MAC HPA

December 2020

Starting December 2020, the new Multi-Asset Class Hybrid Performance Attribution Model (MAC HPA) will be available to all clients via PORT<GO>. The following document provides important reference information related to the new performance and attribution model. For complete details, click here to access the MAC White Paper.

Overview

MAC HPA is Bloomberg's next generation attribution model. When completed, the new model will not only combine the best features of the PORT Attribution and Hybrid Performance Attribution (HPA) models, but will also offer enhancements based on in depth industry research and client feedback. MAC HPA will offer flexibility and precision in performance attribution on a wide variety of asset classes and portfolio strategies. Model unification will promote consistency across Bloomberg's portfolio management tools; the same model used to run interactive attribution on the terminal will be used in our batch reporting system.

MAC HPA will continue to expand and develop over the coming quarters, with the initial model now available to all clients. The feature set listed below details the MAC HPA model available on PORT today. Over the next few quarters, additional capabilities will be added to round out the MAC HPA offering.

Improved Transaction-Based Attribution

MAC HPA supports true transaction-based portfolios and attribution directly on the PORT screen. Some of the transactions-based features include: handling P&L from unsettled positions (settle date can be market convention or custom); transactions on derivatives such as FX Forwards and Interest Rate Swaps; and added support for the full breath of transaction types such as management fees, contribution, withdrawals, transfers, etc.

Note: The ability to load transactions into PORT is available to PORT Enterprise clients. For more information, contact your Sales representative.

Total Return Brinson Model (Local Return and Total Return Models)

The attribution models supported in the initial release of MAC HPA are the total return Brinson models: local return and total return (including base currency). The local return allocation model allows managers to separate currency decisions from the local return allocation, whereas the total return model includes currency as part of the overall asset allocation/security selection decisions. This allows managers the flexibility to align the currency decision in global portfolios.

Over the next few quarters, additional model choices catered to fixed income portfolios, such as excess of curve, spread return, and DTS models, will be added. Additionally, factor-based attribution will also be available at a later date.

Improved Handling of Leverage

MAC HPA model has an improved handling of leverage whereby the bucket weights get renormalized for allocation effects. Leverage is a source of portfolio outperformance that gets reported at the top level. Portfolios that contain derivatives (e.g., equity index futures) can now be analyzed in an intuitive manner.

Turnover Indicators

The MAC HPA performance engine introduces two portfolio turnover related indicators: *1-Way Turnover* and *2-Way Turnover*. These fields are available in the *Attribution* tab field picker in PORT and provide clients an easy way to incorporate portfolio turnover as an additional metric to the overall portfolio analysis.

Next Step: Flexible Currency Attribution

The next phase of the MAC HPA model will be focused on currency attribution and hedging. Starting Q1 2021, PORT Enterprise clients will be able to select from multiple currency attribution model choices to better understand drivers of currency return. The additional flexibility will expand on the existing features of HPA. Model choices will

include a Simple method which looks purely at FX movements; a Karnosky-Singer method that introduces deposit rates; and a variation of the Karnosky-Singer method that accounts for funding cost advantage separately. Clients will also be able to choose whether to handle hedging instruments (e.g., FX Forwards) as part of core holdings or separately as hedges.

PORT UI Enablement

To access the MAC HPA model, from the toolbar, select **Settings > Use MAC HPA Return Attribution Model**. At this time, you must opt in to using the new model. Once you select the MAC HPA setting, the *Performance* and *Attribution* tabs in PORT update to reflect the settings.
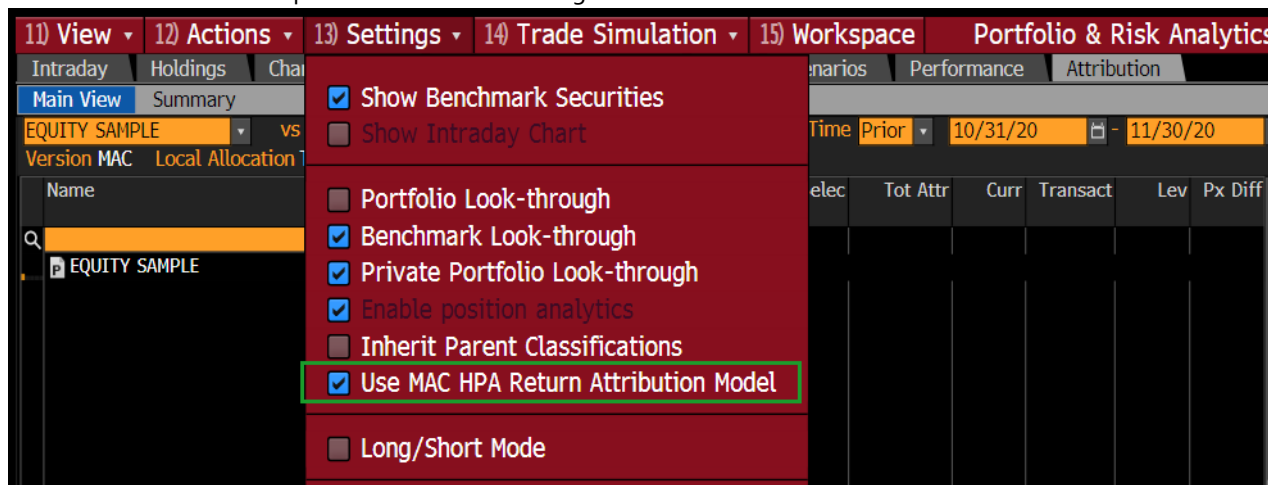
To provide a visual cue regarding which model is run in the analysis, a *Version* label has been added in the display section. 'MAC' implies that the setting above is selected and the MAC HPA is used; 'PORT' implies the setting is unchecked and the legacy PORT Attribution model is used.

Set as Default in the Calculation Profile

The wake up behavior for attribution model selection in PORT is governed by the *Use MAC HPA Return Attribution Model* setting in the PRTU calculation profile. Select **Set As Default** to make MAC HPA the default attribution model in PORT for a given portfolio.

PREP Equity Reporting

Enterprise clients leveraging PORT Performance and PORT Attribution reports via PREP can also leverage the MAC HPA Model. An additional option is available in the Model dropdown. Previous models are still available in the

Legacy Models section. The reporting enablement is on a per request basis. Please reach out to your sales representative for getting access via PREP.