analytical aspects
The abovementioned factors require both qualitative and quantitative analysis. Qualitative analysis provides the context within which the outcome of the quantitative analysis should be viewed.

Quantitative analysis involves scrutinising a bank's financial position and performance over a five-year period (being GCR's typical review period).

Before a bank's results are analysed, consideration is given to their composition and accounting quality. As the rating process explicitly excludes any type of audit, GCR's analysis relies on audit, legal and tax opinions (where relevant) from reputable, registered entities, with the directors' accounting policy choices, and the external auditor's opinion on a bank's financial statements, providing context to their appropriateness as a basis for informing the ratings.

Accounting quality is assessed by taking cognisance of the accounting standards used in a particular jurisdiction and the reputability of the audit firm. GCR also examines how financial statements are impacted by the implementation of, or changes to, accounting policies (in particular: consolidation principles; changes in group structure; reserving policies; off-balance sheet items; and treatment of goodwill and other intangible assets).

Grouping analytical areas within the rating report
In its rating reports, GCR groups the abovementioned focus areas into topics, in a manner which the analyst believes best highlights commonalities and/or linkages between different rating considerations.

The topics typically discussed in GCR's reports prepared under this Criteria, and the related groupings of analytical focus areas, are set out below:

- *Organisational profile* – typically includes a business overview, a discussion of strategy and operations, an assessment of *management quality*, and a consideration of ownership, corporate governance, control and financial reporting structures.

- *Operating environment* – generally discusses *economic risk*, *industry risk*, regulatory considerations and the entity's *competitive position*.

- *Financial profile* – includes commentary on the *likelihood of support*, *funding and liquidity* considerations, and *capital adequacy*.

- *Operational profile* – typically includes a consideration of the risk profile of the asset base, as well as an assessment of *asset quality*, and the *risk management* framework/structures in place to contain risks within acceptable levels.

- *Financial performance and prospects* – usually discusses *financial performance* (through ratio analysis), as well as assessing potential performance beyond the most recent reporting period, with reference to budgets and/or management accounts and the prevailing operating environment.

While a high degree of consistency between reports (with regard to structure and extent of analysis) is sought, the organisational, operational and financial/ risk specifics of entities may, from time to time, require their related rating reports to deviate from the typical topics/analytical groupings.

A discussion of these analytical factors follows.

1. Economic risk

Clearly understanding the fundamentals of the environment in which a bank operates is of foremost importance. This is especially the case in emerging markets, where the political and economic environments tend to be more volatile. GCR focuses on the strengths and weaknesses of the relevant country's economic and political situation, always bearing in mind the effects this could have on the banking industry, and accordingly, a rated institution.

Some of the most important aspects in examining the direct effects of the economy on the performance of the banking sector are the size of the economy, its composition, and its growth prospects. The latter is especially important when considering the rate of monetary and credit growth in relation to economic growth, as well as the trends in savings and investment in the economy. GCR also places emphasis on understanding the potential structural problems facing the economy. These factors determine interest rates and demand for credit, and they significantly influence a bank's operating environment and accordingly its strategy, growth, liquidity and profitability.

Apart from this, GCR analyses the fundamentals of various other industrial sectors within the economy, concentrating on the structure and financial strength of the public and private sectors. In this process, the sectors that are most likely to be affected by an adverse movement in the economy are identified, as high exposure to such sectors could result in deterioration of a bank's asset quality.

2. Industry risk

In understanding the risks inherent in the banking industry, GCR places great emphasis on analysing the basic structure of the banking system (including its relative size, regulatory environment, number of participants and transparency).

Firstly, the percentage of funds in the economy that flow through the banking system, as well as the relative depth of capital markets, are considered. Cognisance is then taken of the dynamics of competition within the industry, including both bank and non-bank institutions. GCR examines the barriers to entry, consolidation trends, number of banks and bank branches relative to population, foreign participation, level of price sensitivity, and market sophistication.

Significant emphasis is placed on the regulatory environment in which a bank operates. In this respect, the quality of the banking supervision framework is closely examined. Apart from an in-depth understanding of the legislation governing the industry, GCR considers the instruments used to monitor the banking system, which include the form and quality of reporting of banks to the regulatory authorities, as well as the frequency and quality of on-site examination and off-site surveillance conducted by the banking supervision authorities. The actions and measures that regulatory authorities are empowered to use in avoiding potential failures of banks and other problems within the system are identified. To this end, GCR considers the level of solvency and liquidity support to banks from the relevant authorities.

3. Competitive position

Once the operating environment of a rated institution has been analysed, GCR determines the competitive position of the bank based on its market share, number of industry players, and core competences. Advantages and vulnerabilities arising from its competitive position are examined, with emphasis on diversification, strategy, management and systems.

As the success of a bank is reliant on its strategy and, to an extent, its ability to differentiate itself from other players in the industry, the bank's chosen target market and its position/ability to service this segment is scrutinised. To this end, diversity of products offered, and the bank's customer base, are examined. These are important in establishing diversification of the bank's revenue streams, and potential vulnerability with regards to dependency on a single product, market segment, geographical area and/or product type.

4. Asset quality

Asset quality reflects the quantum of existing and potential risks associated with the loan and investment portfolios, other real estate owned, and other relevant assets, as well as off-balance sheet transactions. The ability of management to identify, measure, monitor and control credit risk is also reflected here. The evaluation of asset quality considers the adequacy of the impairment provision and weighs the exposure to counterparty, issuer, or borrower default under actual or implied contractual agreements. All other risks that may affect the value or marketability of an institution's assets, including, but not limited to, operating, market, reputation, strategic, or compliance risks, are also considered.

GCR's review of asset quality of a financial institution is based upon, but not limited to, an assessment of a wide range of evaluation factors. GCR forms an opinion on the adequacy of an institution's underwriting standards, the soundness of its credit practices, and the appropriateness of its risk identification practices. Particular attention is placed upon identifying the level, distribution, severity and trend of any non-performing assets, along with assessing the adequacy of the impairment reserve and other provisions. Off-balance sheet risks are carefully reviewed. An analysis of the bank's loan and investment book is carried out to identify the level of risk arising from any concentration, and the level of diversification present. The accumulation of excess counterparty risk in its trading activities is also considered. Finally, GCR assesses the adequacy of the bank's policies, procedures and practices in managing its assets and maintaining efficient controls and management information systems.

4.1 Asset composition

GCR examines the composition of the bank's assets, including relative proportions in different asset classes exposed to credit risk (eg, liquid assets, investment securities, loans and advances, etc). It is important to note that in examining the bank's asset composition, certain off-balance sheet exposures (eg, contingent liabilities) are brought onto the balance sheet, whilst certain intangible items (eg, goodwill) are subtracted from assets and, correspondingly, capital. Whilst cognisance is taken of the annual growth and year on year change in asset composition, particular scrutiny is placed on the bank's loan book.

4.2 Concentrations

GCR focuses on identifying concentrations in the loan book by the type of loan, client, collateral, industry sector, geography and maturity. High exposures to individual clients (measured as a percentage of the bank's capital base) are also reviewed. Portfolios of loans or receivables with high growth or significant concentrations require closer scrutiny, and these features may have a negative influence on ratings.

Some financial institutions offer only a single line of business (such as consumer or mortgage finance). Although the loan portfolios of such institutions are usually granular (ie, well-diversified from a single-borrower perspective) concentration risk remains in the form of undiversified exposure to particular economic/industry variables (such as consumer health and confidence, or residential property prices). In such cases, an assessment of concentration risk is more explicitly linked with economic and industry risk assessments.

4.3 Non-performing loans and provisioning

Any improvement or deterioration in asset quality can significantly influence a bank's profitability and its capitalisation. In assessing asset quality, GCR focuses on the breakdown of all credit exposures in arrears, as well as large individual non-performing loans ("NPLs"). Here changes in levels relative to past performance, as well as industry trends, are monitored. One of the most important aspects of a bank's asset quality is the level of provisions (impairments under IFRS) raised against NPLs, including both general and specific provisions (collective and individual impairments under IFRS), as well as interest suspended. Although cognisance is taken of the level and nature of the collateral held against NPLs, this is not taken into account in the calculation of GCR's asset quality ratios. There are three main ratios measuring the level of asset quality, namely:

- Gross NPL ratio (gross NPLs excluding suspended interest, as a percentage of gross advances excluding suspended interest), which calculates the general level of asset quality, trends in which indicate deterioration/ improvement in asset quality;
- Specific provision coverage ratio (specific provisions as a percentage of gross advances), which assesses the level of specific provisions raised against the total loan book; and
- Net NPLs/Capital (NPLs after suspended interest and total provisions as a percentage of total regulatory capital), which measures the ability of the capital base to absorb potential bad debts.

Charge-offs (write-offs), the sale of NPLs, and recoveries are also important components of the asset quality analysis, and can distort trends in asset quality ratios. As such, these aspects require specific assessment. For instance, a bank demonstrating an aggressive write-off policy could display a reasonable NPL position, when asset quality (relative to loans granted) is in fact worse than that of its peers. Recoveries are an important indicator of the effectiveness of the risk management department, and of the timing of write-offs.

GCR acknowledges that financial institutions with high-volume, granular loan portfolios, particularly when assets are of short duration, require a more dynamic assessment of NPL formation, arrears roll-rates and net write-off and provisioning metrics. This is because such lending (and related provisioning) is highly systems driven, and underwriting criteria may require intra-reporting period adjustment in response to changing market/economic conditions.

It is important to note that GCR typically does not consider collateral in calculating the key asset quality indicators, as the significance placed on security differs from country to country. Clear property rights and a predictable and efficient judicial process are typically required for banks to extract value from the collateral they hold. The judicial process in many

African countries is considered poor, and realising collateral in such environments can be a cumbersome process that could take many years. However, in countries where clear property rights and efficient judicial processes are in place, and a bank has a demonstrated track record of realising collateral timeously, GCR will consider the level of collateral held in determining overall asset quality.

5. Funding and liquidity

In evaluating the adequacy of a financial institution's liquidity position, consideration is given to the current level and prospective sources of liquidity compared to funding needs, as well as to the adequacy of funding and liquidity management practices relative to the institution's size, complexity, and risk profile. In general, funding and liquidity management practices should ensure that an institution is able to maintain a level of liquidity sufficient to meet its financial obligations in a timely manner. Practices should reflect the ability of an institution to manage unplanned changes in funding sources, as well as react to changes in market conditions that affect the ability to quickly liquidate assets with minimal loss. In addition, funding management practices should ensure that liquidity is not maintained at a high cost, or through undue reliance on funding sources that may not be available in times of financial stress or adverse changes in market conditions.

One of the main factors determining a bank's ability to continue meeting its obligations in a timely manner is the stability of its funding base. Whilst the strength of a bank's funding base determines its resilience in difficult conditions, it also provides financial flexibility for growth. GCR examines the bank's funding strategy in establishing the main sources of funding (eg, retail and wholesale markets) and its presence and competitiveness in sourcing funding from these markets. Assessing a bank's funding capability requires an understanding of the local deposit market and the organisational history. The nature of a bank's deposit base influences the relative stability and cost of funding.

In determining the strength of a bank's funding base, GCR focuses on the diversity of funding sources, examining concentrations in the deposit book by client, industry sector, geography and size. In addition, it is important to understand the flow of funds within the institution and, to this end, deposit flows and maturities are examined. Potential maturity mismatches between a bank's assets and liabilities are identified, and the subsequent liquidity gap (relative to capital) is assessed.

Cognisance is taken of management's philosophy and planning with regard to liquidity. GCR takes cognisance of an institution's ability to access debt in the capital markets, as well as the possession of assets that can be liquidated without significant impairment to their value. In this respect, liquidity of assets is closely examined, and includes an assessment of the ability to liquidate short-term deposits and marketable securities, ability to sell or securitise loans, and any liquidity facilities with the central bank or other liquidity providers. The liquidity ratios focused on include:

- Total cash and liquid assets as a percentage of total assets;
- Total cash and liquid assets as a percentage of total short term liabilities;
- Net advances as a percentage of customer deposits; and
- Net advances as a percentage of total funding (excl. equity).

6. Capital adequacy

A financial institution is expected to maintain capital commensurate with the nature and extent of the risks to the institution. GCR begins its review of capital adequacy by looking at local regulatory requirements and understanding the basis for capital measurement.

The focus is on tangible capital, as well as a bank's ability to grow its capital base through the retention of its earnings. In this process, the composition and quality of the bank's capital are examined, including levels of common equity, preferred stock, convertible and subordinated debt, minority interests, asset revaluation and unrealised capital gains, as well as loan loss reserves/provisions. In order to take a more conservative stance in assessing the level of the bank's capital adequacy, certain intangibles and goodwill are excluded from the capital base in GCR's analysis.

6.1 Amount and quality

The types and quantum of risks inherent in an institution's activities will determine the extent to which it may be necessary to maintain capital at levels above the minimum capital requirements ("MCR"), as dictated by local regulations or the Basel Committee. In emerging economies, where local conditions are likely to be volatile, equity size is of critical importance, as banks may at times be compelled to take the losses on NPLs all at once, rather than being able to spread such losses over several years, by way of provisions. As such, capital serves as the buffer against a sudden deterioration in asset quality or acute dips in earnings in a particular year.

In an emerging market context, the measure of risk weighted capital adequacy needs to be considered with a degree of caution. Loans accorded to the public sector are typically assigned lower weights, depending on the degree of government control of the entity, and whether the loan benefits from a government guarantee. For banks with large public sector exposures (sometimes a function of public ownership), risk adjusted assets may not be reflective of the risk profile of the bank's assets, and the MCR may fall short of acceptable capital adequacy standards. The proportion of risk weighted assets to total assets of emerging market public sector banks may be considerably lower than industry averages. For banks where the risk weighted capital adequacy ratio ("RWCAR") may overstate the level of capital cover, risk weighted assets will be adjusted upwards. Alternatively total capital as a percentage of total assets may supplement or replace RWCAR in the analysis. For those banks with lower levels of public sector finance, the RWCAR is a more reliable indicator of capital strength.

Many banks in these markets also benefit from Tier 2 (secondary) capital to meet MCR. Mostly, this takes the form of a surplus on the revaluation of fixed assets, but with increasing regularity, banks are utilising hybrid capital instruments in capital management. Not all capital is created equal and GCR carefully reviews the terms and conditions of any debt-like equity that may appear on the balance sheet, and other Tier 2 capital which is eligible in calculating statutory capital ratios.

6.2 Problem assets and reserves

The nature, trend and volume of problem assets (including off-balance sheet activity) and the adequacy of impairment provisions are vital factors in determining capital adequacy. In emerging markets, the quantum of unprovided loan losses is often the most significant factor contributing to losses, and consequent capital erosion. If the banks are not given any credit for the value of collateral held in view of the delays in legal redress, then the equity of these banks could be seriously impaired.

6.3 Off-balance sheet exposures

The risk exposure from off-balance sheet activities varies between institutions, but must be considered in the capital evaluation. The volume and nature of business transacted in a fiduciary capacity can be significant in the assessment of capital needs. Contingencies where the bank is acting in a fiduciary or non-traditional banking capacity can expose the bank to surcharges, and therefore operations, controls, and potential exposures must be carefully appraised. Similarly, lawsuits involving the bank as defendant or any other contingent liability, such as off-balance sheet lending, may indicate a need for a greater level of capital protection.

6.4 Quality and strength of earnings

A bank's current and historical earnings record is one of the key elements to consider when assessing capital adequacy. Good earnings performance enables a bank to fund asset growth and remain competitive in the marketplace, while at the same time retaining sufficient equity to maintain a strong capital position. An institution's dividend policy is also of importance. Excessive dividends can negate even exceptional earnings performance and result in a weakened capital position, while an excessively low dividend return lowers the attractiveness of the stock to investors, which could compromise investor participation should the bank need to raise additional equity. Generally, earnings should first be applied to the elimination of losses and the establishment of necessary reserves and prudent capital levels. Thereafter, dividends can be disbursed in reasonable amounts.

6.5 Prospects for growth

The continued adequacy of capital as reflected in the growth in equity in relation to the growth in assets is of critical significance to ratings as a reflection of risk. A bank's ability to grow its capital base through the retention of its earnings is paramount. In general, a solid capital base provides a basis for growth, sourcing funding alternatives and creating loan loss provisions. Management's ability to adequately plan for and manage growth is important with respect to assessing capital adequacy. A review of past performance and future prospects is a starting point for this assessment. GCR compares asset growth to capital formation during recent periods, and also reviews current budgets and strategic plans to evaluate growth expectations. Through this analysis, management's ability to both forecast and manage growth is assessed.

6.6 Need for and additional access to capital

Management's ability to address emerging needs for additional capital depends on many factors. A few of these factors include earnings performance and growth prospects, the financial planning capacity of the directorate, and the strength of the parent company, if any. A combination of ratio analysis and judgement is utilised to address this evaluation factor.

Whilst GCR focuses on the absolute quantum of a bank's capital base in order to assess its ability to weather extraordinary and unexpected losses that could arise, a bank's access to external sources of capital and long-term funding is also taken into consideration. Subordinated shareholder loans, where evidence of the subordinated nature exists, are typically included under shareholders' equity by GCR.

In general, a solid capital base provides a basis for growth, sourcing funding alternatives and creating loan loss provisions. A bank's capital ratios are to a great extent determined by the regulatory requirements and GCR compares a bank's capital adequacy position with domestic capital requirements. Qualifying primary and secondary capital is compared with the perceived level of risk in a rated institution's business. Here, the RWCAR is considered to be amongst the most important parameters of a bank's capital adequacy. In addition to the RWCAR (adjusted, as appropriate), GCR focuses on a number of other ratios, including:

- Internal rate of capital generation;
- Dividend payout ratio (and conversely earnings retention ratio);
- Total capital as a percentage of total assets;
- Total capital as a percentage of total advances; and
- The ratios of Tier 1 and Tier 2 (primary and secondary) capital to risk-weighted assets.

7. Management quality

One of the most important aspects of the rating process is the level of confidence GCR develops in the capability and continued performance of management, and the Board of Directors ("the Board"). GCR's assessment of management includes an evaluation of the quality and level of oversight and support of all of an institution's activities. In this process, GCR focuses on the ability of the Board and management, in their respective roles, to plan for and respond to risks that may arise from changing business conditions or the initiation of new activities or products. GCR examines the corporate structure and various divisions and subdivisions within the organisation, determining the level of complexity and depth of the organisation's management and operational systems, and whether the accuracy, timeliness and effectiveness of these management information and risk monitoring systems are appropriate for the institution's size, complexity and risk profile. The adequacy of audits and internal controls to promote effective operations and reliable financial and regulatory reporting, safeguard assets, and ensure compliance with laws, regulations and internal policies, is also assessed.

The experience and depth of management, including its track record, ability to manage through stressful periods, ability to manage new business lines, and the presence of clear and established management succession plans, is also evaluated. One of the focal areas in the analysis of the bank's performance is an evaluation of the quality of the strategic and financial planning. For this purpose, GCR uses a comparison of the bank's financial results with management's plans and budgets.

Another of the focus areas that GCR evaluates is the level of sophistication and quality of a bank's information technology systems. Here, emphasis is placed on storing and retrieval of data, both in individual branches and in the entire network. As it affects both the quality of operations and services delivered, GCR examines the type of network, as well as the communication systems in place. A bank's level of technological flexibility, integration and sophistication relative to its peers may affect the bank's market position and prospects. Furthermore, risk management procedures enhanced by high quality information systems provide for better monitoring and lower risk.

8. Risk management

The ability of management to identify, measure, monitor and control the risks in its operations carries significant weight when assigning a rating. The adequacies of, and conformance with, appropriate internal policies and controls addressing the operations and risks of significant activities through effective risk management systems and procedures, is carefully evaluated. It is recognised, however, that appropriate management practices vary considerably between financial institutions, depending on their size, complexity and risk profile. For less complex institutions engaged solely in traditional banking activities and whose directors and senior managers, in their respective roles, are actively involved in the oversight and management of day-to-day operations, relatively basic management systems and controls may be adequate. At more complex institutions, on the other hand, detailed and formal management systems and controls are needed to address their broader range of financial activities and to provide senior managers and directors, in their respective roles, with the information they need to monitor and direct day-to-day activities. All institutions are expected to properly manage their risks. For less complex institutions in some emerging markets with less sophisticated risk taking activities, the lack of detailed or highly formalised management systems and controls does not necessarily result in a low rating.

It is important that GCR gains an in-depth understanding of an institution's risk management policies and procedures. The risk management structures (including the structure and authority of various risk committees and subcommittees) and policies with regard to credit and market risk, as well as asset and liability management, are particularly closely scrutinised.

8.1 Credit risk

GCR examines a bank's underwriting criteria, the credit approval process, levels of credit approval authority (including the delegation of such authority within the organisation) and collateral valuation. The level of sophistication and stringency of a bank's monitoring of credit exposures, once a facility has been approved and credit extended, is also very important. The monitoring of credit exposures determines a bank's ability to identify potential problems and proactively manage its asset quality. Here, GCR focuses on the credit review function, internal credit assessment system and the role of independent oversight functions. With regard to problem assets, a bank's policy concerning classification of advances in arrears and the level of bad debt provisions (specific, including suspended interest and general provisions), as well as the manner in which problem credits are handled, are considered. Recovery procedures and collateral foreclosure policies are also reviewed.

8.2 Market risk and asset/liability management

Market risk reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution's earnings or economic capital. When evaluating this factor, consideration is given to: management's ability to identify, measure, monitor and control market risk; an institution's size; the nature and complexity of its activities; and the adequacy of its capital and earnings in relation to its level of market risk exposure. For many institutions, the primary source of market risk arises from non-trading positions and their sensitivity to changes in interest rates; for others, trading activities and foreign operations are a major source of market risk.

The level of liquidity, interest rate and other market risk is to a great extent determined by a bank's asset/liability management policies and acceptable risk guidelines. In examining these, the structure and authority of a bank's asset/liability committee ("ALCO") is considered. GCR examines the policies of the ALCO, the various limits ALCO sets with respect to relevant risks, and the impact of its decisions on a bank's daily risk management.

The balance between the bank's interest rate sensitive assets and liabilities is analysed using traditional gap measures. Finally, the institution's use of derivative instruments and other off-balance sheet instruments are reviewed, in order to understand the nature of these exposures, and in the case of hedges, the risks being managed and the effectiveness of methodologies employed.

9. Financial performance and ratio analysis

A financial institution's rating reflects not only the quantum and trend of earnings, but also factors that may affect the sustainability or quality of earnings. The quantum, as well as the quality of earnings can be affected by excessive or inadequately managed credit risk that may result in loan losses and require additional provisions, or by high levels of market risk that may unduly expose an institution's earnings to volatility in interest rates. The quality of earnings may also be diminished by undue reliance on extraordinary gains, nonrecurring events or favourable tax effects. Future earnings may be adversely affected by an inability to forecast or control funding and operating expenses, and the exposure to other risks which are improperly controlled.

The analysis of an institution's earnings is based upon, but not limited to, an assessment of the following evaluation factors:

- The level of earnings, including trends and stability;
- The ability to provide for adequate capital through retained earnings;
- The quality and sources of earnings;
- The level of expenses in relation to operations;
- The adequacy of provisions to maintain acceptable levels of loan loss reserves; and
- The exposure of earnings to market risks such as interest rate, foreign exchange and other price risks.

One of the key factors in assessing the long-term viability of any organisation is profitability. The first step is to examine the split between interest and non-interest income and a bank's relative dependency on certain types of income. Here, GCR analyses how successful a bank has been in optimising the risk/return trade-offs in each of its key businesses. Every significant item on the income statement is examined in detail, determining year on year movements in various types of income and expenses. In measuring a bank's relative profitability, some of the most important ratios considered are:

- Net interest margin (net interest income as a percentage of total interest earning assets), measuring the interest earned relative to the asset base;
- Non-interest income as a percentage of total operating income;

- Cost ratio (total operating expenses as a percentage of total operating income), measuring a bank's cost efficiency;
- Bad debt charge as a percentage of total operating income; and
- Return on average equity and return on average assets, assessing the level of overall profitability.

For certain types of financial institutions, in particular single-product businesses, or those with high-volume, granular portfolios, additional measures of relative profitability may include portfolio yield and cost (operational, financial and credit loss) coverage considerations, as well as "per client" profitability measures. GCR determines the appropriateness of profitability measures on a case by case basis, with reference to the specific nature of a financial institution's business.

The quality of a bank's profitability and efficiency ratios to a large extent determine its long-term prospects. In addition to this, based on the comparison between historical financial performance and the original budgets, GCR assesses the accuracy of the new budgets in determining future prospects.

Likelihood of support

Financial institutions often have access to extraordinary support from shareholders (institutional support) and/or relevant national government authorities (sovereign support). This typically takes the form of financial support. While the potential for institutional support applies to all financial institutions, sovereign support is usually limited to regulated banks/other deposit-taking institutions, and is typically undertaken (on a contingent basis) only when a potential bank failure represents a significant systemic risk, and with the ultimate aim of maintaining financial market stability.

Accordingly, the likelihood of support (which encompasses both willingness and ability to support) from either shareholders or government authorities is an important consideration in determining a bank's credit rating.

When assessing the *likelihood of support from shareholders* (which is explicitly taken into account in the rating process, often using a notching approach), GCR considers the following factors to determine the ability and willingness of shareholders to extend support:

- Shareholders' financial strength/credit ratings;
- The presence or absence of a controlling shareholder;
- Parent/group regulation that might impede the flow of support (in particular where parents /shareholders are foreign domiciled); and
- The relative size and importance of a banking subsidiary relative to the consolidated group.

When analysing the *likelihood of support from government authorities* (which implicitly forms part of the assessment of, for example, industry risk and market position), GCR considers the following factors:

- The existence of a "lender of last resort" – typically the central bank – and accessibility of the discount window;
- The existence of clear legislation detailing troubled bank resolution;
- The track record of banking sector support;
- A bank's eligibility for support, and the regulatory construct of the bank being analysed;
- The systemic importance of the bank;
- The ownership structure of the bank (whether government, local or foreign-owned); and
- The liability structure of the bank (domestic /foreign, wholesale/retail).

While the aforegoing discussion of financial support highlights capital support, and mainly contemplates a single bank in financial difficulty, it should be noted that sovereign support could take other forms, including liquidity support and relaxation of regulatory norms, and may also be provided to several banks at once, in the event of market shocks.

Conclusion

While thorough quantitative analysis is important, the qualitative characteristics of GCR's analysis cannot be overemphasised. It is critically important to look "beyond the numbers" and to evaluate the intangible strengths and weaknesses of an entity. At the core of GCR's analysis is the understanding of the strategic characteristics of an organisation and the quality of management. Our emphasis is on determining how these strategic aspects will affect an organisation's flexibility and capacity to withstand adverse market circumstances.

Annexure 1: Issuer versus Issue Ratings

Credit ratings issued by GCR in respect of banks and other financial institutions, are typically an expression of an Issuer's ability to service all of its debt and other obligations. This is an assessment of the entirety of the Issuer's asset base, cash flows and operations relative to all of its obligations. Most significantly, this relates to the interest bearing obligations of an Issuer, which are generally underpinned by a legal obligation to make repayments, and can most easily lead to a default of the Issuer. However, a complete credit assessment requires that the Issuer's ability to meet all liabilities, including the ongoing ability to meet its operating expenses and trade creditors *inter alia,* be considered.

Different liabilities or obligations of an Issuer can represent different levels of credit risk for reasons that include the size/quantum of the obligation, timing of the related payment, collateral, and other structural enhancements or legal characteristics. As a result, GCR also accords Issue ratings to specific debt Issues/Instruments and assesses these in terms of their unique credit risk characteristics relative to that of the Issuer as a whole. To the extent that the particular Issue has stronger recovery prospects than the Issuer as a whole (due to enhancements, which may take various forms), the Issue rating may be notched upwards from that accorded to the Issuer. Conversely, where such an Issue reports weaker recovery prospects than the Issuer as a whole, the Issue rating may be notched downwards from the rating accorded to the Issuer. An issue may also be notched downwards in the case of subordination, either legal or structural.

In reality, given the complex nature of a corporate entity and its operations, it is usually not possible or practical to assess different probabilities of default across Issues as compared to that of an Issuer as whole (such assessment falls under the purview of structured finance, and typically entails the full securitisation of assets and liabilities). However, many corporate debt Issues are usually accompanied by structural enhancements such as collateral pledged or a guarantee. As these features can improve the expected recovery to a debt funder in the case of a default on the Issue, and can readily be quantified, such structural enhancements are typically utilised to improve the credit risk profile of a specific Issue by a corporate. Such Issue ratings are examined in conjunction with the Issuer or corporate ratings accorded and are assessed in terms of GCR's *Global Structurally Enhanced Corporate Bonds Rating Criteria.*

Annexure 2: Explanation of National Scale and International Scale Ratings

GCR’s local currency National Scale ratings are designed to enable appropriate differentiation of credit quality within a specific country. Particularly in developing countries, where the sovereign ratings tend to be below investment grade, utilising the International Scale has the consequence of compressing ratings within a limited number of rating bands, thus providing limited differentiation among credits.

In according National Scale ratings, sovereign risk factors are neutralised as it is assumed that all corporates (including banks and other financial institutions) within a given country or jurisdiction will be impacted equally. This allows for ratings to be tiered against an assumed lowest risk rating of ‘AAA’ within each country or jurisdiction. This lowest risk will normally, although not always, be assigned to the financial commitments issued or guaranteed by the sovereign state. Certain markets may, however, be characterised by inherent limitations that impose a ceiling on the ratings that can be accorded to entities that operate in these markets. National Scale corporate ratings are intended to be comparable only in a single country or jurisdiction (denoted by a special modifier).

On the other hand, GCR’s International Scale ratings are tiered against a global pool of corporates. Thus, the highest rating that can be achieved will be limited by the credit quality of the country in which the corporate is domiciled (or conducts the majority of its business). Exceptions can arise where the corporate’s rating may pierce the sovereign rating; for example where the entity has significant assets domiciled or revenue sourced offshore, or there are guarantees from foreign entities in place.

Rating corporates on an International Scale introduces additional factors related to sovereign risk, including political risks, the robustness of the legal system and transfer and convertibility risk. While such risks are generally considered when according all corporate ratings, this is done on a more micro level with regard to the specific factors affecting the company or industry under review. For International Scale ratings, a greater macro approach is followed, and the risk factors of the sovereign as a whole are measured against other sovereigns or business jurisdictions.

Political risks are more acute in countries where the democracy is young or even limited. Nevertheless, the principles of good governance and the ability of the government to deliver on development goals are constant across all jurisdictions. Closely related to political risk is societal stability. To the extent there is social instability, the business environment is likely to be negatively impacted, and accordingly the rating of entities in the jurisdiction constrained. To the extent that such factors improve, due to solid economic growth or the successful delivery of development plans, ratings would be positively impacted.

Political stability also adds greatly to the strength of the legal system. History has also shown that changes in government can have a destabilising impact on policies and regulations. Well defined and defensible property rights are critical for a strong business environment; while the absence of such rights or weak enforceability would significantly constrain the International Scale ratings of all entities in the country due to the much higher risk. Even where a sound legal system is in place, GCR is cognisant of the fact that in many developing countries, historical case law regarding financial transactions may be lacking. This would introduce increased uncertainty into the enforceability of rights detailed in more complex financial products.

Transfer and convertibility risk relates to the ability of corporates in a country to convert earnings between local and foreign currencies and to transfer funds abroad in the normal course of business. Countries where such risks are high tend to be those where currency controls are in place and approval from the relevant authorities is necessary for cross border transactions to occur. Challenges may also occur in small economies, were the currency market does not have sufficient scale to timeously convert large amounts of currency at the prevailing conversion rate. Transfer and convertibility are of greater concern where a corporate generates the majority of its revenue in the local currency but has foreign currency denominated debt. If sufficient funds cannot be converted and transferred cross-border, a default on obligations may occur, even when the entity has sufficient financial resources.

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GLOSSARY OF TERMS/ACRONYMS USED IN THIS DOCUMENT AS PER GCR'S FINANCIAL INSTITUTIONS GLOSSARY

Arrears	An overdue debt, liability or obligation. An account is said to be 'in arrears' if one or more payments have been missed in transactions where regular payments are contractually required.
Asset	A resource with economic value that a company owns or controls with the expectation that it will provide future benefit.
Asset Quality	Refers primarily to the credit quality of a bank's earning assets, the bulk of which comprises its loan portfolio, but will also include its investment portfolio as well as off balance sheet items. Quality in this context means the degree to which the loans that the bank has extended are performing (ie, being paid back in accordance with their terms) and the likelihood that they will continue to perform.
Bad Debt	An amount owed by a debtor that is unlikely to be paid due, for example, to a company going into liquidation. There are various technical definitions of what constitutes a bad debt, depending on accounting conventions, regulatory treatment and the individual entity's own provisioning and write-off policies.
Basel	Basel Committee on Banking Supervision housed at the Bank for International Settlements.
Bond	A long term debt instrument issued by either: a company, institution or the government to raise funds.
Budget	Financial plan that serves as an estimate of future cost, revenues or both.
Capital	The sum of money that is invested to generate proceeds.
Capital Adequacy	A measure of the adequacy of an entity's capital resources in relation to its current liabilities and also in relation to the risks associated with its assets. An appropriate level of capital adequacy ensures that the entity has sufficient capital to support its activities and that its net worth is sufficient to absorb adverse changes in the value of its assets without becoming insolvent.
Capital Base	The issued capital of a company, plus reserves and retained profits.
Cash	Funds that can be readily spent or used to meet current obligations.
Cash Flow	The inflow/outflow of cash and equivalents. Such flows arise from operating, investing and financing activities.
Collateral	Asset provided to a creditor as security for a loan.
Contingent Liabilities	Liabilities not recorded in an entity's financial reports, but which might become due.
Corporate Governance	Refers to the mechanisms, processes and relations by which corporations are controlled and directed, and is used to ensure the effectiveness, accountability and transparency of an entity to its stakeholders.
Cost Ratio	The ratio of operating expenses to operating income. Used to measures a bank's efficiency.
Credit Rating	An opinion regarding the creditworthiness of an entity, a security or financial instrument, or an issuer of securities or financial instruments, using an established and defined ranking system of rating categories.
Credit Risk	The possibility that a bond issuer or any other borrowers (including debtors/creditors) will default and fail to pay the principal and/or interest when due.
Customer Deposit	Cash received in exchange for a service, including safekeeping, savings, investment, etc. Customer deposits are a liability in a bank's books.
Debt	An obligation to repay a sum of money. Funds passed from a creditor to a debtor in exchange for interest and a commitment to repay the principal in full on a specified date or over a specified period.
Default	Failure to meet the payment obligation of either interest or principal on a debt or bond. Technically, a borrower does not default, the initiative comes from the lender who declares that the borrower is in default.
Diversification	Spreading risk by constructing a portfolio that contains different investments, whose returns are relatively uncorrelated. The term also refers to companies which move into markets or products that bear little relation to ones they already operate in.
Dividend	The portion of a company's after-tax earnings that is distributed to shareholders.
Economic Capital	The capital that the group holds and allocates internally as a result of its own assessment of risk. It differs from regulatory capital, which is determined by regulators. It represents the amount of economic losses the group could withstand and still remain solvent with a target level of confidence (solvency standard or default probability) over a one-year time frame.
Equity	Equity (or shareholders' funds) is the holding or stake that shareholders have in a company. Equity capital is raised by the issue of new shares or by retaining profit.
Exchange Rate	The value of one country's currency expressed in terms of another.
Exposure	Exposure is the amount of risk the holder of an asset or security is faced with as a consequence of holding the security or asset. For a company, its exposure may relate to a particular product class or customer grouping. Exposure may also arise from an overreliance on one source of funding.
Facility	The grant of availability of money at some future date in return for a fee.
Financial Institution	An entity that focuses on dealing with financial transactions, such as investments, loans and deposits.
Fixed Assets	Assets of a company that will be used or held for longer than a year. They include tangible assets, such as land and equipment, stake in subsidiaries and other investments, as well as intangible assets such as goodwill, information technology or a company's logo and brand.
Forecast	A calculation or estimate of future financial events.
Goodwill	Arises upon the sale/acquisition of a business and is defined as an established entity's reputation, which may be regarded as a quantifiable asset and calculated as the price paid for a company above the net value of its assets. Negative goodwill refers to a situation when the price paid for a company is lower than its assets' value.
Guarantee	An undertaking in writing by one person (the guarantor) given to another, usually a bank (the creditor) to be answerable for the debt of a third person (the debtor) to the creditor, upon default of the debtor.
Impairment	Reduction in the value of an asset because the asset is no longer expected to generate the same benefits, as determined by the company through periodic assessments.
Income Statement	A summary of all the expenditure and income of a company over a set period.

Industry Risk	The risk that defaults will arise in an industry because of factors specifically affecting that industry.
Intangible Assets	The non-physical assets of a company such as trademarks, patents, copyright, information systems and goodwill.
Interest	Scheduled payments made to a creditor in return for the use of borrowed money. The size of the payments will be determined by the interest rate, the amount borrowed or principal and the duration of the loan.
Interest Rate	The charge or the return on an asset or debt expressed as a percentage of the price or size of the asset or debt. It is usually expressed on an annual basis.
International Scale Rating LC	International local currency (International LC) ratings measure the likelihood of repayment in the currency of the jurisdiction in which the issuer is domiciled. Therefore, the rating does not take into account the possibility that it will not be able to convert local currency into foreign currency or make transfers between sovereign jurisdictions.
Investment Grade	Credit ratings equal to or higher than 'BBB-'.
Liabilities	All financial claims, debts or potential losses incurred by an individual or an organisation.
Liquid Assets	Assets, generally of a short term, that can be converted into cash.
Liquidity	The speed at which assets can be converted to cash. It can also refer to the ability of a company to service its debt obligations due to the presence of liquid assets such as cash and equivalents. Market liquidity refers to the ease with which a security can be bought/sold quickly and in large volumes without substantially affecting market price.
Long-Term	Not current; ordinarily more than one year.
Long-Term Rating	Reflects an issuer's ability to meet its financial obligations over the following three to five year period, including interest payments and debt redemptions. This encompasses an evaluation of the organisation's current financial position, as well as how the position may change in the future with regard to meeting longer term financial obligations.
Margin	The rate taken by the lender over the cost of funds, which effectively represents the entity's profit and remuneration for taking the risk of the loan; also known as spread.
Maturity	The length of time between the issue of a bond or other security and the date on which it becomes payable in full.
National Scale Rating	Provides a relative measure of creditworthiness for rated entities only within the country concerned. Under this rating scale, a 'AAA' long term national scale rating will typically be assigned to the lowest relative risk within that country, which in most cases will be the sovereign state.
Net Interest Margin	Net interest income divided by average interest earning assets. Measures a bank's margin after paying funding sources and how successful a bank's interest-related operations are.
Off Balance Sheet	Off balance sheet items are assets or liabilities that are not shown on a company's balance sheet. They are usually referred to in the notes to a company's accounts.
Performing Loan	A loan is said to be performing if the borrower is paying the interest on it on a timely basis.
Political Risk	The risk associated with investing and operating in a country where political changes may have a negative impact on earnings or returns.
Portfolio	A collection of investments held by an individual investor or financial institution. They may include stocks, bonds, futures contracts, options, real estate investments or any item that the holder believes will retain its value.
Provision	The amount set aside or deducted from operating income to cover expected or identified loan losses.
Receivables	Any outstanding debts, current or not, due to be paid to a company in cash.
Regulatory Capital	The total of primary, secondary and tertiary capital.
Retained Earnings	Earnings not paid out as dividends by a company. Retained earnings are typically reinvested back into the business and are an important component of shareholders' equity.
Revaluation	Formal upward or downward adjustment to assets such as property or plant and equipment.
Risk	The chance of future uncertainty (i.e. deviation from expected earnings or an expected outcome) that will have an impact on objectives.
Risk Management	Process of identifying and monitoring business risks in a manner that offers a risk/return relationship that is acceptable to an entity's operating philosophy.
Secondary Capital	Secondary capital is mainly made up of subordinated debt, portfolio impairment and 50% of any revaluation reserves and other specified regulatory deductions.
Securities	Various instruments used in the capital market to raise funds.
Securitisation	A process of repackaging portfolios of cash-flow producing financial instruments into securities for sale to third parties.
Security	An asset deposited or pledged as a guarantee of the fulfilment of an undertaking or the repayment of a loan, to be forfeited in case of default.
Shareholder	An individual, entity or financial institution that holds shares or stock in an organisation or company.
Short-Term	Current; ordinarily less than one year.
Short-Term Rating	An opinion of an issuer's ability to meet all financial obligations over the upcoming 12 month period, including interest payments and debt redemptions.
Sovereign Risk	The risk of default by the government of a country on its obligations.
Subordinated Debt	Debt that in the event of a default is repaid only after senior obligations have been repaid.
Systemic Risk	Risk associated with the general health or structure of the financial system which would have serious adverse effects on economic conditions or financial stability.
Term Deposit	A savings account held for a fixed term. Also called a time deposit. Generally, there are penalties for early withdrawal.
Yield	Percentage return on an investment or security, usually calculated at an annual rate.

For a detailed glossary of terms please click here