

## **BANK RATING METHODOLOGY**



The primary function of PACRA is to evaluate the capacity and willingness of an entity / issuer to honor its financial obligations. Our ratings reflect an independent, professional and impartial assessment of the risks associated with a particular instrument or an entity.

PACRA's comprehensive offerings include instrument and entity credit ratings, insurer financial strength ratings, fund ratings, asset manager ratings and real estate gradings.

PACRA's opinion is not a recommendation to purchase, sell or hold a security, in as much as it does not comment on the security's market price or suitability for a particular investor.

### INTRODUCTION

To arrive at a tenable rating of bank's credit worthiness, the basic precept of our rating method is that we should get to understand the business of the bank in question (and the risks inherent to this business), the objectives of its management, the environment it operates in and the most likely future development of its business.

Recognizing the influence of the operating environment on an entity's credit worthiness, the rating exercise incorporates a review of the overall economy, the structure of the banking sector in general, existing and potential competition in the market, and also the degree of concentration within it. PACRA also analyzes the regulatory environment, including the role of the supervisory authority, quality of bank supervision, reporting requirements and regulations relating to specific type of financial institutions and to specific financial products. This analysis also helps in evaluating a given bank's competitive position within the banking sector.

While our rating process does not include an audit of a bank's financial statements, it does examine accounting policies and the extent to which they accurately reflect a bank's financial performance and balance sheet integrity. We restate figures where necessary to make a bank's financial data comparable with those of its peers. In order to carry out adequate analysis of a particular bank, it is helpful, to establish a "peer group", of comparable banks.

### THE ANALYTICAL PROCESS

PACRA bases its analysis of banks on a number of quantitative and qualitative factors, the most significant of which are covered below. No one factor has an overriding importance or is considered in isolation, and all the factors are reviewed in conjunction before assigning a rating.

### RISK MANAGEMENT

This includes an analysis of the bank's appetite for risk and the systems it has in place for managing risks. We examine the independence and effectiveness of the risk management function, whether all risks are managed together under the same umbrella, the procedures and limits that have been implemented, who sets these limits and the degree to which these procedures and limits are adhered to. Finally, we endeavor to assess senior management's understanding of and involvement in risk management issues, and examine the reporting lines in place.

In recent years, there has been a noticeable upgradation in the risk management systems of the banks, in the face of increasing guidance and supervision from the SBP. Given the impending implementation of Basel II Accord, efforts for further improvement have already been intensified.

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### Rating Methodology

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**CREDIT RISK:** Here we look at all credit risks whether they arise from on-balance sheet activities (including loans, fixed-income securities, and interbank deposits and loans) or off-balance sheet commitments.

We examine the structure of the bank's balance sheet, including the relative proportions of different asset categories. Generally, but not always, the loan book constitutes the most significant portion of a bank's assets, and thus a comprehensive review of this is essential (even if it does not account for the bulk of the balance sheet, it is generally where most risk lies). In this context, we ask for a breakdown of lending by type of loan, size, maturity, currency, economic sector and geographical distribution. We also look at concentrations of credit risk, including large exposures (generally over 10% of equity) to individual customers and credit risk concentrations in particular industries.

We analyze those loans considered as "problem" loans, whether they be "sensitive" or "watchlist" (i.e. still performing) loans, non-performing or restructured loans. In assessing the underlying risk of any problem loans, the adequacy of any security and reserve coverage is taken into account. As far as loan loss reserves are concerned, we examine the different types of risk reserves in place (e.g. specific, general, etc.), the bank's overall policy towards provisioning, its historical loan loss experience, and its write-off and recovery policies. Asset quality is assessed using both absolute and relative criteria and, where possible, we compare ratios with those of peer banks.

With reference to the quality of other (non-customer loan) assets, we analyze the fixed income securities portfolio in terms of the general quality of the securities, their maturity, any undue concentration or particularly large individual exposures and the valuation of these securities. Likewise, an analysis of a bank's interbank deposit and loan book will take into account size, maturity, and concentration of the book as well as the creditworthiness of the counter parties.

Banks are taking on increasing off-balance sheet commitments, and it is important to analyse the risks involved. Such commitments include guarantees and letters of credit as well as derivatives.

The use of derivative instruments by banks is increasing, and as part of its rating process, PACRA looks at the gross notional and net fair values of a

bank's derivative portfolio; it also considers the types of derivative instruments the bank uses and the purpose for which it uses them. As far as credit risk is concerned, it examines the systems used by banks for measuring credit exposure, their valuation policies and the quality of counter parties. Apart from credit risk, derivative instruments also give rise to market, legal and operational risks, which also have to be taken into account, separately.

**MARKET RISK:** Our analysis of market risk covers all structural and trading risks across a bank's entire business (including on- and off-balance sheet business). As far as structural risks are concerned, we examine the bank's asset and liability management strategy, and the role of position taking, hedging and accounting in this strategy. We look at the levels of interest rate, foreign exchange and equity risks on and off-balance sheet and how these compare with the limits set for each of these risks.

On the trading side, we examine the general strategy of the bank in regard to its trading activities (is it a significant position taker or are its trading activities mainly related to client business or hedging transactions?). We then analyze the trading book by product and market, with a focus on the measurement of risk (Value at Risk - VAR, stress scenarios, etc.), volatility of revenues, and bottom-line profitability.

We also analyze the market risk in any equity participations held in a bank's banking book, taking into account any undue concentration of risk and how these participations are valued.

**OPERATIONAL RISK:** Operational risk has historically been defined as all other risks other than market, credit and liquidity risk. In the context of Basel II, however, the Basel Committee has adopted a narrower definition of operational risk: "the risk of loss resulting from inadequate or failed internal processes, people and systems or external events". This definition includes legal risk but excludes strategic and reputation risk.

While PACRA has for some time implicitly analyzed operational risk as part of its credit rating process, the combination of risk measurement advances in the financial sector and new regulatory demands has prompted the agency to adopt a more formalized and explicit approach to these risks.

Our analysis of operational risk focuses on a number of issues, including (a) a bank's definition of such risk (b) the quality of its organizational structure (c) operational risk culture (c) the development of its approach to the identification and assessment of key risks (d) data collection efforts; and (e) overall approach to operational risk quantification and management.

**OTHER RISK:** As already indicated, a risk often not encapsulated in the above categories is reputation risk, which can be significant for some banks, particularly those active in private banking. A good name and brand image are often an important differentiator of long-term performance in an industry which is becoming increasingly commoditised.

### **FUNDING AND LIQUIDITY**

Main areas to analyze here are the structure and diversification of a bank's funding base (in particular the proportion of retail and wholesale funding), including any marked concentration of deposits or borrowing, significant trends in funding sources and in the bank's liquidity. The main risk for a bank's funding is not being able to renew or replace maturing liabilities, either at all or at a reasonable cost. A well diversified and stable funding base and a good spread of suppliers within each source type can limit this risk. It is thus important to analyze the composition of a bank's deposit base and other sources of borrowing by size, maturity, geographical source and currency.

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 an insurance policy against a liquidity crunch, most banks hold a portfolio of marketable securities and other assets, which can be sold quickly for cash in case of need. It is, however, important to assess how marketable a bank's marketable securities portfolio really is, and whether such securities would be sufficiently liquid in the case of a crisis. Finally, banks should have a clear contingency plan, in case they run into difficulties, specifying who is responsible for the management of liquidity in a crisis, what action is to be taken and at what point, and what arrangements exist with "last resort" lenders.

### **CAPITALIZATION**

A bank's equity capital provides a cushion to absorb unreserved losses and thereby allows it to continue as a going concern, thus staving off insolvency, or, if insolvency does become inevitable, to some finite degree absorbing losses which would otherwise have to be borne by creditors. Both the absolute size of a bank's equity capital and its capital adequacy (i.e. the size of its capital in relation to its risks) are thus fundamental considerations when analyzing its creditworthiness.

PACRA has its own standard quantitative measures of capitalization, which it applies to banks across the board, the principal one being pure common equity as a percentage of total assets. If there is any form of obligation to pay a return, then the capital in question is not pure common equity but debt.

While the evolution of a bank's capitalization is an important part of our analysis, we also examine closely the quality of capital: what percentage of the capital base is pure common equity and how much is in the form of subordinated debt, perpetual debt, and other forms of quasi-equity (such as revaluation reserves, unrealized gains, underprovided non-performing loans and overvalued assets). Management's policies with regard to minimum capital ratio objectives, share buy-back programmes and dividend payouts are also taken into account, as are the bank's ability to raise new capital and its internal capital generation record.

It is also important to analyze the level of "free capital" a bank has. If the entirety of its capital base is, for instance, tied up in long-term participations or fixed assets, it will not have any "free" (i.e. immediately available) capital with which to absorb unreserved losses.

PACRA additionally looks at the trends in a bank's regulatory capital ratios, both in absolute terms and in relation to those of its main peers.

### **EARNINGS AND PERFORMANCE**

As the income earned by a bank may ultimately affect its solvency, this is another important area to analyze. PACRA looks at the historical trend of a bank's earnings performance, the stability and quality of its earnings and its capacity to generate profits. While taking into consideration its operating environment,

PACRA compares significant performance indicators for a bank with those of its peers. Where possible, it also analyses earnings for each of the bank's business lines. In this context, it looks at the trends in:

- net interest revenue, including the evolution of interest spreads in each business line, trends in lending volumes and evolution of funding costs;
- non-interest income, including more stable revenues in the form of commissions and inherently more volatile trading revenues;
- non-interest expenses, breaking down personnel and other expenses, and comparing the expense level not only with total income but also where possible with earning assets, to the number of branches (in the case of retail banking) and to the number of employees;
- provisioning levels, together with the capacity of the bank's earnings to absorb provisions;
- exceptional income and expenditure items, as well as developments in taxation incidence.

Where necessary in its ratings analysis, PACRA makes adjustments to a bank's reported income statement figures, so that financial performance indicators are as comparable as possible from one bank to another.

Earnings prospects are also closely examined, based on budgets and forecasts given to us by a bank, as well as any medium-term plan it may have. External factors which may influence future earnings trends are taken into account, as well as management's track record in providing reliable budgets and forecasts.

#### **DIVERSIFICATION OF BUSINESS AND FRANCHISE**

PACRA analyses the diversification of activities undertaken by a bank, in geographical and industrial sector terms. It also examines the diversity of services and products it provides to customers, and its ability to create new products. It takes into account the strength and depth of a bank's franchise as well as its ability to safeguard existing business and gain new business.

#### **MANAGEMENT AND STRATEGY**

An effective management and well-defined strategy are essential ingredients for a successful bank. As part of its assessment of a bank's management, PACRA looks

at the organizational structure of the bank, the dependence of the management team on one or more persons, coherence of the team, the independence of management from major shareholders, and management's track record to date, in terms of building up solid business mix, maintaining operating efficiency and strengthening the bank's market position. It also analyses the quality and credibility of management's strategy, examining plans for future internal or external growth. When evaluating future plans, significant credit is given for delivering on past projections and sticking to strategies. Although judgment of management is subjective, financial performance over time provides a more objective measure.

#### **CORPORATE GOVERNANCE**

PACRA is of the view that a bank's corporate governance practices can have a material impact on its credit quality. In assessing corporate governance, PACRA analyses governance data and information systematically, and also performs more contextual, qualitative reviews of an individual entity's governance practices. The important aspects, which are looked at by PACRA while evaluating the quality of corporate governance include:

- The independence and effectiveness of the board of directors: An independent, active and committed board of directors is an essential element of a robust corporate governance framework. The role of the board is to work with management in steering the bank to its performance objectives and to provide critical, impartial oversight of management performance. A board that is not committed to fulfilling its fiduciary responsibilities can open the door to ineffective or irresponsible management behavior.
- Oversight of related party transactions that may lead to conflicts of interest: Such transactions, which include those between senior management or major shareholders and the bank, may warrant closer review, particularly if the related party is, as a result of the transaction, faced with a competing set of incentives that is separate from the financial performance of the bank.

- Board oversight of the audit function: Governance of the audit process is an important safeguard in protecting the integrity of a bank's financial reporting. It is the responsibility of a bank's audit committee (or equivalent) to monitor the work of external and internal auditors, and at the same time to ensure that the company's audit is conducted independently and objectively.
- Executive and director remuneration: If remuneration exceeds market norms and standards, it can cause a drain on a bank's financial resources; it also suggests a lack of financial discipline that might pervade the culture and operations of the company more generally.
- Complex shareholding/ownership structures: In cases where a bank has a complex ownership company structure, there are unique challenges in evaluating the decision-making process, lines of hierarchy and financial obligations and liabilities. In analyzing these banks the fundamental issue is to explore the underlying reason or motivation for the complexity of the organization.
- Banks which are owned by private individuals and families: On the one hand, the concentration of equity ownership might indicate that the majority shareholders have a strong vested interest in creating long-term value and closely monitoring management behavior. On the other hand, a potential concern in such cases is that the owners might rely heavily on extracting funds from the bank as source of income or to fund other business activities, potentially undermining the financial stability of the bank.

would be supported, and by whom. This is particularly relevant for support in case of larger sized banks, whose failures could have a contagious effect on the confidence in the overall financial system.

## **OWNERSHIP AND SUPPORT**

The ownership of and potential support available to a bank is crucial to our overall rating assessment. We analyze the stability of the shareholding structure of the bank, as well as the ability and willingness of either its owners or the government to bail out the bank in case of need.

A particularly important factor to be taken into account when rating banks is the presence (or possibly absence) of a lender/rescuer of last resort, and a very important part of our background analytical work is an attempt to assess whether, and under what circumstances, a bank

## STANDARD RATING SCALE & DEFINITIONS

LONG TERM RATINGS	SHORT TERM RATINGS
<p><b>AAA: Highest credit quality.</b> ‘AAA’ ratings denote the lowest expectation of credit risk. They are assigned only in case of exceptionally strong capacity for timely payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.</p> <p><b>AA: Very high credit quality.</b> ‘AA’ ratings denote a very low expectation of credit risk. They indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.</p> <p><b>A: High credit quality.</b> ‘A’ ratings denote a low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to changes in circumstances or in economic conditions than is the case for higher ratings.</p> <p><b>BBB: Good credit quality.</b> ‘BBB’ ratings indicate that there is currently a low expectation of credit risk. The capacity for timely payment of financial commitments is considered adequate, but adverse changes in circumstances and in economic conditions are more likely to impair this capacity. This is the lowest investment-grade category.</p> <p><b>BB: Speculative.</b> ‘BB’ ratings indicate that there is a possibility of credit risk developing, particularly as a result of adverse economic change over time; however, business or financial alternatives may be available to allow financial commitments to be met. Securities rated in this category are not investment grade.</p> <p><b>B: Highly speculative.</b> ‘B’ ratings indicate that significant credit risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favourable business and economic environment.</p> <p><b>CCC, CC, C: High default risk.</b> Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favourable business or economic developments. A ‘CC’ rating indicates that default of some kind appears probable. ‘C’ ratings signal imminent default.</p>	<p><b>A1+:</b> Obligations supported by the highest capacity for timely repayment.</p> <p><b>A1:</b> Obligations supported by a strong capacity for timely repayment.</p> <p><b>A2:</b> Obligations supported by a satisfactory capacity for timely repayment, although such capacity may be susceptible to adverse changes in business, economic, or financial conditions.</p> <p><b>A3:</b> Obligations supported by an adequate capacity for timely repayment. Such capacity is more susceptible to adverse changes in business, economic, or financial conditions than for obligations in higher categories.</p> <p><b>B:</b> Obligations for which the capacity for timely repayment is susceptible to adverse changes in business, economic, or financial conditions.</p> <p><b>C:</b> Obligations for which there is an inadequate capacity to ensure timely repayment.</p> <p><b>D:</b> Obligations which have a high risk of default or which are currently in default.</p>

- Notes:**
1. PACRA's ratings are an assessment of the credit standing of entities in Pakistan. They do not take into account the potential transfer / convertibility risk that may exist for foreign currency creditors.
  2. A plus (+) or minus (-) may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the ‘AAA’ long-term rating category, to categories ‘CCC’ and below, or to short-term ratings.
  3. PACRA's rating is not a recommendation to purchase, sell or hold a security, in as much as it does not comment on the security's market price or suitability for a particular investor.