Holdings-Based Returns for Managed Accounts

Morningstar Research
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Introduction

Managed accounts are investment accounts that are managed by a portfolio manager with discretion over assets at an asset-management firm. Managed accounts may be distributed through outside platforms and made available to end investors. Morningstar will use the portfolio holdings of these managed accounts to calculate and publish holdings-based returns.

Trade-ready portfolios are portfolios provided by the investment advisor concurrently five calendar days, of the trade (or the effective date of a rebalance event). Morningstar enforces rules around the accurate and timely submission of these portfolios. If a portfolio is not delivered within the required timeline, the portfolio will be marked as "not trade ready." Three or more late submissions within a trailing calendar year will prompt Morningstar to reset the performance calculation so that it starts on the date the most recent late portfolio was received.

Portfolios with ex-ante, static, and rebalancing instructions are also considered trade-ready. In addition to the timing of the portfolio, at least 98% of the non-cash holdings must be identified, matched, and marked "performance ready" within the Morningstar database. Performance readiness is defined as an investment with an available daily return index that has passed Morningstar's application of data-quality processes and rules. For managed portfolios based in GBP and holding underlying investments with multiple exchange listings and currency lines, Morningstar will utilize a matching protocol that prioritizes London-based, GBP listings over primary listings where available.

As of the second quarter of 2022, we receive these holdings for managed portfolios in the United Kingdom. Whether implemented by the investment advisor creating the strategy or applied by an advisor working directly with the client, these portfolios offer additional transparency to investors that can be used to estimate returns and expenses into component parts. The recalculated returns can be used to compare reported returns versus model instructions, and investors can evaluate personal realized performance as well.

Additionally, by monitoring the daily performance of holdings within the portfolios, daily holding weights are derived. As U.K. managed accounts assess fees daily, the daily weights within a portfolio are required to accurately estimate the assumed expenses from fund holdings.

Holdings-Based Returns

Using the reported portfolio holdings, Holdings-Based Return calculations result in a Total Return Index, or TRI. This methodology describes the calculation of a Total Return Index based upon holdings.

On the Inception Date, create an account with an arbitrary starting value convenient for calculation.

Given that:

[1] $$account\ value_t^I = \sum investment\ value_i^t$$

And

[2] $$account\ net\ value_t = \sum_{\{i=0\}} investment\ value_t^i - account\ fees_t$$

Calculate the starting value in each investment as

[3] $$investment\ value_0^i = account\ value_0 \times trade\ weight_0^i$$

Using the TRI each investment is unitized by applying equation 4

[4] $$\widehat{units}_t^i = \frac{investmentvalue_t^i}{TRI_t^i}$$

At the end of any day, before execution of trades, the investment value is calculated as:

[5] $$investment\ value_t^i = units_t^i \times TRI_t^i$$

The end-of-day weight, the drifted weight

[6] $$drifted\ weight_t^i = \frac{investmentvalue_t^i}{account\ net\ value_t^i}$$

At each trade date we reapply equation 3, resulting in the new weights from rebalancing or submitted trades.

[7] $$\widehat{investment}\ value_t^i = account\ net\ value_t \times tradeweight_t^i$$

To calculate the account net value, fees must be applied when realized. The calculation uses the highest combined management fees and account fees reported. While for regulated mutual funds most fees are deducted daily, for many of the managed account products in which we calculate holdings-based returns, the fees are less frequent than the performance. The calculation of fees is as follows:

[8]

where x is the later of the start date or prior fee collection date and n is the subject period end date

$$\text{fee period fraction}_t = \begin{cases} 1 & \text{if } \dfrac{t_n - t_x}{\frac{\text{fee periods per annum}}{365}} >= 1 \\ \dfrac{t_n - t_x}{\frac{\text{fee periods per annum}}{365}} & \text{if } \dfrac{t_n - t_{n-x}}{\frac{\text{fee periods per annum}}{365}} < 1 \end{cases}$$

To account for fees, the Units need to be recalculated any period where the fee is non-zero. This is accomplished by replacing the account balance and trade weight in equation 3 with the account net value and the drifted weight.

[9] $$\overline{investmentvalue_t^i} = accountnetvalue_t \times driftedweight_t^i$$

The Units need to be restated at any trade date or any date with a periodic fee. This can be simplified to restating the number of units at all periods, as when fees are zero, and equation 1 and equation 2 have the same result. Therefore, when the date is a trade date, the adjusted units are:

[10]

$$\widehat{units_t^i} = \frac{accountnetvalue_t^i \times tradeweight_t^i}{TRI_t^i}$$

And when it is not a trade date, the units are calculated as

[11]

$$\widehat{units} = \frac{accountnetvalue_t \times driftedweight_t^i}{TRI_t^i}$$

When fees are zero, the result of equation investment value before and after accounting for fees are identical, as the number of units used within equation 5 remains identical to the prior day. At the end of each day $\widehat{units_t^i}$ replaces $units_t^i$. The time series of the account net value is the daily return index for these portfolios.

Morningstar requires regular submission of managed account holdings to produce timely and relevant holdings-based returns for investors. Portfolios will be required to be submitted within five days of a rebalance or trade event, or on a quarterly basis. Portfolios that fail to be submitted within five calendar days of these events will be marked as late in our database. Three or more late submissions within a trailing calendar year will prompt Morningstar to reset the performance calculation so that it starts on the date the most recent late portfolio was received.

Morningstar recognizes the necessity of providing lead and preparation time to data providers to set up reliable submission processes to the Morningstar database. The schedule and associated timeliness rules will not apply prior to Sept. 30, 2022, and will be used as an incubating period for submitting data.

Historical portfolios will be reported without restriction prior to Sept. 30, 2022. After this date, data providers will be allowed to report portfolio history up to 90 days after the date in which they fully onboard their investment data onto the Morningstar collection platform (hereafter referred to as the "activation date").

After June 30, 2023, Morningstar will limit the reportable portfolio histories to 366 days prior to the activation date. Ninety days will remain the permissible backfill period after activation date in which managed portfolio providers may report this history. Portfolios exceeding the prior 366 days will not have their data incorporated into the holdings-based return performance stream to control for survivorship bias.

Reporting of Historical U.K.-Managed Portfolios

Morningstar expects that the U.K.-managed portfolio database will be fully live and operational as of June 2022. Morningstar's data team will work with providers to onboard all historical portfolios, and the holdings-based return will be inclusive of this history. For all managed portfolios after June 2023, Morningstar will stipulate that only the trailing 12 months of historical portfolios will be calculated upon activation to control for backfill and survivorship biases.

Short Positions in Holdings-Based Calculations

Morningstar's holdings-based calculation will not include the impact of short positions reported in managed accounts. Therefore, Morningstar's holdings-based return will only include the impact of long positions in portfolios. Further research into the prevalence of short positions within the managed accounts industry will be considered for future enhancements to our calculation.