

CRISIL Mutual Fund Ranking Methodology

Selection criteria for schemes in CMFR

Owing to changes in the categorisation /rationalisation of mutual fund schemes as prescribed by Sebi*, CRISIL has aligned its ranking categories in CMFR as per Sebi circular.

1. Equity funds

Equity funds have been retained in their respective categories as defined by the AMCs.

In case of large cap, large and mid-cap, multi-cap, mid-cap, focused and value/contra categories, funds which were being ranked in different categories previously, with different historical risk-return profiles, are now part of the same category. Hence, for evaluating the performance of such a varied group of funds under one category, active returns (with respect to their appropriate CRISIL-AMFI performance indices) parameter is used instead of mean returns. Since all the funds ranked in the small cap category have come from the erstwhile small & midcap category, mean returns have been used.

Funds in the **thematic – infrastructure** category follow an investment objective to invest in infrastructure-related sectors. Other sectoral/thematic funds have been excluded.

Equity linked savings schemes (ELSS) invest in equity and equity-related instruments, and are aimed to enable investors to avail tax deduction under Section 80 C of the Income Tax Act.

Index funds / ETFs: Schemes launched with an objective to generate returns that are commensurate with the performance of their benchmark's total return index (TRI), subject to tracking errors, are considered.

The following will be excluded:

- Index schemes that allow the fund manager to take overweight investment positions on stocks that comprise their benchmark index.
- Index schemes that are benchmarked to indices other than S&P BSE Sensex and Nifty 50.

2. Hybrid funds

Aggressive hybrid

Schemes investing more than 65%, but less than 80% of the assets under management (AUM) in equity securities and 20-35% in debt instruments, are considered. All funds that have historically maintained the stated equity exposure (three-year average) have been included in this category.

Conservative hybrid

This category includes schemes where investment in equity is limited to 10-25% of the AUM and rest in debt instruments. Funds that have

historically maintained >10% equity exposure (three-year average) have been included in this category.

Arbitrage

The schemes following arbitrage strategy with no net equity exposure stated in investment mandate are shortlisted. Funds with *Riskometer* grading of 'Moderately Low' have been included in this category.

3. Debt funds

In the **gilt category**, funds with a mandate to manage duration dynamically are considered. Gilt funds with 10-year constant maturity are not part of this category.

In the **medium to long duration** category, funds with three-year average duration between 3-7 years have been retained.

In the **medium duration** category, funds with three-year average duration below four years have been retained.

In the **short duration** category, funds with one-year average duration between 1-3 years are classified as defined by Sebi.

In the **credit risk** category, funds that were historically classified as credit opportunities funds in CMFR are considered.

In the **corporate bond** category, funds that maintained one-year average exposure >60% to corporate bonds, with the highest credit rating (i.e. AA+ and above), have been considered.

In the **banking and PSU bond** category, funds that maintained one-year average exposure >60% to debt instruments of banks, public sector undertakings, and public financial institutions have been considered.

In the **liquid and dynamic bond categories**, funds have been retained in their respective categories as defined by the AMCs.

In the **low duration category**, funds with one-year average duration below 1.3 years have been retained.

In the **ultra short duration** and **money market** categories, funds that were considered under the erstwhile ultra-short term and liquid categories have been retained.

*Link to Sebi circular: https://www.sebi.gov.in/legal/circulars/oct-2017/categorization-and-rationalization-of-mutual-fund-schemes_36199.html

CRISIL Mutual Fund Ranking Methodology

CMFR is the relative ranking of mutual fund schemes within a peer group. The basic criteria for inclusion in the ranking universe are three-year / one-year NAV history and AUM in excess of category cut-off limits, and complete portfolio disclosure. Three-year NAV history is considered across all equity, hybrid, dynamic bond, medium duration, medium to long duration and gilt categories; whereas one-year for banking & PSU, corporate bond, credit risk, liquid, low duration, money market, ultra short term, short duration categories.

Only open-ended schemes are considered. Ranking is based on the following parameters:

Mean return and volatility

Mean return and volatility are considered as separate parameters across all categories. Mean return is the average of daily returns based on the scheme's NAV for the period under analysis and volatility is the standard deviation of these returns. While the period for analysis is three years for equity, hybrid, medium duration, medium to long duration categories; it is one year for banking & PSU, corporate bond, credit risk, liquid, and other short duration categories. The period of analysis is broken into four overlapping periods (latest 36, 27, 18 and 9 months for three-year period, and latest 12, 9, 6 and 3 months for one-year period). Each period is assigned a progressive weight starting from the longest period as follows: 32.5%, 27.5%, 22.5% and 17.5%, respectively.

Active return

Owing to changes in the categorisation /rationalisation of mutual fund schemes, as prescribed by Sebi from March 2018 onwards, CMFR incorporated the active return parameter in equity categories (large cap, large and mid-cap, multi cap, mid-cap, focused and value/contra) for evaluation. As funds from different categories with different risk-return profiles are in these categories, active return (with respect to their appropriate CRISIL-AMFI performance indices) is used instead of mean return. The period of analysis is broken into four overlapping periods - latest 36, 27, 18 and 9 months - and progressive weights are assigned as discussed earlier.

Portfolio concentration analysis

Concentration measures the risk arising out of improper diversification. For equity securities, diversity score is used as the parameter to measure industry as well as company concentration. In case of debt schemes, the company concentration is analysed at an individual issuer specific limit. The limit is linked with the credit rating of the issuer; a high rated issuer will have higher limits and as the rating declines the limit is reduced progressively.

Exposure to sensitive sectors

In case of debt schemes, industry concentration is analysed for exposure to sensitive sectors which are arrived based on Industry Risk Score (IRS) for various sectors. CRISIL's assessment of IRS quantifies the credit risk associated with an industry on a uniform scale to ensure comparability across industries. The score captures the influence of various industry variables on the debt repayment ability of companies in a particular sector over a 3-4-year horizon.

Liquidity analysis

It measures the ease with which a portfolio can be liquidated. The lower the score, the better. In case of equities, it measures the number of days to liquidate the portfolio. Liquidity is calculated by taking the average portfolio liquidity score of the past three months.

Equity liquidity is computed as follows:

Liquidity score of each stock = No. of shares held / daily average trading volume of past six months

Portfolio liquidity score = Weighted average liquidity score of the above

Gilt liquidity is measured by analysing the number of days it takes to liquidate the portfolio based on turnover (volume), the number of securities in the portfolio, the number of days security is traded, and the number of trades in any security for a three-month period for that security. Corporate debt liquidity is computed by classifying each security into three categories - liquid, semi liquid and illiquid - and then evaluating a scheme's exposure to each category.

Asset quality

Asset quality measures the probability of default by the issuer of a debt security to honour the debt obligation in time.

Duration

Modified duration is considered across all the debt categories except liquid to capture the interest rate risk of the portfolio. The lower the value, the better. Going forward, Macaulay duration will be used instead of Modified duration.

Tracking error

This is used only for index schemes. The tracking error is an estimation of the variability in a scheme's performance vis-à-vis the index that it tracks. The lower the tracking error, the better.

Count of Negative Returns

The count of negative returns is used as parameter in arbitrage funds to capture downside risk of the funds.

Eligibility criteria

- **Only open-ended funds are considered**
- **NAV history**
 - Three years for equity, hybrid, gilt, dynamic, medium to long and medium duration funds
 - One year for arbitrage, banking & PSU, corporate bond, credit risk and other short duration funds, including liquid funds

- **AUM cut-off criteria**

Broad Investment Type [^]	AUM Cut-offs (Rs. Crore)
Equity	10
Debt and Hybrid	50
Debt (<1 year)	250

[^] Each of the broad investment types comprise of the following ranking categories -

Equity: Multicap, Large Cap, Large & Midcap, Midcap, Small Cap, Focused, Value/Contra, Infrastructure, ELSS, Index/ETF

Hybrid: Aggressive Hybrid, Conservative Hybrid

Debt: Gilt, Dynamic Bond, Medium to Long duration, Medium duration, Banking & PSU, Credit Risk, Corporate Bond, Short duration

Debt (<1 year): Money market, Low duration, Ultra short duration, Liquid

* Cut-off to be met by funds during all the month-ends in the respective quarter, along with Quarterly Average AUM

If a fund not ranked on basis of AUM in the preceding quarter meets the AUM criteria, it will be put on hold for one quarter and ranked in the subsequent quarter provided that the AUM criteria is satisfied in the subsequent quarter as well

- **Complete portfolio disclosure for all three months in the last quarter**
- **March 2017 onwards, CMFR introduced rankings for direct plans of the shortlisted funds as per the appropriate categorisation, provided they have sufficient NAV history.**

Parametric weights

Equity categories:

Category	Large cap, large & mid cap, multi cap, mid cap, value/contra, focused	Small cap, infrastructure and ELSS	Index / ETFs
Active return (%)	55	-	-
Mean returns (%)	-	55	-
Tracking error (%)	-	-	100
Volatility (%)	25	25	-
Company concentration (%)	5	5	-
Industry concentration (%)	10	10	-
Equity - liquidity (%)	5	5	-
Time (years)	3	3	3

Hybrid categories:

Category	Aggressive hybrid	Conservative hybrid	Arbitrage
Mean return (%)	50	50	60
Volatility (%)	25	10	25
Company concentration (%)	5	5	
Industry concentration / exposure to sensitive sector (%)*	10	5	
Equity - liquidity (%)	10%*K	7.5%*K	
Debt - asset quality (%)	5%* (100-K)	17.5	
Debt liquidity (%)	5%* (100-K)	7.5%* (100-K)	
Modified duration (%)	-	5	
Count of Negative Returns (%)			15
Time (years)	3	3	1

K = Equity component in hybrid schemes

** Industry concentration for equity and exposure to sensitive sectors for debt portion of the portfolio*

Debt categories:

Category	Gilt	Dynamic, medium to long, medium duration	Banking and PSU, corporate bond, credit risk, short duration, low duration, money market, ultra short term	Liquid
Mean return (%)	50	50	50	50
Volatility (%)	25	10	10	10
Company concentration (%)	-	5	5	5
Exposure to sensitive sector (%)	-	5	5	5
Debt - asset quality (%)	-	17.5	10	15
Debt liquidity (%)	15	7.5	15	15
Modified duration (%)	10	5	5	-
Time (years)	3	3	1	1

* Parametric weights for liquid category have been revised. 5% weight has been shifted from debt liquidity parameter to asset quality, compared with last quarter.

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