The Pakistan Credit Rating Agency

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Stability Rating Criteria

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PACRA's Stability Rating is assigned to a portfolio of assets (mutual fund) rather than an individual security. This methodology applies to various types of fixed-income funds, money market funds, government securities funds, and 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. These are 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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Introduction

A mutual fund is an effective tool for mobilizing pooled resources from a large number of investors, and in turn, providing them access to a variety of assets. Pakistan's mutual fund industry has witnessed notable evolution in the overall structure as asset management companies (AMCs) continue to introduce a variety of products in line with the varying risk-return preferences of different investors.

The asset management business has two distinct elements; the asset manager, and the mutual funds. PACRA has developed separate methodologies to capture distinctive components of the industry. PACRA's Asset Manager Rating is an independent opinion on the expertise and quality of services of an asset manager. PACRA offers three products to capture the varied factors of different types of mutual funds; Performance Ranking, Stability Rating and Capital Preservation Rating.

Performance Ranking

Performance Ranking is an independent opinion on 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. These include 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.

Capital Preservation

Capital preservation rating indicates the level of certainty regarding timely payment of the original investment as per the terms of a fund. Capital preservation rating is aimed towards investors who are mindful of their original investment and do not intent to extend to downside risk, while retaining the ability to tap upside potential.

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

PACRA's Stability Rating provides investors with an objective measure to gauge the main areas of risk to which income funds are exposed. These are credit risk, liquidity risk, and market risk. The stability rating provides investors with a useful yardstick for comparing their risk-return matrix while making investment decisions.

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 stability rating based on the type and extent of risks that would emanate through the implementation of the proposed investment policies. However, the absence of a proper track record may lead to some prudence in the rating compared to a fund having a sufficiently long operational history. A fund is eligible for fund stability ratings as soon as its mandate is finalized and the offering document is approved by the Securities and Exchange Commission of Pakistan (SECP).

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 fund stability ratings from PACRA's other ratings.

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

In forming an opinion on a fund's price NAV volatility, PACRA considers a variety of factors aimed at establishing the fund's exposure to credit, liquidity, 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.

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.

Credit Risk

Overall Risk Assessment

The assessment of a fund's credit risk aims at forming an opinion on 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, diversification of assets across investment types and issuers, and weighted average maturity.

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. 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

Rating of the securities and the counterparties, where available, are used to form an objective opinion as to credit quality. For securities or investment segments, where ratings are not available, PACRA forms its own opinion as to the credit risk involved. Moreover, whenever there is a difference of opinion regarding the assigned rating, PACRA's view shall prevail. The overall opinion as to the credit quality of the underlying portfolio is based on the weighted average rating of individual securities in the portfolio. Meanwhile, higher ratings on issuers and obligations within the fund's holdings generally implies that the probability of default and transition to lower ratings is less frequent compared to 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 the weighted average credit quality of the fund.

TABLE 1: ASSET ALLOCATION % OF AUMs

Scoring Bands		Govt. Securities / AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-
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.

The table shows that a portfolio with a minimum exposure of 75% to government securities or AAA rated investment avenues would have the maximum score for weighted average credit quality. Similarly, a minimum exposure of 50% to government securities or AAA rated investment avenues, while having 50% distributed across AA+ or AA investments or instruments subject to a maximum of 25% in the lowest mentioned rating category, would carry a score from the second-highest scoring band.

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 of three months for 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

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 the overall credit quality of the underlying portfolio. The size of a fund is critical when assessing the degree of variability in the NAV in the event of a default or non-performance of an instrument. Generally, an equal sized default/non-performing instrument in a portfolio will have a greater effect on a smaller fund's NAV than its larger peer. However, the ability of the fund's performing assets to counterbalance current and future losses, ensuring stability of returns, will also be examined.

Concentration Risk

The concentration risk in the portfolio is established by analyzing the diversification across investment types and issuers. Well-managed funds will 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

The weighted average maturity of the investment portfolio is analyzed to capture time horizon over which the portfolio is exposed to risk. Portfolios having a longer WAM are more vulnerable to credit risk (default and transition to lower rating) in comparison to portfolios with a shorter WAM. Table 2 is considered to gauge a 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

Market Risk

The more complex part of evaluating a fund's stability involves determining the fund's sensitivity to the changing market conditions. PACRA assesses 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, considering 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

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 a fund's NAV with respect to a 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 considers the terms of repricing 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

Liquidity Risk

The liquidity of a fund's portfolio is critical for maintaining a stable NAV. The liquidity of a security refers to the timeline that a security can be sold for approximately the price at which the fund has it valued. Less liquid securities 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 daily and support the fund's ability to correctly measure NAV. While analyzing the liquidity of an investment portfolio, PACRA considers the types of investments in the portfolio, the maturity structure, and secondary market liquidity.

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 base, including the proportion of top investors in total net assets of the fund. In case of a new fund, comfort may be drawn from a sponsor's sizeable holding within the fund, even though it engenders concentration risk. PACRA also examines 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 highly liquid fund would have an investor base with different characteristics 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

Historical Returns' Volatility

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

Management Review

The ability of a fund to meet its investment objectives and adhere to stated policies ultimately depends on the management's experience and the 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, is an integral part of the fund rating process. The assessment of management quality may also provide a basis for how the fund might respond to future opportunities or stress situations under different market conditions.

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.

To determine the fund's level of risk tolerance, confirm the degree of harmony within a fund's stated objectives and the fund manager's investment philosophy in future courses 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

An 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	Long-Term Rating
AAA (f)	Exceptionally Strong. An exceptionally strong capacity to maintain relative stability in returns and possess negligible exposure to risk.
AA+ (f) AA (f) AA- (f)	Very strong. A very strong capacity to maintain relative stability in returns and possesses low exposure risk. 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.

*Where "f" denotes fund ratings

Rating Modifiers | Rating Actions

Outlook (Stable, Positive, Negative, Developing)	Rating Watch	Suspension	Withdrawn	Harmonization
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'.	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.	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.	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 surveil the opinion due to lack of requisite information.	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. Rating actions may include "maintain", "upgrade", or "downgrade".