Methodology
Financial Institution Rating

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Summary

PACRA's financial institution rating is a representation of its opinion on the relative credit risk associated with a financial institution. PACRA arrives at this opinion by conducting, inter-alia, a detailed evaluation of several qualitative and quantitative factors, namely: Profile, Ownership, Governance, Management, Business Risk and Financial Risk. The relative importance of each of these qualitative and quantitative criteria can vary across financial institutions, depending on its potential to change the overall risk profile. While standalone credit quality is addressed, PACRA incorporates the relative positioning of a financial institution to arrive at the final rating.

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0. Introduction

- Methodology applicable to commercial banks and DFIs
- Qualitative and quantitative factors
- All factors assessed on standalone *and* relative basis

A sound financial ecosystem is critical for functioning of any economy. It is defined by the interaction of providers of funds (savers), users of funds (borrowers), financial institutions (intermediaries), and regulators (oversight). This system ensures smooth flow of funds between savers and borrowers; wherein, financial institutions provide platform for their interaction. Regulatory oversight safeguards the sanctity of this system. Like all systems, financial system has its own set of challenges. The most prominent being "Risk"; the risk that some participant may not be able to meet its commitments. All participants do their best to manage this risk to maximize their return. This is not possible unless we have independent information on the risk. Here comes expertise of rating agencies, providing independent opinion on credit risk. Flow of funds is only possible when the provider of funds has confidence that user of funds will be able to return these in a timely manner and as committed. Ratings help build this confidence. A higher rating means higher likelihood of timely repayment compared to a low rating. Our ratings are forward-looking and reflect our expectations for future financial and operating performance. However, historical results are helpful in understanding patterns and trends of an entity's performance as well as for peer comparisons.

0.1 Scope: This methodology applies to financial institutions (FIs) regulated by State Bank of Pakistan (SBP), the central bank. The scope of this methodology covers all commercial banks and development financial institutions. These institutions are mainly licensed to mobilize deposits and provide credit among other financial services. The regulatory framework consists of the laws and regulations designed by SBP to ensure a sound financial system.

0.2 Rating Framework: PACRA bases its analysis of financial institutions on a number of quantitative and qualitative factors. Overall factors are categorized under six key areas: Profile, Ownership, Governance, Management, Business Risk and Financial Risk. No one factor has an overriding importance or is considered in isolation and all the factors are reviewed in conjunction. Quantitative factors help in achieving objectivity in the rating process while the qualitative side helps in establishing the sustainability of the relevant factors in the foreseeable future. Neither all factors can be quantified nor do quantitative values portray the whole story. PACRA, therefore, seeks to employ a best combination of both to ensure comparability between ratings over time.

0.2.1 The basic precepts of this rating methodology are understanding of the business model of the financial institution (and the inherent risks), the strategy of its management, local macro-economic environment, and developments happening in the industry. The relevant positioning of the financial institution, established in comparison with relative peers in the industry, is a key consideration under this methodology to reach a final rating for a financial institution.

0.2.2 While our rating process does not include an audit of a financial institution's financial statements, it does examine the overall control environment to establish to which extent they accurately reflect a financial institution's financial performance and balance sheet integrity. Short-term and long-term ratings are based on a financial institution's fundamental credit characteristics, a correlation exists between them (see PACRA's Criteria document "Correlation between Short-term and Long-term Rating Scale").

1. Profile

- **Background:** Evolution and past strategy
- **Operations:** Key facts including exposure to certain business segments, product slate, geographical location etc.

1.1 Background: PACRA reviews the background of the financial institution to understand its evolution from where it started to where it currently stands. We analyze how and through what means the institution has achieved the desired expansion. PACRA looks at the progress of the institution from its historical past. The progress of the institution helps PACRA in determining the ability of the institution to successfully realize its strategy. The significant factor here for PACRA is to assess whether the institution has achieved the desired expansion through organic growth or acquisitions. Meanwhile, the source of funding for desired growth is also critical.

1.2 Operations: The assessment of operations of a financial institution depends on the exposure of business segments and the stage the business is in. Here PACRA reviews the diversity, geographic spread of operations, product offering, asset mix, borrower profile, size of the franchise/portfolio and track record of operations. Size may be an important factor if it confers major advantages in terms of operating efficiency and competitive position.

2. Ownership

- **Ownership Structure**: Identification of man at the last mile
- **Stability**: Succession planning at shareholders level
- **Business Acumen**: Knowledge, skills and experience of key shareholders
- **Financial Strength**: Willingness and ability of key shareholders to provide extra-ordinary financial support

2.1 Ownership Structure: The assessment of ownership begins by looking at the legal status of the financial institution. The level of perceived stability gradually increases from a sole proprietor to a listed financial institution. This is followed by an in-depth study of the shareholding mix in order to disentangle structure of ownership. Key factors that are considered for this purpose, inter-alia, include: i) shareholding structure, which includes whether the individuals own the institution directly or indirectly, ii) foreign or local shareholders, iii) whether the institution is owned by a single group or through a combination of entities and individuals, and iv) whether it is part of a group or is a standalone financial institution. All these deliberations are done to identify the man at the last mile. PACRA also considers how a financial institution is actually run, as, at times, entities are run as family concerns despite being legally structured as companies.

Complex shareholding/ownership structures: *In cases where a financial institution has a complex ownership structure, there are unique challenges in evaluating the decision-making process, lines of hierarchy and financial obligations and liabilities. In analyzing these financial institutions, the fundamental issue is to explore the underlying reason or motivation for the complexity of the structure.*

financial institutions 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 financial institution as source of income or to fund other business activities, potentially undermining the financial stability of the financial institution.*

Sovereign Ownership: *PACRA draws comfort from sovereign ownership of financial institutions as the ability of the financial institution to raise capital from key shareholders, as and when required, is an important credit driver. Furthermore, the institution's importance in the domestic financial system has a bearing on the possibility of government support at times of financial stress.*

Certain Development financial institutions (DFIs) may have been formed or supported by sovereign/s. This is generally done to focus on a particular set of economic activities or areas. Ratings of such DFIs may benefit if existing support or likelihood of support from sovereign/s can be explicitly established. Support factors, inter-alia, include percentage of ownership,

control over governance framework, concessionary funding and some sort of promise to support given certain contingencies.

2.2 Stability: In order to analyze the stability of the ownership, a critical factor to be taken into account is the succession planning. A very important part of our background analytical work is an attempt to assess whether, and under right of succession, a financial institution's prospects would be supported, and by whom. This is particularly relevant for support in case of larger sized banks, where disputes among shareholders could have a contagious effect on the confidence in the overall financial system. A stable ownership with clarity in succession, perhaps major shareholding residing with one family or group, is considered positive for ratings. On the contrary, high free float (in case of listed concerns) leads to risk of take over and may anchor lower ratings.

2.3 Business Acumen: PACRA gauges the shareholders' business acumen. Having a strong business acumen is considered critical for sustainable success. PACRA analyzes business acumen through two primary areas; i) industry-specific working knowledge and ii) strategic thinking capability. Meanwhile, a deep and applicable understanding of the system is critical in order to determine how a business achieves its goals and objectives. The scope includes the assessment and understanding of how the sponsors of the financial institution think about and successfully make the right business decisions.

2.4 Financial Strength: PACRA analyzes the ability and willingness of the major shareholders to support the financial institution both on a continuing basis, and support in times of crisis. Particularly in case of smaller financial institutions, where capitalization requirements are yet to be met, PACRA critically analyses the likelihood of the major shareholder supporting the financial institution in complying with regulatory requirements within required timeframes. Thus, ongoing support is considered more critical in these cases. However, for large financial institutions, external support from government / regulatory becomes more important. Here, PACRA gives due importance to, i) the behavior of the major shareholders to provide timely and comprehensive support in times of need in the past, ii) prospective view of key shareholders, incase such need arises, iii) other businesses of major shareholders, and iv) the level of commitment of the major shareholder with the financial institution in providing capital support. In case of no explicit commitment, PACRA attempts to form a view on availability of likely support. The scope for looking at other business includes overall profiling of the key shareholders in the context of identifying the resources they have, outside the financial institution. Here, the standalone rating of the institution can benefit from having majority shareholders with very strong financial strength and commitment to the business. If, in a group structure, the financial strength of the shareholders is deemed to be weaker than that of the financial institution, this may bode negatively for the financial institution's standalone rating given the possibility that the financial institution may at some point of time be bound to extend financial support to its weaker parent.

Information Required on Ownership:
- Shareholding pattern
- Details of major shareholders' other businesses
- Shareholders' financial information
- Past pattern of support provided by the shareholders

3. Governance

- **Board Structure**: Composition of the board in terms of size, independence and committees
- **Members' Profile:** Relevance and diversity of board members' skills, knowledge and experience
- **Board Effectiveness**: Extent to which board properly discharges its responsibilities
- **Transparency**: Quality and extent of financial and non-financial information disclosure to stake holders

3.1 Board Structure: This comprises assessment of the board on various criteria including overall size, presence of independent members, duration of board members' association with the financial institution, overall skill mix and structure of board committees. Size of the board may vary as per the scope and complexity of operations. While a very small board is not considered good, similarly, reaching a decision in an effective and efficient manner may not be possible in case of a large board. A healthy composition of board includes the presence of independent/non-executive members having limited relationship with the sponsoring group of the financial institution. Meanwhile, same individual holding chairman and CEO positions is considered weak governance practice. The chairman is expected to have a non-executive role. Compliance with the code of corporate governance is also examined. PACRA also considers independence of governance practices from major shareholders. Lastly, PACRA evaluates number of board committees, their structure, and how these committees provide support to the board. A board with higher number of members should have higher number of committees in place to assist in performing its role.

3.2 Members' Profile: PACRA collects information regarding profile and experience of each board member. This helps in forming an opinion about the overall quality of the board. Moreover, diversification in terms of knowledge background and experience is considered positive. However, a fair number of board members should have related experience.

3.3 Board Effectiveness: In PACRA's view, the role of the board is to work with the management in steering the institution to its performance objectives and to provide critical and impartial oversight of management performance. PACRA analyzes the type and extent of information shared with board members, and quality of discussions taking place at board and committee levels. Effective oversight requires frequent sharing of detailed information covering various aspects of business and market development. Meanwhile, PACRA also reviews the number of board meetings held during the year as these should be justified with the number of issues/matters arising. Board members' attendance and participation in meetings is important and is gauged by viewing board meeting minutes.

3.4 Transparency: Quality of governance framework is also assessed by the procedures designed by the board to ensure transparent disclosures of financial and other information. This can be achieved through: i) ensuring independence of the audit committee, ii) strengthening the quality of internal audit function, which may be in-house or outsourced, and iii) improving quality of external audit by engaging auditors, which are included in the State Bank of Pakistan's panel of auditors and/or have a satisfactory QCR rating.

Accounting Quality*: PACRA reviews the quality of a financial institution's accounting policies as reflected in its notes to accounts, auditors' comments and other disclosures which are part of its financial statements. Adherence to accounting standards is assessed, particularly for unlisted concerns.*

Quality of disclosures: *A well-established information system is required for adequate disclosures. The characteristics of quality information includes timeliness, disclosures beyond the minimum regulatory requirements to improve transparency and consistency of such disclosures.*

Information Required on Governance
- Size and composition of board
- Details of board committees including TORs
- Profile of board members
- Information packs used by the board
- Minutes of board meetings
- Internal auditor detail (if outsourced)
- External auditor detail

4. Management

- **Organizational Structure**: Alignment of organogram with entity size, nature of business and requirements
- **Management Team** Relevance and diversity of skills, knowledge and experience of top management
- **Management Effectiveness**: Extent to which top management properly discharges duties and role of technology infrastructure therein
- **Control Environment**: Robustness of systems and processes, especially risk management framework

4.1 Organizational Structure: The assessment of management starts with PACRA conducting an in-depth analysis of organizational structure of the financial institution. On a standalone basis, PACRA looks into the hierarchal structure, reporting lines and coherence of the team. However, PACRA also places the organizational structure in the institution's relative universe for comparison in order to form an opinion on optimal structure within the sector in context of its complexity. Number of management committees established to monitor performance and assure adherence to the policies and procedures is considered. PACRA measures the effectiveness of the financial institution by forming an opinion on the quality of management committees.

4.2 Management Team: Analysis of management includes evaluating experience profile of key individuals, management's track record to date in building up sound business mix, maintaining operating efficiency and strengthening the financial institution's market position. Although judgment about management is subjective, performance of the financial institution over time provides a more objective measure. PACRA analyses the quality and credibility of management's strategy, examining plans for achieving growth. When evaluating future plans, significant credit is given for delivering on past projections and sticking to strategies. Loss of key personnel, particularly members of senior management, can have potentially adverse effects on overall standing of the financial institution relative to peers. Hence, HR turnover is reviewed to determine the stability of critical staff, with particular focus on key departments. Similarly, dependence of the management team on one or more persons is considered risky. In addition, financial institution's human resource policies are also reviewed to gauge its emphasis on retaining and recruiting vital staff.

***Key-man Risk**: Key-man risk occurs when a financial institution is heavily reliant on an individual, or a limited number of individuals, who are accepted as the key holder(s) of important intellectual capital, knowledge or relationships. While this type of risk is more commonly identified in small to medium-sized entities, it can also exist in larger entities and is relatively challenging to benchmark, and hence, mitigate. PACRA attempts to identify the extent to which a financial institution is dependent on the expertise of such individual(s) and to ensure policies exist for managerial succession to limit the adverse impact of such a person unexpectedly leaving, on the financial institution*

4.3 Management Effectiveness: PACRA conducts a qualitative review of management systems and technology infrastructure to assess management effectiveness. A key measure of management effectiveness is its track record of delivering on past projections and sticking to strategies. One of the key tools available to management to effectively run an organization is the information provided to it. It is critical that information available to management be concise, clear and timely, so it can be interpreted and understood, and the management can respond accordingly. An important part of this analysis is looking at the financial institution's MIS. PACRA further assesses whether management has developed any critical success factors to evaluate performance of various

business segments, and their efficacy. Management meeting minutes are also reviewed, wherever available, to assess the quality of discussion.

MIS: *System generated – real-time based – MIS reports add more efficiency in decision making whether related to operational, financial, or strategic issues. PACRA evaluates the quality and frequency of the MIS reports used by the management team to ascertain that decision-making within the financial institution is information-based.*

4.4 Risk Management Framework/Control Environment: This includes an analysis of the financial institution's appetite for risk and the systems in place to manage these risks. PACRA examines the independence and effectiveness of the risk management function, the procedures and limits that have been implemented, limits setting authority and the degree to which these procedures are adhered to. PACRA endeavors to assess senior management's understanding of and involvement in risk management process and examine the reporting lines in place. In recent years, there has been a noticeable upgradation in the risk management systems of financial institutions, in the face of increasing guidance and supervision from the SBP. In case of a bank, SBP efforts to implement Basel III further improves it.

Credit Risk: *A key attribute of a well-run institution is that it establishes clear parameters around risk appetite and expected returns (profit) for risks being taken. Asset quality indicators are a primary tool to assess the level of risk being taken. The soundness of these indicators is viewed in the context of returns achieved and the adequacy of risk management to determine how the risk return equation may evolve in different phases of the financial institution's business cycle. Indications of poor asset quality or credit risk management will typically lead to lower ratings whereas strong asset quality and credit risk management are positively factored into a rating decision.*

Market Risk: *PACRA's analysis of market risk incorporates structural risks (such as interest-rate risk management) and/or trading risks where present. The vast majority of FIs are subject to structural interest-rate risks due to the shorter nature of their liabilities (including deposits for banks) compared with the duration of their assets. Many financial institutions are also exposed to structural foreign exchange risk. PACRA reviews the asset and liability management strategy of the institution. Board and management policy limits are typically expressed as earnings at risk limits. These are usually evaluated along with reports from management systems. Market risk on its own may not be a rating driver. However, poor market risk management or aggressive market risk-taking without mitigants would likely pressurize an institution's ratings.*

Operational Risk: *In the context of Basel II and Basel III, operational risk is defined as "the risk of loss resulting from inadequate or failed internal processes, people and systems or external events"[1]. Our analysis of operational risk focuses on a number of issues, including (a) financial institution's definition of such risk, (b) the quality of its organizational structure, (c) operational risk culture, (d) approach to the identification and assessment of key risks (e) data collection efforts, and (f) overall approach to operational risk quantification and management. Extent of technological integration is considered crucial in mitigation of operational risks such as fraud, cyber risk, loss of data and technological disruptions in critical processes. High degree of automation in day-to-day operations is considered favorable to operational risk management.*

Reputational and Other Risks: *Reputational risk may emanate from operational problems or failure in any risk management systems. It could be critical for banks as deposits may be withdrawn in case of strain on reputation. It may be difficult to evaluate but could adversely*

[1] BIS: Basel Framework, Chapter OPE - Calculation of RWA for operational risk

affect an institution's rating in cases where it is significant. In addition to reputation risk, any regulatory non-compliance may lead to potential legal ramifications as well.

Information Required on Management
- Latest organogram
- Details of management committees
- Profile of senior management
- Redundancy pattern
- MIS reports
- Minutes of management committees' meetings
- Financial institution's policies and SOPs

5. Business Risk

- **Industry Dynamics**: Systematic risks and opportunities in the operating environment
- **Relative Position**: current standing among peers
- **Revenues**: Quantum, stability and diversification of inflows from core and non-core operations
- **Cost Structure**: Key costs and associated risks and likely impact on profitability
- **Sustainability**: soundness and viability of long-term strategy

5.1 Industry Dynamics: The process for anchoring credit rating of a financial institution builds on PACRA's understanding of the industry dynamics. This understanding, following an in- depth research approach, is documented as a sector study. The analysis captures the placement of the local industry in the international context to see the points of identity and distinction. In points of identity, the risks and challenges identified for the international industry are re-evaluated for the local industry players, with a view to see whether the local players have established effective mitigant's against those risks and taken due measures to meet the challenges. At the same time, we identify the risks and challenges specific to the local context of the industry. While conducting the analysis, PACRA takes a view on the industry alone, independent of the market players. This exercise helps PACRA to form a view on industry's significance in the economic environment of the country, its regulatory environment and likely support, if needed.

5.1.1 PACRA explores the possible risks and opportunities resulting from social, demographic, regulatory and technological changes. It considers the effects of geographical diversification and trends in industry expansion or consolidation required to maintain a competitive position. The analysis includes the role of the regulator, its supervision of regulated entities, reporting requirements and regulations relating to specific type of financial institutions and to specific financial products.

Economic Risk: *PACRA analyzes basic economic indicators of the country including size and composition of economy, performance of important sectors, gross domestic product (GDP) growth, inflation, saving and investment trends and potential credit demand. An important part of economic analysis is positioning of industry and impact assessment of economic risk factors on the industry.*

Regulatory Environment: *A well-regulated and supervised system is pivotal for credibility and stability of financial institutions even when the operating environment may become unfavorable. PACRA's evaluation of the regulatory system involves evaluation of criteria related to capital and other countercyclical measures to absorb risk and the extent of regulatory supervision and changes in response to the macro environment. This includes looking at key norms (such as Non-Performing Loan (NPL) recognition, provisioning, capital adequacy, liquidity, benchmark lending rate and expansion) and prospective regulatory changes.*

5.2 Relative Position: Relative position reflects the standing of the financial institution in the related industry. The stronger this standing is, the stronger is the financial institution's ability to sustain pressures on its business prospects and profitability. This standing takes support from three major factors including: i) market share, ii) growth trend, and iii) franchise/brand value.

Market Share: *Market share represents the financial institution's penetration in the chosen market. Size is advantageous as it provides ability to acquire larger business, pricing power and better cost management. There is a positive correlation between a financial institution's absolute and relative size and its market position and brand value. The large entities exercise greater power over the pricing, while ensuring commensurate profits. Small entities struggle to obtain business, and with less flexibility in the cost structure, their profits remain low. While absolute size is important, it is basically the relative proportion which provides a clear yardstick to analyze the comparative strength of the market players. The more distant a player is from the average on the positive side, the stronger is its ability to reflect the characteristics just mentioned. In a dynamic industry, which is not characterized by concentration, PACRA believes that relative size would better capture the strength of the financial institution's standing.*

Growth Trend: *While evaluating the size, PACRA looks at the rate of growth. Growth is important as it ensures that the financial institution continues to have the ability to meet the industry benchmarks. As the industry grows, it uplifts the scale of its operational context. This reflects in the ability of the players to invest in human resource, upgrade the control environment, enhance the product slate, increase outreach and improve the quality of product/service. To lag the industry's growth trend means to remain short on these avenues, putting pressure on the market position. PACRA monitors higher-than-industry growth to understand the quality of the incremental business including impact on key business segments and if it has resulted in higher concentration due to added business. Higher growth while compromising the quality of the portfolio is perceived negatively.*

Franchise / Brand Value: *The strength of a franchise determines its capacity to grow while maintaining a reasonable cost to income ratio and profitability, thus providing resilience to earnings. PACRA evaluates the franchise strength in terms of scale of operations and market share for various activities, performance and strengths relative to competition, complexity of key segments, diversification across various performance metrics like branches, advances, liabilities, sources of other income etc. and access to special Government support or privileges relative to other financial institutions. A strong franchise is expected to result in a granular asset and liability base. PACRA also considers the brand recognition and life of institution for its franchise strength analysis.*

5.3 Revenues: In measuring revenue quality of a financial institution, diversification and stability are very important factors. A financial institution with a diverse product slate with more than one revenue streams is considered better than a financial institution with a concentrated earning profile. Composition of revenue from core business activities i.e. advances and investments, is considered critical. The analysis of target markets to which a financial institution serves forms a part of the assessment. Stability is measured through historical trend analysis of the financial institution's revenues. Financial institutions that rely more on generating income from risky business lines like trading activities will typically display more volatile revenue trends. Stability in revenue is consider critical for sustainability of the financial institution.

5.3.1 Diversification: Diversification is desirable since it enhances the entity's ability to meet challenges, both present and upcoming. Lack of diversification gives rise to concentration risk, reflecting vulnerability of the financial institution to few elements. At the same time, it enhances the risk of disruption in if the area of concentration goes wrong. This does not entail that an entity specializing in a certain product/segment would necessarily be at a disadvantage. The disadvantage would only arise if the institution's business gives rise to concentration risk. At the same time, diversification into riskier segments may not improve resilience and, therefore, may not translate into superior ratings. In assessing diversification, common factors include loan mix, portfolio granularity, sectoral mix, share of domestic and overseas exposure and borrower profile.

Meanwhile, diverse geographical presence bolsters competitive position as it could offset the credit risks arising from unfavorable regional developments.

5.3.2 Investment Income: Investment income is the alternative revenue stream. It supplements a financial institution's profitability. Profits derived from investments can include interest, dividends and capital gains. Quality of investments is gauged through analysis of the investments from risk viewpoint: credit, market and liquidity risks are the prime ones. Financial institutions invest a significant portion of their investment portfolio in government securities that notably diminishes credit risk. Low rated investments and highly volatile and illiquid investments are considered risky. The quality of the investment book is assessed to form an opinion that the investments are not concentrated in high-risk avenues.

5.3.3 Non-Mark-Up Income: For most financial institutions, income from advances and investments makes up much of revenue. However, non-interest income from fees, service charges, commissions and foreign exchange etc. may also be an important source of revenue. PACRA views earnings profiles comprised primarily of interest income favorably given the relative stability of this income stream. However, PACRA also assesses the financial institution's ability to complement its core income with fee income. A large fee income allows greater diversification which can improve the financial institution's resilience of earnings and earning profile.

5.4 Cost Structure: Cost structure is analyzed for the amount of flexibility provided when market conditions are less favorable. In this regard, PACRA considers how much of the cost base is variable. PACRA also evaluates the financial Institution's performance ratios relative to those of its peers to understand whether costs have been contained while growing assets and revenue. If expense ratios are high, it could be an indicator that the financial institution has a significant fixed cost burden. In this context, key measure that PACRA looks at is the (Non-Mark-Up Expenses / Total Income) ratio. Whereas, Non-Mark Up expenses comprise i) Compensation expense, ii) Infrastructure expense (including Property & Information Technology expenses), iii) Other Operating expenses. Non-mark-up expenses are also compared where possible with earning assets, to the number of branches and to the number of employees. Performance measures are not assessed in isolation as there may be variations that are caused by business model differences and the importance of ongoing investment in the financial institution's franchise. A low-cost base relative to peers offers the financial institution greater flexibility to deal with competitive pricing pressures. PACRA also considers provisioning levels, together with the capacity of the financial institution's earnings to absorb provisions.

***Margins:** PACRA looks at the historical trend of a financial institution's performance, the stability and quality of its earnings and its capacity to generate profits. The future profitability of a financial institution is evaluated by analyzing its interest spreads (asset yields minus cost of funds). While taking indicators for a financial institution with those of its peers. Where possible, PACRA also analyses earnings for each of the financial institution's business lines. In this context, it looks at the trends in:*

- *Net Interest Revenue including evolution of interest spreads in each business lines, trends in lending volumes and evolution in funding cost.*
- *Non-Interest Income, including more stable revenues in the form of fee and commissions, on inherently more volatile trading revenues.*
- *Exceptional income and expenditure items, as well as developments in taxation incidence.*

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

5.5 Sustainability: Earnings prospects are closelyxamined based on budgets and forecasts given to us by a financial institution, 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.

Event Risk: *Incorporating the risk of unforeseen events into a financial institution's rating opinion is challenging, given unpredictable nature and magnitude of impact of the underlying event. These events may be external (M&A's, regulatory changes, litigations or natural disasters) or may be internally driven (unrelated diversification, system breakdown leading to significant operational risk or strategic restructuring) and can lead to substantial rating changes. PACRA applies its analytical judgment in assessing the likelihood of such occurrences and potential impact, insofar as may be possible, and assesses the financial institution's track record, expertise of management team and level of financial discipline to incorporate the same into its ratings.*

Information Required on Business Risk:
- Financial statements of the financial institution for the last three years and latest four quarters
- Projections of two years, with details of underlying assumptions
- Break-up of fee, commission & brokerage income
- Spread calculation
- Details of investment book

Business Risk – Key Ratios:
Revenue:
- Advances Yield (%)
- Deposits Cost (%)
- Core Spread (%)
- Net Mark Up income/Total Income (%)
- Other Comprehensive Income/Total Income (%)

Earnings:
- Return on Average Equity (%)
- Return on Average Assets (%)
- Asset Yield (%) & Cost of Funds (%)
- Intermediate Efficiency (Spreads) (%)
- Non-Mark Up Expenses / Total Income (%)
- Compensation Expense / Total Income (%)

6. Financial Risk

- **Credit Risk**: Quality and concentration of exposures, both on and off-balance sheet
- **Market Risk**: Asset-liability management strategy
- **Liquidity and Funding**: Adequacy of access to internal and external sources for meeting financial needs

6.1 Credit Risk: PACRA looks at all areas that give rise to credit risk whether arising from on-balance sheet activities (including loans, investments, inter-financial institution deposits and placements) or off-balance sheet transactions (letter of credit, guarantees etc.). We examine the structure of the financial institution'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 financial institution'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 top 20 individual and group exposures) and credit risk concentrations in particular industries or sectors.

6.2 Asset Quality: We analyze loans considered to be "problem" loans, whether they are "sensitive" or "watchlist" (i.e. still performing) loans, non-performing or restructured loans. In

- **Capital Structure**: Equity cushion to absorb losses

assessing the underlying risk of problem loans, the adequacy of any security and reserve coverage is taken into account. As far as loan loss reserves are concerned, we examine different types of risk reserves in place (specific, general, etc.), the financial institution'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 financial institutions.

6.2.1 With reference to the quality of other 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 financial institution's inter-financial institution deposit and loan book takes into account size, maturity, and concentration of the book as well as the creditworthiness of the counter parties.

6.2.2 Financial institutions' off-balance sheet commitments are important to analyze. Such commitments include guarantees and letters of credit (LCs) as well as derivatives. Similarities exist when analyzing LCs and guarantee exposures. Regarding derivative instruments, PACRA looks at the gross notional and net fair values of a financial institution's derivative portfolio; it also considers the types of derivative instruments the financial institution uses and the purpose for which it uses them. As far as credit risk is concerned, it examines the systems used by financial institutions 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.

6.3 Market Risk: Analysis of market risk covers all structural and trading risks across a financial institution's entire business (including on- and off-balance sheet business). As far as structural risks are concerned, we examine the financial institution's asset and liability management strategy, the role of position taking, hedging and accounting in this strategy. We look at the levels of interest rate, foreign exchange and market (equity and fixed income) 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 financial institution 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).

6.4 Liquidity and Funding: Main areas to analyze in this section are the structure and diversification of a financial institution's funding base. This includes identifying any marked concentration in deposit base and borrowings, as well as identifying significant trends in funding sources. Composition of the deposit base is analyzed in terms of: retail vs. institutional, current vs. savings/fixed term, and deposits by group (financial institutions, corporates, etc.). The yardstick to gauge concentration is usually proportion of top 20 deposits as a percentage of total customer deposits. The main risk for a financial institution's funding side 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 financial institution's deposit base and other sources of borrowing by size, maturity, geographical source and currency.

6.4.1 As far as liquidity is concerned, we analyze both the financial institution's internal sources of liquidity (marketable securities, maturing loans, etc.) and external sources (such as access to money markets, stand-by lines from other financial institutions and rediscount facilities at the central bank). Against a possible liquidity crunch, most financial institutions 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 financial institution's securities portfolio really is, and whether such securities would be sufficiently liquid in case of a crisis. Finally, financial institutions 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.

6.5 Capital Structure: A financial institution's capital provides a cushion to absorb unreserved losses, or, in case of insolvency, absorbing losses which would otherwise have to be borne by depositors. Both the absolute size of a financial institution'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.

6.5.1 Meanwhile, the framework for domestic systemically important banks (D-SIBs) is considered to have a material impact on the capital adequacy of D-SIBs. Here PACRA reviews the compliance status of the financial institution and forms a forward-looking view and any material adverse effect that may have subsequent consequence on CAR. Any regulatory change and its impact on the financial institution is reviewed in comparison with management's track record on such matters.

6.5.2 Besides regulatory capital requirements, PACRA has its own standard quantitative measures of capitalization. These are applied to financial institutions across the board, the principal one being pure common equity as a percentage of total assets. PACRA also examines 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 buyback programs and dividend payouts are also taken into account, as are the financial institution's ability to raise new capital and its internal capital generation record.

6.5.3 PACRA additionally looks at the trends in a financial institution's regulatory capital ratios, both in absolute terms and in relation to those of its main peers. Moreover, PACRA analyses capital formation rate of a financial institution to form a view on the financial institution's ability to strengthen its capitalization. This is determined on the basis of net retained profits of the financial institutions after deducting the impact of dividend.

Credit Enhancement: *The financial institution that carry third party commitment to make good an amount obligated to the lenders may provide additional support to its financial risk profile. In this case, in determining the impact on rating, key factors to assess are the financial profile of the third party and the extent of coverage – quantum and duration – it provides.*

Information Required on Financial Risk:

- Top performing private group exposures
- Statement of credit exposures by type of security
- Latest Internal Risk Rating of facilities obligors
- Party wise detail of classified loan portfolio
- Latest statement of marginal / watchlist accounts
- Category wise break-up of FSV benefit availed by the bank
- Details of top 20 group-wise deposits and sponsor deposits separately
- Breakup of deposit base
- Capital Adequacy Ratio Statement

Financial Risk – Key Ratios

Credit Risk:

- Top 20 Advances / Advances (%)
- Non-Performing Advances / Gross Advances (%)
- Non-Performing Finances / Gross Finances (%)
- Risk Weighted Assets / Total Assets (%)

- Loan Loss Provisions / Non-Performing Advances (%)

Market Risk:
- Government Securities / Investments (%)
- Risk Weighted Assets / (Investments + Debt Instruments) (%)
- (Investments + Debt Instruments) / Total Assets (%)

Liquidity and Funding:
- Liquid Assets / Deposits and Borrowings (%)
- Advances / Deposits (%)
- Finances / Deposits and Borrowings (%)
- Top 20 Deposits / Deposits (%)
- Government and PSE Deposits / Deposits (%)

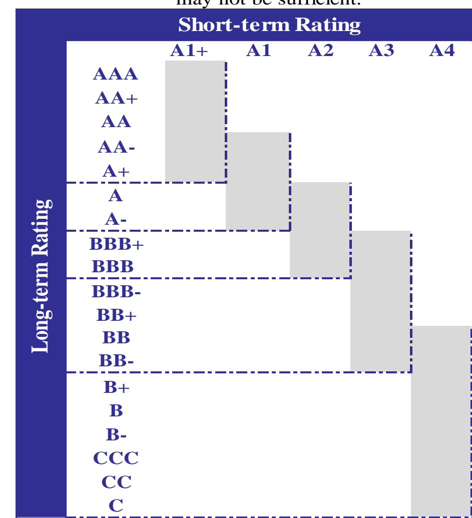
Capitalization:
- Equity / Total Assets (%)
- Tier-I Capital / Risk Weighted Assets (%)
- Tier-II Capital / Risk Weighted Assets (%)
- Capital Formation Rate (%)

Credit Rating

Credit rating reflects forward-looking opinion on credit worthiness of underlying entity or instrument; more specifically it covers relative ability to honor financial obligations. The primary factor being captured on the rating scale is relative likelihood of default.

Long-term Rating	
Scale	**Definition**
AAA	**Highest credit quality.** Lowest expectation of credit risk. Indicate exceptionally strong capacity for timely payment of financial commitments
AA+ AA AA-	**Very high credit quality.** Very low expectation of credit risk. Indicate very strong capacity for timely payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
A+ A A-	**High credit quality.** Low expectation of credit risk. The capacity for timely payment of financial commitments is considered strong. This capacity may, nevertheless, be vulnerable to changes in circumstances or in economic conditions.
BBB+ BBB BBB-	**Good credit quality.** 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.
BB+ BB BB-	**Moderate risk.** Possibility of credit risk developing. There is a possibility of credit risk developing, particularly as a result of adverse economic or business changes over time; however, business or financial alternatives may be available to allow financial commitments to be met.
B+ B B-	**High credit risk.** A limited margin of safety remains against credit risk. Financial commitments are currently being met; however, capacity for continued payment is contingent upon a sustained, favorable business and economic environment.
CCC CC C	**Very high credit risk.** Substantial credit risk "CCC" Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon sustained, favorable business or economic developments. "CC" Rating indicates that default of some kind appears probable. "C" Ratings signal imminent default.
D	Obligations are currently in default.

Short-term Rating	
Scale	**Definition**
A1+	The highest capacity for timely repayment.
A1	A strong capacity for timely repayment.
A2	A satisfactory capacity for timely repayment. This may be susceptible to adverse changes in business, economic, or financial conditions.
A3	An adequate capacity for timely repayment. Such capacity is susceptible to adverse changes in business, economic, or financial
A4	The capacity for timely repayment is more susceptible to adverse changes in business, economic, or financial conditions. Liquidity may not be sufficient.



**The correlation shown is indicative and, in certain cases, may not hold.*

Outlook (Stable, Positive, Negative, Developing) Indicates the potential and direction of a rating over the intermediate term in response to trends in economic and/or fundamental business/financial conditions. It is not necessarily a precursor to a rating change. 'Stable' outlook means a rating is not likely to change. 'Positive' means it may be raised. 'Negative' means it may be lowered. Where the trends have conflicting elements, the outlook may be described as 'Developing'.

Rating Watch Alerts to the possibility of a rating change subsequent to, or, in anticipation of some material identifiable event with indeterminable rating implications. But it does not mean that a rating change is inevitable. A watch should be resolved within foreseeable future, but may continue if underlying circumstances are not settled. Rating watch may accompany rating outlook of the respective opinion.

Suspension It is not possible to update an opinion due to lack of requisite information. Opinion should be resumed in foreseeable future. However, if this does not happen within six (6) months, the rating should be considered withdrawn.

Withdrawn A rating is withdrawn on a) termination of rating mandate, b) the debt instrument is redeemed, c) the rating remains suspended for six months, d) the entity/issuer defaults., or/and e) PACRA finds it impractical to surveill the opinion due to lack of requisite information.

Harmonization A change in rating due to revision in applicable methodology or underlying scale.

Surveillance. Surveillance on a publicly disseminated rating opinion is carried out on an ongoing basis till it is formally suspended or withdrawn. A comprehensive surveillance of rating opinion is carried out at least once every six months. However, a rating opinion may be reviewed in the intervening period if it is necessitated by any material happening.

Note. This scale is applicable to the following methodology(s):

a) Broker Entity Rating
b) Corporate Rating
c) Debt Instrument Rating
d) Financial Institution Rating
e) Holding Company Rating
f) Independent Power Producer Rating
g) Microfinance Institution Rating
h) Non-Banking Finance Companies Rating

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