RATING METHODOLOGY

BANKS AND FINANCIAL INSTITUTIONS

Alpha Credit Rating Limited

AlphaRating's approach towards rating banks and FIs involves a comprehensive assessment of CAMEL framework. The CAMEL methodology for bank credit analysis is well established and identifies five key factors for assessing the soundness of a bank.

The CAMEL framework

The 'CAMEL' model comprises

- **C**apital adequacy
- **A**sset quality
- **M**anagement and systems evaluation
- **E**arnings
- **L**iquidity and funding

No single factor is of overriding importance, or is considered in isolation. All six factors are viewed in conjunction when assigning a rating.

- ### ***Capital Adequacy***

Capital provides a bank/FI with the cushion to withstand credit and other risks in business. While assigning a rating, AlphaRating analyses the capital adequacy and its sustainability over the medium-to-long term. This assessment is significantly influenced by the perception of relative profitability, the bank/FI's risk profile, and asset quality. The analysis encompasses the following factors:

Adherence to capital adequacy requirements as per Basel III regulatory norms

The adequacy of Common Equity Tier I and Total Capital Ratio as required under the Basel III framework is a key input in Alpharating's assessment of the capital adequacy of a bank/FI. A cushion over the minimum capital requirement should enable the bank to better support credit growth.

The actual amount of capital

With respect to the amount of capital, it is important to consider the regulatory definition of capital since there are differences, for example, in the amount of Tier II capital which can be counted as capital eligible for purposes of calculating capital adequacy ratios. In taking a historical and a prospective view, the following are the relevant questions:

- Support of principal shareholders
- Capital raised in past five years as an indication of the ability and willingness of the institution to raise capital in the future
- Capital increases planned/required in the near and medium-term
- Financial position regarding its liability and asset.

Sustainability of capital ratios and flexibility to raise Tier I and hybrid capital

A bank/FI can enhance its Tier I capital base either through internal accrual or by raising fresh equity or hybrid capital. AlphaRating, therefore, evaluates the rated entity's ability to access the capital markets to meet its Tier I capital needs and meet the obligation arising from the increased capital base. Ability to support the increased asset base through earnings is an important parameter in assessing the sustainability of capital adequacy, and an entity capable of sustaining asset growth through internal accrual without impairing capital adequacy is viewed favorably. Other factors considered when assessing the sustainability of capital ratios are dividend policy, likely capital commitments to subsidiaries, shareholding in subsidiaries, and the ability to dilute stake in them.

Quality of capital (Tier I capital)

The proportion of Tier I capital, or core capital—the primary indicator of the quality of capital at a bank/FI—is given significant importance when assigning ratings on the capital adequacy parameter. Although the presence of Tier II capital does provide some cushion over the short-to-medium term, such capital needs to be replenished periodically.

AlphaRating also analyses other issues such as the presence of hidden reserves (for example, unrealized gains on investment portfolio) and the percentage of the investment portfolio that is marked to market.

Growth plans

AlphaRating also factors in the growth plans of the bank/FI when analyzing capital adequacy. Capital adequacy (even if high) would be regarded unsustainable if an entity pursues a high-growth strategy. Also, segments where incremental growth is targeted would require varying levels of capital.

- ***Asset Quality***

Deterioration in asset quality is a very common reason for problems both at individual banking institution and banking industry. Macroeconomic crises can often adversely impact bank asset quality. Asset quality can be assessed through such measures as the ratio of non-performing or impaired loans to total loans, risk concentrations (measured for example by the share of the top twenty loans in total loans), and the ratios of loan loss reserves not only to non-performing or impaired loans but also to total loans.

Regulatory definitions of loan status can affect asset quality measures and should be taken into account. There is an emerging consensus among regulators towards defining non-performing or impaired loans as those that are (for example) more than 90 days past due. It is also important to understand how impaired or non-performing loans are defined. If the amount of such loans is defined for regulatory purposes as the sum of overdue installments rather than the sum of remaining principal related to the impaired or non-performing loan, the regulatory definition would understate the magnitude of asset quality deterioration as measured under best international practice. In addition, regulatory guidelines for non-accrual status need to be taken into account, recognizing that the best international practice is that loans cease to accrue interest when they become impaired or non-performing. Absent such regulatory definition, one would need to rely on an individual bank's definition of impairment which may not be tied to the number of days the loan is past due but rather the Bank's judgment of whether full payment would eventually be made.

To assess asset quality, the following factors should be considered:

- The bank's loan approval and credit risk management processes
- Growth of loan portfolio over last five years
- Market focus i.e. middle market, large corporate credits, retail
- Composition of commercial loan portfolio i.e. service businesses, manufacturing businesses, etc.
- Description of top twenty exposures (borrower and affiliated group) over the last five years measured in absolute terms and as a percentage of total loans and total equity
- Level of non-performing loans as a percentage of total loans for last five years and action plan for recovery of those NPL
- Assessment of effective Credit risk grading policy
- Provisions required by regulators and those above regulatory requirements for last five years
- Loan loss reserve reconciliation for last five years (beginning balance, additions, write- offs, write-backs, final balance)
- Write off policy if different from that mandated by regulator
- Nature of security and security valuation policy
- Annual write-offs for last five years

Geographical diversity

Diversity of asset base across geography and industries, along with single-risk concentration limits, are important determinants of the asset quality of banks/FIs. Regional banks with limited operations and branch network have less flexibility to diversify their advances portfolio than banks with a national presence, and are thus susceptible to adverse economic conditions in a particular region.

Industry exposure and single-risk concentration is monitored by the BB through exposure guidelines. However, some banks/FIs show a high degree of exposure to certain industries or group or companies leaving themselves vulnerable to downturns in those industries or group or companies. To ascertain credit concentration, AlphaRating reviews the rated entity's large exposures.

Movement of provisions and write-offs

Some banks/FIs follow a practice of writing off a large portion of their bad loans to clean up their balance sheet. Therefore, the stressed assets level alone cannot be a criterion to assess a bank's future asset quality. Average provisioning, including write-offs, over a five-year timeframe is an indicator of the level of cleaning up done by a bank over a period of time.

This average provisioning level and its movement is an indicator of the portfolio's credit risk and the expected write- offs and provisioning, which would affect the bank's earnings capability.

Growth in advances

High growth rates in the financial sector engender risks associated with the establishment of collection systems, tracking of asset quality, and lack of seasoning in loan portfolios. AlphaRating closely analyses the pattern and nature of such growth, studying entities with higher growth rates more carefully to look at the nature of the growth, the reasons for it, and its implications on asset quality. An entity that has grown by attracting good quality clients would be viewed more favorably than one that has grown just by increasing geographical presence or diluting credit criteria.

- ***Management and systems evaluation***

Quality of management is an important differentiating factor in the future performance of a bank/FI. As well as experience and educational background of all level of employees, management philosophy, goals and strategies, management appetite towards risk taking are also emphasized. The management is evaluated on the following parameters:

Goals and strategies

A bank/FI's goals and strategies are evaluated to form a view on its management's vision. Ability to adapt to the changing environment and manage credit and market risks, especially in a scenario of increasing deregulation of the financial markets, assumes critical importance.

AlphaRating also has extensive discussions with the management regarding policy on diversification, asset growth, and maintenance of capital, provisioning, and liquidity levels.

Systems and monitoring

AlphaRating studies systems for credit appraisal and for managing and controlling credit and market risks at a portfolio level. Significant emphasis is laid on the analysis of risk monitoring systems and the periodicity and quality of monitoring. Most Bangladeshi banks face the challenge of enhancing coverage and quality of their information systems and reporting. The degree of acceptance of new systems and procedures, data monitoring systems, and the extent of digitalization and interconnectivity between branches within a bank are given considerable importance. The level of computerization is gauged on the basis of the extent of business covered by computerization of branches, and of the money market and foreign exchange desks.

AlphaRating assigns significance to operating systems for data capture and management information systems (MIS) reporting. A balance sheet that has a large volume of transactions pending reconciliation reflects lack of adequate operating systems and is viewed negatively. Expenses made on technology during the recent period and the strategy of using technology effectively as a delivery platform to reduce costs and improve service levels are also assessed.

Appetite for risk

AlphaRating also analyses the management's attitude towards risk and growth. An analysis of the strength of systems and processes put in place by the management to strengthen structures within a bank/FI is undertaken to assess the management's risk appetite. A high-risk propensity typically reflects higher earnings volatility in both fund-based and fee-based business. A management with a higher propensity to take on risks is viewed cautiously. If management operating efficiency are being calculated on the basis of earning, management has a higher propensity to take on risks, which is viewed cautiously.

Human Resource Management

In banks and financial institutions, human based development is especially important. Due emphasis is placed on human resource development plans, retention policy, management operation efficiency by assessing yield per taka staff cost, system based banking, staff motivation plans, staff turnover, quality of training being offered etc.

- ***<u>Earnings</u>***

AlphaRating analyses a bank/FI's earnings on the basis of the level, diversity, and stability of earnings.

Level of earnings

The level of earnings as measured by the net profitability margin (NPM) provides the bank/FI with a cushion for its debt servicing and increases its ability to cover asset risk. NPM is a function of interest spreads, expenses, and fee- based income earned. The earnings level is looked at in conjunction with risk appetite. Purely from the viewpoint of size, absolute profit is also relevant to the earnings profile.

Earnings can be affected significantly by volatility in interest rates. Thus, the trend in profitability at the gross profit level over the past years is examined to form a view on the sustainability of earnings. The various elements leading to profitability, such as interest spreads, fee level, expenses, and provisioning levels are also analyzed to form a view on profitability trends and their sustainability. As well as non-funded business prospects and its contribution towards earnings.

The following are the key earnings measures

- Net interest margin (net interest income/average earning assets)
- Fee income as percentage of total operating income
- Trading income as a percentage of net operating income
- Total operating costs/net operating income
- Return on average total assets
- Return on average total equity

Diversity of income sources

Diversity of income sources is an important input in analyzing the stability of earnings. Diversity in fund-based income is achieved by focusing on different borrower segments such as industries, trade, and retail. Banks also diversify their income streams through non-interest or fee-income such as guarantees, cash management facility, service charges from retail customers, and trading income. Fee income provides a cushion to profitability, especially in times of pressure on interest spreads.

AlphaRating also views the composition of interest revenue streams when analyzing earnings. Those relying on short- term, non-repetitive income sources such as bill financing and trading income are viewed less favorably than those with long-term credit relationships with companies through cash credit or term loan exposures. The composition of non-interest income is also analyzed when evaluating earnings. This includes income from trading activities, which tends to be volatile. A closer analysis of the composition of revenue streams helps form an opinion on the sustainability of earnings.

Efficiency measures

AlphaRating looks at the level and trend of operating expenses and degree of automation. Salary expenses and total non- interest expenses as a proportion of average assets is used to benchmark efficiency. At the same time, interest rate management and interest rate policy are analyzed, whether rates are reviewed regularly to comply with the guidelines imposed by BB. Also sensitivity of earnings to interest rates, foreign exchange rates and commodity prices are also analyzed.

- ***Liquidity and funding***

AlphaRating analyzes the structure and diversification of a bank's funding base, concentration of deposit or borrowing, significant trends in funding sources (funding source in distress situation) and in the bank's liquidity. AlphaRating also evaluates the asset-liability maturity structure, deposit renewal ratios, proportion of liquid asset to total asset, volatility of interest rates on deposits and the extent to which core asset are fund by core liabilities. We consider the core and non-core deposit mix and identify various indicators to assess the mix of corporate and retail deposits. As far as liquidity is concerned, we analyze both the bank's internal sources of liquidity (marketable securities, maturing loans, etc.) and external sources (such as access to capital markets, stand-by lines from other banks and rediscount facilities at the central bank). As well as compliances of SLR (statutory liquidity reserve) & CRR (cash reserve requirement)

The liquidity indicators are sensitized to measure coverage against total borrowings, maximum possible stress analysis by measuring coverage against the portion of contingent liabilities that may, maturate within a time horizon. The Impact of interest rate volatility on deposit and its trend is also examined in the evaluation process of liquidity strength of Banks.

Following are the key measurements of liquidity:

- Interbank funding/total funding
- Deposits/total funding
- Deposit concentrations-20 largest depositors
- Loans/assets
- Loans/deposits
- Liquid assets/deposits and money market funding
- Liquid assets to total assets

<u>Other Factors considered while assigning the rating are as follows:</u>

Market Position

AlphaRating factors in the size of a bank/FI and its position in the industry. A large size helps withstand business and systemic shocks and helps determine the extent of systemic support that can be expected. AlphaRating also factors in the level of automation, diversity in product portfolio, business lines, and customer base.

The Regulatory Environment

In virtually all jurisdictions, banks come under regulatory oversight. However, since the quality of regulators and regulations is not uniform worldwide or even region-wide, a critical analytical issue is the quality of prudential regulation. Regulators can and do define permissible and impermissible business activities. Regulatory bodies in Bangladesh has issued a number of instructive circulars and best practice guidelines for the Banks covering a wide range of operational areas such as restriction on related party loans, maintenance of CRR & SLR, ADR ratio, composition of Board, Executive Committee, Audit committee, maintenance of capital adequacy, role of the Board members and the Chairman, appointment and removable of the CEO, credit rating, disclosure requirement, foreign exchange management, risk management (operational & market risk), credit lending policy & process, internal control, delegation of power at operating level, loan against stocks/bonds/debentures, large loan policy, loan classification policy, disclosure system, money laundering and terrorism act implementation, Compliance of Basel so on so forth. AlphaRating reviews the compliance status and management system installed to comply the regulations.

Ownership and Corporate Governance

Corporate governance regulates the relations between the company's management, the Board of Directors, shareholders and other stakeholders and informing the public. Ensuring sustainable growth and financial stability of companies is one of the main objectives of corporate governance. The quality of corporate governance affects the cost that companies undertake to access capital for growth and the confidence of those who provide this capital directly or indirectly that they can share the value created by the companies on fair and equal terms. AlphaRating covers factors such as ownership & constitution of the boards, delegation of power at required level, conflict of interest issues in the operational management, personnel policy and employee satisfaction, application of IT system and IT audit functions etc. while analyzing corporate governance and ownership.

Government support

AlphaRating positively considers government support for specialized entities in the financial sector, which have a policy role to play in the economy. Furthermore, public sector banks are benefited from the high likelihood of support arising from government ownership.

In AlphaRating's opinion, the likelihood of government support is underpinned by strong economic and moral imperatives, given the role that the public sector banking system plays in the economy. Banks are the primary agencies for channeling savings and the government uses the system as a vehicle to fulfil its economic and social agenda through priority sector lending.

While the authorities have stepped in to rescue challenging private sector banks in the past, AlphaRating believes that the support to public sector banks would unquestionably be of a higher order as demonstrated by capital infusion over the years. Government ownership and control of banks is a politically sensitive issue and the government will find it difficult to deny support to public sector banks in the event of distress.

Accounting Quality

Accounting quality is the extent to which accrual accounting facilitates the measurement of the underlying economic performance. Financial disclosure plays very important role in rating, so due weight is given in this section. Polices for income recognition, provisioning policy, valuation policy, quality of book of accounts, assigning quality auditor etc. are analyzed.

Franchise Value

It is tried to measure the strategic alliance, global linkage, management contact, technical collaboration, national and international awards or recognitions, product diversity, CSR activities etc.

Conclusion

AlphaRating's analysis of banks and FIs focuses on analysis of all the factors in the CAMEL frameworkand other factors mentioned above. It is to mention that if any unusual issues arise in the economy, which AlphaRating may consider have impact on the future performance of the Banks and FIs will be assessed in the rating assignment. No single factor is of overriding importance, or is considered in isolation. All factors are viewed in conjunction when assigning a rating. The analysis factors in market position and systemic importance of the entity. Based on rating criteria, and the strengths and weaknesses of each bank/FI compared with peers, a final opinion on the quality of paying financial obligation is expressed in the form of a credit rating.

Rating Scale and definitions:

Long Term Rating

AAA	Issuers or issues rated AAA represents the strongest credit quality relative to other Bangladeshi obligors
AA	Issuers or issues rated AA represents very strong credit quality relative to other Bangladeshi obligors
A	Issuers or issues rated A represents above average credit quality relative to other Bangladeshi obligors
BBB	Issuers or issues rated BBB represents average credit quality of Bangladeshi obligors
BB	Issuers or issues rated BB represents slightly below average credit quality relative to other Bangladeshi obligors
B	Issuers or issues rated B represents weak credit quality relative to other Bangladeshi obligors
CCC	Issuers or issues rated CCC represent very weak credit quality relative to other Bangladeshi obligors
CC & C	Issuers or issues rated CC and C both represent extremely weak credit quality relative to other Bangladeshi obligors. Rating of C will normally be assigned when an obligor is in technical default on certain commitments or obligations, but not yet in financial default.
D	Issuers or issues rated D have failed to meet their rated financial commitment on time or when due

**Long term rating from AA to B may be modified by the inclusion of a plus (+) or minus (-) sign to indicate relative strength within the rating category.

Short term Rating

ST 1	Issuers rated ST 1 have the strongest ability to meet short term financial commitments relative to other Bangladeshi obligors
ST 2	Issuers rated ST 2 have an above average ability to meet short term financial commitments relative to other Bangladeshi obligors
ST 3	Issuers rated ST 3 have an average ability to meet short term financial commitments
ST 4	Issuers rated ST 4 have a below average ability to meet short term financial commitments relative to other Bangladeshi obligors
ST 5	Issuers rated ST 5 have a well below average ability to meet short term financial commitments relative to other Bangladeshi obligors
ST 6	Issuers rated ST 6 have failed to meet their short term financial commitments

Rating Outlook

Rating Outlook assesses the potential direction of the Debt Rating over the intermediate term (typically over a one to two-year period). The Rating Outlook may either be :	
POSITIVE	Which indicates that a rating may be raised;
NEGATIVE	Which indicates that a rating may be lowered;
STABLE	Which indicates that a rating is likely to remain unchanged; or
DEVELOPING	Which indicates that a rating may be raised, lowered or remain unchanged.