

RISK RATING METHODOLOGY

This document is intended for financial advisers who wish to learn more about the Mabel Risk Rating methodology.

> Abstract This paper outlines the purpose and methodology of the Mabel Risk Ratings.

> > Gaurav Gupta, CFA Director

Contents

Purpose	2
FCA concerns	2
Objective	2
Methodology	3
Five risk ratings	3
Inputs	3
Time periods	4
Returns assessment	5
Cumulative drawdowns	5
Probability of losing money	6
Risk Profile Questionnaire	6
Risk Committee	8

Purpose

Mabel risk ratings enable advisers to capture their clients' risk profile and select a suitable fund or portfolio for that profile.

Discretionary Fund Managers (DFMs) have multiple investment solutions and not all are rated by the popular rating services due to costs. Mabel Insights has committed to rating all funds and portfolios on the platform allowing advisers to compare like-for-like investment solutions.

Advisers can incorporate the Mabel Risk Rating into their workflow as appropriate, aligning their client's risk profile and assessing which investment solution is best suited via whole-of-market analysis.

To ensure the risk profiles stay relevant and continually develop, the Mabel Risk Committee is responsible for the ongoing development.

FCA concerns

Our research finds that the regulator has primarily two concerns:

- Portfolios have traditionally been classified as "Defensive", "Balanced", "Growth". The labelling can often be unreliable or inconsistent when matching with a client's risk profile. A preferred method is to understand the underlying assets of each fund or portfolio and independently assign a risk rating that is based on a risk metric that can be associated with a risk profile.
- 2) The risk questionnaires used are often too simplistic, static, and may not capture the correct risk profile of the client.

Objective

Below outlines what we aimed to achieve when designing the Mabel Risk Ratings.

- 1. Design a risk rating framework that can apply algorithmically to all funds and portfolios on the Mabel Insights platform.
- 2. The risk ratings should group similar risk funds and portfolios together.
- 3. The framework should centre around drawdown risk as the risk of losing money is a major concern of clients.
- 4. Multiple time periods should be considered. History shows that the drawdown risk changes depending on the period selected.
- 5. A rating system algorithm is complex. An effort should be made to make the methodology simple to understand.
- 6. Sound fundamentals should underpin the methodology.

7. The methodology should be continuously evolving to reflect the fast progression of the investment advice landscape.

Methodology

In this section we dive deeper into the process and construction of the five Mabel Risk Ratings.

Five risk ratings

Risk Rating	Definition
1	You are likely to be more conservative and want to limit risk taken for more stable returns.
2	You are relatively cautious and can accept some loss in exchange for higher long-term returns.
3	You can accept fluctuations in the value of your portfolio in exchange for potentially better long-term returns.
4	You seek higher returns and are willing to accept more significant fluctuations in the value of your portfolio.
5	You seek high long-term returns and are comfortable taking risks, including periods where your investment underperforms.

Inputs

When constructing our algorithm, we summarise below the main five factors that impact a rating:

1) Bonds are fundamentally a safer asset class than stocks.

- a. Bonds are a contractual asset with a defined coupon payment and time horizon.
- b. Bond investors only lose money if the issuer defaults and the amount the investor gets in return is subject to a recovery rate.
- c. Stock returns are subject to the price return and any dividend payments. There is no contractual obligation for stockholders to be paid a dividend, nor any guarantees the price of a stock will rise.
- d. Bond investors are higher up the capital structure and will be paid back first if the issuer defaults.

2) We assess risk based on global equites and global bonds.

- a. Global equities include North America, Europe, UK, Emerging Markets, Japan, and Asia Pacific ex Japan.
- b. Global bonds include global government bonds, global investment grade bonds and global high yield.
- c. The asset allocation data we collect from DFMs include equities and bonds.
- 3) Drawdown risk a better measure of investment risk than the standard deviation of returns.
 - a. Drawdown risk is the negative performance of an asset class over a specified time.

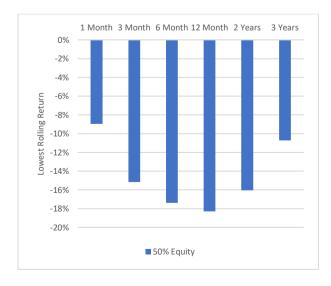
- b. The standard deviation of returns is the average difference in performance from the average return over a specified period.
- c. Our research finds that clients are most concerned about loss of money which best matches with the definition of drawdown.
- 4) Risk is assessed over multiple time periods.
 - a. Clients invest with different time horizons, and therefore risk needs to be considered over the short term and medium term.
- 5) A human overlay is needed to ensure the outputs of the model are sensible and can be applied across all funds or portfolios on the platform.
 - a. Our models display multiple risk metrics based on various asset allocation combinations of global equities and global bonds (made up of regional exposures).
 - b. Our human overlay interpretate the information and categorise the outputs into 5 risk profiles.
 - c. We believe 5 risk profiles strikes a good balance between having a too narrow or too wide bands.
 - d. The asset allocation of each fund or portfolio can then algorithmically be assigned a risk rating.

Time periods

Our research covering over 1000 model portfolios suggest that most investment solutions are designed for the following time periods:

- 1) Defensive investors 3+ year time horizon.
- 2) Balanced investors 5+ year time horizon.
- 3) Growth investors 7+ year time horizon.

Our research finds that over longer time periods the drawdown risk diminishes as investment markets return rise, supported by inflation. An example of this is shown below for a portfolio of 50% bonds and 50% equities.



Source: Mabel Insights

A lower risk investor looks to avoid short term loses as sequencing risk can have a large impact on future returns. A higher risk investor can afford a short term loses, as they have a longer time horizon and sequencing risk has less impact due to lower withdrawals over the short term.

- Sequencing risk is the risk created by the combination of the 'sequence' in which returns are generated and withdrawals are made from a portfolio.
- It affects investors making withdrawals from their portfolio.
- Sequencing risk is at its highest in the earliest years, when both portfolio value and the time horizon are at their greatest.

Our models focus on the drawdown risk associated with 1 month, 3 months, 6 months, 12 months, 2 years and 3 years.

Returns assessment

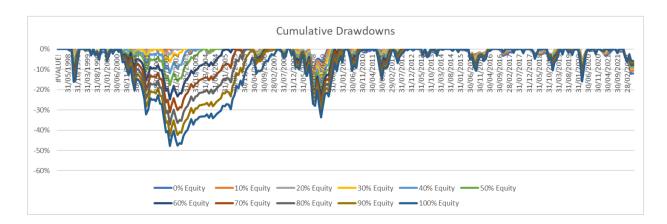
For each time frame, and multiple combinations of asset allocations, we assess:

- Monthly rolling returns
- Cumulative drawdowns
- Probability of losing money

Cumulative drawdowns

We consider the average time taken to recover from drawdowns. Below shows an output from our 12-month drawdown analysis.

The chart below is a simplified example used to illustrate the analysis.



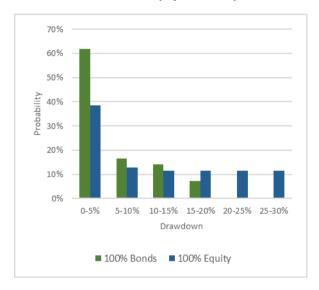
Source: Mabel Insights

For clients with a lower time horizon, the speed of an investment recovery may have significant impact on their financial goals.

Probability of losing money

We consider the frequency of losing money. The below example shows the probability and impact of losing money in negative periods over a 12-month rolling period.

The chart below is a simplified example used to illustrate the analysis.



Source: Mabel Insights.

The severity of losses is higher the more equities are in a portfolio. This impacts the ability of a lower risk investor to hold stocks which have a higher probability of significant drawdown.

Risk Profile Questionnaire

The questionnaire is designed to guide advisers on which risk profile best reflects a client's willingness and ability to take risk.

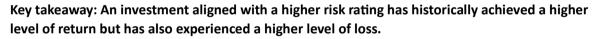
The final score is linked to the Mabel Risk Ratings and the final score can be adjusted at the end of the process. This is to reflect that an adviser will have a broader understanding of a client's circumstances and can better adjust the score to better reflect a client's objectives and risk-taking ability.

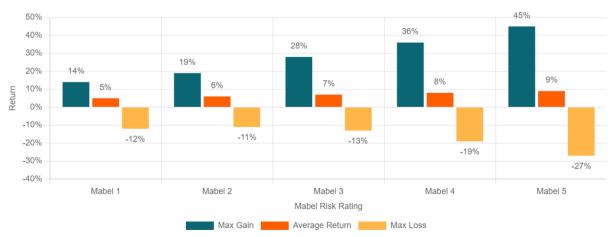
The 10 questions used to assess the risk need, risk taking ability and loss tolerance and their weightings are shown below.

Section	Weighting
Risk Need	60%
You require a high level of return.	
How long are you looking to invest for?	
When do you anticipate you will require access to the	e portfolio on a regular basis?
Risk Taking Ability	20%
What portion of this investment could you afford to lifestyle?	lose without significantly impacting your future
I am comfortable taking risks to generate a higher re	turn.
I would seek the highest return even if there were ris	sk involved.
I would seek the highest return even if there were ris	sk involved.
I would seek the highest return even if there were ris Loss Tolerance	sk involved. 20%
	20%
Loss Tolerance	20%
Loss Tolerance I typically take risks when making financial decisions.	20% The sl've made. Sould you invest into high growth investments,

To help communicate the risk profiles with the risk ratings, we provide examples of the level of return and risk that you might expect from an investment aligned to each risk rating.

Example 1: The data shows the maximum, average and minimum return calculated for a 12-month period calculated on a continuous basis. This is to help you understand what kind of returns an investment aligned with each Mabel Risk Rating has delivered over a 12-month period and help illustrate the potential reward and risks going forward.

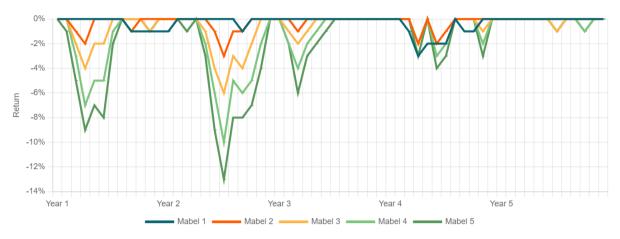




Source: Mabel Insights, for illustration only.

Example 2: With any investment, its value may go up and down overtime. This chart shows an example drawdown over 5 years. Drawdown refers to how much an investment value may fall before it recovers back to its previous highest value.

Key takeaway: An investment aligned with a lower risk rating recovers faster from losses than a higher risk investment. This may be an important factor to consider if you need to take out regular income.



Source: Mabel Insights, for illustration only.

Risk Committee

The risk committee oversee the continued development of the models used and govern the human overlay aspect of the rating methodology.