The Pakistan Credit Rating Agency Limited

Stability Rating Criteria

Assessment Framework

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Summary

PACRA's Stability Rating is assigned to a portfolio of assets i.e., mutual fund, rather than an individual security. This methodology applies to various types of fixed-income funds, money market funds, government securities funds, aggressive income funds. Fund Stability Rating provides the investors with an objective measure for the main areas of risk to which the income funds are exposed, that is credit risk, liquidity risk and market risk. Stability Rating provides investors with a useful yardstick in comparing their individual risk-return matrix while making investment decisions.

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1. Introduction

Stability Rating: Opinion on main areas of risk a fund is exposed to – credit, liquidity & market risks

Quantitative and Qualitative factors are considered

1.1 Mutual fund is an effective tool for mobilizing resources from a large pool of investors, and in turn, providing them access to a variety of assets, which might otherwise be difficult. Pakistan's mutual fund industry has witnessed notable evolution in the overall structure. Asset management companies (AMCs) have introduced a variety of products in line with varying risk return preferences of investors.

1.2 The asset management business has two distinct elements – 1) the asset manager, 2) the mutual funds. PACRA has developed separate methodologies to capture distinct components of the industry. Asset Manager Rating is an opinion on the quality of fund management, capability to manage risks inherent in asset management business, ability to generate sound fund performance and effectiveness of an AMC's systems and processes. PACRA offers two products to capture varied factors of different types of mutual funds, i) Star Ranking, and ii) Stability Rating.

Performance Ranking

- Performance Ranking is an independent opinion on a fund's historical risk adjusted performance in comparison to other funds in similar category measured through a quantitative yardstick. Each asset management company compiles their own funds' performance and the performance of peer funds. Being an independent rating agency, PACRA ensures that it applies same basis to determine the relative performance of all funds.

Stability Rating

- Fund Stability Rating provides investors with an objective measure to the main areas of risk to which income funds are exposed, that is credit risk, liquidity risk and interest rate risk. Stability Rating provides investors with a useful yardstick to compare their individual risk-return matrix while making investment decisions.

1.3 Recognizing the rising competition and growth potential in this industry, the asset managers are using varying investment styles and techniques to offer competitive returns. All these developments have necessitated the need for an independent opinion as to the risk exposure of these funds, which, in turn, has an impact on stability in the funds' net asset value.

1.4 The Fund Stability Rating provides the investors with an objective measure as to the main areas of risk to which the income funds are exposed, that is credit risk, liquidity risk and market risk. The stability rating could provide investors with a useful yardstick in comparing their individual risk-return matrix, while making investment decisions.

1.5 There is no requirement of any minimum operational history of the fund to be eligible for the rating. Thus, a fund proposed to be launched in the near future could also be assigned a rating, based on the type and extent of risks to emanate by the implementation of the proposed investment policies. However, the absence of proper track record may lead to some prudence in the rating compared to a fund having sufficiently long operational history. A fund is eligible for fund stability ratings as soon as its mandate is finalized and offering document is approved by the Securities and Exchange Commission of Pakistan.

Stability Rating Framework: Sensitivity of NAV to risk factors

1.6 Stability Rating Framework: PACRA's mutual fund stability rating is an opinion on the relative stability in a fund's return. The rating is designed to provide investors with a simple to use indicator for evaluating the sensitivity of a fund's NAV to a combination of risks. The rating categories range from AAA (f) (fund having an exceptionally strong capacity to maintain relative stability in returns and possesses negligible exposure to risks) to B (f) (fund having a very low capacity to maintain stability in returns and possesses very high exposure to risks). The suffix – (f) – distinguishes the Fund's stability ratings from PACRA's other ratings.

1.7 The stability rating is based on a detailed quantitative assessment of a fund's portfolio and qualitative assessment of fund management. The rating is current as to the date it is assigned, and any significant changes in fund's portfolio or investment philosophy of the fund manager may lead to deviation from the assigned rating.

1.8 In forming an opinion on a fund's price NAV volatility, PACRA will consider a variety of factors aimed at establishing the fund's exposure to credit, liquidity and market risk and the quality of the fund management. These factors are assessed within the broad context of a fund's investment objectives and policies to determine how they may affect the fund's risk profile and relative price volatility under different market conditions.

1.9 The foremost factor is credit risk, having the highest weight in the rating matrix. This is followed by market risk and liquidity risk. These three factors collectively have 90% of the weight. This means that the fund's stability rating would be directly governed by its policies on credit, market and liquidity risks.

2. Credit Risk

Overall Risk Assessment: Credit risk, concentration risk & WAM

2.1 Overall Risk Assessment: The assessment of a fund's credit risk aims at forming an opinion as to the fund's overall exposure to this risk. The opinion is based on review of various factors, including the fund's investment policies regarding credit risk exposure towards various market segments, individual and cumulative credit quality of the investment portfolio, and the diversification of assets across investment types and issuers, and weighted average maturity.

Market Segment: Exposure towards certain market segments

2.2 Market Segment: The fund's exposure to market segments is analyzed to estimate the risk inherent in the investment portfolio. PACRA believes that one market segment, despite belonging to the same operating environment, could have distinct independent characteristics from others due to the specific attributes of the players therein. The high rated funds will have predominant exposure to low-risk segments (government securities, TFCs of commercial banks) and low proportion towards high-risk avenues (corporate TFCs/Sukuks).

Weighted Average Credit Quality: Weighted Average ratings of individual securities in portfolio

2.3 Weighted Average Credit Quality: Rating of the securities and the counterparties, where available, will be used to form an objective opinion as to credit quality. For securities or investment segments, where ratings are not available, PACRA will form its own opinion as to the credit risk involved. Moreover, whenever there would be a difference of opinion with reference to the assigned rating, the view of PACRA shall prevail. The overall opinion as to the credit quality of the underlying portfolio will be based on the weighted average rating of individual securities in the portfolio. Meanwhile, higher rating on issuers and obligations on the fund's holdings will generally mean that the probability of default and transition to lower rating is less-frequent than lower-rated issuers and obligations. Herein, both the individual rating and the weighted average rating would be the yardstick to follow. PACRA believes that an individual scrip is critically proportionate to its bearing on the cumulative credit quality of the portfolio. Table 1 elaborates PACRA's view as to the computation of weighted average credit quality of the fund.

Scoring Band		Govt. Securities/AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
		Table 1: Asset Allocation % of AUM															
9.0	10.0	=>75%	=<25%														
8.0	9.0	=>50%		=<25%													
7.5	8.0	=>25%			=<25%												
7.0	7.5					=<25%											
6.0	7.0						=<25%										
5.5	6.0							=<25%									
5.0	5.5								=<25%								
4.0	5.0									=<25%							
3.5	4.0										=<25%						
3.0	3.5											=<25%					
2.5	3.0												=<25%				
2.0	2.5													=<25%			
1.5	2.0														=<25%		
0.5	1.5															=<25%	
0.0	0.5																=<25%

The remaining portfolio allocation should be in higher rating categories, subject to minimum specified in government securities. Note: Actual asset allocation may vary over time as the assigned weights are indicative.

2.4 The table shows that a portfolio, with a minimum exposure of 75% to government securities/AAA rated investment avenues, would have the maximum score. Similarly, a minimum exposure of 50% to government securities/AAA rated investment avenues, while having 50% distributed across AA+ or AA investments/instruments subject to a maximum of 25% in the lowest mentioned rating category would carry the second-high level of score.

2.5 Portfolio credit quality is a primary rating factor for fund stability ratings. Failure to maintain credit quality scores within required benchmarks can become a limiting factor for stability ratings. In such cases, PACRA allows a curing period to the fund to bring its credit quality score within the benchmarks required to maintain the rating. If the fund fails to correct this within the requisite timeframe, it may be downgraded.

Non-Performing Assets: Percentage of non-performing securities to total fund value

2.6 Non-Performing Assets: The asset composition of the portfolio will be reviewed in terms of non-performing /under-restructuring assets with respect to the fund size. The presence of non-performing assets will have a diluting impact on overall credit quality of the underlying portfolio. The size of fund is critical when assessing the degree of variability in NAV in the event of default or non-performance of an instrument. Generally, an equal sized default/non-performing instrument in portfolio will have greater effect on a smaller fund's NAV than its larger peer. However, the ability of fund's performing assets to counterbalance current and future losses, ensuring stability of returns, will also be examined.

Concentration Risk: Segment wise & security wise concentration

2.7 Concentration Risk: The concentration risk in the portfolio is established by analyzing the diversification across investment types and issuers. Well-managed funds would have clearly articulated and documented policies and procedures to ensure compliance with its stated portfolio diversification objective. Fund portfolios are subject to additional risk when they are highly concentrated in a specific industry. For example, concentration in securities of a specific industry may expose a fund to industry risks that could deviate significantly from general market trends. High rated funds would have a diversified portfolio, minimizing exposure to any single issuer, sector, security or market segment.

Weighted Average Maturity: Sensitivity of portfolio with time horizon

2.8 Weighted Average Maturity: The weighted average maturity of the investment portfolio is analyzed to capture time horizon over which the portfolio is exposed to risk. Portfolio having longer WAM is more vulnerable to credit risk (default and transition to lower rating) in comparison to portfolio with lower WAM. Table 2 is considered to gauge the fund's ability to maintain the threshold.

Table 2

Score	WAM
9 to 10	45 Days
8 to 9	60 Days
7 to 8	90 Days
6 to 7	180 Days
4 to 6	2 Years
1 to 2	4 Years
0 to 1	Above 4 Years

Information Required on Credit Risk:
- Publicly available information of the fund
- Information about the credit quality of scripts in the fund
- Allocation of AUM within AAA to AA+ scripts
- Details of any non-performing instruments
- Maturity of investments executed by the fund

3. Market Risk

3.1 The more complex part of evaluating a fund's stability involves determining the fund's sensitivity to the changing market conditions. PACRA assess market risk in the nexus of variables affecting the market value of the underlying portfolio. Market value can fluctuate due to a number of variables largely including interest rate, liquidity and operating environment. Another key factor affecting the stability of returns is the volatility in prices of TFCs, conceiving the absence of a well-established bond market. However, given the difference in investment philosophy and operating characteristics of income and money market funds, the relative degree of emphasis on identified factors may vary for different categories of funds.

Interest Rate Risk: Sensitivity of fund to interest rate movements

3.2 Interest Rate Risk: Movement in interest rates is the principal determinant of a fund's price and these represent one of the most important factors contributing to a fund's risk profile. The interest rate risk measures the fund's sensitivity to shifts in the yield curve. Duration is a useful tool for quantifying a fund's exposure to interest rate risk. It is defined as the rate of change of fund's NAV with respect to change in interest rates. In general, the longer the duration, the more susceptible the fund is to interest rate movements. As the majority of the corporate bonds issued in the country are based on floating interest rates, PACRA would also consider the terms of re-pricing while evaluating interest rate risk. The result of the threshold mentioned in Table 3 is considered to gauge the fund's ability to maintain market value and avoid disruption in returns.

Table 3

Score	WAM
9 to 10	45 Days
8 to 9	60 Days
7 to 8	90 Days
6 to 7	180 Days
4 to 6	2 Years
1 to 2	4 Years
0 to 1	Above 4 Years

Information Required on Market Risk:
- Publicly available information which can the NAV
- Liquidity position of the fund
- Sensitivity of the fund to interest rates movements

4. Liquidity Risk

4.1 PACRA's Liquidity of a fund's portfolio is critical for maintaining a stable NAV. The liquidity of a security refers to the speed at which that security can be sold for approximately the price at which the fund has it valued. Securities which are less liquid are subject to greater price variability, and can significantly impact the NAVs at times of major redemptions. More liquid investments present lower risk, as these are more amenable to accurate pricing on a daily basis and support the fund's ability to correctly measure NAV. While analyzing the liquidity of investment portfolio, we consider the types of investments in the portfolio, the maturity structure, and secondary market liquidity.

Redemption: Liquidity and monetizing risk associated with redemption

4.2 Redemption: The counterpart to managing the liquidity of investments is the necessity to accurately monitor and anticipate subscription/redemption activity. Unexpected large redemptions have a direct influence on the fund's market risk exposure, as they could lead to liquidation of investments at below their fair value to meet redemption requests. Redemption volatility also adds to the complexity in managing a fund, as the uncertainty created by the instant liquidity requirements can make it difficult to employ a consistent investment strategy. Therefore, PACRA carefully reviews the characteristics of each fund's unit holder's base, including the proportion of top investors in total net assets of the fund. In case of a new fund, comfort can be drawn from sponsor's sizeable holding in the fund though it engenders concentration risk. PACRA also examine the effectiveness of the management's policies and procedures for tracking and anticipating major redemption activity.

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.

Information Required on Liquidity Risk:
- Details of planed and previous redemptions
- Details of Unit holders along with their holdings
- Internal control polices

5. Historical Returns' Volatility

Coefficient of variation of returns

5.1 For funds having operational history of six-months or more, the variability in returns is gauged on standardized basis through coefficient of variation for each fund in a category. The coefficient of variation is calculated by dividing standard deviation of fund's monthly returns by average monthly return (SD of Monthly Returns/Average Monthly Return).

6. Management Review

Management Review: Asset manager rating, experience, skill set, track record

6.1 The ability of a fund to meet its investment objective and adhere to stated policies ultimately depends on the management's experience and quality of support systems. Therefore, an assessment of the fund manager's qualification and experience, and the asset management entity's capabilities and track record are an integral part to the fund rating process. The assessment of management quality may also provide a basis of how the fund might respond to future opportunities or stress situations under different market conditions.

6.2 Management scoring is directly derived from the asset manager rating of the entity managing the fund. During the evaluation process, PACRA reviews the policies and procedures developed by the management to meet its investment objectives and assesses the efficacy of the investment management process, the supporting organizational structure, internal controls, risk management, and reporting systems. A detailed description of the key factors that contribute to an assessment of the fund management qualities is reflected in our methodology for rating asset managers.

6.3 To determine fund's level of risk tolerance and confirming harmony in fund's stated objectives and fund manager's investment philosophy in future course of action, discussions with the fund manager regarding the prospective asset mix and investment strategy will be vital during the rating process. The framework deployed to ensure compliance with regulatory requirements and its actual effectiveness would likewise be an important consideration.

Information Required on Management Review:
- List of staff along with their experiences & qualifications
- Management and investment policies
- Investment Prospects and harmony against the stated objectives are discussed in the management meeting

Stability Rating	
Opinion on the relative stability in a fund's return, the rating provides an objective measure as to the main areas of risk to which fixed-income funds are exposed, that is credit risk, liquidity risk and interest rate risk.	

Scale	Definition
AAA (f)	**Exceptionally Strong.** An exceptionally strong capacity to maintain relative stability in returns and possesses negligible exposure to risks.
AA+ (f) **AA (f)** **AA- (f)**	**Very strong.** A very strong capacity to maintain relative stability in returns and possesses low exposure to risks. This capacity may, nevertheless, be more vulnerable to changes in circumstances or in economic conditions.
A+ (f) **A (f)** **A- (f)**	**Strong.** A fund with stable performance generally in line with its peers with strong capacity to respond to future opportunities or stress situations.
BBB+ (f) **BBB (f)** **BBB- (f)**	**Adequate.** An adequate capacity to maintain relative stability in returns and possesses high exposure to risks. This capacity may be impacted adversely by changes in circumstances or in economic conditions.
BB+ (f) **BB (f)** **BB- (f)**	**Inadequate.** A low capacity to maintain stability in returns and possesses very high exposure to risks.
B (f)	**Weak.** A very low capacity to maintain stability in returns and possesses very high exposure to risks.

The fund stability rating scale of AAA to B is appended by the letter (f) to denote fund ratings and to differentiate it from the nomenclature used for issue and issuer

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) cessation of underlying entity, c) the debt instrument is redeemed, d) the rating remains suspended for six months, e) the entity/issuer defaults., or/and f) 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 mutual fund rating opinion is carried out on a periodic basis till it is formally suspended or withdrawn. A comprehensive surveillance of rating opinion is carried out at least once every six months.