Rating Methodology

4 September 2023

Request for Comment: Money Market Funds

Fund-specific rating methodology

CCXAP publishes a Request for Comment (RFC) on the proposed rating methodology for money market funds

Summary

China Chengxin (Asia Pacific) Credit Ratings Company Limited ("CCXAP") proposes to introduce a new methodology for assessing the investment quality of money market funds ("MMFs"). The proposed methodology broadly applies to MMFs globally, with the main goal of preserving principal and providing liquidity to investors. MMFs typically invest in short-term fixed-income instruments that earn interest, such as bills, notes, or time deposits. The proposed methodology is also applicable to other similar liquidity management products or other investment vehicles with objectives comparable to MMFs.

MMF ratings are not credit ratings. It is our view of the investment quality of an MMF's capacity to meet its primary goals of preserving principal and providing liquidity to investors. We commonly use an "mf" subscript to differentiate MMF ratings from the conventional credit ratings.

Our general approach to evaluating MMFs consists of three components: (1) credit quality, (2) portfolio stability, and (3) other adjustment factors. Each factor contains sub-factors. Our approach includes both the qualitative and quantitative factors. Quantitative factors may be assessed using historical or prospective data, or both.

This proposed methodology describes our general approach to determining MMF ratings, explains how we examine each key factor in detail, and illustrates the definitions and scales of MMF ratings. It also includes a discussion of the assumptions and limitations underlying the rating methodology.

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Impact on Ratings

MMF ratings are not credit ratings. In addition, CCXAP does not have any existing rated funds that match the scope of application of the rating methodology for money market funds. The adoption of this methodology is not expected to result in any rating changes.

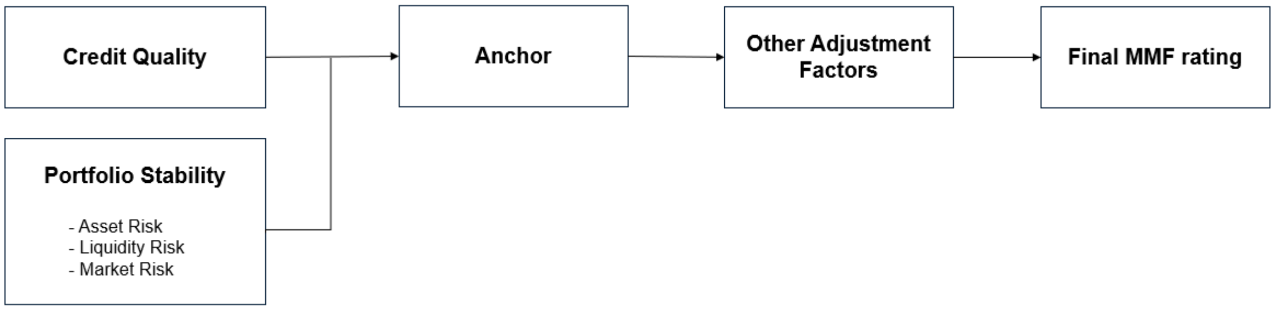
How to Submit Comments

In this request for comment, CCXAP invites interested market participants to submit written comments on the proposed rating methodology by 4 October 2023 on the "Request for Comment" page or by email to info@ccxap.com. CCXAP will review and take all received comments into account before publishing the methodology.

Introduction of Rating Methodology

Our general approach to assessing an MMF's relative investment quality is shown in Exhibit 1. We begin our analysis by examining an MMF's (1) credit quality and (2) portfolio stability, using a scorecard that includes a standard set of credit metrics in each factor to evaluate the fund. Next, we will use a mapping method to integrate these two factors to obtain a rating anchor. In addition, several factors that we deem relevant but may vary between funds in different sectors or under particular conditions will be considered when determining an MMF's rating.

Exhibit 1. Overview of CCXAP's approach to an MMF rating



This methodology provides general guidance for MMF ratings, but does not contain an exhaustive description of all factors that CCXAP may use in its rating considerations. As a result, the mapped rating may not match the final rating for each rated entity.

Rating Considerations

1. Credit Quality

When assessing the investment quality of MMFs, credit quality is a key consideration. Credit losses can occur as a result of investment obligation defaults or crystallized losses from security selling during a price decline. A strong ability to minimize credit risk helps a fund to meet its primary goals of preserving principal and providing liquidity. When evaluating the credit quality of MMFs, CCXAP focuses on the credit quality of individual holdings and the expected losses associated with these holdings. We also regularly review a fund's portfolio data to examine characteristics relevant to our methodology and assigned ratings.

There are two main attributes for calculating the credit metrics of an MMF in credit quality:

- The par value of the fixed-income investment
- The expected loss of the fixed-income investment after considering its maturity

To determine a fund's credit risk, CCXAP conducts a rating analysis based on the fund's investment portfolio. We take long-term credit ratings as a reference point for assets held by the fund. An MMF can hold a variety of assets, such as cash, cash equivalents, time deposits, commercial paper, supported asset-backed programs, repurchase agreements, sovereign bonds, etc. Different instruments may refer to different types of ratings to represent the appropriate risk nature. For example, we may employ the long-term credit rating of a bank in which the fund makes a deposit, the senior unsecured debt rating for a bank-issued unsecured bond, and the subordinated debt rating for a bank-issued subordinated security.

If a long-term rating is not available, CCXAP will convert a short-term rating that is currently accessible to the appropriate long-term rating. For securities not rated by CCXAP, we shall utilize the long-term issuer rating from other reliable sources as a stand-in rating for that fixed-income instrument, provided that they are not secured or subordinated. In our rating analysis, CCXAP may also use internal or private ratings, as appropriate. Unrated exposures, with the exception of those that have been collateralized or guaranteed, are typically classified as non-investment grade assets. For instance, a security that lacks a given rating but gains access to a letter of credit ("LOC"), a guarantee, or another form of credit/liquidity enhancement will be assessed using the long-term credit rating of the LOC provider, guarantor, or credit/liquidity enhancement provider.

CCXAP will match the relevant long-term ratings of each investment holding with its long-term idealized loss table to obtain its expected loss. If an instrument has a maturity of less than 12 months, we will assume that the fund reinvests the proceeds in the instrument with same long-term rating and maturity over the course of 12 months. For an instrument with a maturity of one year, we match the expected loss to the one-year maturity. For maturity of more than one year, CCXAP will calculate non-yearly expected loss using linear interpolation based on our expected loss table. We may also evaluate the underlying investment portfolio assets or attributes for investment instruments with no stated maturity (for example, the investment holdings in another fund). In addition, the expected loss will be adjusted for an instrument with a maturity of less than 12 months to reflect the lower probability of default. For example, an AA_g-rated security with a remaining maturity of 60 days is expected to have expected losses that are similar to an AAA_g-rated security with a remaining maturity of 1 year.

2. Portfolio Stability

The stability of an MMF's portfolio is critical to the quality of its investments, as the fund often faces interest rate risk and liquidity harzards, which can significantly affect the fund's market value and its capacity to meet liquidity needs for withdrawal. The portfolio stability of an MMF is evaluated by CCXAP in three aspects: (1) asset risk, (2) market risk, and (3) liquidity risk.

(1) Asset Risk

CCXAP measures a fund's asset risk based on its maturity and diversification. They are essential indicators for assessing a fund's asset risk from potential portfolio losses or net asset value ("NAV") impairments. A portfolio with diverse asset holdings and low-risk correlation is more likely to enjoy diversification benefits and reduce losses from the failure of a single large investment. Concentrated asset holdings or substantial investments in securities issued by affiliated entities that have a strong correlation in creditworthiness may result in an increased risk of loss following a sell-off. Furthermore, a fund with a higher exposure to longer-dated assets often has a higher asset risk, because it is more difficult to sell or has larger losses from selling under market stress. On the contrary, a fund that holds more short-dated assets helps to mitigate the impact of interest rate changes and provides liquidity in the short term without a large discount. We assess a fund's asset risk by weighted average maturity ("WAM") and the ratio of the top three exposure/fund asset under management ("AUM").

Weighted Average Maturity: CCXAP seeks to anticipate the interest rate risk of a fund by analyzing its weighted average maturity. We calculate the percentage of each individual investment relative to the total value of the investment portfolio based on fair value. Each of the percentage is multiplied by the time to maturity (in days) and then summed up to obtain the weighted average maturity, as shown in Exhibit 2. It is calculated as the asset-weighted average number of days to the next reset date for floating-rate notes ("FRN") and the maturity date for fixed-rate notes or discount notes. For fund investments, CCXAP uses the weighted average life to measure its maturity.

Exhibit 2. Example of the calculation of a fund's weighted average maturity

Investments	% of portfolio (Fair Value)	Day(s) to Maturity
Investment A	20%	40
Investment B	40%	52
Investment C	40%	30
Weighted Average Maturity		40.8

Top Three Credit Exposure/Fund Asset Under Management: CCXAP measures the aggregated credit exposure by obligors. Securities issued by different affiliated entities will be aggregated to calculate the risk exposure to the ultimate parent company, unless CCXAP believes that the creditworthiness of the affiliated issuers is largely independent from each other, in which case, we may treat affiliated entity on a standalone basis in calculation. In addition, we may omit certain assets deemed to be extremely low risk in our calculations, such as AA_g or higher-rated government securities, or repurchase agreements with maturities of seven days or less collateralized by AA_g or higher-rated sovereign assets.

(2) Liquidity Risk

Liquidity risk is critical to a fund's stability because one of the primary functions of an MMF is to preserve liquidity for investors. A fund with a higher proportion of high-quality, short-dated, and liquid assets in its investment portfolio may be more resilient to market stress and better able to honor redemptions. The level of investor diversification is also related to the stability of a fund. A fund with a diverse investor base may have reduced volatility since it typically has fewer funding outflows for large single redemptions. A fund that primarily serves retail investors is thought to have lower liquidity risk than a fund that serves mostly institutional or professional investors, who are more sensitive to market changes and are more likely to make significant redemptions. We assess a fund's liquidity risk by the ratios of high liquid assets/fund AUM and high liquid assets/top three fund unitholders.

High liquid Assets/Fund Asset Under Management: The numerator is the fund's holdings in high liquidity assets, and the denominator is fund's AUM. The higher the ratio, the more liquid the fund is. Cash and cash equivalents, AA_g or higher-rated government securities maturing within 18 months, committed undrawn liquidity lines from strong counterparties, and other high-quality assets are among the highly liquid assets recognized by CCXAP.

High liquid Assets/Top Three Fund Unitholders: The numerator is the fund's holdings in high liquidity assets, and the denominator is the sum of the equity of the top three unitholders. The greater the ratio, the better the liquidity of the fund. CCXAP ranks the top three unitholders based on the number of shares they possess in the fund. For the purposes of our evaluation, we may consider certain accounts, such as sweep and omnibus accounts, whose behavior is similar to or highly correlated with that of a single fundholder. Furthermore, a fund with a high proportion of intracompany investment or investment from affiliates of the fund manager may result in an upward adjustment of the score to reflect the reduced risk of large redemptions by such investors.

(3) Market Risk

Market risk is an important aspect to consider when analyzing MMFs, as it can dramatically alter a fund's value during times of market stress. CCXAP attempts to capture important market risk variables of MMFs by constructing a combined stress scenario to evaluate changes in NAV under extreme market conditions. We typically have three key stresses in our stress scenario, including (1) an unexpected increase in short-term interest rates (2) widening credit spreads, and (3) large equity withdrawal from investor redemptions. To compute an appropriate NAV, we will subtract the losses from the three stressors described above from the initial NAV (which is assumed to be 1.000). The greater the loss of the fund's NAV, the greater its market risk.

3. Other Considerations

CCXAP may consider other factors not included in the rating factors above, but in some cases, they may have a meaningful effect on the investment quality of an MMF. Additional considerations may include the quality of manager, the operating and regulatory environment, funding quality, operating history, quality of reporting and trends in portfolio credit and stability profiles. These factors often have a negative impact on the MMF rating.

(1) Quality of Manager and Sponsor

The quality of a fund manager and sponsor is critical to its operation and performance. Fund managers have substantial influence over investment decisions and strategies, and are often responsible for a significant portion of a fund's success. The sponsor also plays an important role in the stability of the fund. Risk associated with the sponsor may negatively affect an MMF's rating. A fund may experience significant redemptions when a fund's sponsor suffers from major financial deterioration or negative publicity, which may cause investors to lose confidence in the fund.

CCXAP typically conducts qualitative assessments of the managers and sponsors to estimate the impact of these two entities. Key aspects of managerial quality include operating track record, corporate governance, and management policies and procedures in comparison to industry best practices. Financial stability, public image, and operating track record are all important factors in the quality of a sponsor. Funds will not receive rating upgrades for high quality managers and sponsors; however, we may notch down funds for poor quality managers or sponsors.

(2) Operating and Regulatory Environment

The operating and regulatory environment broadly affects a fund's operations. Different regions or markets may have distinct characteristics that meaningfully impact the investment quality of MMFs. We intend to incorporate factors such as the local political, social, regulatory, economic and litigation environment that may affect the operating environment for a fund. In some regions, regulators may have established tools for funds to address mass redemptions, such as allowing mandatory suspension of redemptions or the application of fees on redemptions under an unfavorable environment, which however impede the core function of MMFs to provide liquidity. CCXAP may consider to notch down an MMF rating for the actions taken by a fund to restrict liquidity. In addition, we assess regional trends and significant events in other countries that may gradually affect the fund's operations.

(3) Operating Track Record

CCXAP may, in some cases, assign MMF ratings to a fund before its launch or with a very short track record. Assessments may be adjusted to focus on the manager's experience and the track record in managing funds with similar strategies or investment guideline. CCXAP will then evaluate the actual portfolio of the fund to make sure that the actual credit quality of the portfolio is consistent with the pro forma portfolio.

(4) Quality and timeliness of Reporting

The quality and timeliness of reporting is essential for assessing an MMF's rating. Given the nature of MMF, the fund's portfolio may vary from time to time. CCXAP highly relies on the accuracy and frequency of a fund's financial reporting. Poor reporting quality may manifest itself in incomplete disclosures, delayed reporting, and inconsistent accounting policies and procedures, which may affect our perception of the investment quality of a fund.

Money Market Fund Rating Scale

MMF ratings are not credit ratings. It is our opinions on the investment quality of an MMF's ability to meet its primary goals of preserving principal and providing liquidity to investors. We typically use an "mf" subscript to differentiate MMF ratings from normal credit ratings on the global long-term rating scale.

Exhibit 3. CCXAP's rating scale for Money Market Funds

Rating	Definition
$mfAAA_g$	"$mfAAA_g$" ratings denote a very strong capacity to achieve the dual goals of providing liquidity and capital preservation.
$mfAA_g$	"$mfAA_g$" ratings denote a strong capacity to achieve the dual goals of providing liquidity and capital preservation.
mfA_g	"mfA_g" ratings denote a relatively strong capacity to achieve the dual goals of providing liquidity and capital preservation.
$mfBBB_g$	"$mfBBB_g$" ratings denote a moderate capacity to achieve the dual goals of providing liquidity and capital preservation.
mfB_g	"mfB_g" ratings denote a weak capacity to achieve the aim of providing liquidity and have a marginal capacity to achieve the goal of capital preservation.
mfC_g	"mfC_g" ratings denote a very weak capacity to achieve either goal of providing liquidity or capital preservation.

Assumptions and Limitations

The final ratings assigned are based on CCXAP's forward-looking opinions, which we assume any changes in the macro environment are aligned with our expectations, and do not incorporate any unanticipated changes, such as the outbreak of war and destructive natural disaster.

CCXAP assumes that there is a strong correlation between the sovereign credit risk and the rated entity while refinancing capability is the key driver of credit risk. The debt rating assigned is based on our view that the legal priority of claims is the key factor affecting the ratings for different classes of debt issued by the same issuer. Also, we assume that the data used in the rating is true, legal and does not incorporate misleading statements.

The ratings incorporate our expectations of the rated entity's future performance, which are mainly deduced from the historical information via our forward-looking model. Under some circumstances, the expectations would incorporate confidential information. In addition, our expectations would consider the industrial trend, rival analysis, and other considerations. In any case, prediction is subject to substantial uncertainty. Therefore, the mapped ratings may not match our final ratings. The ratings may include some qualitative factors. CCXAP would evaluate these factors in an objective and precise approach, but the assessment may be unavoidably affected by subjective views in some cases. Therefore, the weighting of rating considerations could be varied. Specifically, the variation in weighting would happen if the rated entity were in default or approaching to be in default.

Furthermore, the ratings rely on public information and information provided by the rated entity and underwriters. Despite the fact that CCXAP can ensure the integrity, truthiness, and completeness of the data, due to the delay of information, the ratings may on some occasions not reflect the rated entity's credit risk in a timely manner.

Apart from that, the ratings are decided by our rating committee and could be influenced by their empirical views which may not be incorporated in the rating methodology. As a result, the final ratings could be varied with the mapped rating from the methodology.

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