
Rating Methodology

Corporate and Public Sector Debt

Global Criteria for Rating Water Utilities

February 2018

Related methodologies

Global Master Criteria for Rating Public Entities, updated February 2018

Global Master Criteria for Rating Corporate Entities, updated February 2018

Introduction

GCR's credit ratings for Water Utilities are a measure of a utility's relative ability to honour its financial obligations. The utility's ability to honour payments is assessed over both the short term and the long term, with separate short-term and long-term ratings accorded.

- Short-term credit ratings are an opinion of an Issuer's ability to meet all financial obligations over the upcoming 12 month period, including interest payments and debt redemptions.
- Long-term credit ratings reflect an Issuer's ability to meet its financial obligations over a period greater than 12 months, 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.

A strong linkage exists between short and long-term credit ratings. However, as the rating process is dynamic, this linkage may be broken under certain circumstances, at the discretion of the GCR Rating Panel.

The Criteria report is an update to the version published in February 2017. There are no significant changes and the implementation of this Criteria will not have an impact on any existing ratings. Going forward, this Criteria will be applied to all ratings of Water Utilities.

Rating methodology

The criteria outlined in this document are intended to illustrate the rating guidelines that GCR follows when according a rating to a Water Utility. Water Utilities (and utility companies in general) tend to exhibit characteristics of both private and public sector institutions. On the one hand, Water Utilities are usually partially or wholly owned by the National Government of a particular country, or fall under some regional jurisdiction. Even where the entity may have been privatised, the provision of water and the pricing thereof tends to be highly regulated. On the other hand, Water Utilities tend to operate as corporatised legal entities, having a Board of Directors and management structure similar to that of private sector entities. Accordingly, the rating approach taken by GCR combines elements from both *GCR's Criteria for Rating Public Entities* and *GCR's Criteria for Rating Corporate Entities*. Readers are advised to read the two related methodologies in conjunction with this criteria for a more comprehensive discussion of GCR's rating philosophy. The methodologies are available on GCR's website, www.globalratings.net.

GCR's rating approach encompasses analytical techniques that assess quantitative and qualitative factors. The ratings reflect an evaluation of the organisation's current financial position, as well as how the financial position may change in the future. Ultimately, the goal of any credit rating analysis is to assess if, and to what extent, future cash flows cover interest and principal payments (as well as ongoing operating expenses and liabilities), and the relative certainty associated with this coverage. GCR examines the ability of the organisation to meet its obligations under reasonable and stressed scenarios.

GCR's analytical process for Water Utilities focuses on the following key areas:

1. Economic and operating environment, with particular emphasis on the state of the water delivery infrastructure, and factors that may impact on the supply and demand for water and sanitation;
2. Legal and institutional framework, including management and administrative structures;
3. Operating performance of the entity;
4. Financial performance and ratio analysis;
5. Funding profile;
6. Future prospects/Strategic direction.

1. Economic and operating environment

Water Utilities are unique in that the provision of water and sanitation services is critical for the

wellbeing of the population they service. Yet such services require a substantial fixed infrastructure, which needs to be funded from the tariffs charged to consumers. Where the required tariffs may be unaffordable to the general public, income needs to be compensated by government subsidies or grants. Accordingly, the economic analysis focuses on the extent to which funding can be made available from the different sources. An evaluation of the overall economic environment of a country or region is thus necessary to determine the ability of the National Government to financially support the utility. Indicators such as GDP growth, the national deficit and the national debt to income or GDP ratio are used to provide a measure of a government's financial health and its ability to support the entity.

Social and development indicators are important in measuring the ability of the population to afford the services being rendered. As many of the countries in which GCR accords credit ratings are underdeveloped, with relatively low standards of living, the ability to afford water services may be low. Moreover, in such countries Water Utilities are often required to provide a certain amount of water and sanitation services to indigent sections of the populations free of charge. To the extent that social indicators such as employment, income levels and household indebtedness are improving, this is considered positive for the utility as it implies a greater ability to recoup expenses through tariff charges, while limiting the burden of free service provision.

Expected capital expenditure is also largely determined by the economic environment in which the Water Utility operates. Where financial resources are limited, the water and sewerage network may not have been maintained to the required standards, and in many cases the infrastructure and equipment may have exceeded its useful life. This could add significantly to the cost of providing services due to breakdowns and leakages. In addition, such infrastructure characteristics imply that substantial new funding is necessary to improve the system, although the necessary funding may not be available.

In developing countries the level of reticulated water and sewerage penetration may be very low, implying that significant capex is required to connect the population to the water network. In many cases running water and flush toilets are only available in the more affluent neighborhoods of the urban areas, whereas the peri-urban areas (where most of the population lives) only have limited access to such services. Even where some infrastructure already exists, trends such as population growth and urbanisation could see the demand for services exceed the design capacity,

thus placing the system under severe strain and implying that further capex will be required.

For entities servicing populations with the above characteristics, the development backlogs will typically substantially exceed the five year rating horizon, and the quantum of funding necessary to address the infrastructure needs will be well in excess of what can be generated internally. This persistent need for capital and outside assistance will pose a material constraint on the rating.

2. Legal and institutional framework

Water Utilities, even if privatised, tend to be highly regulated entities and their financial and operating performance depends, to a large extent, on maintaining a strong working relationship with the National or Regional Government. The rating analysis therefore encompasses a synopsis of the laws, regulations and practices that shape the public entity's operations. Most importantly, this is attained by reviewing the applicable water and sanitation legislation. Such legislation will usually outline the requirements and responsibilities of the utility and its pricing mechanisms, as well as delineate the relationship with the industry regulator. It is only within this framework that the operational flexibility afforded to the Water Utility can properly be assessed.

In most instances where the Water Utility (even if wholly owned by the government) operates in a corporatised manner, legislation has mandated the establishment of a regulatory authority to oversee the water industry and represent the interests of consumers. Responsibilities of the regulatory authority may include, *inter alia*: licencing industry participants; managing the interactions between the parties; determining the appropriate tariffs to be charged; and ensuring that the Water Utility complies with the service delivery benchmarks as stipulated in its operating licence. An analysis of the scope of the regulatory authority's powers is critical in determining the operational flexibility afforded to the Water Utility. Evidence of a productive working relationship between the authority and the utility is also important in assessing the stability and sustainability of operations.

Implied support from National Government, or lack thereof, plays an important role in the rating of public entities. As Water Utilities provide one of the most critical social services, performing a central role in government's overall development framework, the likelihood of support is generally assumed to be high. Such support may be operational, as demonstrated by seconding or deploying senior management to the entity, or by maintaining a particularly responsive policy towards the entity, whereby new policies and strategies can

be easily discussed and quickly implemented. Financial support can be determined by analysing the historical funding track record. Where the National Government has provided equity capital, concessionary debt funding, or financial guarantees to the Water Utility, support can be considered high. With regard to financial matters, however, the willingness to support must be considered in conjunction with the ability of the National Government to provide support, as determined through the economic analysis.

Tariffs

Given the sensitivities surrounding such a critical social service as water provision, tariffs are usually highly regulated. Typically, the Water Utility's role is to propose a tariff structure to the regulator, which must consider the proposal in terms of cost recovery and affordability before approval is granted. Most importantly, the regulatory body should determine the tariff pricing mechanism in a transparent manner. To reduce reliance on outside sources of funding, tariffs need to be set at a rate that adequately compensates the utility for all expenses incurred in water provision, including the depreciation of assets and the funding costs of new equipment. Flexibility should also be built into the pricing mechanism that allows for the automatic readjustment of tariffs if key exogenous factors (such as energy costs or the exchange rate) changes substantially.

While it is common for tariffs to be structured in a step-up fashion, whereby the tariff rate increases at higher levels of consumption, it is important that the higher rates do not, inadvertently, disincentivise water consumption. Another more common occurrence is where lower utilisation bands capture an excessive portion of water users, and thus inadvertently lead to a high percentage of water being provided at suboptimal rates.

GCR recognises that in many jurisdictions, and particularly in developing economies, water tariffs are unlikely to reflect the total cost of service provision. Accordingly, GCR may consider the extent to which tariffs meet cash operating costs on an ongoing basis. Government grants or subsidies that mitigate the cost of water provision should also be considered in relation to the tariff structure.

Corporate governance

Corporatised Water Utilities are generally controlled by a Board of Directors ("Board") that delegates the day to day management of the utility to an executive team. Cognisance is taken of the Board Charter (or lack thereof), the utility's operating policies and procedures, as well as the management structure and reporting lines. An assessment of the number of engineers and other specialised technical staff

employed in-house may be undertaken to determine the capacity of the entity to carry out its functions.

The composition of the Board, and the Board committees, is also important as it attests to the operating independence of a utility. Where the Board is weighted towards political appointments, rather than independent professionals, this would imply greater political interference in the utility's operations. Similarly, Board actions that overstep into the general operations of the utility or seek to influence appointments, is indicative of political meddling and would be considered ratings negative. Conversely, the demonstrated ability of executive management to take actions for the benefit of the utility, even if they are politically unpopular, point to an entity with operational independence.

Given the often significant quantum involved, procurement is an aspect of a utility's operations that is predisposed to conflicts of interest and corruption. For an entity to be highly functional, it should have robust policies and procedures in place to prevent opportunities for such malfeasance, as well as mechanisms to investigate and remediate incidents when they occur.

3. Operating performance

Operating performance assesses the success of the Water Utility in performing its mandate. Key performance indicators ("KPIs") are not assessed on an absolute basis, but relative to the performance of previous years and relative to targets as outlined in its medium term development plan or other internal or external strategy documents. A positive trend in KPI's will generally indicate a highly performing utility, while negative trends would be indicative of operational challenges. KPIs for Water Utilities include: water quality; the volume of water produced; the volume distributed; the percentage of water lost through the process (and loss management); as well as the number of new connections installed and the percentage of the population connected to reticulated water and sewerage.

Water quality standards and/or guidelines is an important aspect of the qualitative assessment of the credit ratings. GCR understands that there are no universal standards for drinking water and potable water in many urban areas may not meet the recommended standards for direct consumption. Nevertheless, improving water quality is indicative of high functioning utilities, while a deterioration in water quality would suggest major challenges within the entire water delivery system. Having access to diverse sources of water, such as different dams, rivers, or desalination, is also positive for a Water Utility. However, GCR recognises that this is most

often a factor of the geographical and environment conditions, where only one source may be available or financially viable.

The efficiency in production is measured by the energy consumption in the production and distribution process, as well as the amount of water losses throughout the process. Cognisance is taken that distribution losses may result from the government mandated provision of free services to certain population groups. International best practice indicates that true losses that arise from purification and distribution should be limited to around 10% of the water distributed. Where losses are excessively high, this may be indicative of an aging or inadequate infrastructure, failure to timeously repair leaks, billing related problems or lax enforcement against illegal connections. With regard to energy costs, cognisance is taken that procuring water from certain sources, such as desalination, is inherently more energy intensive than from rivers or dams. In this regard, the cost per kilolitre produced is a critical input in financial modelling for Water Utilities and a core indicator of the utility's performance relative to previous years and to similar entities. To the extent that purification and distribution costs are higher, water losses have a greater adverse impact.

A higher proportion of prepaid meters is considered positive for a Water Utility. Not only does this alleviate the problem of debtors and improve cash flows, but prepaid metres tend to be more technologically advanced and can thus help detect problems such as leaks and illegal connections faster. Furthermore, a modern IT backbone that allows the utility to monitor its network, identify problems faster and improve billing accuracy should also support improved efficiency metrics, and ultimately more sustainable cash flows for the utility.

Within emerging economies, a Water Utility's operational performance can also be judged on its success in extending reticulated water and sewerage to new areas and broader sections of the population. This is usually measured by the number of new connections, although in less developed areas water could be supplied by public taps or water booths.

4. Financial performance and ratio analysis

GCR's quantitative analysis for Water Utilities closely follows that of Corporate Issuers. The analysis involves scrutinising the utility's earnings performance, cash generation and financial position, typically over a five year period. As the ratings process explicitly excludes any type of audit, due consideration is given to the composition and accounting quality of financial statements, taking

into account factors such as reserving policies, valuation of assets, treatment of off-balance sheet items, depreciation and asset impairment, as well as debtors write-offs and provisioning. In particular, accurate asset valuations are crucial in determining the necessary depreciation charge and thus the true level of expenses for a utility. If the asset values are understated, the depreciation charge will not properly reflect the replacement cost, resulting in inadequate maintenance spend. This may give the impression that the utility is profitable, although profitability is being achieved at the expense of long term sustainability.

The core analysis centres on the extent to which income generated from the sale of water is sufficient to cover the expenses incurred, and the different factors that may impact this. While credit is given to more diverse sources of income, cognisance is taken of the limited ability of Water Utilities to diversify income relative to corporate entities (as they generally have rigid mandates) and, in many cases, to independently set prices. Nevertheless, utilities may benefit from recurring subsidies or grants from the National Government or Development Finance Institutions (“DFIs”), which can provide a stable base level of income. It is also informative to look at the proportion of income generated from prepaid water provision relative to post-paid, with prepaid water favoured as a more reliable source of income, as it does not incur the collection costs and delays often associated with post-paid water.

The expenditure analysis seeks to identify and quantify each major cost component affecting the entity, and thereafter to assess how changes in these items contribute to, or inhibit, the utility’s financial stability. The absolute value of key expenditure items is of limited value, but rather such expenditure is evaluated relative to previous years, as well as relative to total expenditure and/or revenue.

Key cost ratios that are considered are the:

- **Delivery cost ratio** – which measures the cost of providing the water against revenue earned (akin to the gross margin);
- **Staff costs relative to total expenditure and/or revenue** – staff costs tend to be higher in utilities than in municipal or other state entities, as the staff component should include a higher proportion of skilled personnel;
- **Administrative costs relative to total cost** – measures non-service delivery related costs;
- **Maintenance and repairs cost ratio** – a higher ratio may imply that a Water Utility is maintaining its infrastructure to an adequate standard and therefore the costs associated with service disruptions, as well as future capex costs, may be lower. At a minimum, maintenance expenditure should match or exceed the

depreciation charge, but this may often be insufficient (depending on the estimation of depreciation).

To obtain a credit rating in the ‘BBB’ band or above, a Water Utility should be able to report positive operating profit on a consistent basis.

Interest obligations are assessed in absolute terms and relative to operating profit and free cash flow. GCR considers a **net interest coverage** metric (operating profit divided by net interest expense) of 2.5x to be prudent for entities rated in the ‘A’ band or higher. **Free cash flow coverage of interest** (cash flow from operations before the net interest payment divided by gross/net interest) takes into account the potential working capital drain and the metric should be above 2x for ‘A’ band rated Water Utilities.

Liquidity

Liquidity within a Water Utility is largely a function of the ability of the utility to collect from its customers the amounts they are billed. Debtors collection remains a major challenge in many of the jurisdictions in which GCR accords credit ratings and an analysis of the historical debtors trends, and the aging of the debtors book, must be performed in order to extrapolate the expected cash flows from current billed water. As explained, having a higher portion of prepaid water provision can significantly reduce the cost of collection and the incidence of bad debts and is therefore positively considered. However, prepayments may not be practical for large consumers such as industrial companies. To the extent that water losses can be sustainably reduced and debtors managed more efficiently, liquidity metrics will be firmer.

Although variations in liquidity requirements need to be assessed within a given month and across the seasons, Water Utilities tend to exhibit uniform demand throughout the whole year (with only small increases in demand during the summer months relative to winter). Nevertheless, to mitigate unforeseen liquidity requirements, a Water Utility should maintain cash on hand. To gain a clear understanding of the actual amount of liquidity available for a utility’s discretionary use, cash on hand must be adjusted for existing capex and maintenance commitments (for which cash has been earmarked), as well as for cash that is restricted (by the National Government or a donor) for specific projects. The key ratio considered is the level of days cash on hand, with a ratio of around 60 days considered prudent.

5. Funding profile

An appraisal of the funding profile commences with an overview of the various sources of funding

available to the Water Utility. While in theory a Water Utility should have access to the full scope of private sector funding, in practice such entities tend to rely on government and DFI funding. This could partly be explained by the politically sensitive nature of Water Utilities, which tends to discourage private investors. This is particularly true of utilities in developing countries that report large capital requirements, but due to their social mandate, have inherently restricted income generating capacity. In such cases, it is critical for the utility to demonstrate ongoing support from the National Government or DFIs to enable it to diversify into new sources of funding.

National Government financial support can take several forms including equity, grant funding, direct loans, on-lent loans or guarantees. Equity and grant funding represent the lowest risk options for the utility as it provides needed funding without creating a corresponding liability. Moreover, the provision of such funds demonstrates a strong level of commitment to the Water Utility. Although support is also implied by the provision of Government loans to the utility, such loans do require a commitment to service their financial obligations according to the loan agreements. Government loans, however, tend to be on concessionary terms and for longer durations than could be obtained through the private sector, making it a less risky funding source. Nevertheless, where the National Government has borrowed money and on-lent the funds to the utility, credit terms could be more akin to those of the private sector. Government guarantees require a Water Utility to source funding from the private sector and to service this debt. By providing the lender the assurance that in the event that the utility is unable to meet its obligations, the National Government will honour the debt, guarantees can play a critical role in opening up private and alternative sources of funding to the Water Utility, and enabling it to borrow on more favorable terms.

DFIs also play an important role in making funding available to Water Utilities. Such funding is generally in the form of longer term debt funding at concessionary rates, and DFIs, by virtue of their mandates, are often prepared to fund riskier projects. To the extent that repayment terms are flexible and/or debt is convertible into equity, credit risk is reduced, even if the quantum of debt is high. DFI involvement also tends to extend to technical support and capacity building by aiding utilities to improve operating and accounting standards, and to implement corporate governance best practices (often as a precondition for the loan). Over the long term, an improved level of professionalism and effectiveness should increase the willingness of

private sector financial institutions to lend to such utilities.

As discussed previously, the extent of government support that can be factored into the rating must be tempered by financial capacity of the government, which in many countries may be limited or unreliable. In such circumstances, the rating enhancement provided by DFI support may be greater than that of Government support, as DFIs are generally highly rated on an international scale and have access to substantial funding.

To the extent that a Water Utility is able to access private sources of funding, this is positively considered. Even where a utility does not have any debt on its balance sheet, an assessment of access to debt funding can be made based on historical debt utilisation trends. A close working relationship with potential funding parties (such as Government, DFIs, and banks) is also indicative of sound access to capital.

Where debt is present, GCR will undertake an assessment of the Water Utility's debt burden in terms of the historical trend, future expectations and its ability to service obligations at present and over the medium term. Earnings based gearing metrics are of greater value in the analysis, as equity may be underpinned by a fixed infrastructure that cannot practically be sold. The currency distribution of debt also needs to be analysed. As a utility's revenue is almost always generated in local currency, having large foreign currency exposures (particularly in countries with volatile currency fluctuations), including embedded derivatives, adds a significant element of risk.

Other key debt factors that are considered include:

- **Net debt to total income** – a sustainable ratio of around 400% is acceptable for 'BBB' rated entities, although to obtain an 'A' band credit rating, a ratio of around 200% is more appropriate;
- **Operating cash flow coverage of debt** – measures the level of debt relative to annual cash flows;
- **Maturity profile of the debt** – Water Utilities should strive to have longer dated maturities, corresponding to the lifespan of the assets the debt is financing. However, of greater importance is that debt maturities are relatively evenly spread;
- **Short term maturities (less than one year)** – GCR expects the utility to have initiated refinancing or redemption arrangements at least six months in advance;
- **Off balance sheet liabilities** – are not reflected in traditional gearing metrics but may result in unexpected cash outflows which could impact

credit quality. These include contingent liabilities, outstanding legal claims or unfunded pension obligations.

6. *Future prospects/Strategic direction*

GCR's credit ratings provide a forward looking assessment of a Water Utility's financial commitments and its ability to meet these obligations. As the demand of water is inelastic, shifts in the general economic environment do not noticeably impact the demand for water. This provides a level of predictability to income forecasts, with underperformance more likely to be driven by equipment failure or other internal challenges. Correspondingly, growth in water sales and revenue is largely a factor of the expansion of the water network and improvements in efficiencies.

Much of the assessment of future prospects centres on capex plans. Having a significant capex pipeline does introduce project and construction risk, as well as the potential for significant costs overruns, but such risks can be mitigated by a more staggered development schedule. Water Utilities tend to publish broad medium to long term plans, but of these, only a small number of the projects will be undertaken in a given year. Thus, in terms of projecting cash requirements, GCR focuses on short term capex plans, and in particular on the capex that has already been approved and committed. The availability of funding for such capex needs to be clearly demonstrated. GCR will stress capex budgets and income forecasts to assess if recurring earnings and cash flows will be sufficient to ensure timely payment of interest and principal obligations under various economic conditions.

Ultimately, the performance of an entity depends, to a large extent, on the strengths and capabilities of management. In this regard, forecast analysis and the comparison to actual performance, provides a crucial insight into management's ability to understand its environment (and the current trends therein), project earnings performance accordingly and to execute its strategy within the parameters set in the budget.

Conclusion

Water Utilities present investors with a unique convergence between the private and public sectors. Whether analysing the utility from the private or public perspective, this convergence presents both additional risks and safeguards which must be carefully understood by investors. To this end, the credit ratings report is a critical tool in describing the interplay, or potential conflict, between the various factors and in accurately assessing the credit risk of such an entity.

Credit ratings have an additional advantage for Water Utilities, as they are often the only independent research conducted on the entity. Even in developing markets where a ratings culture may not manifest, ratings can play a unique role in helping Water Utilities access alternative sources of funding, by providing potential investors with the comfort that a vigorous analysis has been conducted, and that the entity will be reviewed on an ongoing basis. Moreover, the credit rating symbol allows for these risks to be easily compared across various potential investments.

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

Bad Debt	A bad debt is 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.
Balance Sheet	Also known as Statement of Financial Position. A statement of a company's assets and liabilities provided for the benefit of shareholders and regulators. It gives a snapshot at a specific point in time of the assets the company holds and how they have been financed.
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 Expenditure	Expenditure on long-term assets such as plant, equipment or land, which will form the productive assets of a company.
Cash Flow	The inflow and outflow of cash and cash equivalents. Such flows arise from operating, investing and financing activities.
Corporate Governance	Corporate governance broadly 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.
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 interest when due.
Debt	An obligation to repay a sum of money. More specifically, it is 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.
Equity	Equity 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.
Fix	The setting of a currency or commodity price for trade at a future date.
Gearing	With regard to corporate analysis, gearing (or leverage) refers to the extent to which a company is funded by debt and can be calculated by dividing its debt by shareholders' funds or by EBITDA.
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.
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 Cover	Interest cover is a measure of a company's interest payments relative to its profits. It is calculated by dividing a company's operating profit by its interest payments for a given period.
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.
LC	An LC is a guarantee by a bank on behalf of a corporate customer that payment will be made if that entity cannot to meet its obligations.
Liabilities	All financial claims, debts or potential losses incurred by an individual or an organisation.
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 its equivalents. Market liquidity refers to the ease with which a security can be bought or sold quickly and in large volumes without substantially affecting the market price.
Long-Term Rating	A 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.
Mandate	Authorisation or instruction to proceed with an undertaking or to take a course of action. A borrower, for example, might instruct the lead manager of a bond issue to proceed on the terms agreed.
Margin	A term whose meaning depends on the context. In the widest sense, it means the difference between two values.
Maturity	The length of time between the issue of a bond or other security and the date on which it becomes payable in full.
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.
Operating Cash Flow	A company's net cash position over a given period, i.e. money received from customers minus payments to suppliers and staff, administration expenses, interest payments and taxes.
Operating Profit	Profits from a company's ordinary revenue-producing activities, calculated before taxes and interest costs.
Option	An option gives the buyer or holder the right, but not the obligation, to buy or sell an underlying financial asset at a pre-determined price.
Prepayment	Any unscheduled or early repayment of the principal of a mortgage/loan.
Principal	The total amount borrowed or lent, e.g. the face value of a bond, excluding interest.
Redemption	The repurchase of a bond at maturity by the issuer.
Refinancing	The issue of new debt to replace maturing debt. New debt may be provided by existing or new lenders, with a new set of terms in place.
Risk	The possibility that an investment or venture will make a loss or not make the returns expected. There are many different types of risk including basis risk, country risk, credit risk, currency risk, economic risk, inflation risk, liquidity risk, market or systemic risk, political risk, settlement risk and translation risk.
Short-Term Rating	A short term rating is an opinion of an issuer's ability to meet all financial obligations over the upcoming 12 month period, including interest payments and debt redemptions.
Working Capital	Working capital usually refers to the resources that a company uses to finance day-to-day operations. Changes in working capital are assessed to explain movements in debt and cash balances.

This page has intentionally been left blank

This page has intentionally been left blank

This page has intentionally been left blank

ALL GCR CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS, TERMS OF USE OF SUCH RATINGS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS, TERMS OF USE AND DISCLAIMERS BY FOLLOWING THIS LINK:[HTTP://GLOBALRATINGS.NET/UNDERSTANDING-RATINGS](http://GLOBALRATINGS.NET/UNDERSTANDING-RATINGS). IN ADDITION, RATING SCALES AND DEFINITIONS ARE AVAILABLE ON GCR'S PUBLIC WEB SITE AT WWW.GLOBALRATINGS.NET/RATINGS-INFO. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. GCR'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE UNDERSTANDING RATINGS SECTION OF THIS SITE.

CREDIT RATINGS ISSUED AND RESEARCH PUBLICATIONS PUBLISHED BY GCR, ARE GCR'S OPINIONS, AS AT THE DATE OF ISSUE OR PUBLICATION THEREOF, OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. GCR DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL AND/OR FINANCIAL OBLIGATIONS AS THEY BECOME DUE. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: FRAUD, MARKET LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND GCR'S OPINIONS INCLUDED IN GCR'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS AND GCR'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND GCR'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL OR HOLD PARTICULAR SECURITIES. NEITHER GCR'S [CREDIT RATINGS](#), NOR ITS PUBLICATIONS, COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. GCR ISSUES ITS CREDIT RATINGS AND PUBLISHES GCR'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING OR SALE.

Copyright © 2013 Global Credit Rating Co (Pty) Ltd. INFORMATION PUBLISHED BY GCR MAY NOT BE COPIED OR OTHERWISE REPRODUCED OR DISCLOSED, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT GCR'S PRIOR WRITTEN CONSENT. Credit ratings are solicited by, or on behalf of, the issuer of the instrument in respect of which the rating is issued, and GCR is compensated for the provision of these ratings. Information sources used to prepare the ratings are set out in each credit rating report and/or rating notification and include the following: parties involved in the ratings and public information. All information used to prepare the ratings is obtained by GCR from sources reasonably believed by it to be accurate and reliable. Although GCR will at all times use its best efforts and practices to ensure that the information it relies on is accurate at the time, GCR does not provide any warranty in respect of, nor is it otherwise responsible for, the accurateness of such information. GCR adopts all reasonable measures to ensure that the information it uses in assigning a credit rating is of sufficient quality and that such information is obtained from sources that GCR, acting reasonably, considers to be reliable, including, when appropriate, independent third-party sources. However, GCR cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall GCR have any liability to any person or entity for (a) any loss or damage suffered by such person or entity caused by, resulting from, or relating to, any error made by GCR, whether negligently (including gross negligence) or otherwise, or other circumstance or contingency outside the control of GCR or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits) suffered by such person or entity, as a result of the use of or inability to use any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained in each credit rating report and/or rating notification are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained in each credit rating report and/or rating notification must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY GCR IN ANY FORM OR MANNER WHATSOEVER.