The Pakistan Credit Rating Agency Limited

Broker Entity Rating Criteria

Methodology

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Summary

PACRA's Broker Entity rating is a representation of its opinion on the relative credit risk associated with the broker being rated. PACRA arrives at this opinion by evaluating the broker's business and financial risks, its competitive strengths, along with an assessment of its management quality and the operating environment. Given the inherent volatility in the industry, the assessment of the financial risk profile of a broker also focuses on ascertaining the sustainability of its business operations in stressful times. While several parameters are used, the relative importance of each of these qualitative and quantitative criterions can vary across entities, depending on its potential to change the overall risk profile.

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1. Introduction

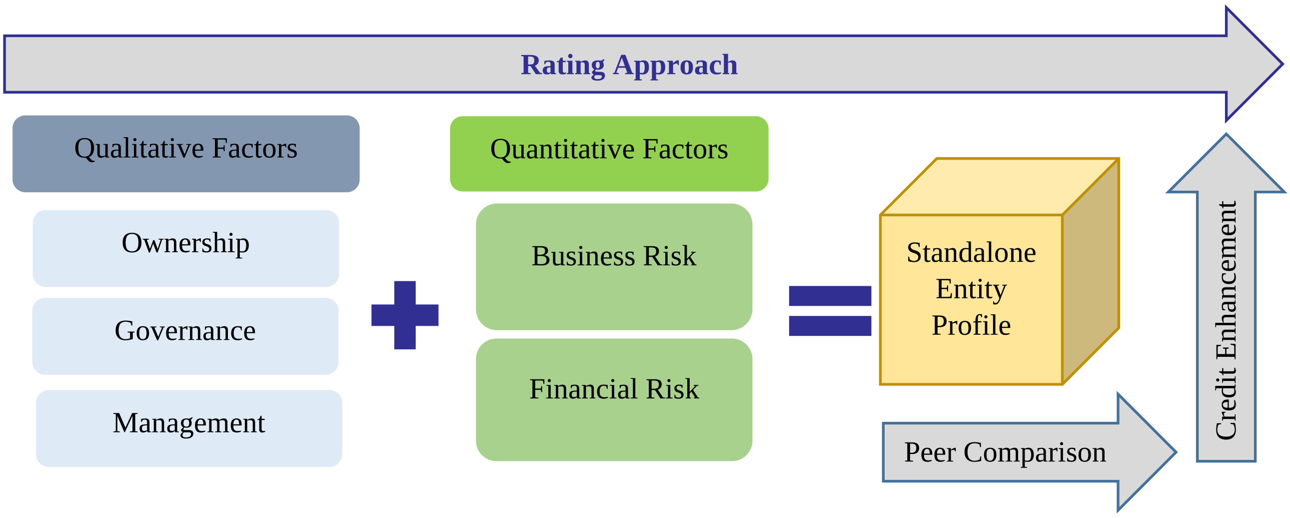
1.1 Scope: This methodology applies to securities brokers. These are regulated primarily by Securities and Exchange Commission of Pakistan under the Brokers and Agents Registration Rules 2001. SECP issued final Securities Brokers Regulations in June 2016. The firm, to undertake brokerage business, needs to be a TREC holder of an exchange, participant in CDC, a clearing member of NCCPL, and registered with SECP. In the latest regulations, SECP has created a distinction between Trading, Trading and Self Clearing and Trading and Clearing brokers. Separate set of regulations apply to each category including minimum capital, net worth and minimum net capital balance.

1.1.1 A broker provides multiple services: brokering (equity, fixed income, and commodity), dealing in listed and unlisted equities, providing and helping provide leverage products (Margin Trading System, Margin Financing, and Securities Lending and Borrowing). Some brokers are also engaged in advisory and underwriting. For underwriting, the broker needs to be registered with SECP as underwriter under the Underwriter Rules, 2015.

1.2 Rating Framework: PACRA bases its analysis of brokers on a number of quantitative and qualitative factors, the most significant of which are i) Profile, ii) Ownership, iii) Governance, iv) Management, v) Business Risk and vi) Financial Risk. No one factor has an overriding importance or is considered in isolation and all the factors are reviewed in conjunction. The 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 and would stick to it to ensure comparability between ratings over time.

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

1.2.2 While our rating process does not include an audit of a broker's financial statements, it does examine the control environment to establish to which extent they accurately reflect a broker's financial performance and balance sheet integrity. We make adjustments where necessary to make a broker's financial data comparable with those of its peers. In order to carry out adequate analysis of a particular broker, it is helpful to establish a "peer group" of comparable brokers. Short-term and Long-term ratings are based on a broker's fundamental credit characteristics, a correlation exists between them (see PACRA's Criteria Document "Correlation between Short-term and Long-term Rating Scale")



2. Profile

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

2.2 Operations: The assessment of operations of a broker depends on the exposure of business segments and the stage the business is in. Understanding of operations help PACRA to identify the types of business risks a broker could face together with its ability to safeguard or defend existing businesses, and gain new business. Here PACRA reviews the diversity, geographic spread of operations, strength and quality of the franchise, licenses, business model, Standard operating procedures, policies and protocols, and product offering. Size may be an important factor if it confers major advantages in terms of operating efficiency and competitive position.

3. Qualitative Factors

3.1 Qualitative assessment helps to establish the sustainability of the rating in the foreseeable future. Qualitative considerations here refer to rating factors which do not pertain to an entity's business or financial risk. Rather, they focus more on internal processes, people and systems, and thus are essential to incorporate a forward-looking perspective into rating opinions. This section is meant to provide a brief overview of how PACRA generally factors qualitative considerations into its assessment, insofar as they can impact an issuer's ability to meet financial obligations. PACRA's detailed approach undertaken to conduct this analysis is documented in its methodology titled "Qualitative Considerations".

3.2 Incorporating the potential impact of qualitative considerations into the rating opinion can be challenging because it is generally inferred or estimated based on information which may not be standardized and is difficult to quantify. This often requires some degree of subjectivity and analyst judgement, supplemented by PACRA's own experience and experience of the underlying entity or other entities with similar risks. Three factors underlying PACRA's qualitative analysis at entity level include: Ownership, Governance and Management. The scope of analysis for each category is briefly described below.

3.3 Ownership: This section provides an overview of the risks pertaining to the structure and stability of the entity's ownership structure, owners' experience and prowess in the entity's industry, and willingness and ability to extend extraordinary financial support in distressful circumstances.

3.4 Governance: This section provides an overview of the risks pertaining to the Board of Director's role in establishing a robust oversight and control framework to ensure appropriate management oversight, alignment between shareholder and management objectives, transparency in reporting and disclosures, and adherence to applicable regulatory requirements.

3.5 Management: This section provides an overview of the risks pertaining to the management team's proficiency in executing strategy, maintaining strong information systems and utilizing the same for efficient decision making, and ensuring adherence to the entity's ethical and quality standards.

3.5.1 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 issues and examine the reporting lines in place. In recent years, there has been a noticeable upgradation in the risk management systems of the brokers, in the face of increasing guidance and supervision from the SBP and SECP.

Credit Risk
- Risk emanates from the inability of clients to pay for the securities pruchased on their behalf.
- PACRA analyses the mechanism put in place by the broker to minimize credit risk.
- Assessment of credit worthiness of client is crucial.

Market Risk
- Arises from adverse movements in investment values.
- Management's policy as to the proprietary book play a vital role in the overall assessment of the broker's market risk appetite
- Poor market rrisk management or aggressive market risk-taking without mitigants would likely pressure a broker's ratings.

Liquidity Risk
- Occurs due to insufficient funds to meet obligations.
- PACRA analyses liquid investments against the broker's funding base.
- Brokers with well defined policies of maintaining adeuate liquidity are considered superior.

Operational Risk
- Operational Risk analysis include,
- Financial institution's definition of such risk,
- The quality of its organizational structure,
- Operational risk culture,
- Approach to the identification and assessment of key risks
- Data collection efforts, and
- Overall approach to operational risk quantification and management.

Reputation and other Risk
- May emanate from operational problems or failure in any risk management systems
- Results in withdrawl of deposits in case of strain on reputation.
- Difficult to evaluate but could adversely affect an institution's rating in cases where it is significant.
- Any regulatory non-compliance may lead to potential legal ramifications as well.

4. Business Risk

4.1 Industry Dynamics: The Industry analysis focuses on the dynamics of the domestic capital markets over the past. The fluctuations and the cyclical movements are analyzed and based on this, future projections are looked at, especially with reference to the medium-term outlook. Key data is interplay of domestic and foreign investors, appetite of these investors and future trends. The trading volumes and their concentration also helps identify the health of the industry. The domestic market dynamics are compared with the regional and global markets. This analysis is done with an objective of identifying the gaps and areas where the domestic market is lagging and what kind of implications it would have on the local market. Industry positioning of significant players is evaluated. At the same time, legal injunctions, current and forthcoming, are reviewed to form a view whether the industry would experience a major shift in the medium term the objective of business risk analysis it to establish the broker's ability to sustain – indeed – grow its relative positioning in the industry while ensuring profitable operations.

4.1.1 PACRA explores the possible risks and opportunities in a broker 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 supervisory authority, its supervision of regulated entities, reporting requirements and regulations relating to specific type of brokers and to specific financial products.

4.1.2 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, and saving and investment trends. An important part of economic analysis is positioning of industry and impact assessment of economic risk factors on the industry and its prospects.

4.1.3 Regulatory Environment: A well-regulated and supervised system is pivotal for credibility and stability of brokers even when the operating environment may become unfavorable. PACRA's evaluation of the regulatory system involves evaluation of criterion related to capital and other countercyclical measures to absorb risk and the extent of regulatory supervision and changes in response to the macro environment and prospective regulatory changes.

4.2 Relative Position: Relative position reflects the standing of the broker in the related market. The stronger this standing is, the stronger is the broker's ability to sustain pressures on its business volumes and profit margins. This standing takes support from two major factors including a) market share, b) growth trend.

4.2.1 Market Share: Market share represents the broker'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 broker'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 broker's standing.

4.2.2 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.

4.3 Revenues: In measuring earning's quality of a broker, diversification and stability are very important factors. Broker with a diverse product slate with more than one revenue streams is considered better than a broker with a concentrated earning profile. PACRA sees diversification at both product and customer levels. Diversification is desirable as it enhances ability to meet challenges, both present and upcoming. The lack of diversification gives rise to concentration risk, reflecting vulnerability of the broker. The analysis of revenues of a broker is based on a clear understanding of two lines of business in which the firm may engage itself. One is the fee-based revenue stream and the second is fund-based revenue stream. PACRA generally tends to name the first source of revenue as the core business. While the second source of revenue may still be fundamental to the overall profitability of the broker, it is usually termed non-core to contrast it with the core fee-based income. This clarity is helpful in understanding the issues surrounding the sustainability of the broker, to be rated. The core revenue needs to present a strong case for the continuity of the firm. This is evaluated by comparing the core revenue with the cost of doing business. The cost which is compared against the core revenue qualifies the test of relatedness. Only the cost incurred for the core business is pitched against the core revenue.

4.3.1 PACRA considers three types of revenues as core: brokerage, commission and advisory fees. The first type of revenue is most prevalent; the second is relevant for firms which are engaged in underwriting etc. The third is yet to make sizable presence in the domestic market. It is pertinent to analyze each of these revenue streams. The structure of brokerage fee is evaluated: mix of value versus scrip revenue, mix of institutional, HNWs and individuals, interplay of foreign vs. local clients, longevity of the relationship, trend analysis, average brokerage fee and its relativeness in the industry, and mix of buy and sell brokerage. The alternative revenue streams from underwriting, advisory and financing are analyzed to form a view how significant these are and whether these represent a sustainable revenue stream.

4.4 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 broker'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 FI has a significant fixed cost burden. In this context, key measure that PACRA looks at are the (Cost as a percentage of Fee Income and Cost as a percentage of Total Operating Income). Non-mark-up expenses are also compared where possible with earning assets 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 FI's franchise. A low-cost base relative to peers offers the broker greater flexibility to deal with competitive pricing pressures.

4.4.1 Margins: PACRA looks at the historical trend of a broker's performance, the stability and quality of its earnings and its capacity to generate profits. While taking indicators for a broker with those of its peers. Where possible, it also analyses earnings for each of the broker's business lines. In this context, it looks at the trends in;

i. Where necessary in its ratings analysis, PACRA makes adjustments to a broker's reported income statement figures, so that financial performance indicators are as comparable as possible from one broker to another.
ii. The related ratios are: fee-based income to total income and operating cost to fee-based income. The core income/loss explains the firm's strength in its business.
iii. Fund-based income is an additional buffer. This may emanate from financing activities, fixed income avenues and generally proprietary book. The depth and diversity of this income stream is analyzed with an objective to form a view whether this is one-off or recurrent. PACRA takes comfort from demonstrated stream of recurrent non-fee-based income. Funding to the clients may result in crystallization of credit risk; hence bad debts are analyzed and pitched against financing book. The aging analysis also becomes relevant, though its impact is fully catered in the financial risk analysis of the broker.

4.5 Sustainability: PACRA evaluates the strategy of the management and the viability of designed path to reach to the goal. Earnings prospects are monitored, based on budgets and forecast prepared by the management. A reality check is performed while analyzing underlying assumption taken by the management as well as management's track record in providing reliable budgets and forecasts.

4.5.1 Event Risk: Incorporating the risk of unforeseen events into a broker'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 broker's track record, expertise of management team and level of financial discipline to incorporate the same into its ratings.

Information Required on Business Risk

- Market Share
- Financial projections for next two years
- Branch network
- List and contribution to brokerage income of top 10 brokerage clients
- Contribution to brokerage revenue along with the number of trading accounts from each of the above category.
- Break-up of brokerage sales in terms of number of shares handled on stock and commodity exchange on monthly basis.
- Client wise (i.e., individuals, corporate, foreign) transaction rate charged.
- Break-up of investment book of the broker

5. Financial Risk

5.1 Financial risk of a brokerage firm emanates from the type of transactions that the firm executes. A broker may engage in a) leveraged products, b) receivable financing, c) ready futures, and d) proprietary investments. These transactions may (or may not) be backed by borrowings: short term usually and long term rarely. In addition to the borrowing, the firm may utilize clients' funds (normally reported under advances from and/or payables to clients). The higher the reliance on borrowings and payables, the higher the quantum of risk the broker is carrying. It is therefore fundamentally important to classify the firm's finances and funding avenues with marked clarity. This would capture the amount of risk that the firm is carrying on the balance sheet at a first glance. From here, a case may be built for an in-depth analysis of each risk.

5.2 **Credit Risk:** Credit risk results from the credit offered to the clients. The highest level of risk exists in case of receivables, primarily related to the securities purchased on behalf of the clients. This is a type of clean credit though the firm is carrying respective clients' scrips in the subaccount. For these scrips, the market risk is most critical. In the event of downfall of the market, the value of these scrips may stumble suddenly, inducing the client to withdraw from their commitment to settle the receivable. The mechanism put in place by the broker to limit its loss ensuing from the credit risk is assessed. Herein the most important is the system of margin calls, how timely and effective it is.

5.2.1 Credit risk also results from the leverage products. These products are governed by the oversight of National Clearing Company of Pakistan Limited. Currently, Margin Trading System and Margin Financing are mostly availed in the domestic market. The design and structure of MTS make it less risky, so is true for MF to some extent. Nevertheless, the counterparty credit risk is borne by the financier as the ultimate analysis of the products dictate.

5.2.2 Ready futures transactions entail purchase of securities from the current market and sale of the same in the future. This type of transactions has inherent risk mitigants against credit risk since the securities would be handed over only in case of payment settlement. Nevertheless, the market risk would become relevant in case of client's denial to make the payment in future to take up the securities.

5.3 **Market Risk:** The assessment of market risk is premised on an understanding that not all types of investments are equally exposed to market risk. Alternatively, while investments are mostly exposed to market risk, the impact of this risk, should it materialize, would be different from one type of investment to the other type of investment. In certain investments, the interplay of credit risk and market risk aggravates the overall quantum of risk exposure. Bonds are exposed to interest rate risk; in so far as these are exposed to credit risk, their valuations are much vulnerable. Hence, bonds with low credit rating should secure less score. Management's policy as to prop book including equities play a vital role in the overall assessment of broker's market risk appetite and its ability to manage conflict of interest. Moreover, PACRA considers the extent to which the fund is invested in liquid avenues as a percentage of net assets, notably short-term government securities along with any other sources of potential liquidity. The liquidity of the fund is gauged with reference to its underlying character, as depicted in the offering document. A fund styled as a high liquid fund would have an investor base with different characteristic as against a fund where the objective is to earn high returns.

5.4 Liquidity Risk: Liquidity risk is evaluated to identify balance sheet cushions against committed liabilities. Liquidity risk has a very straightforward computation. Liquid investments are compared against the broker's funding base.

5.5 Capital Structure: The broker's ability to maintain the related capital regime is analyzed to form a view as to the sustainability of operations. The funding lines and their utilization is assessed to evaluate fall back avenues. Net Capital Balance (NCB) must reflect the overall health of the broker and would normally coincide with its size and rating.

5.5.1 Credit Enhancement: The broker 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

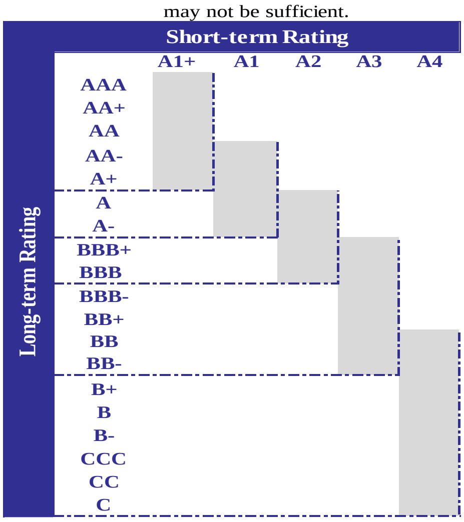
- Top 10 trade receivables and top 10 trade payables.
- Top 10 accounts classified under doubtful receivables
- Details of exposure limits for the brokerage operations and measures taken by the management to ensure implementation of these limits
- Details of instances of margin calls during recent one year
- Authority limits of treasury head and other top management as well as policy regarding total investment limit in said securities as percentage of equity
- Details of latest approved funding limits along with outstanding amount
- Internally approved list of eligible securities for margin financing (if any)
- Calculation of net capital balance under Rule 2 (D) of the SECP Rules, 1971
- Aging analysis of receivables
- Statutory reports filed with PSX and SECP

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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